United States Environmental Protection Agency

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Justification of Appropriation Estimates for the Committee on Appropriations

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United States Environmental Protection Agency

FY 2024 Budget Overview

The United States Environmental Protection Agency (EPA) has a clear and vital mission: to protect human health and the environment. While the Agency, along with tribal, state, and local partners, has made great progress in advancing this mission over the last 50 years, much work remains to guarantee that all people living in the United States share more fully in the benefits of clean air, clean water, clean land, and chemical safety. The urgency of climate change raises the stakes of the Agency's work to protect communities. The FY 2024 President's Budget articulates Agency plans to confront these challenges and advance the priorities described in the *FY 2022 – 2026 EPA Strategic Plan*, which will make real, durable changes to the environmental and public and economic health of all Americans.

The FY 2024 President's Budget for EPA totals $12.083 billion, $1.9 billion or 19 percent higher than the FY 2023 enacted level. It includes 17,077 full-time equivalents (FTE), an increase of 1,961 FTE above the current level, to restore the Agency's capacity to carry out its core mission. These resources will advance EPA's efforts to clean up air, land, and water pollution, tackle the climate crisis, advance environmental justice, fund scientific research, support the President's Cancer Moonshot Initiative, and position the Agency with the workforce required to address emerging and ongoing challenges. In furtherance of its mission to protect human health and the environment, the Budget requests robust funding to address the climate crisis by reducing greenhouse gas (GHG) emissions; building resilience in the face of climate impacts; and engaging with the global community, and state, local and tribal partners to respond to this shared challenge. The Agency also will continue to ensure environmental justice is at the forefront of its activities by investing across numerous programs in support of environmental justice and ensuring compliance with several civil rights laws that prohibit discrimination in programs or activities that receive federal financial assistance from EPA.

Reliable and safe drinking water is critical to every citizen's health while access to clean water for recreation, as well as commerce, supports the environmental and economic health of all communities; therefore, the Budget supports the full implementation of grant programs authorized in the Drinking Water and Wastewater Infrastructure Act (DWWIA). To capitalize on the once-in-a-generation opportunity to make meaningful, long overdue progress, the FY 2024 Budget will complement the significant resources provided in the bipartisan Infrastructure Investment and Jobs Act (IIJA), American Rescue Plan (ARP), and Inflation Reduction Act (IRA) to ensure that EPA, tribes, and states have the support needed to effectively implement these new or significantly expanded programs.

The FY 2024 Budget is rooted in the four foundational principles of the *FY 2022 – 2026 EPA Strategic Plan: Follow the Science*, *Follow the Law*, *Be Transparent*, and *Advance Justice and Equity*. These principles form the basis of the Agency's culture and will guide its operations and decision making now and into the future. The *Strategic Plan* focuses on achieving the Agency's and Administration's environmental priorities to instill scientific integrity in decision making, tackle the climate crisis, and embed environmental justice across Agency programs.

FY 2024 Funding Priorities

Tackle the Climate Crisis

The FY 2024 Budget prioritizes tackling climate change with the urgency that science demands. EPA's Climate Change Indicators website presents compelling and clear evidence of changes to our climate reflected in rising temperatures, ocean acidity, sea level rise, river flooding, droughts, heat waves, and wildfires.[1] Resources in the Budget support efforts to mitigate and adapt to the impacts of the climate crisis while spurring economic progress and creating good-paying jobs. Both climate mitigation and adaptation are essential components of the strategy to reduce the threats and impacts of climate change. The Budget empowers EPA to work with partners to address the climate crisis by reducing GHG emissions; building resilience in the face of climate impacts; and engaging with the global community to respond to this shared challenge.

In FY 2024, EPA will drive reductions in emissions that significantly contribute to climate change through regulations of GHGs, climate partnership programs, and support to tribal, state, and local governments. The Agency will accomplish this through the transformative investments in the IRA, IIJA, and our annual appropriation, which funds the core operating accounts of the Agency. In FY 2024 and beyond, EPA will ensure its programs, policies, regulations, enforcement and compliance assurance activities, and internal business operations consider current and future impacts of climate change.

The Budget proposes an additional $64.4 million and 24 FTE to implement the bipartisan American Innovation and Manufacturing (AIM) Act to continue phasing out potent greenhouse gases known as hydrofluorocarbons (HFCs). Resources support efforts to implement innovative Information Technology solutions, such as a Quick Response (QR) code system and database integration across EPA and Customs and Border Patrol, to ensure that the phasedown is not undermined by illegal imports. By September 30, 2023, EPA expects that annual U.S. consumption of HFCs will be 10 percent below the baseline[2] of 303.9 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) consistent with the HFC phasedown schedule implemented in the AIM Act and codified in the implementing regulations. A 10 percent reduction would decrease the U.S. consumption limit to less than 273.5 MMTCO2e by 2023, meeting an Agency Priority Goal for FY 2022 – 2023 to *Phase down the production and consumption of hydrofluorocarbons (HFCs)*.

Building on investments in the FY 2023 enacted budget, the FY 2024 Budget also provides an additional $71.5 million and 40.6 FTE, for a total of $181 million and 257 FTE, for the Climate Protection Program to tackle the climate crisis at home and abroad through an integrated approach of regulations, partnerships, and technical assistance. This additional resource includes $5 million for EPA to provide administrative support to the $27 billion GHG Reduction Fund, enacted through the IRA. With enhanced administrative support, EPA will be able to more efficiently and effectively administer competitive grants to mobilize financing and leverage private capital for clean energy and climate projects that reduce GHG emissions with an emphasis on projects that

[1] For more information, please visit:https://www.epa.gov/climate-hfcs-reduction/final-rule-phasedown-hydrofluorocarbons-establishing-allowance-allocation.

[2] https://www.epa.gov/climate-hfcs-reduction/final-rule-phasedown-hydrofluorocarbons-establishing-allowance-allocation

benefit low-income and disadvantaged communities. Additionally, EPA provides investments to support the private sector in calculating GHG emissions and climate risk and setting science-based climate targets, as well as investments to embed the economic impacts of climate change and decarbonization efforts within government economic projects.

In FY 2024, EPA will continue to take action to reduce dangerous air pollution and GHG emissions from mobile sources. The FY 2024 Budget provides $150 million for the Diesel Emissions Reduction Act (DERA) Grant Program, a $50 million increase above the FY 2023 enacted level, to expand the availability of DERA grants and rebates to reduce harmful diesel emissions, with a focus on school buses, ports, and communities disproportionately affected by air quality problems.[3] These locations also are often where lower income communities and communities of color suffer from exposure to higher levels of pollution.

The Agency also will commit an additional $62.3 million and 46.8 FTE for a total of $180 million and 370 FTE to the Federal Vehicle and Fuels Standards and Certification Program to build on investments in FY 2023. This includes the development of analytical methods, regulations, and analyses to support climate protection by controlling GHG emissions from light-, medium-, and heavy-duty vehicles. In FY 2024, EPA also will promulgate a final rulemaking to establish new GHG emissions standards for heavy-duty engines and vehicles. This rule will reduce GHG and other emissions from highway heavy-duty vehicles, the second largest source of transportation GHG emissions. In support of Executive Order 14037: *Strengthening American Leadership in Clean Cars and Trucks,*[4] EPA's longer-term rulemaking to set emission standards will save consumers money, cut pollution, boost public health, advance environmental justice, and tackle the climate crisis. EPA will establish new multi-pollutant emissions standards, including for GHG emissions, for light- and medium-duty vehicles beginning with model year 2027 and extending through at least model year 2030.

Acting domestically to reduce GHG emissions is an important step to tackle the climate crisis; however, environmental protection is a shared responsibility that crosses international borders, and climate change poses a threat that no one government can solve alone. The FY 2024 Budget provides an additional $18 million and 16 FTE to support tackling the climate crisis abroad. Through a collaborative approach with international counterparts, we will enhance capacity building programs for priority countries with increasing GHG footprints, to enable stronger legislative, regulatory and legal enforcement. To this end, President Biden has ambitiously laid out a path, by 2030, for the United States to cut GHG emissions by at least half from 2005 levels showing our international partners that America is doing its part to reduce global emissions. EPA will continue to engage both bilaterally and through multilateral institutions to improve international cooperation on climate change. These efforts help fulfill EPA's commitment to Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*.

Tackling the climate crisis depends not only on the Agency's ability to mitigate GHG emissions but also the capacity to adapt and deliver targeted assistance to increase the Nation's resilience to climate change impacts. As part of a whole-of-government approach, EPA will directly support

[3] DERA Fourth Report to Congress: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100X1BI.pdf.
[4] Executive Order 14037: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/08/05/executive-order-on-strengthening-american-leadership-in-clean-cars-and-trucks/.

federal partners, tribes and indigenous communities, states, territories, local governments, environmental justice organizations, community groups, and businesses as they anticipate, prepare for, adapt to, and recover from the impacts of climate change. In FY 2024, the Budget provides an additional $45.3 million and 26.5 FTE for climate adaptation efforts to strengthen the adaptive capacity of tribes, states, territories, local governments, communities, and businesses. The Budget also provides resources to support the implementation of the Agency's Climate Adaptation Action Plan, which accelerates and focuses attention on five priority actions the Agency will take over the next four years to increase human and ecosystem resilience as the climate changes and disruptive impacts increase.

Take Decisive Action to Advance Environmental Justice and Civil Rights

The communities hardest hit by pollution and climate change are most often communities of color, indigenous communities, rural communities, and economically disadvantaged communities. For generations, many of these communities, which also are among the most vulnerable, have been overburdened with higher instances of polluted air, water, and land. The inequity of environmental protection is not just an environmental justice issue but also a civil rights concern. Neither an individual's skin color, nor the community in which they live, should determine whether they have clean air to breathe, safe water to drink, or healthy environments in which their children can play. And yet, the development, implementation, and enforcement of environmental laws, regulations, and policies has not always ensured the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income. In FY 2024 EPA provides over $758 million within programs under Goal 2 to advance environmental justice and civil rights across the Nation and across Agency efforts.

EPA will continue efforts in FY 2024 to implement the President's Justice40 Initiative with the goal of delivering at least 40 percent of the overall benefits of relevant federal investments to underserved and overburdened communities. In June 2022, EPA announced 73 programs that will be covered under the Justice40 initiative, including the Clean Water and Drinking Water State Revolving Funds, Brownfields Projects Program, Superfund Remedial Program, and the Clean School Bus Program. EPA is currently looking at ways to ensure the delivery of benefits to disadvantaged communities to achieve the 40-percent goal within existing legal authorizations. EPA also is developing methodologies to track and report the benefits going toward communities that are marginalized, underserved, and overburdened by pollution. Advancing the Administration's environmental justice priorities is a foundational component of the Agency's FY 2024 Budget, and success requires a whole-of-EPA approach. EPA's Budget recognizes the importance of embedding environmental justice principles in all Agency programs and implementing Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*, and Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.

To elevate environmental justice as a top Agency priority in FY 2024, EPA's newest National Program Manager, the Office of Environmental Justice and External Civil Rights (OEJECR), will lead the agency-wide effort to address the needs of overburdened and underserved communities and maximize the benefits of the Agency's programs and activities to underserved communities. By September 30, 2023, EPA expects to develop and implement a cumulative impacts framework,

issue guidance on civil rights compliance for recipients of federal funding, establish at least 10 indicators to assess EPA's performance in eliminating disparities in environmental and public health conditions, and train staff and partners on how to use these resources, to meet an Agency Priority Goal for FY 2022 – 2023 to *Deliver tools and metrics for EPA and its tribal, state, local, and community partners to advance environmental justice and external civil rights compliance.*

The FY 2024 Budget will expand upon the FY 2023 enacted budget to enhance the Agency's ability to develop, manage, and award new competitive grants to reduce the historically disproportionate health impacts of pollution in communities with environmental justice concerns. Nearly $375 million and 265 FTE, an increase of $267 million and 41 FTE above the FY 2023 enacted, is requested for the Environmental Justice Program to expand support for community-based organizations, indigenous organizations, tribes, states, local governments, and territorial governments in pursuit of identifying and addressing environmental justice issues through multi-partner collaborations. The FY 2024 Budget proposes to invest $91 million and 50 FTE on building out community-centered technical assistance hubs to support basic capacity building of communities and their partners to advance equity and justice in their communities. With the FY 2024 investment of $34.7 million and 167 FTE in the Tribal Capacity Building Program, an increase of $20 million and 88 FTE above the FY 2023 enacted, EPA will strengthen efforts to support nationwide core work in the tribal capacity building program with a focus on addressing the climate change crisis. In addition, EPA will implement the revised EPA Tribal Consultation Policy and Implementation Guidance to improve consultation practices in conformance with the executive order on tribal consultation and train EPA staff.

To fully implement its external civil rights mission with quality and consistency and in a way that yields positive and sustainable impacts for the most overburdened and vulnerable communities where protection of civil rights may be at risk, EPA must embed civil rights obligations into its programmatic actions and provide the level of funding and staffing necessary for success. All applicants for and recipients of EPA financial assistance, including state and local governments as well as private entities, have an affirmative obligation to comply with federal civil rights laws, both as a prerequisite to obtaining EPA financial assistance and in administering their programs and activities. EPA enforcement of these anti-discrimination provisions is a vital part of the Agency's goal to advance equity and environmental justice. Consistent enforcement of federal civil rights laws for recipients of federal funds will prevent decisions that can overburden underserved communities and create or exacerbate significant inequities in human health protection and environmental pollution. In FY 2024, the Budget provides a total of $31.5 million and 144 FTE, an increase of $18.6 million and 77.2 FTE above the FY 2023 enacted level, to build civil rights capacity across the Agency and to reduce the backlog of civil rights cases such as claims of discrimination in communities and pre-award and post-award compliance activities. In the long term, the vigorous enforcement of civil rights laws will address historical and systemic barriers that contribute to the environmental injustice affecting vulnerable communities.

Enforce Environmental Laws and Ensure Compliance

Ensuring compliance and enforcement of the Nation's environmental laws is foundational to achieving EPA's mission. The Agency will hold bad actors accountable for their violations, with a particular focus on protecting communities with multiple pollution sources and ensuring a level

playing field in the marketplace for regulated sources and parties. In FY 2024, EPA will provide $757 million and 3,354 FTE to strengthen compliance with the Nation's environmental laws and hold violators accountable. The FY 2024 Budget provides an increase of $22.6 million and 38.3 FTE above the FY 2023 enacted levels to rebuild the inspector corps, which is EPA's highest enforcement priority. The inspector corps will be able to be more efficient attributable to the resources provided in the IRA that are targeted for improving enforcement technology and inspection software and for other related purposes. EPA also will leverage funding from the IRA for enhanced tools (such as the Integrated Compliance Information System, ICIS) and technical assistance to the regulated community to support understanding and compliance with environmental laws. EPA will implement a comprehensive action plan in FY 2024 for integrating environmental justice and climate change considerations throughout all aspects of its enforcement and compliance assurance work. The Agency will increase the percentage of inspections impacting overburdened communities and provide greater public access to compliance data to help a community better understand and manage risks. In addition, EPA will advance its efforts to address climate change mitigation and adaptation issues through targeted inspections, compliance monitoring, and technical assistance directed to sources with the most potential for noncompliant emissions of GHGs that contribute to climate change.

The FY 2024 Budget includes $165 million for the Compliance Monitoring Program, an increase of $50.9 million and 41.5 FTE above the FY 2023 enacted, to support enforcement and compliance assurance efforts with a focus on incorporating environmental justice considerations into programmatic work. EPA will leverage its resources to expand software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections and continue the data system modernization effort, including enforcement and compliance assurance data systems. These resources will complement those provided to EPA under the IRA that are targeted for improving enforcement technology, inspection software, and other related purposes. In FY 2024, EPA will provide robust targeted oversight and support to tribal, state, and local programs. The Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology to increase the availability of information about environmental conditions in disadvantaged communities.

EPA's Civil Enforcement Program is designed to protect human health and the environment by ensuring compliance with the Nation's environmental laws. The Budget provides $246 million for civil enforcement efforts, which includes funding to increase enforcement efforts in communities with high pollution exposure and to prevent the illegal importations and use of HFCs in the United States. These resources also include an additional $3.4 million and 7 FTE over the FY 2023 enacted level to support compliance and enforcement of the Coal Combustion Residual (CCR) Program. The CCR Program ensures that coal ash disposal units do not present dangerous structural stability issues that could put surrounding communities at risk, in particular, those in rural and underserved areas. These resources will allow the Agency to continue analyzing groundwater monitoring data and ensuring facility corrective action and closure efforts are complying with the regulatory requirements and adequately addressing coal ash disposal risks. Together, these resources will enable EPA to incorporate environmental justice and climate change considerations into all phases of case development without displacing other important enforcement and compliance assurance work. For example, EPA may focus on opportunities to reduce GHG emissions while providing co-benefits in underserved communities, expand inclusion of GHG mitigation and climate

resilience remedies, and prioritize environmental justice concerns in case resolutions where appropriate.

Overburdened and underserved communities are more often victims of environmental crime. EPA's FY 2024 Budget supports the development of a specialized Criminal Enforcement Initiative focused on addressing environmental justice issues with other Agency priority National Compliance Initiatives in partnership with the Department of Justice (DOJ). The Criminal Enforcement Initiative focuses on the prioritization of investigative resources to overburdened communities and vulnerable populations, while maintaining case initiation standards and reducing the impact of pollution. The FY 2024 Budget includes $75.1 million and 296 FTE to support the Criminal Enforcement Program by targeting investigations on the most egregious environmental cases.

In FY 2024, EPA will continue to advance efforts to protect fenceline communities at risk to environmental health hazards from nearby oil and chemical facilities and underground storage tank releases. Fenceline communities are often low-income and/or communities of color facing disproportionate risks from environmental health hazards, particularly in light of severe weather events caused by a changing climate. The FY 2024 Budget invests additional resources to advance protection of these communities by increasing inspections and compliance assistance to ensure nearby facilities are adhering to regulations designed to protect vulnerable populations. This investment also will be used to create and expand programs to improve environmental protections and increase monitoring capability in fenceline communities.

Ensure Clean and Healthy Air for All Communities

Providing clean and healthy air for all communities is a central tenet of EPA's mission. Long-term exposure to elevated levels of certain air pollutants has been associated with increased risk of cancer, premature death, and damage to the immune, neurological, reproductive, cardiovascular, and respiratory systems, while short-term exposure can exacerbate asthma and lead to other adverse health effects and economic costs.[5] Relying on the latest science, EPA will continue work to reduce emissions of the six National Ambient Air Quality Standards (NAAQS) pollutants—particulate matter (PM), ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead—and air toxics from mobile and stationary sources. In FY 2024, EPA will leverage approaches including regulatory tools, innovative market-based techniques, public and private-sector partnerships, community-based approaches, voluntary programs that promote environmental stewardship, and programs that encourage adoption of cost-effective technologies and practices. The FY 2024 Budget includes approximately $1.4 billion and 2,207 FTE to advance EPA efforts in protecting human health and the environment from the harmful effects of air pollution.

Building upon the work under the ARP and IRA, the FY 2024 Budget requests an additional investment of $100 million to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, such as smoke pollution from wildfires. In FY 2024, the Agency will continue to work closely with tribes, states, and local air quality agencies to develop the most effective approaches to meet community concerns. The Budget includes resources to fulfill the

[5] For more information, please visit https://www.epa.gov/air-research/research-health-effects-air-pollution.

President's commitment to engage meaningfully with overburdened and vulnerable communities during the entire rulemaking process, from pre-proposal through final promulgation and implementation.

In FY 2024, EPA will make critical resource investments in air regulatory development and implementation work, particularly to support NAAQS review and implementation activities. The President directed EPA to review the 2020 PM NAAQS and the 2020 Ozone NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis.*[6] An increase of $89.9 million and 193 FTE over the FY 2023 enacted is requested to develop and implement climate and clean air regulations and programs, including supporting NAAQS review and implementation work. Critical to successful NAAQS implementation are activities such as timely issuance of rules and guidance documents, ongoing outreach to states and other entities, development of NAAQS implementation and permitting-related tools, and taking timely action on State Implementation Plans (SIPs) and reducing the SIP backlog. In total, the FY 2024 Budget provides $367 million and 1,080 FTE, an increase of $208 million and 200 FTE above FY 2023 enacted levels, for the Federal Support for Air Quality Management Program.

The FY 2024 President's Budget also provides $47.5 million and 165 FTE for the Federal Stationary Source Regulations Program to finalize the review of standards for power plants, as well as rules to limit GHG emissions from new and existing sources in the power sector and new and existing facilities in the oil and gas sector. The Budget provides $47.6 million and 71.4 FTE for the Reducing Risks from Indoor Air Program to expand technical assistance to community-based asthma programs to reduce asthma disparities, particularly in disadvantaged communities, and provide technical support to high-risk, low-income communities to reduce lung cancer risk.

The Agency also will seek to address the air quality challenges presented by wildfires. Wildfire smoke can vary from year to year but can typically make up approximately 30 percent of total PM2.5 emissions in some regions of the U.S., aggravating heart and lung disease and causing premature death. Climate change has already led to a marked increase in wildfire season length, wildfire frequency, and burned area.[7] The FY 2024 Budget includes $7 million for Wildfire Smoke Preparedness, and EPA will continue to work with the U.S. Forest Service and other federal, state, and community agencies and organizations to identify ways to improve public notification and reduce the public health risk from air pollution resulting from wildfires.

The Agency also is committed to protect both the climate system and the stratospheric ozone layer, which shields all life on Earth from harmful solar ultraviolet (UV) radiation. The FY 2024 Budget will include $72.2 million and 52.2 FTE for Stratospheric Ozone: Domestic Programs to implement the American Innovation and Manufacturing (AIM) Act of 2020 to phase out climate-damaging hydrofluorocarbons (HFCs), building on the successful work with manufacturers and phase-out methodologies that have led to progress restoring the ozone layer.

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[6] Executive Order 13990: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

[7] For more information on climate impacts, risk and adaptation in the United States visit: https://nca2018.globalchange.gov/.

The Agency also will provide $423 million in financial support through Categorical Grant Programs to EPA's tribal, state, and local partners, an increase of $158 million over the FY 2023 enacted level, to further their efforts in implementing air quality management programs. These programs are critical for EPA's state, tribal and local partners to support implementation of environmental laws in states and tribal lands across the county and assure tangible progress for historically overburdened and underserved communities through sustained financial support. Funding for state and tribal support has been largely flat since 2018, while the need and expectations from EPA partners has only increased. In FY 2024, EPA provides $400 million for the State and Local Air Quality Management Program to provide grants to tribes and states that will support on-the-ground efforts to address GHG emissions and continuing core work, such as state and local air quality monitoring networks, air permitting programs, emission inventories, air quality forecasts, air quality training, visibility improvements, and air toxic monitoring efforts. In FY 2024, EPA also includes $23.1 million for the Categorical Grant: Tribal Air Quality Management Program. Funding will assist tribes to develop and implement air pollution control programs for Indian Country to prevent and address air quality concerns, including mitigating and adapting to the effects of climate change. EPA will work with tribes to assess environmental and public health conditions in Indian Country by developing emission inventories and, where appropriate, expanding the siting and operating of air quality monitors.

Ensure Clean and Safe Water for All Communities

EPA's most recent clean and drinking water needs assessment surveys, published in 2016 and 2018, respectively, determined that the country would need to invest more than $743 billion over the next 20 years to maintain, upgrade, and replace critical drinking water and wastewater infrastructure.[8] In FY 2023, EPA will finalize the seventh Drinking Water Infrastructure Needs Survey and Assessment (DWINSA). This survey provides a 20-year capital investment need for public water systems that are eligible to receive funding from state Drinking Water State Revolving Fund (DWSRF) Programs. The survey also informs the DWSRF allocation formula as required under the Safe Drinking Water Act (SDWA). Beginning in FY 2024, early framework activities for the eighth DWINSA will begin. Today, up to 10 million homes in America and more than 400,000 schools and childcare centers rely on drinking water distribution lines that contain lead—a clear and present danger to the health of children. Replacing these lead pipes and adapting America's water infrastructure to be more resilient to climate change is critical to keeping communities healthy and safe, consistent with the President's Lead Pipe and Paint Action Plan.[9] As the climate warms, more extreme rainfall and flooding events could damage or overwhelm water systems, leaving entire communities without safe water supplies for days or weeks. While there are significant funds from IIJA, there is still more demand and the FY 2024 Budget builds on the $8.83 billion available to State Revolving Funds (SRFs) in FY 2024 from the law. The Budget also includes $268 million and 1,056 FTE for the Surface Water Protection Program, an increase of $43.5 million and 46.1 FTE over the FY 2023 enacted level, to support efforts to protect, improve, and restore the quality of our Nation's coastal waters, rivers, lakes, wetlands, and streams.

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[8] For more information on EPA's Clean Water and Drinking Water Needs Survey Reports, visit: https://www.epa.gov/cwns and https://www.epa.gov/dwsrf/epas-6th-drinking-water-infrastructure-needs-survey-and-assessment.

[9] https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/16/fact-sheet-the-biden-harris-lead-pipe-and-paint-action-plan.

The Budget provides $219 million for two grants dedicated to remediating lead contamination in water − Reducing Lead in Drinking Water and Lead Testing in Schools − an increase of $163 million over the 2023 enacted level. The Budget also funds other grants and loans that can be used for lead service line replacements. The Budget updates the cross-government Lead Pipe Replacement Funding Inventory that was published for the first time with the 2023 President's Budget.

EPA's water infrastructure financing programs will advance the Agency's ongoing commitment to infrastructure repair and replacement and also build climate resilience into the water sector. At the same time, these investments will create hundreds of thousands of good-paying jobs across the country.[10] The Budget provides more than $4 billion for water infrastructure, an increase of $1 billion over the 2023 enacted level. These resources would advance efforts to upgrade drinking water and wastewater infrastructure nationwide, with a focus on underserved and rural communities that have historically been overlooked. The Budget also funds all of the authorizations in the original Drinking Water and Wastewater Infrastructure Act (DWWIA) of 2021 and includes funding levels of $2.8 billion for EPA's State Revolving Funds (SRF), which complements funds provided for water infrastructure programs in the bipartisan IIJA. Also included is approximately $1.2 billion for grant programs authorized in the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016, the America's Water Infrastructure Act (AWIA) of 2018, and DWWIA. These resources are intended to upgrade aging infrastructure, invest in new technologies, and provide assistance to communities.

Another goal of the Agency's infrastructure repair and replacement efforts is to address lead and other contaminants such as per- and polyfluoroalkyl substances (PFAS) in drinking water, especially in small and underserved communities. AWIA strengthened many existing programs within EPA, including programs authorized by the WIIN Act, while creating new programs to tackle significant public health and environmental concerns. DWWIA, as authorized under IIJA, builds on the foundation of AWIA and WIIN to strengthen the federal government's ability to upgrade the Nation's drinking water and wastewater infrastructure. These investments will enable the Agency to increase water infrastructure resilience and sustainability, provide assistance for underserved communities, and reduce lead in drinking water. By September 30, 2023, in support of *Goal 5, Ensure Clean and Safe Water for All Communities* and *Goal 6, Safeguard and Revitalize Communities*, EPA expects to provide technical assistance to at least 10 communities to help achieve clean and safe water, an Agency Priority Goal for FY 2022 – 2023 to *Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities*.

In FY 2024, EPA provides $150 million and 554 FTE, an increase of $22.9 million and 15.1 FTE, to support Drinking Water Programs to better protect communities, especially overburdened and underserved communities. This includes efforts to finalize the Lead and Copper Rule Improvements (LCRI) regulation, which aims to strengthen the Lead and Copper Rule Revisions (LCRR) issued in 2021 to more proactively replace lead service lines and more equitably protect public health. In August 2022, EPA released Guidance for Developing and Maintaining a Service

[10] Jobs created estimates are based on the *U.S. Water Alliance: The Value of Water Campaign: The Economic Benefits of Investing in Water Infrastructure.*

Line Inventory[11] to support water systems with their efforts to develop inventories and to provide states with needed information for oversight and reporting to EPA. This guidance will help water systems comply with the LCRR requirement to prepare and maintain an inventory of service line materials by October 16, 2024.

Resources also will support reducing public health and environmental threats from PFAS by finalizing the new drinking water standards in FY 2024. An additional $56.5 million is provided to accelerate progress on EPA's PFAS Strategic Roadmap,[12] and enable EPA to move more quickly on policy, regulatory, and enforcement actions across multiple statutory authorities, and to support states and tribes in taking action on PFAS. EPA will continue its efforts in FY 2024 to develop analytical methods, drinking water health advisories, toxicity values, effluent limitation guidelines, as well as risk communication and other tools to support states, tribes, and localities in managing PFAS risks in their communities.

Clean Water and Drinking Water State Revolving Loan Programs

The FY 2024 Budget includes $1.64 billion for the Clean Water State Revolving Fund (CWSRF) Program to capitalize state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. It represents the largest source of federal funds for states to provide loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, and green infrastructure projects. In addition to capitalizing the CWSRF Program, a portion of the Budget will provide direct grants to communities in tribal nations and territories. The sanitation infrastructure in these communities often trails the rest of the country, causing significant public health concerns.

EPA's DWSRF is designed to assist public water systems in financing the costs of drinking water infrastructure improvements needed to comply with SDWA requirements, protect public health, and support tribal, state, and local efforts to protect drinking water. The FY 2024 Budget includes $1.13 billion for the DWSRF to help finance critical infrastructure improvements to public water systems. States have considerable flexibility to tailor their DWSRF Programs to their unique circumstances and needs and to consider how best to achieve the maximum public health protection and infrastructure development that benefits all people living in the United States.

Infrastructure within the water sector goes beyond repair and replacement to include the safety and reliability of the IT systems used to monitor clean and safe water. In FY 2024, EPA provides $25 million for a grant program to advance cybersecurity infrastructure capacity and protections within the water sector. An additional $19.6 million is provided to implement regulatory action to mitigate the risks of cyberattacks in the water sector as well as increase the Agency's ability to respond to incidents. Cybersecurity represents a substantial concern for the water sector, given the prevalence of state-sponsored and other malevolent attacks on the sector as well as the sector's inherent vulnerability and limited technical capacity to address cyber issues.

[11] https://www.epa.gov/system/files/documents/2022-08/Inventory%20Guidance_August%202022_508%20compliant.pdf.
[12] https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024.

Water Infrastructure Finance and Innovation Act (WIFIA)
The WIFIA Program, created in 2014, is a critical tool to increase water infrastructure investments by leveraging public and private sources of funds to maximize the reach of federal funds. As of February 2023, EPA had issued 100 WIFIA loans to communities across the country totaling over $17 billion in credit assistance to help finance more than $36 billion for water infrastructure projects.[13] WIFIA loans for these projects have saved communities nearly $5 billion, which can be used for additional infrastructure investment and to keep rates affordable for water system users. These WIFIA-financed projects have created over 123,000 jobs and benefited more than 50 million people, demonstrating that WIFIA credit assistance is an effective tool to help address a variety of water infrastructure needs to support communities nationwide. The FY 2024 Budget supports WIFIA with $80.4 million in total funding.

Geographic Programs
Beyond water infrastructure, the Agency recognizes the important role federal assistance provides to protect water bodies of special ecological and economic importance to our Nation. Through EPA's Geographic Water Programs, the Agency assists state and multi-state partners and tribes to accelerate and manage the restoration of the ecological health of these water bodies. In total, the FY 2024 Budget provides $682 million for EPA's Geographic Water Programs to advance work on projects that target the most significant environmental problems in these important water bodies and watersheds. In FY 2024, EPA will continue to provide resources to accelerate ecological restoration and sustainable management for the Chesapeake Bay, Columbia River, Gulf of Mexico, the Great Lakes, Lake Champlain, Lake Pontchartrain, Long Island Sound, Northwest Forest Watershed, Puget Sound, San Francisco Bay, South Florida, and Southeast New England. Funding will help monitor and restore these ecological treasures and enable sustainable use for years to come. These important geographic efforts also will benefit from the $343 million provided by the IIJA to create synergies for EPA's Geographic Programs in FY 2024.

Categorical Grants
The Agency will provide $493 million in financial support through Categorical Grant Programs to EPA's tribal, state, and local partners to support their efforts in implementing key provisions of the Clean Water Act. Within this amount, $279 million is provided to the Section 106 Grants Program, an increase of $42.4 million from the FY 2023 enacted budget, which funds state, interstate, and tribal water pollution control programs to support actions to identify and take actions to assess and mitigate PFAS in the environment, and is a critical funding source to establish, expand, and implement water quality programs to protect and restore water resources (e.g., rivers, streams, lakes, wetlands, and groundwater). Also included is $189 million for the Section 319 Grants Program, which will continue to focus on implementing watershed projects and maintaining current Nonpoint Source Management Programs to restore impaired waterbodies to meet water quality standards and protect unimpaired waters. In addition, EPA provides $133 million for the Public Water System Supervision (PWSS) Program, which helps support state drinking water programs and technical assistance providers in achieving and maintaining compliance at drinking water systems, amplifying best practices, strengthening state capacity, and certifying drinking water operators. EPA's efforts under this program will help deliver clean drinking water, improve public health, and support environmental justice for overburdened and underserved communities, including rural and tribal communities.

[13] https://www.epa.gov/newsreleases/epa-announces-100th-wifia-loan-investing-115-million-improve-resilience-extreme.

Safeguard and Revitalize Communities

Preventing and cleaning up environmental damage that harms communities and poses a risk to public health and safety continues to be a top priority for the Administration.

Cleaning up contaminated lands so that they can be redeveloped and returned to productive use is a challenge faced by many communities. Cleaning up America's most contaminated land and reducing exposure to toxic substances are critical components of the Agency's strategy to address human health impacts, particularly in underserved communities where many of these sites are located. Approximately 22 percent of Americans live within three miles of a Superfund site. Recent research shows Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 1.2 miles of a Superfund National Priorities List (NPL) site where lead is a contaminant of concern.[14] Remediating contaminated land and restoring it to productive use is not only an environmental imperative but presents an economic opportunity as well. A peer reviewed study found that residential property values within three miles of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and removed from the NPL.[15]

The FY 2024 Budget enables the Agency to continue efforts to clean up hazardous waste sites in communities across the Nation, including those where vulnerable populations, such as children, the elderly, and economically disadvantaged individuals, reside. These hazardous sites also are vulnerable to the effects of climate change, making remediation even more urgent. Federal data in a recent Government Accountability Office (GAO) report suggests that approximately 60 percent of Superfund sites overseen by EPA are in areas that are vulnerable to wildfires and different types of flooding—natural hazards that climate change will exacerbate.[16] The Agency is working to clean up these sites considering climate change implications to protect at-risk populations.

The Budget provides approximately $350 million for the Superfund Program to continue cleaning up some of the Nation's most contaminated land and respond to environmental emergencies and natural disasters, in addition to an estimated $2.5 billion in Superfund tax receipts that will be available to EPA in 2024. The Superfund tax receipts will allow the Agency to continue critical Superfund pre-construction work such as site characterization, construction design, and community outreach/engagement, as well as critical remedial actions to clean up sites as described above, which supports the Administration's Justice40 Initiative. Additionally, this funding will allow the Superfund Emergency Response and Removal Program to effectively and efficiently address situations that require emergency response and removal actions such as chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances including from abandoned and uncontrolled hazardous waste sites.

Investing in brownfields cleanup and redevelopment can revitalize main streets, neighborhoods, and rural communities, increase residential property values, and create good-paying jobs. The

[14] Details can be found at https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series.

[15] Shanti Gamper-Rabindran and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," *Journal of Environmental Economics and Management 65*(3): 345-360, http://dx.doi.org/10.1016/j.jeem.2012.12.001.

[16] https://www.gao.gov/products/gao-20-73.

Budget provides $217 million for EPA's Brownfields Program to provide technical assistance and grants to communities so they can safely clean up and reuse contaminated properties, as well as $20 million for the new Alaska Contaminated Lands Program. These programs support the President's Cancer Moonshot initiative by addressing contaminants that lead to greater cancer risk. Approximately 143 million people live within three miles of a brownfields site that receives EPA funding.[17] In FY 2022, EPA leveraged 14,170 jobs and $1.8 billion in cleanup and redevelopment funds and made 662 additional brownfields sites ready for anticipated use (RAU). Activities undertaken in FY 2024 will leverage approximately 13,400 jobs and $2.6 billion in other funding sources.[18] By September 30, 2023, in support of *Goal 6, Safeguard and Revitalize Communities* and *Goal 5, Ensure Clean and Safe Water for All Communities*, EPA expects to provide technical assistance to at least 10 communities to help achieve reduced exposures to hazardous substances, an Agency Priority Goal for FY 2022 – 2023 to *Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities*.

In FY 2024, the Agency will continue to invest in domestic recycling and solid waste infrastructure that build a circular economy, one where reuse and recycling is the norm. According to the U.S. EPA Recycling Economic Information Report, the U.S. recycling industry supports 680,000 jobs and provides $5.5 billion annually in tax revenues. In addition to these human resources and financial returns, the materials themselves hold great value, as recent data indicate that materials worth $9 billion are thrown away each year. The FY 2024 Budget includes $12.7 million and 53.4 FTE in the Resource Conservation and Recovery Act Waste Minimization and Recyling Program to better support the sustainable management of resources, in addition to a $10 million for Solid Waste Infrastructure in grant funding under State and Tribal Assistance Grants (STAG). This funding will advance efforts to strengthen the U.S. recycling system, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste.

The Agency has a statutory role to ensure that contamination is quickly and effectively cleaned up while ensuring protection of human health and the environment from releases of hazardous substances. Additional resources are provided to help increase protection of fenceline communities from hazardous substance releases from facilities and underground storage tanks. In FY 2024, the Budget includes $37.4 million in the Federal Facilities Program to enable EPA to address critical gaps in its ability to oversee federal agencies/facilities cleanup, including Department of Defense PFAS cleanup under Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The Agency also will assist with homeland security goals by investing in critical resources to replace the outdated Portable High-Throughput Integrated Laboratory Identification System (PHILIS) equipment. PHILIS is EPA's mobile laboratory asset for the on-site analysis of chemical warfare agent and toxic industrial compound contaminated environmental samples. Resources also will be provided to upgrade the Chemical Incident and Radiological Reconnaissance on Unmanned Systems (CIRRUS) with the Airborne Spectral Photometric

[17] U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: (1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; (2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.

[18] U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's Assessment, Cleanup, and Redevelopment Exchange System (ACRES) database.

Environmental Collection Technology (ASPECT) airborne screening capability to more effectively and efficiently support emergency response.

Ensure the Safety of Chemicals for People and the Environment

The FY 2024 Budget provides additional resources to build Agency capacity to manage chemical safety and toxic substances. EPA has significant responsibilities under amendments to the Toxic Substances Control Act (TSCA) to ensure the safety of chemicals in or entering commerce and addressing unreasonable risks to human health or the environment. Chemicals and toxic substances are ubiquitous in our everyday lives and are often released into the environment from their manufacture, processing, use, or disposal. EPA's work in managing chemical safety and toxic substances is particularly important to vulnerable populations, including low-income, minority, and indigenous populations, as well as children, who may be disproportionately affected by, and particularly at risk from, exposure to chemicals.

Based on five years of implementing TSCA since enactment of the bipartisan Lautenberg Act, the Agency has determined that additional FTE are required to increase the capacity of the Program to address the heavy workload associated with chemical risk evaluations and risk management to better support the Agency's ability to meet statutory mandates. Increased funding for the TSCA Program is needed in FY 2024 to advance implementation of the law's requirements. While the Program received additional funding in FY 2023, the full request of $131 million is needed in FY 2024, else achieving the TSCA goals will be a challenge. The FY 2024 Budget for TSCA implementation supports over 535 FTE with appropriated resources and represents a $47.9 million increase over the FY 2023 enacted level. EPA will continue to emphasize quality of work, adherence to statutory intent and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, data development and information collection, and review of Confidential Business Information (CBI) claims.

The Agency also has significant responsibility under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to screen new pesticides before they reach the market and ensure that pesticides already in commerce are safe. In addition, EPA is responsible for complying with the Endangered Species Act (ESA) and ensuring that federally endangered and threatened species are not harmed as a result of the use of pesticides. Endangered species risk assessments involve consideration of risks for approximately 1,200 active ingredients in more than 17,000 pesticide products to the more than 1,600 listed endangered species and 800 designated critical habitats in the United States. Given the complexity of evaluating potential effects to diverse listed species under ESA, EPA has been subject to numerous litigation challenges for registration and registration review actions. To continue making progress toward meeting ESA mandates in FY 2024, EPA requests an additional $27 million and 22.5 FTE to provide a total of $77.7 million and 282 FTE for the Pesticides: Protect the Environment Program. The Agency's Budget also provides $29 million and 69.2 FTE for the Pollution Prevention Program to support businesses, states, tribes, and other partners to promote and facilitate the adoption of approaches to improve multimedia environmental conditions and climate impacts through reductions in pollutants and other hazardous materials. In this Program, $7.9 million and 9 FTE is provided to a new grant program to help small businesses transitioning to TSCA compliant practices to mitigate economic impacts.

As part of the President's commitment to tackling PFAS pollution, the Budget provides approximately $170 million for EPA to continue working toward commitments made in the 2021 PFAS Strategic Roadmap, including: increasing our knowledge of PFAS impacts to human health and ecological effects; restricting use to prevent PFAS from entering the air, land, and water; and remediating PFAS that have been released into the environment.

Ensure Scientific Integrity and Science-based Decision Making

Delivering rigorous scientific research and analyses to guide the Agency's policy and regulatory process and inform evidence-based decision making is one of EPA's cross-agency strategies. Scientific and technological information, data, and evidence-based decision making are central to the development and iterative improvement of sound policies and to the delivery of effective and equitable programs. Environmental challenges in the 21st century are increasingly complex. For example, the interplay between air quality, climate change, and emerging energy options requires new approaches and solutions than those used in the past. These solutions require research that transcends disciplinary lines and involve EPA regions and programs working together with tribal, state, and local partners, stakeholders, and communities.

The FY 2024 Budget includes $643 million and 1,868 FTE for EPA's Office of Research and Development (ORD). EPA requests an increase of $37.4 million and 34.7 FTE to the Air, Climate, and Energy Research Program, which will substantially advance research to assess the impacts of climate change on human health and ecosystems. EPA also requests an increase of $11.3 million and 28.5 FTE to the Chemical Safety for Sustainability Research Program, which will be focused on modernizing the chemical toxicity and assessment process and incorporating scientific advances in new chemical evaluations under TSCA. This funding will lead to the development and translation of science to inform regulatory and policy decisions by the Agency and external partners that increase access to clean and safe air, land, and water for all communities across the Nation.

Continue to Restore EPA's Core Capacity

Ensuring the Agency has the work force it needs to carry out its mission to protect clean air and water, tackle the climate crisis, and promote environmental justice is essential. The Budget adds more than 1,960 Full Time Equivalents (FTEs) relative to 2023 levels, for a total of more than 17,000 FTEs, to help rebuild the Agency's capacity. This FTE level remains below EPA's workforce for much of the 1990s and early 2000s, while today the Agency faces a growing workload and set of statutory responsibilities. Restoring staffing capacity across the Agency would enable EPA to better protect our Nation's health by helping cut air, water, and climate pollution and advancing environmental justice. EPA strives to provide modern and efficient workforce services and serve as a model for diversity, equity, inclusion, and accessibility. In FY 2024, the Agency will continue to support this goal by providing funding to enhance diverse hiring practices, expand EPA's intern program, and strengthen agencywide capacity to increase staff levels in key offices and programs. Effective workforce management is critical to EPA's ability to accomplish its mission. EPA's efforts in human resource functions are focused on strengthening the workforce, retaining critical expertise, and capturing institutional knowledge. EPA continues developing

mechanisms to ensure that employees have the right skills to successfully achieve the Agency's core mission today and in the future.

The FY 2024 Budget provides the funding needed for critical Agency infrastructure that all programs require to maintain operations and meet various mandates. In FY 2024, EPA funds new and rising costs to adequately fund mission support functions across EPA programs and regional offices, including Diversity, Equity, Inclusion and Accessibility (DEIA) and data management, and support agencywide implementation of OMB and DHS cybersecurity mandates. In FY 2024, EPA will continue to implement the actions identified in the Agency's DEIA Strategic Plan. This includes working to ensure that Agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices are equitable.

The FY 2024 Budget also provides robust support for implementation of the Foundations for Evidence-Based Policymaking Act of 2018. EPA has embarked on a multi-year effort to strengthen how the Agency identifies, prioritizes, and undertakes evidence-building activities and develops evidence-building capacity to inform its policies and decisions, consistent with the Evidence Act. An additional $6.4 million and 7.2 FTE above the FY 2023 enacted level is included for evaluation work to support implementation of the Evidence Act. The FY 2024 Budget will continue to promote program evaluation as an essential component of federal evidence building. This effort will advance an evaluation culture through a bottom-up approach and increase agency-wide engagement in program evaluation. By restoring EPA's core capacity and ensuring that mission support services are adequately funded, the FY 2024 Budget will enable the Agency to carry out its mission effectively while being a good steward of federal resources.

In FY 2024, the Agency will continue to reconfigure its workplaces to ensure the physical footprint can accommodate a growing and increasingly hybrid workforce. For example, EPA will continue the space optimization projects at the Agency's laboratories in Ada, Oklahoma, Athens, Georgia, and Corvallis, Oregon to achieve potential long-term cost and energy savings. EPA will consider all opportunities for supporting the future of work, in line with OMB Memoranda M-21-25, including the potential for releasing underutilized space or sharing with other federal agencies, investing in facility enhancements to assess utilization and inform future consolidations or releases, and converting workspaces to support hoteling and hybrid collaboration. In FY 2024, the Budget includes additional resources in the Buildings and Facilities account to pursue critical and backlogged repairs and improvements across EPA, initiate and complete climate resiliency and sustainability projects across EPA-owned facilities, and invest in cutting edge EPA lab facilities, including to support PFAS research.

Support for the Cancer Moonshot

Reducing exposure to environmental contaminants that are known or suspected to cause cancer is embedded in much of EPA's programmatic work. EPA uses cancer incidence as one of the indicators in its Report on the Environment[19] to help answer questions relating to trends in the condition of the Nation's air, water, and land. To support the Administration's Cancer Moonshot initiative, EPA will renew focus on its scientific research and regulatory agenda in FY 2024 to

[19] For more information, please visit: https://www.epa.gov/report-environment/learn-about-roe-program.

better prevent and mitigate cancer-related exposure. The Agency will accomplish this work with a focus on addressing environmental injustice, disparity, and inequities in prevention of and exposure to environmental hazards that can cause cancer. Below are some examples of EPA's work in FY 2024 to support this important initiative.

- *Research to Understand and Address Environmental and Toxic Exposures.* EPA conducts extensive assessments on chemical hazards related to cancer outcomes and has developed a variety of tools for evaluating health hazards posed by chemicals.[20, 21, 22] These programs provide toxicity information and toxicity values for contaminants of concern and have formed the scientific foundation for many of EPA's air and water quality standards and the Superfund Program.

- *Risk Evaluations of Toxic Substances and Pesticides.* In FY 2024, EPA will continue to conduct TSCA risk evaluations on new and existing chemicals to determine if they present an unreasonable risk to human health and the environment. The Agency has authority to order manufacturers to provide information on a chemical's carcinogenicity. In addition, the Pesticide Programs generates an annual list of cancer classifications for all pesticides.

- *Air Toxics and Radon.* EPA implements programs to improve air toxics data, characterize potential cancer risk, and issue regulations to lower emissions and reduce health risk for people across America. The FY 2024 Budget will continue to support work for air toxics and address emerging issues and likely carcinogens such as PFAS. EPA also will continue its efforts to prioritize strategies to reduce radon risk in underserved communities.

- *Drinking Water Regulations Aimed at Reducing Cancer Risks.* The National Primary Drinking Water Regulations include primary standards and treatment techniques for drinking water that remove carcinogens and prevent cancer cases. The PFAS drinking water regulation may prevent additional cancer cases since PFAS exposure is associated with increased risk of prostate, kidney, and testicular cancers. The FY 2024 Budget will continue to support efforts to finalize the PFAS Rule.

- *Remediation at Superfund Sites to Reduce Exposure to Harmful Contaminants.* EPA's Superfund Program cleans up contaminated land to reduce human exposures to harmful contaminants that lead to greater risk for cancer and other health complications. In FY 2024, EPA will continue to oversee federal agencies and facilities cleanup, including Department of Defense PFAS cleanup under CERCLA.

- *Childhood Cancer Prevention.* In FY 2024, EPA will continue to help prevent childhood cancer by expanding the education provided to health care providers, parents, and communities about how to identify cancer clusters, key exposures to carcinogens, and the relationship between environmental exposures and childhood cancer or cancer due to exposures in childhood.

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[20] For more information, please visit: https://www.epa.gov/iris.
[21] For more information, please visit: https://www.epa.gov/pprtv/basic-information-about-provisional-peer-reviewed-toxicity-values-pprtvs#basicinfo.
[22] For more information, please visit: https://www.epa.gov/isa.

Supplemental Funding

Resources in the FY 2024 Budget are complemented by the supplemental funding provided under the landmark Infrastructure Investment and Jobs Act (IIJA) and the transformative Inflation Reduction Act (IRA).

Infrastructure Investment and Jobs Act (IIJA)
The bipartisan IIJA makes historic investments in tackling climate change, protecting public health, creating jobs in communities across the country, and delivering a more equitable future. The IIJA appropriated to EPA approximately $60 billion over a five-year period from FY 2022 through FY 2026. In FY 2024, $11.6 billion of IIJA funding will be available to EPA for upgrading drinking water and wastewater infrastructure, replacing lead pipes, addressing emerging contaminants such as PFAS, protecting critical water bodies, cleaning up longstanding pollution at Superfund and brownfields sites, making improvements to waste management and recycling systems, decarbonizing the Nation's school bus fleet, and advancing the Pollution Prevention Program. The IIJA also invests in strengthening the work of our tribal and state partners and helping create good-paying jobs and increasing climate resilience throughout the country.

Inflation Reduction Act (IRA)
The IRA appropriated $41.5 billion for EPA over the next decade to reduce harmful air pollution in places where people live, work, play, and go to school. With these resources, EPA will target climate change and harmful air pollution while supporting the creation of good jobs and lowering energy costs for families. The Agency will accelerate work on environmental justice and empower community-driven solutions in overburdened neighborhoods by dedicating resources specifically for environmental and climate justice efforts in underserved and overburdened communities. The IRA also contains funding for various grants to assist state, local, and tribal governments with creating their own such programs to address issues affecting their homes.

Allocating Resources to Strategic Goals and Objectives

In accordance with the Government Performance and Results Act of 1993 (GPRA) and the GPRA Modernization Act of 2010, the FY 2024 Budget identifies resources aligned with the strategic goals and objectives of the Agency's *FY 2022 – 2026 EPA Strategic Plan*. The Budget also allocates agencywide mission and science support resources and FTE across the goals and objectives. These resources provide support for multiple goals to achieve their objectives. This support involves the provision of foundational agencywide and cross-agency research and development, science, and essential mission assistance services by the EPA Offices of the Administrator (OA), Chief Financial Officer (OCFO), General Counsel (OGC), Inspector General (OIG), Mission Support (OMS), and Research and Development (ORD). The resource summaries by Strategic Goal and Objective within this Submission provide the total of both direct and allocated resources.

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APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
Science & Technology	$740,947	$802,276	$967,838
Environmental Programs & Management	$2,988,189	$3,286,330	$4,511,011
Inspector General	$48,605	$44,030	$64,526
Building and Facilities	$31,730	$48,752	$111,685
Inland Oil Spill Programs	$21,709	$22,072	$27,551
IG Transfer	$8,706	$11,800	$13,847
S&T Transfer	$30,347	$31,607	$31,928
Superfund Program	$1,209,987	$1,239,293	$310,081
Hazardous Substance Superfund	$1,249,039	$1,282,700	$355,856
Leaking Underground Storage Tanks	$84,427	$93,205	$108,739
State and Tribal Assistance Grants	$3,088,886	$4,493,728	$5,855,624
Hazardous Waste Electronic Manifest System Fund	$12,631	$0	$0
Water Infrastructure Finance and Innovation Fund	$154,098	$75,640	$80,443
Energy R&D No year c/o	$0	$0	$0
SUB-TOTAL, EPA	*$8,420,261*	*$10,148,733*	*$12,083,273*
Cancellation of Funds	$0	-$13,300	$0
TOTAL, EPA	*$8,420,261*	*$10,135,433*	*$12,083,273*

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
Science & Technology	2,005.4	2,022.0	2,265.7
Environmental Programs & Management	8,623.8	9,592.7	11,082.4
Inspector General	244.4	227.5	284.5
Inland Oil Spill Programs	76.9	85.8	99.8
IG Transfer	39.8	42.5	49.0
S&T Transfer	65.4	63.1	63.1
Superfund Program	2,518.0	2,572.4	2,614.3
Hazardous Substance Superfund	2,623.2	2,678.0	2,726.4
Leaking Underground Storage Tanks	42.3	49.4	54.6
State and Tribal Assistance Grants	8.2	7.5	128.6
Hazardous Waste Electronic Manifest System Fund	12.1	11.0	11.0
Water Infrastructure Finance and Innovation Fund	30.8	38.4	40.0
Rereg. & Exped. Proc. Rev Fund	169.6	135.3	135.3
WCF-Reimbursable	225.9	268.0	249.1
Deepwater Horizon Natural Resource Damage Assessment	4.0	0.0	0.0
Pesticide Registration Fund	74.3	0.0	0.0
UIC Injection Well Permit BLM	1.9	0.0	0.0
SUB-TOTAL, EPA	*14,142.8*	*15,115.6*	*17,077.4*
TOTAL, EPA	*14,142.8*	*15,115.6*	*17,077.4*

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Environmental Protection Agency
FY 2024 Annual Performance Plan and Congressional Justification

Table of Contents – Cross-Agency Strategies

Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making

Deliver rigorous scientific research and analyses to inform evidence-based decision making.

EPA's ability to protect human health and the environment depends on the integrity and quality of the information, data, and evidence that secure the scientific foundation for Agency decision making. Identifying and implementing effective strategies, including strategies to adapt to the changing climate, advance environmental justice and equity, and protect children at all life stages, require that decisions be grounded in the best available science and evidence. EPA's Cross-Agency Strategy 1 in the *FY 2022 – 2026 EPA Strategic Plan* will strengthen scientific integrity, advance the delivery of rigorous and independent scientific evaluation and analyses, and ground EPA's actions in the best available science.

Cross-Agency Strategy 1, Ensure Scientific Integrity and Science-Based Decision Making is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, increase the annual percentage of Office of Research and Development (ORD) research products meeting partner needs to 95% from a baseline of 93% in FY 2021.[1]

- By September 30, 2026, implement 126 actions for scientific integrity objectives that are certified by Deputy Scientific Integrity Officials in each EPA program and region.

Science touches all parts of EPA and plays an integral role in informing a range of environmental decisions. EPA program and regional offices support this strategy through a commitment to science as foundational to decision making, scientific integrity, rigorous quality assurance, appropriate peer review, the timely release of scientific information, and transparency in decision making.

As part of this commitment, the Agency will ensure an effective scientific integrity program. Scientific integrity results from adherence to professional values and practices when conducting, communicating, supervising, and developing and implementing science. It ensures objectivity, clarity, reproducibility, and utility, and it safeguards against bias, fabrication, falsification, plagiarism, outside interference, censorship, and inadequate procedures and information security. EPA will advance and strengthen a culture of scientific integrity across the Agency by ensuring adherence to the scientific and ethical standards outlined in EPA's Scientific Integrity Policy. To support employees, contractors, and officials, EPA will provide agencywide training on scientific integrity. Employees, contractors, and officials have access to the Scientific Integrity Official and staff and a network of Deputy Scientific Integrity Officials on whom they can rely for advice or to report allegations of a loss of scientific integrity.[2]

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[1] ORD is tracking environmental justice and climate products as annual performance goals. Please see the annual performance plan table in the President's Budget (https://www.epa.gov/planandbudget/cj) for more information.

[2] The Foundations for Evidence-Based Policymaking Act of 2018 promotes a culture of evaluation and continuous learning that ensures agency decisions are made on the best available evidence including developing an Evaluations and Other Evidence-Building Activities Policy (Evaluation Policy). EPA's Evaluation Policy includes many elements that are related to EPA's Scientific Integrity Policy including principles of independence, objectivity, transparency, and rigor. Please see (https://www.epa.gov/system/files/documents/2022-05/epa-evaluation-evidence-building-policy.pdf) for more information.

EPA's research and science programs support this strategy through the delivery of rigorous scientific research and analyses. The primary mission of the Agency's Office of Research and Development and Regional Lab Enterprise is to provide leading-edge research to meet near-term and long-term science needs of the Agency and inform EPA decisions. This research portfolio also supports the emerging needs of tribal, state, and community partners. Scientific research and development will support: 1) tackling the climate crisis by addressing the causes and consequences of climate change and developing more resilient communities; 2) addressing current, emerging, and long-term water resource challenges; 3) developing scientific and technical approaches to enhance the Agency's ability to evaluate chemicals and their risks; 4) accelerating the pace of cleanups at contaminated sites so they can be returned to beneficial use; 5) revitalizing and protecting the most vulnerable communities and groups; and 6) conducting environmental risk assessments to better inform policies for protecting human health, particularly for children at all life stages. The Agency's regional laboratories provide essential expertise and scientific data for a wide array of media needed to make local decisions. In FY 2024, regional laboratories will analyze scientific data to inform immediate and near-term decisions on environmental conditions, emergency response, compliance, and enforcement.

In FY 2024, the Agency will continue critical research on the highest priority issues. EPA will focus on addressing lead issues associated with the Superfund and childhood lead exposure. The Agency also will continue to emphasize per- and polyfluoroalkyl substances (PFAS) research to increase understanding of PFAS exposures, human health and ecological effects, and technologies for reducing PFAS in the environment. In addition, the Agency will continue to advance the Administration's science-based approach to improve wildfire readiness by enhancing wildfire data and communications related to air quality and helping communities become "smoke ready."

Cross-Agency Strategy 2: Consider the Health of Children at All Life Stages and Other Vulnerable Populations

Focus on protecting and improving the health of children at all life stages and other vulnerable populations in implementing our programs.

EPA's programs will apply and promote the use of science, policy, partnerships, communications, and action to protect children at all life stages and other vulnerable populations from adverse health effects resulting from exposure to pollution and the impacts of climate change. EPA also will take actions to protect children and other vulnerable populations in underserved communities where socioeconomic determinants of health exacerbate the harm caused by these environmental stressors.

Children's environmental health refers to the effect of the environment on children's growth, wellness, development, and risk of disease. EPA actions will be informed by two important considerations: first, the scientific understanding of childhood as a sequence of life stages, and second, the recognition that protecting children's health is necessary to protect human health, because every adult was once a child. The effects of early life exposures may become apparent during childhood or may not arise until adulthood or in later generations.

Cross-Agency Strategy 2, Consider the Health of Children at All Life Stages and Other Vulnerable Populations is directly supported by the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, assess and consider environmental health information and data for children at all life stages for EPA actions that concern human health.[3]

To best protect children's environmental health at all life stages and vulnerable populations, EPA will identify, assess, develop, and promote the use of science to support its policies, decisions, and actions, including regulations and voluntary programs. EPA also will ensure that agency toxicity, exposure, and risk assessments consider all relevant and available science to address the unique vulnerabilities of children and vulnerable populations, including disproportionate impacts related to race, ethnicity, income, existing health problems, or other social determinants of health.

In FY 2024, EPA's Children's Health Program will continue its core work to:

- Coordinate and advance the protection of children's environmental health across EPA by assisting with development of regulations, improving risk assessment and science policy, implementing community-level outreach and education programs, and tracking indicators of progress on children's health.

- Coordinate two plenary meetings of the Children's Health Protection Advisory Committee,[4] including delivery of expert responses to additional charge questions related to high priority children's environmental health issues.

[3] Changed from "By September 30, 2026, assess and consider environmental health information and data for children at all life stages for all completed EPA actions that concern human health."
[4] For additional information, please visit: https://www.epa.gov/children/chpac.

- Tackle the climate crisis and advance environmental justice by following up on recommendations from the National Academy of Sciences, which highlighted the latest scientific advancement and challenges to protecting children's health, and continue to implement the *2021 Policy on Children's Health* to ensure that EPA consistently and explicitly considers early life exposures and lifelong health in all human health decisions.[5]

- Support health care professionals via the Pediatric Environmental Health Specialty Units to better address risks from childhood exposures, particularly in communities with environmental justice concerns.

- Partner with the Department of Health and Human Services to lead the cross-federal President's Task Force on Environmental Health Risks and Safety Risks to Children.[6]

To continue to implement Executive Order (EO) 13045: *Protection of Children from Environmental Health Risks and Safety Risks* in FY 2024 EPA also will:

- Support the EPA Administrator to convene the President's Task Force on Environmental Health Risks and Safety Risks to Children. The focus of this work will be on protecting children from adverse consequences of climate change and disasters, addressing disparities in asthma among children, and reducing childhood lead poisoning.

- Take actions to protect children in underserved communities who suffer disproportionately from the effects of pollution exposures exacerbated by socio-economic determinants of health.

[5] For additional information, please visit: https://nap.nationalacademies.org/catalog/25466/vibrant-and-healthy-kids-aligning-science-practice-and-policy-to.
[6] For additional information, please visit: https://ptfcehs.niehs.nih.gov/.

Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity

Foster a diverse, equitable, and inclusive workforce within an effective and mission-driven workplace.

To support its mission to protect human health and the environment, EPA will make significant progress in FY 2024 to advance organizational excellence and workforce equity. The Agency will strengthen workforce planning of mission-critical positions and support succession management for the next generation of workers while emphasizing diversity, equity, inclusion, and accessibility (DEIA). EPA will modernize information technology systems, enhance the physical workplace for a hybrid workforce, support employee-friendly work policies, and transition to a paperless work environment. EPA will focus on implementing efficient and effective processes across the full range of agency efforts, utilizing proven continuous improvement techniques and training to equip staff to solve problems and enhance our ability to accomplish our mission. Additionally, EPA will continue to safeguard against cybersecurity risks to protect agency assets and infrastructure from potentially malicious attacks. Further, EPA will be a leader in the federal government in advancing the sustainability of facilities and operations while developing resiliency to respond to the risks of climate change. EPA will eliminate barriers to its procurement processes through greater diversification of the Agency's vendor base, increasing engagement and technical assistance, and enhancing the Agency's contracts with new vendors, including with small and underserved businesses and targeting businesses located in Historically Underutilized Business Zones (HUBZones).[7] EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results.

Cross-Agency Strategy 3, Advance EPA's Organizational Excellence and Workforce Equity is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, EPA will achieve the highest Diversity, Equity, Inclusion and Accessibility (DEIA) Maturity Level of "Leading and Sustaining" as defined by the November 2021 *Government-wide Strategic Plan to Advance DEIA in the Federal Workforce* and achieve all EPA goals identified in the Agency's Gender Equity and Equality Action Plan.

- By September 30, 2026, improve 1,000 operational processes.

- By September 30, 2026, initiate all priority climate resiliency projects for EPA-owned facilities within 24 months of a completed facility climate assessment and project prioritization.

[7] For additional information, please consult the Small Business Administration's HUBZone Program webpage: https://www.sba.gov/federal-contracting/contracting-assistance-programs/hubzone-program.

- By September 30, 2026, EPA will be in full compliance with the five high-priority directives in Executive Order 14028 - *Improving the Nation's Cybersecurity*.

- By September 30, 2026, award 4% of EPA contract spending to small businesses located in HUBZones compared to the FY 2018-2020 average annual baseline of 2.2%.

- By September 30, 2026, automate the major EPA permitting programs.

- By September 30, 2026, automate all priority internal administrative processes.

In FY 2024, EPA will continue to implement the Agency's DEIA Plan to advance progress towards recruiting and maintaining a workforce representative of the American public that promotes a culture of inclusion and accessibility within the Agency. By the end of FY 2024, EPA will have achieved at least the Level 2: Advancing Outcomes maturity level as defined by the November 2021 Government-wide Strategic Plan to Advance DEIA in the Federal Workforce.[8]

In FY 2024, EPA will make progress towards equity goals by eliminating barriers in its procurement processes and increasing the amount of spending on small and disadvantaged businesses. EPA will provide technical assistance to small business vendors on navigating federal contracting requirements and ensure that new EPA procurements are accessible in scope and requirements for small businesses to successfully compete. This work will yield an increase in contract spending awarded to small and disadvantaged businesses, including those located in HUBZones.

In FY 2024, EPA will continue to implement its Future of Work plans that will re-envision both the workforce and the physical workspace of the Agency. Activities will include modernization and transformation of collaborative spaces across several agency facilities to encourage seamless engagement of a hybrid workforce, leveraging the latest collaboration and productivity IT tools and software, and a continued investment in IT infrastructure to sustain the increase in telework, remote work, and operational readiness. Additionally, EPA will continue to manage flexible workforce policies and procedures that maximize productivity to support a hybrid workforce and enable EPA to be a model employer.

In FY 2024, EPA will continue to pursue information technology systems and infrastructure modernization, innovation, and automation of internal administrative forms and processes to achieve a paperless work environment. To support the Agency's Cybersecurity posture, EPA will continue to accelerate cloud adoption. In addition, EPA will continue to increase adoption of Multifactor Authentication, encryption for agency systems and data, adoption of a Zero Trust Architecture, and meeting advanced logging requirements to accomplish Executive Order (EO) 14028: *Improving the Nation's Cybersecurity*.

In FY 2024, in support of EO 14008: *Tackling the Climate Crisis at Home and Abroad*, EPA will conduct climate resiliency assessments at six EPA-owned facilities. These assessments will

[8] For more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2021/11/Strategic-Plan-to-Advance-Diversity-Equity-Inclusion-and-Accessibility-in-the-Federal-Workforce-11.23.21.pdf.

include identifying potential projects the Agency can implement to increase facility resiliency against the impacts of climate change, such as roofing stability, building envelope, and emergency power projects. Following completion of a climate assessment, EPA will initiate high-priority projects within 24 months. Further, EPA will continue progress towards achieving carbon-pollution free energy use and net-zero emissions in line with Administration sustainability goals.

In FY 2024, the Agency will continue to modernize its financial systems to gain greater efficiencies by improving accounting systems and retiring legacy systems. OCFO is evolving duplicative and manual work by automating and modifying business processes and enhancing the ability to generate automated reports. Robotics Process Automation (BOTS) will be a part of the overall strategy to reduce manual work, decrease error, and improve efficiency. In FY 2024, EPA will continue to expand and enhance easy to use dashboards to manage resources and track performance. Adopting Treasury's Invoice Processing Platform and G-Invoicing solution (for interagency agreements) will further standardize processes and allow for retirement of legacy administrative systems. Additionally, the Agency will leverage senior staff engagement in continuous improvement through nearly 100 executive-sponsored improvement projects annually. EPA also is applying continuous improvement tools and initiatives to support IIJA implementation with an emphasis on improving processes related to hiring and grants.

In FY 2024, EPA will collaborate with the Agency's major permitting programs to establish the target number of permit processes to be automated.[9] Automation of permit processes will reduce processing time on issuing permits, decrease the time between receiving monitoring data and engaging in enforcement actions, and foster transparency by allowing communities to search, track, and access permitting actions easily. Further, permit automation will enable the integration of climate change and environmental justice considerations into permit processes and ensure that they are addressed within the terms and conditions of the permit. For the regulated community, permit automation will allow for a simplified, streamlined, and transparent permitting process that will result in time and costs savings. For communities and stakeholders, permit automation can empower communities, especially communities with environmental justice concerns, to actively participate in the permit decision-making process and post-permit related compliance.

[9] Broad statutory frameworks for the permitting programs are found in Sections 165, 173, and 502 of the Clean Air Act (42 U.S.C. §§ 7475, 7503, and 7661a); Section 402 of the Clean Water Act (33 U.S.C. § 1342); Section 3006 of the Resource Conservation and Recovery Act (42 U.S.C. § 6926), and Section 1422 and Section 1425 of the Safe Drinking Water Act (42 U.S.C. §§ 300h and 300h-4).

Cross-Agency Strategy 4: Strengthen Tribal, State, and Local Partnerships and Enhance Engagement

Collaborate and engage effectively with Tribal Nations in keeping with the Federal Government's trust responsibilities, state and local governments, regulated entities, and the public to protect human health and the environment.

Protecting human health and the environment is a shared responsibility of EPA and its tribal, state, and local government partners. With tribal governments, EPA also has a historic and fundamental trust responsibility. Environmental outcomes are best achieved through collaborative and effective partnerships across all levels of government, successful oversight of federally delegated programs, and robust engagement with non-governmental organizations, national and community groups, stakeholders, and the public, built on a foundation of public trust and transparency, including through timely responses to information requests. Through a renewed focus on fostering intergovernmental relationships, improving on-the-ground community engagement, delivering high-impact environmental education programs, and increasing public trust and transparency, EPA will forge stronger partnerships. As a result, EPA will be better positioned to advance durable solutions to its most pressing challenges and ensure the equitable protection of all communities, including those who have historically been underserved and overburdened.

Cross-Agency Strategy 4, Strengthen Tribal, State, and Local Partnerships and Enhance Engagement is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, consider tribal treaty rights as part of all EPA tribal consultations that may affect tribal treaty rights.

- By September 30, 2026, eliminate the backlog of overdue Freedom of Information Act (FOIA) responses, compared to the FY 2021 baseline of 1,056.

In light of the disproportionate impact of environmental pollution on Native Americans, EPA is committed to strengthening its Nation-to-Nation relationship with American Indian and Alaska Native Tribal Nations. EPA will strive to meet its federal trust responsibility and work to integrate consideration of tribal treaty and reserved rights early into decision making and regulatory processes.

The early, meaningful, and substantial involvement of EPA's co-regulator partners is critical to the development, implementation, and enforcement of the Nation's environmental programs. With a renewed focus on climate, environmental justice, and children's health, EPA will emphasize frequent and early communication as a keystone of its partnership with tribal and state co-regulators, since EPA must thoughtfully consider their concerns and existing regulatory programs to develop effective and lasting solutions to our most pressing environmental challenges.

In FY 2024, EPA will continue to support the Agency's web-based tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

In addition, EPA will update key policies and guidances related to overseeing states' implementation of federal environmental programs. These updates are intended to strengthen and improve the Agency's oversight of federally delegated environmental programs.

In FY 2024, EPA will continue to enhance transparency, build public trust in Agency actions, and support public participation by strengthening its implementation of the Freedom of Information Act (FOIA). EPA will improve its processing of FOIA requests, in particular, to address the increasing complexity and volume of electronic documents required to be searched, collected, and reviewed when responding to FOIA requests. The Agency will work to increase processing speed and to apply appropriate technologies to ensure it supports the timely searching and collection of information for purposes of responding to FOIA requests and other information needs in a cost-effective and sustainable manner. In addition, EPA will procure and prepare to launch a new FOIA recordkeeping and processing software solution to replace FOIAonline at the beginning of FY 2024.

Table of Contents – Goal and Objective Overview

GOAL, APPROPRIATION SUMMARY

Budget Authority
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
Tackle the Climate Crisis	$515,493	$599,283	$909,964
Science & Technology	$178,075	$200,330	$272,451
Environmental Programs & Management	$268,874	$265,320	$449,120
State and Tribal Assistance Grants	$68,545	$133,633	$188,393
Take Decisive Action to Advance Environmental Justice and Civil Rights	$278,287	$385,330	$758,430
Environmental Programs & Management	$171,184	$264,934	$622,844
Hazardous Substance Superfund	$800	$6,248	$15,449
State and Tribal Assistance Grants	$106,303	$114,148	$120,137
Enforce Environmental Laws and Ensure Compliance	$756,146	$803,726	$757,066
Science & Technology	$23,100	$23,652	$26,177
Environmental Programs & Management	$466,895	$510,167	$626,846
Inland Oil Spill Programs	$3,567	$3,824	$5,713
Hazardous Substance Superfund	$225,248	$225,549	$56,729
Leaking Underground Storage Tanks	$711	$734	$767
State and Tribal Assistance Grants	$36,625	$39,800	$40,835
Ensure Clean and Healthy Air for All Communities	$754,266	$809,802	$1,401,734
Science & Technology	$38,172	$40,492	$55,231
Environmental Programs & Management	$325,983	$330,424	$742,640

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
Hazardous Substance Superfund	$2,408	$2,926	$7,013
State and Tribal Assistance Grants	$387,702	$435,960	$596,850
Ensure Clean and Safe Water for All Communities	$3,830,705	$5,182,344	$6,373,747
Science & Technology	$10,102	$7,264	$9,141
Environmental Programs & Management	$1,089,313	$1,213,354	$1,279,388
State and Tribal Assistance Grants	$2,694,483	$3,880,700	$4,999,721
Water Infrastructure Finance and Innovation Fund	$36,763	$81,026	$85,497
Deepwater Horizon Natural Resource Damage Assessment	$30	$0	$0
UIC Injection Well Permit BLM	$15	$0	$0
Safeguard and Revitalize Communities	$1,840,703	$1,912,643	$1,301,017
Science & Technology	$67,084	$69,911	$122,342
Environmental Programs & Management	$304,947	$303,529	$368,101
Building and Facilities	$15,940	$14,720	$13,082
Inland Oil Spill Programs	$22,663	$22,732	$26,815
Hazardous Substance Superfund	$1,038,760	$1,079,928	$281,458
Leaking Underground Storage Tanks	$89,786	$100,444	$121,116
State and Tribal Assistance Grants	$288,892	$321,379	$368,104
Hazardous Waste Electronic Manifest System Fund	$12,631	$0	$0
Ensure Safety of Chemicals for People and the Environment	$444,661	$455,605	$581,315
Science & Technology	$10,716	$10,278	$11,182
Environmental Programs & Management	$390,577	$396,282	$512,201
State and Tribal Assistance Grants	$42,660	$49,045	$57,932
Pesticide Registration Fund	$708	$0	$0

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
Sub-Total	*$8,420,261*	*$10,148,733*	*$12,083,273*
Cancellation of Funds	$0	-$13,300	$0
TOTAL, EPA	$8,420,261	$10,135,433	$12,083,273

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
Tackle the Climate Crisis	1,171.0	1,237.2	1,467.8
Science & Technology	450.1	470.8	528.5
Environmental Programs & Management	670.9	683.4	852.1
State and Tribal Assistance Grants	50.0	83.0	87.1
Take Decisive Action to Advance Environmental Justice and Civil Rights	624.0	848.8	1,181.0
Environmental Programs & Management	523.2	736.4	1,065.4
Hazardous Substance Superfund	2.3	13.8	29.0
State and Tribal Assistance Grants	98.6	98.3	86.7
WCF-Reimbursable	0.0	0.2	0.0
Enforce Environmental Laws and Ensure Compliance	2,926.8	3,173.7	3,353.6
Science & Technology	78.4	77.8	84.1
Environmental Programs & Management	1,914.3	2,121.0	2,292.4
Inland Oil Spill Programs	13.9	15.1	15.8
Hazardous Substance Superfund	892.2	933.8	937.9
Leaking Underground Storage Tanks	3.4	3.4	3.4
State and Tribal Assistance Grants	21.9	22.6	20.1
Rereg. & Exped. Proc. Rev Fund	2.5	0.0	0.0
Ensure Clean and Healthy Air for All Communities	1,670.2	1,749.8	2,207.0
Science & Technology	79.9	85.6	98.9
Environmental Programs & Management	1,362.4	1,432.3	1,886.8
Hazardous Substance Superfund	12.3	12.1	21.0
State and Tribal Assistance Grants	215.6	219.8	200.2
Ensure Clean and Safe Water for All Communities	2,761.4	3,021.8	3,271.5
Science & Technology	26.3	24.4	28.7
Environmental Programs & Management	2,088.0	2,282.6	2,325.2

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget
State and Tribal Assistance Grants	599.7	661.2	863.6
Water Infrastructure Finance and Innovation Fund	41.2	53.6	54.0
Deepwater Horizon Natural Resource Damage Assessment	4.1	0.0	0.0
UIC Injection Well Permit BLM	2.0	0.0	0.0
Safeguard and Revitalize Communities	3,323.9	3,404.4	3,642.6
Science & Technology	153.7	155.3	231.9
Environmental Programs & Management	1,038.3	1,085.9	1,264.9
Building and Facilities	20.0	17.8	13.6
Inland Oil Spill Programs	82.6	91.3	104.3
Hazardous Substance Superfund	1,796.2	1,806.0	1,766.0
Leaking Underground Storage Tanks	62.1	69.6	78.7
State and Tribal Assistance Grants	146.8	154.2	163.1
Hazardous Waste Electronic Manifest System Fund	12.1	11.0	11.0
WCF-Reimbursable	12.0	13.3	9.2
Ensure Safety of Chemicals for People and the Environment	1,665.5	1,679.9	1,954.0
Science & Technology	27.5	28.5	28.5
Environmental Programs & Management	1,364.9	1,482.0	1,757.2
State and Tribal Assistance Grants	28.0	34.2	32.9
Rereg. & Exped. Proc. Rev Fund	166.8	135.3	135.3
Pesticide Registration Fund	78.2	0.0	0.0
Sub-Total	*14,142.8*	*15,115.6*	*17,077.4*
TOTAL, EPA	14,142.8	15,115.6	17,077.4

Tackle the Climate Crisis

Goal 1: Tackle the Climate Crisis—Cut pollution that causes climate change and increase the adaptive capacity of Tribes, states, territories, and communities.

STRATEGIC OBJECTIVES:

- Objective 1.1: Reduce Emissions that Cause Climate Change—Aggressively reduce the emissions of greenhouse gases from all sectors while increasing energy and resource efficiency and the use of renewable energy.
- Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts—Deliver targeted assistance to increase the resilience of Tribes, states, territories, and communities to the impacts of climate change.
- Objective 1.3: Advance International and Subnational Climate Efforts—Collaborate with Tribal, state, local, and international partners and provide leadership on the global stage to address climate change.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	**FY 2023 Enacted Operating Plan**	**FY 2024 President's Budget**	**FY 2024 President's Budget v. FY 2023 Enacted Operating Plan**
Tackle the Climate Crisis	**$515,493**	**$599,283**	**$909,964**	**$310,681**
Reduce Emissions that Cause Climate Change	$391,014	$472,195	$679,420	$207,224
Accelerate Resilience and Adaptation to Climate Change Impacts	$59,081	$61,129	$134,864	$73,735
Advance International and Subnational Climate Efforts	$65,398	$65,959	$95,681	$29,722
Total Authorized Workyears	1,171.0	1,237.2	1,467.8	230.6

Goal 1: Tackle the Climate Crisis

Cut pollution that causes climate change and increase the adaptive capacity of tribes, states, territories, and communities.

Introduction

Climate change is a global issue that has far-reaching human health, social, economic, and biodiversity impacts on our planet. It directly and adversely affects the United States. Climate change is accelerating the frequency and severity of wildfires and extreme weather events, such as hurricanes, floods, heat waves, and drought, and is altering sea temperature, ocean acidity, sea-level, and other global systems that support human life and biodiversity. Climate change impacts include famine, property loss, mass migrations, human conflict, species extinctions, and ecosystem failures, with significant humanitarian, economic and national security implications. Certain communities and individuals are particularly vulnerable to these impacts, including low-income communities and communities of color, children, the elderly, tribes, and indigenous people.

The impacts of climate change challenge EPA's ability to accomplish its mission of protecting human health and the environment because climate change can exacerbate existing pollution problems and environmental stressors. EPA is working with other federal agencies to reduce greenhouse gas (GHG) emissions and increase the climate resilience of the Nation, with a particular focus on protecting and helping disadvantaged communities. Climate change is a global issue, and domestic action must go hand in hand with international leadership. EPA will continue to extend its expertise internationally, while learning from the expertise of others, to help shape and advance international agreements and solutions.

In FY 2024, EPA will drive reductions in emissions that significantly contribute to climate change through regulations on GHGs, climate partnership programs, and support to tribal, state, and local governments. The Agency will accomplish this through the transformative investments in the Inflation Reduction Act (IRA), the bipartisan Infrastructure Investment Jobs Act (IIJA), and our base appropriation, which funds the core operating accounts of the Agency. In FY 2024 and beyond, EPA will ensure its programs, policies, regulations, enforcement and compliance assurance activities, and internal business operations consider current and future impacts of climate change. EPA will consult and partner with tribes, states, territories, local governments and communities, businesses, and other federal agencies to strengthen adaptive capacity. By engaging with organizations representing overburdened and underserved communities, EPA will ensure its GHG mitigation and adaptation activities address environmental justice and equity concerns for all communities. Finally, EPA plans to implement international climate engagements that result in an individual partner commitment or action to reduce GHG emissions, adapt to climate change, and improve resilience in a manner that promotes equity. The FY 2024 President's Budget includes $909.9 million and 1,467.8 FTE for *Goal 1: Tackle the Climate Crisis.* Importantly, this total includes $5 million for additional administrative support to ensure the sound implementation of the $27 billion Greenhouse Gas Reduction Fund under the Inflation Reduction Act, which received an administrative set aside of less than half of one percent in that appropriation.

Objective 1.1: Reduce Emissions that Cause Climate Change – *Aggressively reduce the emissions of greenhouse gases from all sectors while increasing energy and resource efficiency and the use of renewable energy.*

The FY 2024 Budget includes $679.4 million and 965.1 FTE for Objective 1.1. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, promulgate final rules to reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.
- By September 30, 2026, EPA's climate partnership programs will reduce expected annual greenhouse gas (GHG) emissions by 545 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). EPA's climate partnership programs reduced 518.6 $MMTCO_2e$ of annual GHG emissions in 2019.

In FY 2024, EPA will drive significant reductions in the emissions that cause climate change through regulation of GHGs; climate partnership programs such as ENERGY STAR; support for tribal, state, and local governments; and publication of GHG emissions data. EPA regulations will cut GHG pollutants, including carbon dioxide (CO_2), methane, and HFCs. EPA will collaborate closely with stakeholders to promote energy efficiency, renewable energy, and decarbonization of the Nation's electric grid. By continuing the transition away from reliance on high-emitting fossil fuels, EPA programs will cut GHG emissions from cars, trucks, homes, and businesses.

In the FY 2024 Budget, an additional $207.2 million and 119.8 FTE is provided to advance the Agency's priority work to mitigate climate change. This includes activities such as issuance of final rules to set new standards for light and medium-duty vehicles, development of a final rule to set new GHG emission standards for Model Year (MY) 2030 and later heavy-duty vehicles, and finalization of rulemakings proposed in FY 2023 under the American Innovation and Manufacturing (AIM) Act.[1] EPA will also finalize standards for new and existing facilities in the oil and gas sector and rules to limit GHG emissions from new and existing sources in the power sector. The additional funding will bolster implementation efforts related to the Agency's GHG rulemakings (e.g., review of state plans to implement the oil and gas or power sector rulemakings). Additional funding also is requested for EPA to update and enhance its infrastructure to track and report on GHG reductions (e.g., revisions to the Greenhouse Gas Reporting Program to require reporting of methane emissions from the oil and gas sector, and enhanced reporting of emissions from other U.S. industrial sectors).

Under the AIM Act of 2020, EPA will work with industry to phase down the production and import of HFCs, which are commonly used in refrigerators, air conditioners, and in many other applications. The AIM Act directs EPA to take steps to sharply reduce production and consumption of these harmful GHG pollutants by using an allowance allocation and trading program. This phasedown will decrease the production and import of HFCs in the United States by 85 percent over the next 15 years. A global HFC phasedown is expected to avoid up to 0.5°C of global warming by 2100. Within the additional request, $64.4 million and 24 FTE are requested to

[1] For more information on the AIM Act, please visit: https://www.epa.gov/climate-hfcs-reduction/aim-act.

implement provisions in the AIM Act to phase down the use of HFCs, to facilitate U.S. entry to the Kigali amendment to the Montreal Protocol, and to restore staff capacity around efforts to tackle the climate crisis. For example, this investment includes resources to implement innovative IT solutions, such as a QR system and database integration across EPA and Customs and Border Patrol to help ensure that the phasedown is not undermined by illegal imports, as has happened in Europe.

EPA finalized robust federal GHG emissions standards for passenger cars and light trucks to secure pollution reductions through Model Year (MY) 2026. In FY 2024, EPA will promulgate a final rulemaking for new multi-pollutant emissions standards, including for GHG emissions, for light- and medium-duty vehicles beginning with MY 2027 and extending through and including at least MY 2030. These standards will help transition the fleet to zero and near-zero emissions. In FY 2024, EPA also will promulgate a final rulemaking to establish new GHG emissions standards for heavy-duty engines and vehicles. This rule will reduce GHG and other emissions from highway heavy-duty vehicles, the second-largest source of transportation GHG emissions. EPA will ensure additional GHG and air quality benefits by testing vehicles, engines, and fuels to certify that they comply with federal clean air, GHG, and fuel economy standards. In FY 2024, EPA is requesting an additional $52.5 million and 46.8 FTE for the development of analytical methods, regulations, and analyses to support climate protection by controlling greenhouse gas emissions from light duty, medium-duty, and heavy-duty vehicles. The additional funding also invests in the maintenance, repair and replacement of aging test equipment and infrastructure at the National Vehicle and Fuel Emissions Laboratory.

In FY 2024, EPA will continue to work with other federal agencies to promote more sustainable and resilient communities. This includes identifying and pursuing opportunities to reduce barriers to deploying EV charging infrastructure and working with tribes, states, and communities to ensure equitable distribution and thoughtful community integration of charging infrastructure, including for electric buses and delivery and rideshare vehicles.

In meeting the requirements of Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*[2] and as part of the Administration's comprehensive approach to tackling the climate crisis, EPA will issue rules to reduce CO_2 and methane from power plants and oil and gas facilities. These rules will be informed by robust engagement with tribes, states, communities, and regulated entities and by any guidance from the judiciary.

Through voluntary partnership programs, EPA will work to incentivize energy efficiency and further decarbonize the transportation, power generation, industrial, and building sectors. Some examples of these programs include ENERGY STAR, Green Power Partnership, Natural Gas STAR, AgSTAR, *GreenChill*, and *SmartWay*. In FY 2024, EPA will continue to implement these climate partnership programs to improve delivery of energy efficiency, clean energy, and heat mitigation solutions to historically underserved and overburdened communities. EPA also will

[2] Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis* (January 20, 2021): https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

continue domestic programs and international collaboration to reduce exposures to harmful emissions from cookstoves.

EPA will continue to implement the U.S. GHG Reporting Program, which collects and publishes data from more than 8,100 facilities from 41 large industrial source categories in the United States. EPA will improve models of climate change impacts, including how risks and economic impacts can be reduced under mitigation and adaptation scenarios. EPA will also continue to make the Climate Change Indicators website more accessible through enhanced visualization.

In FY 2024, EPA will work to complete the annual Inventory of U.S. Greenhouse Emissions and Sinks,[3] and to improve inventory methodologies in areas such as oil and gas, land-use, and waste, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines. EPA will also meet upcoming Paris reporting requirements and create a new GHG emission calculator, linked to Portfolio Manager, to develop building GHG inventories that fully comply with accounting protocols and local mandates.

Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts – *Deliver targeted assistance to increase the resilience of tribes, states, territories, and communities to the impacts of climate change.*

The FY 2024 Budget includes $134.9 million and 261.5 FTE for Objective 1.2. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, implement all priority actions in EPA's Climate Adaptation Action Plan and the 20 National Program and Regional Climate Adaptation Implementation Plans to account for the impacts of the changing climate on human health and the environment.[4]
- By September 30, 2026, assist at least 400 federally recognized tribes to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.
- By September 30, 2026, assist at least 450 states, territories, local governments, and communities, especially communities that are underserved and disproportionately at risk from climate change, to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

EPA will take necessary actions to anticipate, prepare for, and adapt to the impacts of climate change to ensure EPA continues to fulfill its mission of protecting human health and the environment even as the climate changes and disruptive impacts increase. It will also support the development of climate adaptation strategies at the local level to advance the climate resilience of tribes, states, territories, local governments, and communities across the Nation. EPA will actively engage organizations representing overburdened and underserved communities that are more vulnerable to climate impacts to ensure the Agency's adaptation plans reflect the principles of environmental justice and equity. EPA's commitments are part of a whole-of-government

[3] For more information, please visit: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinksb
[4] These plans are available at: https://www.epa.gov/climate-adaptation/climate-adaptation-plan.

approach to pursue actions at home and abroad to avoid the most catastrophic impacts of climate change.

In FY 2024, EPA will continue to modernize its financial assistance programs to encourage climate-resilient investments across the Nation. The Agency will focus on ensuring that the outcomes of its investments are resilient to the impacts of climate change. In addition, EPA will lead by example and prioritize climate resiliency investments across EPA-owned facilities. EPA will conduct climate resiliency assessments at EPA-owned facilities, prioritize investments, and initiate work on priority projects. In FY 2024, EPA will continue to pursue aggressive energy, water, and building infrastructure improvements to advance the Agency's use of carbon pollution-free electricity.

The FY 2024 Budget includes additional $45.3 million and 26.5 FTE for its work in the Climate Adaptation Program. In FY 2024, EPA will continue to implement its 2021 Climate Adaptation Action Plan as well as the 20 Climate Adaptation Implementation Plans developed by the Program and Regional Offices in FY 2022 and updated in FY 2023. Each Program and Regional Office will implement the priority actions identified in their Implementation Plans to address the five agency-wide priorities from the 2021 EPA Climate Adaptation Action Plan. These strategies are informed by the best available science and deliver co-benefits for mitigation of GHG and other pollution, public health, economic growth and job creation, national security, and environmental justice − all of which will be central to building a more resilient future. These actions will integrate climate adaptation planning into agency programs, policies, rulemaking processes, enforcement and compliance assurance activities, financial mechanisms, and operations to ensure they are effective even as the climate changes. EPA will leverage the additional resources and FTEs provided in FY 2024 to implement selected additional priority actions identified in program and regional Climate Adaptation Implementation Plans. These additional actions will enhance the adaptive capacity and resilience of states, tribes, territories, local governments, and communities by providing technical assistance through the program and regional offices.

In FY 2024, EPA will provide targeted assistance to tribes and indigenous peoples, states, territories, local governments, communities, and businesses to bolster these groups' climate resilience efforts. The Agency will focus resources on communities with environmental justice concerns to develop new strategies that strengthen adaptive capacity and increase climate resilience across the Nation. The Agency will produce and deliver training, tools, technical assistance, financial incentives, and information the Agency's partners indicate they need to adapt and to increase resilience to climate change.

All of the baseline and additional priority actions identified in the 20 Climate Adaptation Implementation Plans support at least one of the three Long Term Performance Goals in Objective 1.2. The priority actions support EPA's efforts to continue to fulfill its mission even as the climate changes and disruptive impacts increase. The additional resources also will be used to advance climate justice through the provision of grants and technical assistance and protect communities that are disproportionately affected by climate change.

Objective 1.3: Advance International and Subnational Climate Efforts – *Collaborate with tribal, state, local, and international partners and provide leadership on the global stage to address climate change.*

The FY 2024 Budget includes $95.6 million and 241.2 FTE for Objective 1.3. This objective is directly supported by the following long-term performance goal in the *FY 2022 - 2026 EPA Strategic Plan*.

- By September 30, 2026, implement at least 40 international climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG) emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

Moving forward in addressing the climate crisis calls for international as well as domestic efforts. EPA has an important role in helping countries respond to the climate crisis as well as in reducing domestic climate impacts. Progress will require both significant short-term global reductions in GHG emissions and net-zero global emissions by mid-century alongside increased and equitable adaptation and resiliency to climate change impacts. EPA's responsibilities for protection of human health and the environment mean that EPA play a critical role internationally in providing technical expertise, guidance, and capacity building to help countries set and meet ambitious GHG reductions, improving adaptive capacity, and strengthening climate governance. Specifically, EPA international work will further the environmental governance of priority partner countries so that they can implement and enforce effective climate mitigation activities and incorporate environmental justice climate principles. Without basic governance infrastructure, it is difficult for many countries to make progress on their Nationally Determined Contributions (NDCs) under the Paris Agreement, opening the Agreement to criticism about lack of developing country action on climate. EPA will enhance capacity building governance programs for priority countries with increasing GHG footprints and increase their capacity to implement partnerships as well as legislative, regulatory, and legal enforcement. These programs will also work to improve adaptive capacity and mitigation strategies of pollution burdened, vulnerable and indigenous communities.

These efforts support Executive Order (EO) 14008: *Tackling the Climate Crisis at Home and Abroad,*[5] which directs federal agencies to develop plans for integrating climate considerations into their international work, as appropriate and consistent with applicable law. Objective 1.3 fulfills EO 14008 by dedicating EPA expertise to help countries build capacity so they can set and meet ambitious GHG reduction commitments under the Paris Agreement, while also building resilience to current and future climate impacts. EPA's long-term aim is to implement at least 40 international climate engagements by 2026 that result in an individual partner commitment or action to reduce GHG emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

As of January 2023, EPA had implemented 11 international climate engagements resulting in individual partner commitments or actions as outlined in the long-term performance goal stated above. In FY 2024 with additional resources, in anticipation of the G7 Summit in Italy, EPA would collaborate with other Federal agencies to design and implement projects for the Partnership for

[5] Executive Order 14008: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Global Infrastructure and Investment (PGII) that conform to the values and climate policy objectives of EO 14008. PGII was announced at the 2022 G7 Summit in Germany for the purpose of mobilizing public and private investment in low-and-middle-income countries for decarbonizing infrastructure and to support the Just Energy Transition Partnerships (JETP) with individual countries for the early decommissioning of coal-fired power plants and to attract private capital investment in support of efforts to decarbonize national economies.

Take Decisive Action to Advance Environmental Justice and Civil Rights

Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights—Achieve tangible progress for historically overburdened and underserved communities and ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing and implementing environmental laws, regulations, and policies.

STRATEGIC OBJECTIVES:

- Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels—Empower and build capacity of underserved and overburdened communities to protect human health and the environment.
- Objective 2.2: Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities—Integrate environmental justice and civil rights in all the Agency's work to maximize benefits and minimize impacts to underserved and overburdened communities.
- Objective 2.3: Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns—Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	**FY 2023 Enacted Operating Plan**	**FY 2024 President's Budget**	**FY 2024 President's Budget v. FY 2023 Enacted Operating Plan**
Take Decisive Action to Advance Environmental Justice and Civil Rights	**$278,287**	**$385,330**	**$758,430**	**$373,099**
Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels	$141,556	$151,660	$204,497	$52,837
Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities	$87,853	$181,963	$476,835	$294,872
Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns	$48,879	$51,707	$77,098	$25,390
Total Authorized Workyears	624.0	848.8	1,181.0	332.3

Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights

Achieve tangible progress for historically overburdened and underserved communities and ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in developing and implementing environmental laws, regulations, and policies.

Introduction

EPA will center its mission on the integration of environmental justice (EJ), equity, and civil rights across the Nation's environmental protection enterprise. We will focus on all American communities, those within the contiguous and non-contiguous states and all other territories and protectorates of the United States. By doing so, EPA will advance the promise of clean air, clean water, and safe land to communities across the country that have not fully benefitted from the Nation's decades of progress. Centering its work on justice is especially important in an era when EPA must simultaneously break the cycle of historic environmental injustices while maximizing protection for these same communities that are too often hit worst and first from the impacts of a changing climate. In the *FY 2022 – 2026 EPA Strategic Plan*, EPA added "justice and equity" to the Agency's fundamental principles,[6] as originally articulated by Administrator William Ruckelshaus.

EPA's goal is to achieve measurable environmental, public health, and quality of life improvements in the most overburdened, vulnerable, and underserved communities. Achieving this goal will require significant transformation and mindfulness in how EPA understands and conducts its work, including how EPA prioritizes program resources, stewards its relationships with regulatory partners and recipients of EPA funds, implements statutory authorities, and engages the communities most affected by environmental and public health threats, especially as the climate changes. Critical to achieving this goal is for EPA to proactively engage with tribes, states, and local governments to discuss and address disproportionate impacts through their implementation of EPA authorities and engage in meaningful joint planning with communities to advance community visions and priorities.

The vigorous enforcement of civil rights laws is also key to addressing systemic barriers and ensuring recipients of EPA funding make more responsible and equitable siting and permitting decisions. EPA's work on environmental justice and civil rights enforcement will be a success if it leads to reductions in longstanding racial and ethnic disparities such as in levels of air pollutants and exposure to toxins; access to clean and reliable water infrastructure, free of lead and other toxins; and management of solid waste.

EPA will work to increase its capacity to tackle environmental justice and civil rights issues and embed consideration of these issues in its programs, policies, and processes, all with the goal of improving outcomes in environmental and health conditions for communities with environmental justice concerns. The FY 2024 Budget includes $758.4 million and 1,181 FTE to advance *Goal 2, Take Decisive Action to Advance Environmental Justice and Civil Rights*.

[6] Follow the science, follow the law, and be transparent, and the additional fourth principle: advance justice and equity.

Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels – *Empower and build capacity of underserved and overburdened communities to protect human health and the environment.*

The FY 2024 Budget includes $204.5 million and 357.6 FTE for Objective 2.1. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, all EPA programs that seek feedback and comment from the public will provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.[7]
- By September 30, 2026, include commitments to address disproportionate impacts in all written agreements between EPA and tribes and states (e.g., grant work plans) implementing delegated authorities.[8]
- By September 30, 2026, EPA programs with direct implementation authority will take at least 100 significant actions that will result in measurable improvements in Indian country.
- By September 30, 2026, all state recipients of EPA financial assistance will have foundational civil rights programs in place.[9]
- By September 30, 2026, increase by 40% the number of Office of Research and Development (ORD) activities related to environmental justice that involve or are applicable to tribes, states, territories, local governments, and communities.[10]

EPA has the responsibility to make transformative progress on environmental justice and civil rights at the tribal, state, and local levels through a whole-of-government approach that involves communities as authentic partners. In FY 2024, EPA will continue support for community-led action at new levels by providing unprecedented investments and benefits directly to communities with environmental justice concerns as well as by integrating equity throughout all agency support programs. EPA will ensure that all relevant programs are actively supporting community efforts to engage and influence program implementation and maximize the benefits from the investment of resources to achieve meaningful change on the ground for the most impacted communities. Supporting communities as they adapt to and recover from climate change is also part of this commitment.

Critical to EPA's success in advancing equity and justice is the responsibility to financially support the efforts of community members and organizations that provide EPA with opportunities to learn from and engage with their communities. To meet this responsibility, EPA commits to establishing the necessary policy and procurement mechanisms so that EPA is able to financially support organizations and individuals who provide EPA with community engagement, input, educational

[7] First year activities of this LTPG will focus on definition and scope of program participation and what qualifies as capacity-building resources.
[8] First year activities of this LTPG will focus on definition and scope of written agreements and what qualifies as addressing disproportionate impacts.
[9] For reference only, and as an example from a smaller subset of state recipients - EPA's proactive initiative involving foundational civil rights programs of state agencies in Regions 1, 5, and 7, which consisted of 14 state agencies, the baseline from the proactive initiative in FY 2020 was 6.5%.
[10] Baseline to be developed in FY 2022.

opportunities, and other forms of community expertise. In addition, the Agency will take concrete action to include the voices, experiences, and passions of the full diversity of the Nation in our workforce, such as reaching out and bringing in diverse students on paid internships, fellowships, and clerkships.

In FY 2024, EPA will continue to work proactively to integrate environmental justice and civil rights into policies and activities as a fundamental element of the Agency's relationships with federal, state, and local partners to jointly achieve beneficial changes on the ground for communities. EPA will invest in oversight, guidance, and assistance for states and local governments to embed environmental justice into their programs and enhance civil rights enforcement.

With the public engagement, partnerships, and environmental education investment of $24 million and 24 FTE, EPA will establish and implement programs to improve its engagement, partnership, and environmental education initiatives at the regional levels and across EPA, including increased engagement with communities and Agency stakeholders and Justice40, an initiative identified in Executive Order (EO) 14008, *Tackling the Climate Crisis at Home and Abroad.*[11] The additional FTE and funding will support the Administrator on public engagement travel and his Journey to Justice tours across the country to hear the environmental concerns of local communities. These resources also will allow EPA to better coordinate and communicate around Justice40; Historically Black Colleges and Universities and Minority Serving Institutions engagements; expansion of public and private partnerships to reach out to a broader group of people; creation of a Youth Engagement Council for environmental learning; and strengthened environmental education work on the local level.

Equity principles and equal protection require that implementation of federal environmental law protections be as robust inside Indian country as EPA requires these protections to be outside of Indian country. EPA directly implements the majority of federal environmental programs in Indian country where EPA seeks to apply key environmental justice principles, such as equity, meaningful involvement, and fair treatment. In FY 2024, EPA will continue to ensure that direct implementation activities are fully protective of communities and will advance environmental justice for federally recognized tribes in keeping with the federal trust responsibility. With the tribal strategic investment of $34.7 million and 166.9 FTE, an increase of $20 million and 88.3 FTE above the FY 2023 enacted, EPA will strengthen efforts to improve public health by reducing disparities in compliance rates between Indian country and the national average through greater agency support and leadership to EPA programs and regions for planning and measuring EPA direct implementation actions in Indian country. In addition, EPA will implement the revised EPA Tribal Consultation Policy and Implementation Guidance to improve consultation practices in conformance with the Executive Order on Tribal Consultation and train EPA staff.

EPA will continue in FY 2024 its longstanding commitment to assist tribes in building the capacity to receive delegated programs. In those instances when tribal governments are authorized to implement federal programs, EPA supports tribal governments' inclusion of environmental justice

[11] Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* (January 27, 2001), found at: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

principles into their programs, community engagement, and decision-making processes, and is committed to ensuring flexibilities in Indian General Assistance Program (GAP) funding for tribal environmental program implementation. Integration of environmental justice principles into all EPA activities with tribal governments and in Indian Country is designed to be flexible enough to accommodate EPA tribal program activities and goals, while meeting EPA environmental justice goals.

Objective 2.2: Embed Environmental Justice and Civil Rights in EPA Programs, Policies, and Activities – *Integrate environmental justice and civil rights in all the Agency's work to maximize benefits and minimize impacts to underserved and overburdened communities.*

The FY 2024 Budget includes $476.8 million and 575.1 FTE for Objective 2.2. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, reduce disparities in environmental and public health conditions represented by the indicators identified through the FY 2022-2023 Agency Priority Goal.[12]
- By September 30, 2026, 80% of significant EPA actions with environmental justice implications will clearly demonstrate how the action is responsive to environmental justice concerns and reduces or otherwise addresses disproportionate impacts.[13]
- By September 30, 2026, all EPA programs that work in and with communities will do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.[14]
- By September 30, 2026, all EPA programs and regions will identify and implement areas and opportunities to integrate environmental justice considerations and achieve civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities.
- By September 30, 2026, all EPA programs and regions will implement program and region-specific language assistance plans.
- By September 30, 2026, all EPA programs and regions will implement program and region-specific disability access plans.

Meeting these commitments to achieving change on the ground and accountability for such change will be the ultimate measure of the Agency's success at advancing environmental justice, civil rights, and equity, including the implementation of EO 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,* EO 14008, *Tackling the Climate Crisis at Home and Abroad*, and EO 14091, *Further Advancing Racial Equity and Support*

[12] EPA will monitor progress through a holistic system that tracks the actions and responsibilities individual national programs have identified to support reducing disparities through the implementation of their statutory authorities, coordinated efforts of regulatory partners, support for community action, and other key actions.
[13] First year activities of this LTPG will focus on definition and scope of significant EPA action and what qualifies as environmental justice implications, responsiveness to community concerns, and addressing disproportionate impacts.
[14] First year activities of this LTPG will focus on definition and scope of program participation and what qualifies as adoption of the community-driven approach.

for Underserved Communities Through the Federal Government.[15] These efforts include incorporating feedback from communities with environmental justice concerns while analyzing and addressing disproportionate impacts. The laws that Congress passed to guide EPA's work are meant to apply to all Americans. EPA must not only better support community efforts to engage with the Agency but also advance the Agency's ability to engage in community-driven work through the regions and across all programs. EPA must implement the Civil Rights Act as equally as environmental statutes.

The majority of the resources allocated for Objective 2.2 is devoted to the Environmental Justice program with more than $370 million and 264.6 FTE requested in FY 2024. This includes an important new investment of $71.2 million and 50 FTE to build out a cadre of staff to serve as EJ Community Navigators, primarily through regional offices, to provide a more robust and broad coverage of relationship building, awareness, and support directly from EPA to community leaders and their local on-the-ground partners such as local governments, tribes, and academic institutions. The EJ Community Navigators will be dedicated to developing and stewarding EPA's relationships with these partners to ensure: awareness by other EPA programs of the needs of these communities thus facilitating holistic responsiveness by the Agency in deploying our programs, resources, and staff; deploying EJ resources directly to these communities in a timely manner and in ways that meet the needs of the communities; a much stronger ability to proactively connect other forms of federal involvement and assistance from other agencies to leverage the multiple resource streams needed to make meaningful progress on the complex and multifaceted challenges faced by communities with EJ concerns.

In FY 2024, EPA will set ambitious goals of achieving meaningful change on the ground for communities with environmental justice concerns; identify data gaps; build tracking systems; and put in place any needed policy, guidance, or regulatory changes to achieve the goals. EPA also will ensure that agency plans include responsibility and measurable accountability for advancing environmental justice, including the annual performance plans of key political, senior executive, and general schedule staff. EPA will develop and commit to at least 10 measures of progress towards achieving meaningful outcomes on the ground through the identification of indicators of disparities with the goal of informing EPA policy and tracking reductions over time.

In FY 2024, EPA will establish policies to ensure that actions with major significance for environmental justice and civil rights are responsive to the needs of communities, consider the results of environmental justice analyses, and reflect recommendations from the National Environmental Justice Advisory Council (NEJAC). EPA also will continue to ensure that all EPA programs develop guidance on the use of environmental justice tools such as EJScreen and the Climate and Economic Justice Screening Tool[16] to support screening and analysis of program outcomes.

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[15] Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* (January 20, 2021), found at: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/. Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021), found at: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

[16] For more information, please visit: https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5.

In FY 2024, EPA will continue to leverage and coordinate its investments in communities and collaborate with partners and other external stakeholders to advance comprehensive and strategic community-driven approaches. EPA will increase the number of programs that have fully integrated the key principles of community work into their program implementation and will continue to build on the number of collaborative partnerships centered on community priorities primarily through an update and relaunch of EPA's comprehensive public involvement policy. This effort will reestablish a consistent foundation defined by the updated policy to ensure that all EPA program implementation efforts, with a particular focus on program deployment and policy development, will be rooted in a comprehensive approach to meaningfully engaging impacted communities.

EPA will continue to communicate requirements and expectations related to environmental justice and civil rights to its employees through education, training, outreach, and technical assistance. In particular, EPA will improve employees' awareness and understanding of civil rights enforcement and strengthen intra-agency collaboration to identify whether recipient programs and activities are abiding by civil rights laws or engaging in prohibited discrimination.

Objective 2.3: Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns – *Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.*

The FY 2024 Budget includes $77.1 million and 248.3 FTE for Objective 2.3. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, initiate 45 proactive post-award civil rights compliance reviews to address discrimination issues in environmentally overburdened and underserved communities.
- By September 30, 2026, complete 305 audits to ensure EPA financial assistance recipients are complying with nondiscrimination program procedural requirements.
- By September 30, 2026, complete 84 information sharing sessions and outreach and technical assistance events with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.

To address the legacy of pollution in overburdened communities that results from discriminatory actions, whether direct or indirect, intentional or unintentional, EPA must use the full extent of its authority and resources to enforce federal civil rights laws. EPA is required to enforce federal civil rights laws that prohibit discrimination on the basis of race, color, national origin (including limited English proficiency), disability, gender, and age, in programs or activities that receive agency financial assistance. To ensure EPA's financial assistance is not being used in a manner that discriminates and subjects already overburdened communities to further harm, EPA must support and promote a robust and mature external civil rights compliance program for execution of EPA responsibilities and to provide a strong partner to its environmental justice program.

EPA's Office of External Civil Rights Compliance (OECRC) is committed to enforcing compliance with federal civil rights laws to address historical and systemic barriers that contribute

to the environmental injustice, overburdening, and vulnerability of communities. In FY 2024, EPA proposes to invest $31.5 million and 143.6 FTE, an increase of $18.6 million and 77.2 FTE above the FY 2023 enacted level, in the external civil rights program to continue to build capacity to improve oversight and enforcement of civil rights compliance and prioritize and advance EJ concerns. The additional FTE will support activities including investigations into claims of discrimination in communities and pre-award and post-award compliance activities. It is critical that, in addition to increasing the FTE for the external civil rights work done in headquarters, there be a significant increase in FTE for the regional offices specifically targeted to external civil rights work. The regional offices provide critical support to external civil rights investigations and resolutions.

In FY 2024, EPA will take actions that will address permitting decisions found to be discriminatory by EPA financial assistance recipients. Through investigations and informal resolution agreements, OECRC will address discriminatory disparities in exposure to pollutants and toxins in order to advance access to clean air, water and land and health protection. EPA will increase the number of affirmative compliance reviews targeting discrimination in critical environmental health and quality of life impacts in overburdened communities. The Agency will issue important policy guidance to clarify recipients' civil rights obligations and improve compliance through technical assistance deliveries. Further, EPA will increase the timeliness and effectiveness of complaint investigations and resolutions. In FY 2024, EPA will increase the number of meaningful engagements with overburdened communities and environmental justice groups on civil rights and environmental justice issues.

Enforce Environmental Laws and Ensure Compliance

Goal 3: Enforce Environmental Laws and Ensure Compliance—Improve compliance with the nation's environmental laws and hold violators accountable.

STRATEGIC OBJECTIVES:

- Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable—Use vigorous and targeted civil and criminal enforcement to ensure accountability for violations and to clean up contamination.
- Objective 3.2: Detect Violations and Promote Compliance— Ensure high levels of compliance with federal environmental laws and regulations through effective compliance tools -- including inspections, other monitoring activities, and technical assistance supported by evidence and advanced technologies.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	**FY 2023 Enacted Operating Plan**	**FY 2024 President's Budget**	**FY 2024 President's Budget v. FY 2023 Enacted Operating Plan**
Enforce Environmental Laws and Ensure Compliance	**$756,146**	**$803,726**	**$757,066**	**-$46,659**
Hold Environmental Violators and Responsible Parties Accountable	$522,402	$559,138	$438,563	-$120,575
Detect Violations and Promote Compliance	$233,744	$244,587	$318,503	$73,915
Total Authorized Workyears	2,926.8	3,173.7	3,353.6	179.9

Goal 3: Enforce Environmental Laws and Ensure Compliance

Improve Compliance with the Nation's environmental laws and hold violators accountable.

Introduction

A robust compliance monitoring and enforcement program is necessary to ensure communities receive the environmental and human health benefits intended by environmental statutes and EPA's regulations. EPA regulates more than 1.2 million facilities subject to a variety of environmental statutes that protect human health and the environment. Likewise, EPA regulates a wide range of products, from automobiles to pesticides. In FY 2024, EPA will continue to work cooperatively with tribes, states, territories, and other federal agencies to improve compliance with environmental laws and statutes. EPA will continue to collaborate with tribes in Indian country, by both directly implementing compliance monitoring and enforcement programs and supporting and overseeing tribal implementation of approved programs. In FY 2024, EPA will provide $757.1 million and 3,353.6 FTE to strengthen compliance with the Nation's environmental laws and hold violators accountable under *Goal 3: Enforce Environmental Laws and Ensure Compliance*.

In FY 2024, EPA will collaborate with tribes, states, territories, and other federal agencies to focus federal enforcement resources on the most serious environmental problems where noncompliance with environmental statutes and regulations is a significant contributing factor and where federal enforcement can have a significant impact on the Nation's air, water, and land. The Agency will continue to identify a small number of key areas, called National Enforcement and Compliance Initiatives (NECIs), where EPA focuses attention on the most significant, widespread environmental problems.

In FY 2024, the Agency is requesting an increase of $22.6 million and 38.4 FTE above the FY 2023 enacted to continue rebuilding the inspector cadre, which is EPA's highest enforcement priority. A robust inspection program, including compliance and enforcement actions, is essential to advancing the promise of clean air, land, and water to the many communities across the country that have not received the full benefits from the Nation's decades of progress. Dedicated staff that can identify public health concerns and environmental regulatory violations are critical to protect communities that are underserved or disproportionately harmed by pollution. EPA's inspection programs have faced substantial resource challenges for over a decade, leading to a loss of Agency expertise and a decline in the numbers of inspections. To meet EPA's environmental justice goals and its mission to protect human health and the environment, EPA must rebuild and strengthen its inspection program by hiring and training new and existing inspectors, including in-person basic inspector trainings and travel funding for the trainings for the following programs: Clean Air Act; Safe Drinking Water Act; Clean Water Act; Resource Conservation and Recovery Act; Federal Insecticide, Fungicide, & Rodenticide Act; and Toxic Substances Control Act. Additionally, funding is needed to purchase health and safety equipment and inspection monitoring equipment. Travel funding for inspections also is essential to get inspectors into the field.

In addition, EPA will focus on vulnerable communities and those facing substantial burdens from environmental noncompliance. In these areas, EPA will increase inspections, prioritize enforcement cases, identify remedies with tangible benefits for harmed communities, and increase engagement with communities about enforcement cases. In FY 2024, EPA also will target

compliance monitoring in overburdened and underserved communities with environmental justice concerns. EPA will continue to initiate enforcement actions to protect against children's health hazards in areas such as exposure to lead paint, the presence of lead and other contaminants in drinking water, and particulate air emissions with the potential to aggravate asthma.

The Agency will address climate change by directing resources to ensure effective enforcement responses for those sources with noncompliant emissions of greenhouse gases (GHGs), develop remedies that are consistent with GHG mitigation and climate resilience goals, and pursue violators of the Renewable Fuel Standard. In addition, EPA requests an additional $12.1million and 26.8 FTE above the FY 2023 enacted to enforce against the illegal importation, distribution, and use within the United States of hydrofluorocarbons (HFCs), which are chemicals with potent global warming potential, under the American Innovation and Manufacturing (AIM) Act. [17]

In FY 2024, an increase of $5.6 million and 6.5 FTE will support efforts to investigate and identify releases of per- and polyfluoroalkyl substances (PFAS) to the air, land, and water by actively investigating under RCRA, TSCA, CWA, SDWA, and CAA at the yet-unknown number of processing facilities, waste disposal facilities, and federal facilities where PFAS are suspected of contaminating various environmental media. PFAS released into the environment may present an urgent public health and environmental threat. EPA will continue to investigate releases, address imminent and substantial endangerment situations, and prevent exposure to PFAS, under multiple environmental statutes. OECA has been stretching its base Superfund (SF) & EPM resources to (1) issue corporate-wide information requests and analyze responses, (2) create site profiles and information databases on specific facilities, (3) obtain site-specific data, and (4) use administrative and judicial authorities to require sampling and other response actions.

EPA will continue implementing the Foundations for Evidence-Based Policymaking Act,[18] coordinated by EPA's Evidence Act officials. The Agency will expand its evidence-based compliance program through projects developed under OECA's compliance learning agenda, which systematically identifies the most important evidence the Agency needs to gather and generate to advance its compliance goals, and ensure the Agency uses high quality data and other information to inform policy and decision making.

Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable – *Use vigorous and targeted civil and criminal enforcement to ensure accountability for violations and to clean up contamination.*

The FY 2024 Budget includes $438.6 million and 2,444.1 FTE for Objective 3.1. This objective is directly supported by the following long-term performance goal in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, reduce to not more than 93 the number of open civil judicial cases more than 2.5 years old without a complaint filed.[19]

[17] For more information on the AIM Act, please visit: https://www.epa.gov/climate-hfcs-reduction/aim-act
[18] Full-text of the Foundations for Evidence-Based Policymaking Act of 2018 may be found at: https://www.congress.gov/bill/115th-congress/house-bill/4174/text.
[19] For comparison, there were 129 cases more than 2.5 years old without a complaint filed as of June 30, 2018. The number of cases fluctuates and is therefore difficult to predict how many cases will "age in" in a given year. EPA reduces the number of

Enforcement is essential to ensuring that everyone is protected by the Nation's environmental laws and regulations. EPA strives to not only return violators to compliance but also obtain timely relief needed to address the underlying causes of the violations, to prevent reoccurrence, and, in appropriate cases, mitigate the harm to the communities impacted by noncompliance. EPA uses administrative enforcement and Alternative Dispute Resolution (ADR), where appropriate, in the environmental enforcement context and plans to deploy ADR to new Superfund and External Civil Rights projects. In FY 2024, EPA will invest an additional $1.3 million and 4.1 FTE for a total of $3.1 million and 10.0 FTE to the ADR Program to promote equity by including underserved communities in negotiations.

Civil Enforcement

The overall goal of EPA's Civil Enforcement Program is to maximize compliance with the Nation's environmental laws and regulations to protect human health and the environment. In FY 2024, EPA requests $245.9 million and 1,041.7 FTE, an increase of $36.7 million and 43.6 FTE above the FY 2023 enacted, to support civil enforcement efforts. EPA will encourage regulated entities to correct violations rapidly, ensure that violators do not realize an economic benefit from noncompliance, pursue enforcement to deter future violations, and continue to strengthen environmental partnerships with tribes, states, and other federal agencies. The additional resources will enhance EPA's ability to incorporate environmental justice and climate change considerations into all phases of case development. To protect public health and ensure that private, public, and federal facilities are held to the same standard, EPA will rebuild and train headquarters and regional inspectors to inspect more facilities in the large public, private, and federal facility universe. In addition, EPA will continue to improve its sampling capability to identify regulatory violations. These resources are needed recognizing the complexity of many facilities and the inspections needed to identify the range of potential contamination. EPA will pursue enforcement actions at public, private, and federal facilities where significant violations are discovered to protect the health of surrounding communities. Lastly, EPA will provide technical and scientific support to tribes, states, and territories with authorized programs.

In FY 2024, EPA is requesting an additional $3.4 million and 7.0 FTE to enforce the Coal Combustion Residuals (CCR) rule. The CCR Program ensures that coal ash disposal units (landfills and surface impoundments) do not present dangerous structural stability issues (such as those that led to the catastrophic 2008 Kingston, Tennessee coal ash disaster) that could put surrounding communities in harm's way. These resources will augment the work the Agency has already started, i.e., analyzing groundwater monitoring data and the corrective action and closure efforts of facilities to determine whether facilities are complying with the regulatory requirements and adequately addressing coal ash disposal risks.

EPA has been working to improve the processes associated with enforcement actions to move more quickly in protecting the environment. To reduce the time that a facility is in violation of an environmental standard, EPA has a FY 2026 long-term performance goal (LPTG) to reduce to no more than 93 the number of open civil judicial cases more than 2.5 years old without a complaint

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older cases using a number of different tools. For example, sometimes the United States government needs to file a complaint in order to make progress in resolving a case; other times, it needs to drop a claim or shift its injunctive relief or penalty demand because of litigation risk.

filed. In FY 2022, EPA reduced that number to 65, surpassing the FY 2026 LPTG. EPA will continue to build upon this success to further improve upon our accomplishments in FY 2024 and beyond.

Criminal Enforcement

EPA's Criminal Enforcement Program enforces the Nation's environmental laws through targeted investigation of criminal conduct committed by individual and corporate defendants who threaten public health and the environment. EPA's Criminal Enforcement Program plays a critical role across the country supporting tribes, states, and territories that may have limited capacity to investigate and prosecute environmental crimes. In FY 2024, the Agency requests $75.1 million and 296 FTE, an increase of $4.4 million and 26.7 FTE above the FY 2023 enacted, to support the Criminal Enforcement Program by targeting investigations on the most egregious environmental cases.

Superfund Enforcement

In FY 2024, the Superfund Enforcement Program will transition from using annual appropriations to funding activities and staff through Superfund tax receipts. Resources are expected to be at an equivalent level. The Program will continue to facilitate prompt site cleanup. EPA uses an "enforcement first" approach before turning to taxpayer dollars to fund cleanups, by maximizing Potentially Responsible Party (PRP) involvement at Superfund sites. The Superfund Enforcement Program works to ensure that viable and liable PRPs pay to clean up sites and seeks to recover costs if EPA expends Superfund dollars to clean up sites. These enforcement efforts allow the Trust Fund to be used at those sites that have no funding source other than government resources and have no other means of cleanup. Thus, Superfund enforcement efforts ensure that Superfund sites are cleaned up in a timely manner in addition to getting more sites cleaned up than would be possible using only government funds. With the availability of Superfund tax receipts in FY 2024, EPA plans to use these resources to support traditional Superfund Enforcement efforts and to place greater emphasis towards implementing agency initiatives like Environmental Justice, PFAS, and Lead. In addition, EPA will ensure we provide DOJ essential funding to support agency efforts, complete negotiations quicker, provide additional training, and provide greater regional support towards PRP searches and other counseling work.

Objective 3.2: Detect Violations and Promote Compliance – *Ensure high levels of compliance with federal environmental laws and regulations through effective compliance tools – including inspections, other monitoring activities, and technical assistance supported by evidence and advanced technologies.*

The FY 2024 Budget includes $318.5 million and 909.5 FTE for Objective 3.2. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 Strategic Plan*:

- By September 30, 2026, send 75% of EPA inspection reports to facilities within 70 days of inspection.[20]

[20] For comparison, 46% of inspection reports were sent within 70 days of inspection at the end of FY 2018.

- By September 30, 2026, conduct 55% of annual EPA inspections at facilities that affect communities with potential environmental justice concerns.[21]

Compliance Monitoring

Effectively focusing compliance monitoring, including inspections in overburdened and underserved communities with environmental justice concerns, plays a critical role in achieving the goals EPA has set forth for protecting human health and the environment. Achieving high rates of compliance with environmental laws and regulations requires the use of a wide range of compliance tools, including compliance monitoring. Through its ongoing process of selecting National Enforcement and Compliance Initiatives in collaboration with tribes, states, and territories, EPA will focus its work on critical areas of noncompliance. In FY 2024, EPA will advance its efforts to address climate change mitigation and adaptation issues through directing of inspections, compliance monitoring, and technical assistance to sources with the most potential for noncompliant emissions of greenhouse gases.

EPA will continue to emphasize the importance of providing facilities with a completed inspection report in a timely manner notifying the facility of any potential compliance issues. In FY 2024, EPA is requesting a total of $3.3 million and 3.0 FTE to expand software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections conducted by EPA and authorized states. Smart Tools software allows EPA to use its compliance monitoring resources more efficiently and to make inspection reports more available to regulated entities and to the public in affected communities.

In FY 2024, EPA is requesting a total of $3.1 million and 1.0 FTE to support the Agency's Compliance Advisor Program (previously called Circuit Riders Program), which reduces noncompliance at small public water systems (PWSs) and small wastewater treatment facilities (WWTFs) by providing hands-on technical assistance. To date, Compliance Advisors have provided support to approximately 199 small PWSs and 63 WWTFs in under-resourced communities nationwide. Hundreds more small systems and facilities across the Nation need technical support to help them achieve and stay in compliance and provide clean and safe water to the communities they serve.

In FY 2024, EPA will continue its implementation of the Evidence Act by continuing its work on the "Drinking Water Systems Out of Compliance" learning priority area of EPA's Learning Agenda. EPA also will expand its ongoing work with tribes, states, and academic experts to develop and implement OECA's compliance learning agenda: prioritizing the most pressing programmatic questions; conducting evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance.

In FY 2024, EPA will continue the data system modernization effort to better support tribes, states, local governments, federal partners, and the public's need for information with modernized technology and it will implement EPA's enterprise-wide Digital Strategy with shared IT services. For example, EPA is requesting an increase of $22.9 million and 5.0 FTE to modernize the Agency's enforcement and compliance assurance data systems. These resources will complement those provided to EPA under the Inflation Reduction Act that are targeted for improving

[21] The baseline for this measure is 27% based on average of FY 2017 - FY 2019.

enforcement technology, inspection software, and other related purposes. Modernization will facilitate EPA's efforts to better target noncompliance that impacts overburdened and vulnerable communities and will increase the availability of information about environmental conditions in those communities and elsewhere.

Through the State Review Framework, EPA periodically reviews authorized state compliance monitoring and enforcement programs for Clean Air Act (CAA) Stationary Sources, Resource Conservation and Recovery Act (RCRA) Hazardous Waste facilities, and the Clean Water Act National Pollutant Discharge Elimination System (NPDES) dischargers. This review is conducted using criteria agreed upon by states to evaluate performance against national compliance monitoring or enforcement program standards. When states do not achieve standards, the Agency works with them to make progress. However, EPA may take a lead implementation role when authorized states have a documented history of failure to make progress toward meeting national standards. In total, EPA provides $165.3 million and 520.4 FTE to detect violations and promote compliance with environmental laws, an increase of $50.9 million and 41.5 FTE above the FY 2023 enacted budget.

Categorical Grants: Pesticides Enforcement

In FY 2024, EPA is requesting a total of $25.6 million funding cooperative agreements to support state and tribal compliance and enforcement activities under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The resources will be used to rebuild programmatic capabilities between EPA and partner agencies; provide vital training programs to EPA, state, territory, and tribal partners; and help address environmental justice concerns in overburdened and vulnerable communities.

Categorical Grants: Toxic Substances Compliance

In FY 2024, EPA is requesting a total of $6.9 million to continue focusing on compliance monitoring programs to prevent or eliminate unreasonable risks to health or the environment associated with chemical substances such as asbestos, lead-based paint, and polychlorinated biphenyls (PCBs), and to encourage states to establish their own compliance and enforcement programs for lead-based paint and asbestos.

Ensure Clean and Healthy Air for All Communities

Goal 4: Ensure Clean and Healthy Air for All Communities—Protect human health and the environment from the harmful effects of air pollution.

STRATEGIC OBJECTIVES:

- Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts—Reduce air pollution on local, regional, and national scales to achieve healthy air quality for people and the environment.
- Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air—Limit unnecessary radiation exposure and achieve healthier indoor air quality, especially for vulnerable populations.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	**FY 2023 Enacted Operating Plan**	**FY 2024 President's Budget**	**FY 2024 President's Budget v. FY 2023 Enacted Operating Plan**
Ensure Clean and Healthy Air for All Communities	**$754,266**	**$809,802**	**$1,401,734**	**$591,932**
Improve Air Quality and Reduce Localized Pollution and Health Impacts	$657,185	$705,042	$1,241,622	$536,580
Reduce Exposure to Radiation and Improve Indoor Air	$97,081	$104,760	$160,112	$55,352
Total Authorized Workyears	1,670.2	1,749.8	2,207.0	457.1

Goal 4: Ensure Clean and Healthy Air for All Communities

Protect human health and the environment from the harmful effects of air pollution.

Introduction

All people regardless of race, color, national origin, or income deserve to breathe clean air outside and indoors, and it is especially important to protect the health of vulnerable and sensitive populations including children and persons adversely affected by persistent poverty or inequality. Numerous scientific studies have linked air pollution and specific pollutants to a variety of health problems and environmental impacts. Long-term exposure to elevated levels of certain air pollutants is associated with increased risk of cancer, premature mortality, and damage to the immune, neurological, reproductive, cardiovascular, and respiratory systems. Levels of harmful air pollutants have continued to decline even as the economy has grown significantly over the long term. Between 1970 and 2021, the combined emissions of six key pollutants dropped by 78 percent, while the U.S. economy remained strong – growing 292 percent over the same period.[22] Yet poor air quality still affects millions of people across the country, affecting near- and long-term health and quality of life. EPA will continue to build on its historic progress and work to assure clean air for all Americans, with a particular focus on those in underserved and overburdened communities.

In FY 2024, EPA will work to ensure clean and healthy air for all communities by reducing emissions of ozone-forming pollutants, particulate matter, and air toxics. In the FY 2024 Budget, EPA is requesting an investment of $132.5 million and 33 FTE to modernize the Nation's air quality and radiation monitors and to make their supporting information systems more reliable and resilient in emergencies, such as wildfires and radiation events, and better able to produce near real-time data to assess and communicate exposure risks to vulnerable populations. EPA also will work to address high-risk indoor air quality pollutants in homes, schools, and workplaces. The Agency will rely on proven approaches including innovative market-based techniques, public and private-sector partnerships, community-based approaches, regulatory and technical assistance programs that promote environmental stewardship, public education, and programs that encourage adoption of cost-effective technologies and practices. Understanding that many sources of air pollutants also are sources of greenhouse gases (GHG), the Agency will look to control strategies that can reduce both air pollution and mitigate the impacts of climate change. In the FY 2024 Budget, $1.402 billion and 2,207.0 FTE are allocated to Goal 4 to advance EPA efforts in protecting human health and the environment from the harmful effects of air pollution.

Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts – *Reduce air pollution on local, regional, and national scales to achieve healthy air quality for people and the environment.*

The FY 2024 Budget includes $1.242 billion and 1,833.2 FTE for Objective 4.1. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

[22] For additional information, please visit: https://gispub.epa.gov/air/trendsreport/2022/

- By September 30, 2026, reduce ozone season emissions of nitrogen oxides (NO_x) from electric power generation sources by 21% from the 2019 baseline of 390,354 tons.
- By September 30, 2026, improve measured air quality in counties not meeting the current National Ambient Air Quality Standards (NAAQS) from the 2016 baseline by 10%.
- By September 30, 2026, strive to ensure all people with low socio-economic status (SES) live in areas where the air quality meets the current fine particle pollution ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS).
- By September 30, 2026, ensure U.S. consumption of hydrochlorofluorocarbons (HCFCs) is less than 76.2 tons per year of ozone depletion potential.[23]

In FY 2024, EPA will work collaboratively with tribal and state air agencies to maintain and improve the Nation's air quality. EPA will focus particularly on advancing environmental justice by engaging with local communities that have been historically underserved on key activities including technical assistance, regulation development, and financial assistance. In FY 2024, $366.7 million and 1079.7 FTE are allocated to the Federal Support for Air Quality Management Program to implement climate and clean air regulations and programs, which is an increase of $207.6 million and 200.4 FTE above the FY 2023 enacted. This includes resources for activities such as supporting the NAAQS review and implementation work, taking timely action on State Implementation Plans (SIPs) to reduce the SIP backlog, and environmental justice activities. This also includes additional resources for modernizing the Nation's ambient air monitoring network and for supporting community-scale monitoring.

Taking into account the most current research findings on health effects and changing conditions from a warming climate, EPA will continue to review the NAAQS and make revisions, as appropriate. Specifically, the President directed EPA to review the 2020 Particulate Matter (PM) NAAQS and the 2020 Ozone NAAQS.[24] EPA will work to improve air quality in areas not in attainment with the NAAQS, including assisting tribes and states in developing Clean Air Act-compliant SIPs. EPA will continue reviewing regional haze SIPs, working closely with states to improve visibility in the country's national parks and wilderness areas.

EPA will reduce air pollution by focusing on the transportation sector's largest contributors to criteria pollutant and GHG emissions: light-duty vehicles (LDVs) and heavy-duty vehicles (HDVs). EPA will continue to work to ensure that Clean Air Act requirements are met for new transportation projects with heavy-duty diesel traffic, such that they do not worsen air quality near communities with environmental justice concerns. The Agency will collaborate with a broad range of stakeholders to develop targeted, sector-based, and place-based strategies for diesel fleets, including school buses, ports, and other goods movement facilities.

In FY 2024, EPA will continue to operate nationwide and multi-state programs, such as the Acid Rain Program (ARP) and the Cross-State Air Pollution Rules (CSAPR), that address major global, national, and regional air pollutants from the power sector and other large stationary sources. EPA also will work on several regulatory actions related to criteria air pollutants, air toxics, and GHG

[23] The U.S. HCFC consumption baseline is 15,240 ODP-weighted metric tons effective as of January 1, 1996.
[24] Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis* (January 20, 2021): https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.

pollution from power plants. EPA has made significant progress in reducing emissions from power plants through the ARP and CSAPR. Together, as of 2021, the Programs delivered a 94% reduction of sulfur dioxide and an 85% reduction in nitrogen oxide emissions from 1990 levels. For FY 2021, there has been 100% compliance for power plants in the ARP and CSARP allowance trading programs.[25]

As part of a forward-looking air toxics strategy, EPA will address regulatory and emerging issues and improve access to air toxics data. The Agency will continue implementing an approach that develops and shares air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. By 2024, EPA will continue reporting the most current air toxics data each year in the annual Air Trends Report and an online interactive tool, instead of the previous three to four-year cycle for reporting air toxics data, and providing that data at an increased spatial resolution.

EPA will continue to protect and restore the stratospheric ozone layer by reducing the use, emission, import, and production of ozone-depleting substances in the U.S. By 2026, U.S. consumption of HCFCs, chemicals that deplete the Earth's protective ozone layer, will be less than 76.2 tons per year of ozone depletion potential compared to the 2015-2019 target of 1,520 tons per year. As a result of global action to phase out ozone-depleting substances, the ozone layer is expected to recover to its pre-1980 levels by mid-century. As a Party to the Montreal Protocol, the U.S. must incrementally decrease HCFC consumption and production, culminating in a complete HCFC phaseout in 2030. These reductions in consumption and production help protect the stratospheric ozone layer, which shields all life on Earth from harmful solar ultraviolent (UV) radiation. Scientific evidence demonstrates that ozone depleting substances used around the world destroy the stratospheric ozone layer, which raises the incidence of skin cancer, cataracts, and other illnesses through overexposure to increased levels of UV radiation. Under the American Innovation and Manufacturing (AIM) Act, EPA will continue to phase down the production and consumption of hydrofluorocarbons, review and list alternatives that are safer for the ozone layer, as well as facilitate the transition to next-generation technologies.

EPA also will seek to address air quality challenges presented by wildfires. Wildfire smoke can make up approximately 30 percent of total $PM_{2.5}$ emissions in some regions of the U.S., aggravating heart and lung disease and causing premature death. In FY 2024, EPA requests additional resources for air monitoring and will continue to support work that will identify, predict, and communicate where smoke events are occurring, especially for overburdened and underserved communities impacted by wildfire issues. EPA also requests $7 million for Wildfire Smoke Preparedness Grants, a competitive grant funding to be awarded to tribes, states, public pre-schools, local educational agencies, and non-profit organizations to better prepare buildings for wildfire smoke.

The Agency will continue to develop and make available the necessary technical data and tools to support air quality planning and environmental justice analyses, such as *AirNow*, the Air Quality System, and the National Emissions Inventory. The Agency also will develop new and enhanced applications of environmental justice analytics to inform how power sector rules can mitigate

[25] For additional information, please visit: http://www3.epa.gov/airmarkets/progressreports/index.html.

impacts on overburdened communities. This effort will include modeling of power sector emissions down to the county level as well as improved representation of fine particulate matter that includes toxic heavy metals. EPA also will continue to test, evaluate, and refine draft tools for incorporating environmental justice considerations into EPA-issued permits and ensure opportunities for meaningful public involvement in the permit process. Early and meaningful dialogue between a permit applicant and a community is especially important in communities that have historically been underrepresented in the permitting process or that potentially bear a disproportionate burden of an area's pollution to promote environmental justice. Providing specific information about the pollution and related health impacts of a permit action may alleviate community's concerns about the facility or educate the public about other sources of exposure.

Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air – *Limit unnecessary radiation exposure and achieve healthier indoor air quality, especially for vulnerable populations.*

The FY 2024 Budget includes $160.1 million and 373.7 FTE for Objective 4.2. This objective is directly supported by the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, prevent 2,250 lung cancer deaths annually through lower radon exposure as compared to the FY 2020 baseline of 1,684 prevented lung cancer deaths.

To improve indoor air and reduce exposure to radiation, EPA leads programs that educate the public about radiation and indoor air quality concerns, including radon, asthma triggers, and poor ventilation. These programs promote public action to reduce potential risks in homes, schools, and workplaces. Because Americans spend most of their time indoors, where pollutant levels are often significantly higher than outdoors, poor indoor air quality is a major health concern. For example, radon is a leading cause of lung cancer, responsible for 21,000 lung cancer deaths annually. Nearly 24 million Americans have asthma, and low-income, communities of color suffer disproportionately. Indoor allergens and irritants play a significant role in making asthma worse and triggering asthma attacks. These concerns have been heightened during the past two years of the COVID pandemic, when people have had to spend more time indoors, elevating the importance of effective ventilation.

To better address these human health risks from indoor air and radiation, the FY 2024 Budget includes $5.3 million with 12.4 FTE for the Indoor Air Radon Program and $47.6 million with 71.4 FTE for the Reducing Risks from Indoor Air Program. EPA will continue programs to reduce exposures to radon through home testing and mitigation, promote in-home asthma management, improve air quality in homes and schools, and build capacity for tribes and communities across the country to comprehensively address indoor air risks.

In-home asthma management is a critical component of asthma care, particularly in low-income populations. EPA, in partnership with the Centers for Disease Control (CDC) and the U.S. Department of Housing and Urban Development (HUD) through the Federal Asthma Disparities Action Plan, will support state Medicaid Programs and private health plans to pay for in-home

asthma interventions through reimbursement mechanisms[26]. In addition, EPA will reduce asthma disparities for low-income people and communities of color by supporting public health and housing organizations to train community health workers to deliver in-home asthma interventions and care. In FY 2024, EPA is measuring delivery of technical assistance, tools, and grants to equip community-based programs and the organizations that support them to deliver evidence-based, comprehensive asthma care.

In FY 2024, EPA will collaborate with public and private sector organizations to provide clear and verifiable protocols and specifications for promoting good indoor air quality and support adoption of these protocols and specifications into existing healthy, energy efficiency, and green building programs and initiatives to promote healthy buildings for a changing climate. EPA also will equip the housing sector with guidance to promote the adoption of these best practices with the aim of creating healthier, more energy efficient homes, including for low-income families. EPA also will equip school leaders to make science-based decisions and implement sustainable ventilation, filtration and other indoor air quality improvements for healthy school environments. To reduce the high public health risks from exposure to indoor radon, EPA will co-lead the National Radon Action Plan, a multisector public-private coalition committed to eliminating avoidable radon-induced lung cancer in the U.S. and addressing radon as a health equity challenge. EPA will continue to provide State Indoor Radon Grant funding and technical assistance to tribes and states, with a focus on increasing access to testing and mitigation in underserved communities. This work supports the Administration's Cancer Moonshot Initiative.

EPA responds to radiological emergencies; conducts essential national and regional radiological response planning and training; and develops response plans for radiological incidents or accidents. In FY 2024, EPA will continue to fill gaps in the expertise that is critical for essential preparedness work, restoring critical capacity to meet EPA's core mission. EPA will maintain personnel expertise, capabilities, and equipment readiness of the radiological emergency response program under the National Response Framework and the National Contingency Plan, including the Agency's Radiological Emergency Response Team. EPA also is requesting additional funding of $1.7 million and 3.4 FTE in the FY 2024 Budget to supports efforts to restore EPA's staff expertise, analysis, and capacity in the Indoor Air Radon Program in order to better lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program. EPA will provide oversight of the Waste Isolation Pilot Plant, including review of the U.S. Department of Energy's plans for additional waste panels and surplus plutonium disposal, to ensure safe long-term disposal of radioactive waste and the continued cleanup of nuclear weapons program legacy sites.

[26] For more information, please visit: https://www.epa.gov/asthma/coordinated-federal-action-plan-reduce-racial-and-ethnic-asthma-disparities

Ensure Clean and Safe Water for All Communities

Goal 5: Ensure Clean and Safe Water for All Communities—Provide clean and safe water for all communities and protect our nation's waterbodies from degradation.

STRATEGIC OBJECTIVES:

- Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure—Protect public health from the risk of exposure to regulated and emerging contaminants in drinking and source waters by improving the reliability, accessibility, and resilience of the nation's water infrastructure to reduce the impacts of climate change, structural deterioration, and cyber threats.
- Objective 5.2: Protect and Restore Waterbodies and Watersheds—Address sources of water pollution and ensure water quality standards are protective of the health and needs of all people and ecosystems.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	**FY 2023 Enacted Operating Plan**	**FY 2024 President's Budget**	**FY 2024 President's Budget v. FY 2023 Enacted Operating Plan**
Ensure Clean and Safe Water for All Communities	**$3,830,705**	**$5,182,344**	**$6,373,747**	**$1,191,403**
Ensure Safe Drinking Water and Reliable Water Infrastructure	$2,420,972	$3,624,001	$4,620,117	$996,116
Protect and Restore Waterbodies and Watersheds	$1,409,733	$1,558,343	$1,753,630	$195,287
Total Authorized Workyears	2,761.4	3,021.8	3,271.5	249.7

Goal 5: Ensure Clean and Safe Water for All Communities

Provide clean and safe water for all communities and protect our Nation's waterbodies from degradation.

Introduction

Clean and safe water is a vital resource essential to the protection of human health and is a foundation for supporting healthy communities and a thriving economy. The United States has made great progress over the past 50 years protecting and restoring water resources through legislation such as the Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and Marine Protection, Research and Sanctuaries Act (MPRSA). As of January 2023, approximately 85 percent of the public water systems (e.g., 2,988 out of 3,508) with health-based violations as of the end of FY 2017 have returned to compliance. While progress is being made to bring systems into compliance, it is clear that the Nation still faces significant barriers and challenges to ensuring access to clean and safe water for communities. This is particularly the case regarding safe and clean water, as well as impacts from aging infrastructure, legacy lead pipes, cybersecurity threats, climate change, and emerging contaminants of concern. These challenges are distributed unequally, and tens of thousands of homes, primarily in tribal communities and the territories, currently lack access to basic sanitation and drinking water and experience higher pollution levels.

In FY 2024, EPA will continue to work with its tribal, federal, state, and nongovernmental partners to advance science, to provide clean and safe water for all communities, and to protect our Nation's waterbodies from degradation. The FY 2024 Budget includes $6.373 billion and 3,271.5 FTE for *Goal 5, Ensure Clean and Safe Water for All Communities.* This investment will complement resources provided in the bipartisan Infrastructure Investment and Jobs Act of 2021 (IIJA) and expand the Agency's capacity to protect human health and the environment across the Nation.

Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure – *Protect public health from the risk of exposure to regulated and emerging contaminants in drinking and source waters by improving the reliability, accessibility, and resilience of the Nation's water infrastructure to reduce the impacts of climate change, structural deterioration, and cyber threats.*

The FY 2024 Budget includes $4.620 billion and 1,391.7 FTE for Objective 5.1. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan:*

- By September 30, 2026, reduce the number of community water systems still in noncompliance with health-based standards since March 31, 2021, from 752 to 500.[27]
- By September 30, 2026, reduce the number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021, from 110 to 70.
- By September 30, 2026, leverage an additional $45 billion in non-federal dollars through EPA's water infrastructure finance programs (CWSRF, DWSRF, and WIFIA).[28]

[27] This baseline is a subset of the 3,508 systems, including systems in Indian Country, that have been in long-term noncompliance since September 30, 2017. Technical assistance provided will focus on non-compliant water systems in underserved communities.

[28] EPA will ensure a focus on climate resiliency and equity by revising loan guidelines, program guidance, and providing technical assistance.

- By September 30, 2026, in coordination with other federal agencies, provide access to basic sanitation for an additional 36,500 American Indian and Alaska Native homes.
- By September 30, 2026, provide 2,203 tribal, small, rural, or underserved communities with technical, managerial, or financial assistance to improve operations of their drinking water or wastewater systems.

Safe and Reliable Water

Providing safe and reliable drinking water and wastewater treatment for all communities is a priority for EPA. Aging infrastructure, climate change, cyber threats, and contaminants such as lead and per- and polyfluoroalkyl substances (PFAS) are creating new stresses on the Nation's water systems. In FY 2024, EPA will work to address these challenges through approximately $4 billion in water infrastructure spending. This includes $1.639 billion for the Clean Water State Revolving Fund (CWSRF) Program, $1.126 billion for the Drinking Water State Revolving Fund (DWSRF) Program, and $80.4 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Also included is approximately $1.2 billion for grant programs authorized in the America's Water Infrastructure Act (AWIA) of 2018, the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN), and the Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA). Among these resources, $219 million is dedicated to two grant programs for reducing lead in drinking water and lead testing in schools, an increase of $163 million over the 2023 enacted level.

As of February 2023, EPA had issued 100 WIFIA loans to communities across the country totaling over $17 billion in credit assistance to help finance more than $36 billion for water infrastructure projects. In FY 2024, EPA will continue to use the SRF and WIFIA investments to improve the reliability, accessibility, and resilience of the Nation's water infrastructure. These programs are critical tools for EPA to accelerate water infrastructure investments by leveraging public and private sources of funds, which will maximize the reach of federal funds. To increase access to these funds, EPA will provide training and technical assistance to help disadvantaged communities identify needs, develop projects, apply for funding, design and implement projects, build capacity, and create training and career pathways. In addition, working collaboratively with the state and tribal partners, EPA's SRF programs will make progress toward Justice40, which aims to ensure that federal agencies deliver at least 40 percent of overall benefits of relevant federal investments to overburdened and underserved communities.

In FY 2024, EPA requests $150 million and 554.5 FTE to support Drinking Water Programs to better protect communities, especially overburdened and underserved communities. This includes efforts to finalize the Lead and Copper Rule Improvements (LCRI) regulation, which aims to strengthen the Lead and Copper Rule Revisions (LCRR) issued in 2021 to more proactively replace lead service lines and more equitably protect public health. EPA released Guidance for Developing and Maintaining a Service Line Inventory[29] in 2022 to support water systems in their efforts to develop lead service line inventories and to provide states with needed information for oversight and reporting to EPA. The guidance provides essential information to help water systems comply with the LCRR requirement to prepare and maintain an inventory of service line materials by October 16, 2024.

[29] For additional information, please visit: https://www.epa.gov/system/files/documents/2022-08/Inventory%20Guidance_August%202022_508%20compliant.pdf.

Resources will support the Agency's efforts to reduce public health and environmental threats from PFAS by finalizing the new drinking water standards in FY 2024. An additional $42.8 million and 22 FTE is requested to advance EPA's PFAS Strategic Roadmap,[30] which will allow EPA to accelerate its efforts to develop various methods and tools to support, states, tribes, and localities in managing PFAS risks, particularly in small and underserved communities. EPA will continue the development of the Drinking Water State-Federal-Tribal Information Exchange System (DW-SFTIES) and support state migration to the Compliance Monitoring Data Portal, which enables drinking water utilities and laboratories to report drinking water data electronically.

EPA also will continue to coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events, including cyberattacks. Cyberattacks can compromise the ability of water and wastewater utilities to provide clean and safe water to customers, erode customer confidence, and result in financial and legal liabilities. In FY 2024, EPA will leverage its role as the lead federal agency for cybersecurity in the water sector and work with government partners to close vulnerabilities and mitigate risks to cyberthreats. EPA requests $25 million for a grant program to help water systems establish and build the necessary cybersecurity infrastructure to address rising threats. EPA also requests $19.4 million and 25 FTE to implement regulatory action to mitigate the risk of cyberattacks in the water sector as well as increase the Agency's ability to respond to incidents. EPA will continue to provide practical tools, training, and technical assistance to increase resilience to extreme weather events (e.g., drought, flooding, wildfires, hurricanes), malevolent acts (e.g., cyberattacks), and climate change. In FY 2022, almost 4,000 drinking water and wastewater systems and water sector partners received training and technical assistance.

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) authorized a suite of water programs to help better address drinking water and wastewater issues across the country. Implementation of DWWIA will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all residents of the United States can obtain and maintain access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, invest in new technologies, and provide assistance to underserved communities. The FY 2024 Budget provides $1.2 billion funding for DWWIA at the full authorization level and represents a robust investment in America's drinking water infrastructure.

Objective 5.2 Protect and Restore Waterbodies and Watersheds – *Address sources of water pollution and ensure water quality standards are protective of the health and needs of all people and ecosystems.*

The FY 2024 Budget includes $1.754 billion and 1,879.7 FTE for Objective 5.2. This objective is directly supported by the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan:*

[30] The PFAS Strategic Roadmap may be found at: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024.

- By September 30, 2026, increase by 41,000 square miles the area of watersheds with surface water meeting standards that previously did not meet standards.[31]

Clean Waterbodies and Watersheds

Pollution and degradation of lakes, rivers, streams, and wetlands endanger aquatic ecosystems, threaten the safety of drinking water, compromise water quality planning and flood protections, impact commercial and recreational opportunities, and reduce the natural benefits these resources provide to communities. Climate change is often the root cause of emerging threats such as drought, sea level rise, and invasive species proliferation. To address these challenges, in FY 2024, EPA will use a suite of CWA core programs to protect and improve water quality and ecosystem health, including the development and implementation of Total Maximum Daily Loads (TMDLs), alternative restoration plans, or other protection approaches for impaired waterbodies; development of national recommended water quality criteria; development of technology-based and water-quality based standards; and implementation of effluent and stormwater discharge permit programs. In FY 2024, funding will support the Agency's work assisting local communities, particularly underserved communities, in their efforts to restore and protect the quality of their waters.

In addition to strengthening its programs, EPA plans to promulgate and update several rules to support clean and safe water. In FY 2024, EPA will seek to complete a rulemaking to establish more protective nutrient limits on wastewater discharges from meat and poultry product facilities. The Agency also will produce effluent limitation guidelines for chemical manufacturers and metal finishing and electroplating companies to address PFAS, for steam electric power generators to address toxics and other pollutants, and for meat and poultry products to address nutrient discharges. The Agency will finalize rules related to improving CWA protections on tribal reservations and consider tribal treaty rights when acting on state Water Quality Standards (WQS) that impact those rights.

EPA also will work collaboratively with public and private sector stakeholders to establish innovative, location-appropriate programs to protect and improve water quality. Additionally, the FY 2024 Budget request would continue to fund the Clean Water Act Research, Investigations, Training, and Information grant authorized by DWWIA in support of Objective 5.2.

Ensuring Clean Water Through Partnerships, Including with Tribes and States

EPA will work with partners and local communities to better safeguard human health and maintain, restore, and improve water quality. In FY 2024, EPA requests $493.3 million for ongoing categorical grants that support tribal and state implementation of the CWA. This request includes an increase of $42.4 million above the FY 2023 enacted for the Section 106 Grants Program, which funds actions to identify, assess and mitigate PFAS in the environment and supports programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources In FY 2022, over 20 thousand square miles of watersheds that previously were not meeting water quality standards, now meet standards.

[31] The FY 2022-2026 Strategic Plan included a draft July 2021 baseline: 425,198 square miles of watersheds with surface water meeting standards and 652,609 square miles of watersheds with surface water not meeting standards. As of July 2022, the final baseline is 504,605 square miles of watersheds with surface water not meeting standards.

EPA plays an important role as a convener and facilitator with federal, tribal, state, territorial and local partners to align resources and authorities within regional, watershed, and basin-scaled collaborative networks. In FY 2024, EPA will invest $682 million and 175.4 FTE in Geographic Programs, funding equal to the current FY 2023 enacted levels, to maintain, restore, and improve water quality for all communities to enjoy. More specifically, EPA's Geographic Programs will deliver technical and financial assistance to solve problems and support healthy climate resilient ecosystems that address water quality, water infrastructure, nutrient pollution, habitat loss, treaty rights, equity, and environmental justice.

Safeguard and Revitalize Communities

Goal 6: Safeguard and Revitalize Communities—Restore land to safe and productive uses to improve communities and protect public health.

STRATEGIC OBJECTIVES:

- Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities—Clean up and restore contaminated sites to protect human health and the environment and build vibrant communities, especially in underserved and overburdened areas.
- Objective 6.2: Reduce Waste and Prevent Environmental Contamination—Prevent environmental pollution by preventing releases, reducing waste, increasing materials recovery and recycling, and ensuring sustainable materials management practices.
- Objective 6.3: Prepare for and Respond to Environmental Emergencies—Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with Tribes, states, and local planning and response organizations.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	**FY 2023 Enacted Operating Plan**	**FY 2024 President's Budget**	**FY 2024 President's Budget v. FY 2023 Enacted Operating Plan**
Safeguard and Revitalize Communities	**$1,840,703**	**$1,912,643**	**$1,301,017**	**-$611,626**
Clean Up and Restore Land for Productive Uses and Healthy Communities	$1,312,826	$1,382,925	$542,476	-$840,449
Reduce Waste and Prevent Environmental Contamination	$312,170	$311,402	$346,409	$35,007
Prepare for and Respond to Environmental Emergencies	$215,707	$218,316	$412,132	$193,816
Total Authorized Workyears	3,323.9	3,404.4	3,642.6	238.2

Goal 6: Safeguard and Revitalize Communities

Restore land to safe and productive uses to improve communities and protect public health.

Introduction

EPA collaborates with tribal, state, and local partners to benefit all communities across the United States by cleaning up, addressing health and environmental risks and then returning contaminated sites to productive use, through the Superfund, brownfields, underground storage tanks, and RCRA programs. Cleaning up contaminated land contributes toward the Administration's Justice40 goal, an initiative initially announced in Executive Order (EO) 14008, *Tackling the Climate Crisis at Home and Abroad*,[32] and amplified through Equity Plans under E.O. 13985 that outline specific actions to ensure fair program implementation. Communities reuse previously contaminated sites in many ways, including parks, shopping centers, sports fields, wildlife habitat, manufacturing facilities, homes and infrastructure. These reuse outcomes can provide significant benefits for underserved and overburdened communities. EPA and its partners also work to prevent releases of contaminants, reduce waste by increasing materials recovery and recycling, and support sustainable materials management practices. Through prevention activities, EPA protects groundwater from releases from underground storage tanks. Through reduction and recycling activities, EPA not only prevents future contamination but supports a less wasteful circular economy. Additionally, EPA prepares for and responds to environmental emergencies as a mission essential function. A recent example is responding to the Norfolk Southern train derailment in East Palestine, Ohio. EPA On-Scene Coordinators and other personnel were boots-on-the ground since the onset of the incident, conducting air, water, and soil monitoring at the site and working alongside federal, state, and local partners with response efforts to ensure the health and safety of the residents. In FY 2024, EPA requests a total of $1.301 billion and 3,642.6 FTE to support *Goal 6, Safeguard and Revitalize Communities.* New in FY 2024, discretionary appropriated funding for certain CERCLA programs is not included here as it is transitioned to the Superfund Tax receipts account. Superfund results remain critical to achieving environmental and human health protections for the Nation.

Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities – *Clean up and restore contaminated sites to protect human health and the environment and build vibrant communities, especially in underserved and overburdened areas.*

The FY 2024 Budget includes $542.5 million and 2,028.5 FTE for Objective 6.1.[33] This objective directly supports the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, bring human exposures under control at an additional 60 Superfund sites.
- By September 30, 2026, complete 225 Superfund cleanup projects that address lead as a contaminant.

[32] Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad* (January 27, 2001), found at https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

[33] Included in Objective 6.1 are the Superfund Remedial and Emergency Response and Removal programs for which appropriated funding is not requested. EPA will transition to funding from Superfund tax receipts for these programs in FY 2024.

- By September 30, 2026, clean up an additional 650 brownfields properties.
- By September 30, 2026, make an additional 425 RCRA corrective action cleanups Ready for Anticipated Use.
- By September 30, 2026, conduct an additional 35,000 cleanups at Leaking Underground Storage Tank facilities.

Nationally, there are thousands of contaminated sites with challenging and complex environmental problems, including soil, sediment, and groundwater contaminated by chemicals such as per- and polyfluoroalkyl substances (PFAS). Superfund cleanups also contribute to reducing lead exposure, a particular health risk for children. Recent research shows Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within 1.2 miles of a Superfund NPL site where lead is a contaminant of concern.[34] While there is no single way to characterize communities located near contaminated sites, the legacy of pollution disproportionally affects communities of color, low-income communities, linguistically isolated populations, and populations with lower rates of high school education. For these reasons, the Superfund program is an important part of the Administration's Justice40 Initiative. By cleaning up and returning contaminated land to productive use, EPA and its partners will reduce the environmental and health effects of exposure to contamination in communities, especially for underserved and overburdened communities.

In FY 2024, EPA proposes to transition from using annual appropriations to funding from Superfund tax receipts for a number of core Superfund programs, starting with continuing critical Superfund pre-construction work such as site characterization, construction/remedial design, and community outreach/engagement, through the implementation of remedial efforts to clean up the sites. This work will complement resources received through the Infrastructure Investment and Jobs Act of 2021 (IIJA) to implement the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) which have provided resources to help eliminate lags in investigation and cleanup as well as foster climate change adaptations to protect at-risk populations. Federal data in a recent Government Accountability Office (GAO) report suggests that approximately 60 percent of Superfund sites overseen by EPA are in areas that are vulnerable to wildfires and different types of flooding − natural hazards that climate change will exacerbate. Nationwide, EPA will aim to control human exposures at 12 additional Superfund sites supporting the 2022-2026 long-term performance goal of 60 sites. To reduce exposure to lead and associated health impacts, EPA will complete at least 45 Superfund lead cleanup projects supporting the 2022-2026 long-term performance goal of 225 projects.

In FY 2024, the Superfund Emergency Response and Removal Program also will transition to Superfund tax receipts. Situations requiring emergency response and removal actions vary greatly in size, nature, and location, and include chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances including from abandoned and uncontrolled hazardous waste sites. EPA's 24-hour-a-day response capability is a cornerstone element of the National Contingency Plan.[35] These resources also will help the EPA and Navajo

[34] Details can be found at https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series.
[35] For more information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.

Nation to accelerate actions laid out in the 2020 Ten-Year Plan: *Federal Actions to Address Impacts of Uranium Contamination on the Navajo Nation*.[36]

Additionally, in FY 2024, EPA requests an increase of $11.2 million in funding above the FY 2023 enacted to continue oversight of Federal Facility Superfund site cleanups and to strive to keep pace with the growing number of PFAS cleanups at Department of Defense (DoD), Department of Energy, and other federal agency sites. EPA anticipates additional engagement on non-National Priorities List (NPL) federal facilities on the Federal Agency Hazardous Waste Compliance Docket to address new information on PFAS at these sites and ensure appropriate assessment and referral of these sites to appropriate cleanup programs.

Currently operating facilities or businesses also may have contamination requiring cleanup, performed under the RCRA Corrective Action program. Cleaning up these contaminated sites also serves as a catalyst for economic growth and community revitalization and can help to preserve existing business operations. The 2021 RCRA economic benefits analyses of 79 RCRA cleanups found that these cleaned up facilities support 1,028 on-site businesses, which provide economic benefits including: $39 billion in annual sales revenue; over 82,000 jobs; and $7.9 billion in estimated annual employment income.[37] The FY 2024 Budget includes $41.7 million and 174.4 FTE to continue efforts to clean up 3,983 priority contaminated hazardous waste facilities under RCRA, which include highly contaminated and technically challenging sites, and assess others to determine whether cleanups are necessary. In FY 2022, EPA approved 124 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,922. In FY 2024, EPA will make an additional 85 sites RAU supporting the FY 2022-2026 long-term performance goal of making 425 sites RAU.

Under the Leaking Underground Storage Tank (LUST) Program, EPA is requesting $79.7 million and 46.8 FTE, an increase of $14.7 million and 5.2 FTE above the FY 2023 enacted, for states and tribes to assess and clean up petroleum contamination, including in groundwater.[38] EPA collaborates with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion. Through the cooperative efforts between EPA and states, the backlog was reduced by approximately 42 percent between the end of 2008 and October 2022 (from 102,798 to 59,890).[39] Requested funds also will support additional tribal cleanup activities in fenceline communities that are immediately adjacent to oil and chemical facilities and UST who are vulnerable to environmental health hazards and climate risks at those facilities.

In FY 2024, EPA requests $131.0 million for the Brownfields Projects Program that will build on current work to revitalize communities, especially those that are historically overburdened and underserved, by providing financial and technical assistance to assess, clean up, and plan reuse at brownfields sites. In FY 2022, EPA leveraged 14,170 jobs and $1.8 billion in cleanup and

[36] https://www.epa.gov/sites/default/files/2021-02/documents/nnaum-ten-year-plan-2021-01.pdf
[37] For more information, please refer to: https://www.epa.gov/hw/redevelopment-economics-rcra-corrective-action-facilities.
[38] Almost half of the Nation's overall population and 99 percent of the population in rural areas rely on groundwater for drinking water. (See *EPA 2000 Water Quality Inventory Report*, https://archive.epa.gov/water/archive/web/html/2000report_index.html).
[39] For additional information, please see EPA website: https://www.epa.gov/ust/ust-performance-measures.

redevelopment funds and made 662 additional brownfields sites RAU. Activities undertaken in FY 2024 will leverage approximately 13,400 jobs and $2.6 billion in other funding sources.[40]

In FY 2024, EPA continues to request the $20 million first provided in the FY 2023 enacted budget to inventory and support the cleanup of contaminated lands in Alaska, many of which were contaminated while not under Alaska Native ownership. Contaminants on some of these lands – arsenic, asbestos, lead, mercury, pesticides, PCBs, and other petroleum products – pose health concerns to Alaskan Native communities, negatively impact subsistence resources, and hamper economic activity.

Objective 6.2: Reduce Waste and Prevent Environmental Contamination – *Prevent environmental pollution by preventing releases, reducing waste, increasing materials recovery and recycling, and ensuring sustainable materials management practices.*

The FY 2024 Budget includes $346.4 million and 695.4 FTE for Objective 6.2. This objective directly supports the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, increase the percentage of updated permits at RCRA facilities to 80% from the FY 2021 baseline of 72.7%.

Nationwide, EPA and its state partners strive to reach all permitting-related decisions in a timely manner for the approximately 6,700 hazardous waste units (e.g., incinerators, landfills, and tanks) located at 1,300 permitted treatment, storage, and disposal facilities. The goal is to ensure that permits are updated to reflect the latest technology and standards and remain protective under changing conditions, such as climate change, and that communities, including those that are underserved and overburdened, have an equitable opportunity to engage in the permitting process over time. To measure progress, EPA has set an FY 2024 target of 110 permit renewals at hazardous waste facilities supporting the FY 2022-2026 long-term performance goal.

The FY 2024 Budget supports building capacity to implement various aspects of the coal combustion residuals (CCR) program. The Agency has promulgated regulations specifying improved management and disposal practices to protect people and ecosystems. The Agency will continue to work with our stakeholders as we implement these regulations. In FY 2024, EPA will take action to ensure protective management of CCR through the implementation of existing regulations, promulgation of additional regulations to address legacy surface impoundments, and the launch of a federal permitting program. EPA will continue to work with states that wish to establish state CCR permit programs that meet EPA's baseline requirements.

Through its National Recycling Strategy and efforts to advance a more circular economy, EPA is working to develop a stronger, more resilient, and cost-effective U.S. municipal solid waste recycling system.[41] Recycling is an important part of a circular economy, which refers to a system

[40] U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's ACRES database.
[41] For additional information, please refer to: https://www.epa.gov/recyclingstrategy/what-circular-economy#:~:text=EPA's%20circular%20economy%20for%20all,healthy%20communities%20are%20the%20goals.

of activities that is restorative to the environment, enables resources to maintain their highest values, designs out waste, and reduces greenhouse gas emissions. Recycling helps alleviate burdens on populations that bear the brunt of poorly run waste management facilities. The FY 2024 Budget includes $10 million to continue efforts to strengthen the U.S. recycling system, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste. EPA will work with recipients of the Solid Waste Infrastructure for Recycling (SWIFR) grants and Recycling Education and Outreach (REO) grants on their projects, which are funded primarily by the IIJA, as well as complete key studies, and identify additional actions needed to support a circular economy for all.

To protect groundwater from releases of petroleum from underground storage tanks (UST), EPA works with its tribal and state partners on prevention. FY 2024 resources include $42.6 million and 61.8 FTE, an increase of $3.3 million and 5.5 FTE, for inspecting UST facilities to meet the three-year inspection requirement and assisting states in adopting prevention measures such as delivery prohibition, secondary containment, and operator training. EPA also will continue assessing the compatibility of UST systems with higher blends of ethanol, including E15, in fenceline communities. These activities emphasize bringing UST systems into compliance with release detection and release prevention requirements and minimizing future releases. Due to the increased emphasis on inspections and release prevention requirements, the number of confirmed releases decreased from 6,847 in FY 2014 to 4,568 reported releases in FY 2022.

Objective 6.3: Prepare for and Respond to Environmental Emergencies – *Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with Tribes, states, and local planning and response organizations.*

The FY 2024 Budget includes $412.1 million and 918.7 FTE to support Objective 6.3. This objective directly supports the following long-term performance goal in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, ensure that 40% of annual emergency response and removal exercises that EPA conducts or participates in incorporate environmental justice.

Environmental emergencies are growing in frequency, and the risks they pose are increasing. EPA strives to prevent such emergencies and be ready to respond to those that occur through the Agency's planning and preparedness efforts, in coordination with and through the support of partner organizations. EPA develops regulations and policies that aim to prevent environmental emergencies and enhance the ability of communities and facilities to prepare for and respond to emergencies that occur. EPA also prepares for the possibility of significant incidents by maintaining a trained corps of federal On-Scene Coordinators, Special Teams, and Response Support Corps, and by providing guidance and technical assistance to tribal, state, and local planning and response organizations to strengthen their preparedness. EPA carries out its responsibility under multiple statutory authorities and the National Response Framework, which provides the comprehensive federal structure for managing national emergencies.

In FY 2024, EPA will continue to chair the U.S. National Response Team[42] and co-chair the 13 Regional Response Teams, which serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams. EPA will participate in the development of limited, scenario-specific exercises and regional drills designed to assess national emergency response management capabilities. To bring broader opportunity to participate in these key planning and preparation activities, EPA has set a long-term performance goal of ensuring that 40 percent of annual emergency response and removal exercises that EPA conducts or participates in incorporate environmental justice principles. Based upon higher-than-expected results in the measure's initial year, EPA anticipates meeting this goal ahead of schedule.

EPA will inspect chemical facilities to prevent accidental releases. The objective is to ensure compliance with accident prevention and preparedness regulations at Risk Management Plan (RMP) and Emergency Planning and Community Right-to-Know Act (EPCRA)-regulated facilities and to work with chemical facilities to reduce chemical risks and improve safety to populations, especially in fenceline communities. There are approximately 12,000 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,800 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and proximity to large residential populations.[43] EPA prioritizes inspections at high-risk facilities and will focus on those facilities located in communities with environmental justice concerns and communities with increased climate-related risks (e.g., extreme weather, flooding, wildfires). In addition, EPA is developing a regulatory action to revise the RMP regulations to incorporate consideration of communities with environmental justice concerns and those vulnerable to climate risks.

In FY 2024, EPA will inspect oil facilities to ensure compliance with prevention and preparedness requirements. Inspections involve reviewing the facility's prevention, preparedness, and response plans and discussing key aspects of these plans with facility staff. EPA will increase inspections, enforcement, and compliance assistance at regulated facilities, focusing on high-risk facilities located in communities with environmental justice concerns and communities with increased climate-related risks. EPA also will conduct unannounced exercises at facilities subject to Facility Response Plan regulations, a subset of facilities identified as high risk due to their size and location, to test the facility owner's ability to put preparedness and response plans into action.

[42] For additional information, please refer to: https://www.nrt.org/.https://ww.nrt.org/.
[43] Located in the EPA RMP database.

Ensure Safety of Chemicals for People and the Environment

Goal 7: Ensure Safety of Chemicals for People and the Environment—Increase the safety of chemicals and pesticides and prevent pollution at the source.

STRATEGIC OBJECTIVES:

- Objective 7.1: Ensure Chemical and Pesticide Safety—Protect the health of families, communities, and ecosystems from the risks posed by chemicals and pesticides.
- Objective 7.2: Promote Pollution Prevention—Encourage the adoption of pollution prevention and other stewardship practices that conserve natural resources, mitigate climate change, and promote environmental sustainability.

GOAL, OBJECTIVE SUMMARY
Budget Authority
Full-time Equivalents
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Ensure Safety of Chemicals for People and the Environment	**$444,661**	**$455,605**	**$581,315**	**$125,710**
Ensure Chemical and Pesticide Safety	$364,088	$367,932	$470,715	$102,783
Promote Pollution Prevention	$80,573	$87,673	$110,600	$22,927
Total Authorized Workyears	1,665.5	1,679.9	1,954.0	274.0

Goal 7: Ensure Safety of Chemicals for People and the Environment

Increase the safety of chemicals and pesticides and prevent pollution at the source.

Introduction

EPA is responsible for ensuring the safety of chemicals and pesticides for the environment and people at all life stages, improving access to chemical safety information, and preventing pollution at the source before it occurs. The Agency focuses on assessing, preventing, and reducing releases and exposures resulting from the manufacture, processing, use, and disposal of chemicals and pesticides and advances the community's right-to-know about these releases and exposures. EPA works to protect the most vulnerable populations from unsafe exposures, especially children, the elderly, and those with environmental justice concerns (including low-income, minority and indigenous populations) who may already be disproportionately harmed by and at risk from other stressors. In addition, EPA works to ensure public access to chemical and pesticide data, analytical tools, and other sources of information and expertise, and promotes source reduction, integrated pest management, and other pollution prevention strategies by organizations and businesses. In total, the FY 2024 Budget includes $581.3 million and 1,954.0 FTE for *Goal 7: Ensure Safety of Chemicals for People and the Environment*.

In FY 2024, EPA's activities under this goal, as described below, will focus on evaluating, assessing, and managing risks from exposure to new and existing industrial chemicals; continuing to address lead-based paint risks; reviewing and registering new pesticides and new uses for existing pesticides; reducing occupational exposure to pesticides, particularly in disadvantaged communities; and addressing potential risks to threatened and endangered species from pesticides. In addition, EPA will continue working with tribes, state agencies, industry, and communities to implement voluntary efforts to prevent pollution at the source and continue to publish Toxics Release Inventory (TRI) data on chemical releases from industrial facilities for public review and use.

Objective 7.1: Ensure Chemical and Pesticide Safety – *Protect the health of families, communities, and ecosystems from the risks posed by chemicals and pesticides.*

The FY 2024 Budget includes $470.7 million and 1,677. FTE for Objective 7.1. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, complete at least eight High Priority Substance (HPS) TSCA risk evaluations annually within statutory timelines compared to the FY 2020 baseline of one.
- By September 30, 2026, initiate all TSCA risk management actions within 45 days of the completion of a final existing chemical risk evaluation.
- By September 30, 2026, review 90% of risk management actions for past TSCA new chemical substances reported to the 2020 Chemical Data Reporting Rule (CDR) compared to the FY 2021 baseline of none.[44]

[44] Changed from "By September 30, 2026, review 90% of risk mitigation requirements for past TSCA new chemical substances decisions compared to the FY 2021 baseline of none."

- By September 30, 2026, recertify before the expiration date 36% of lead-based paint Renovation, Repair, and Painting (RRP) firms whose certifications are scheduled to expire compared to the FY 2021 baseline of 32%.
- By September 30, 2026, complete 78 pesticide registration review cases with statutory due dates that fall after October 1, 2022.
- By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species for all new active ingredients in 90% of the risk assessments supporting pesticide registration decisions for new active ingredients compared to the FY 2020 baseline of 50%.
- By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species in 50% of the risk assessments supporting pesticide registration review decisions compared to the FY 2020 baseline of 27%.
- By September 30, 2026, support Agricultural Worker Protection Standard (WPS) pesticide safety training for 20,000 farmworkers annually compared to the FY 2018-2020 annual average baseline of 11,000.

Toxic Substances Control Act (TSCA)

Under Section 5 of TSCA, EPA is responsible for reviewing all new chemical submissions before they enter commerce to determine whether the chemicals may pose unreasonable risks to human health or the environment.[45] In FY 2024, EPA will conduct risk assessments and make affirmative determinations on risks for more than 500 new chemical notice and exemption submissions annually.

Under TSCA Section 6,[46] EPA has responsibility for prioritizing and evaluating at least 20 existing chemicals at a time, assessing additional chemicals at manufacturers' request, and managing identified unreasonable risks. In FY 2024, EPA will continue developing draft and final risk evaluations for High Priority Substances (HPS) and will develop risk management actions in response to unreasonable human health and environmental risks identified in nine of the first 10 risk evaluations. The FY 2024 Budget includes $130.7 million and 451.8 FTE for the EPM TSCA Program, an increase of $47.9 million and 112.5 FTE above the FY 2023 enacted. Increased funding for the TSCA Program is needed in FY 2024 to advance implementation of the law's requirements. While the Program received additional funding in FY 2023, the full request of $130 million is needed in FY 2024, else achieving the TSCA goals will be a challenge.

Lead-Based Paint (LBP) Risk Reduction

Also under TSCA, EPA's EPM Lead-Based Paint Risk Reduction Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportionate

[45] Actions under TSCA Section 5 may be found at: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/actions-under-tsca-section-5.

[46] Information regarding the regulation of Chemicals under Section 6(a) of the Toxic Substances Control Act may be found at: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/regulation-chemicals-under-section-6a-toxic-substances.

vulnerabilities of certain communities.[47,48] With $14.4 million and 62.9 FTE included in the FY 2024 Budget, EPA will continue to reduce exposure to lead in paint and dust by establishing standards governing lead hazard identification and abatement practices; establishing and maintaining a national pool of certified firms and individuals; and providing information and outreach to housing occupants and the public so they can make informed decisions and take actions on lead hazards in their homes.

Pesticide Programs

In FY 2024, consistent with statutory responsibilities,[49,50,51] EPA will continue to review and register new pesticides and new uses for existing pesticides, and other covered applications under the Pesticide Registration Improvement Extension Act (PRIA). EPA also will act on other registration requests in accordance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and Federal Food, Drug, and Cosmetic Act (FFDCA) standards. Many of these registration actions will be for reduced-risk conventional pesticides and biopesticides, which, once registered and used by consumers, will increase benefits to society and reduce ecological impacts. Additionally, in FY 2024, EPA will continue to reevaluate existing chemicals in the marketplace on a 15-year cycle to ensure the FIFRA standard for registration continues to be met based on current science, including registration review actions subject to the October 1, 2026, deadline for completion.

The *Agricultural Worker Protection Standard* (WPS)[52] and the *Certification of Pesticide Applicators* (CPA)[53] revised rules (finalized in FY 2015 and FY 2017, respectively) are key elements of EPA's strategy for reducing occupational exposure to pesticides. In FY 2024, EPA will continue to support the implementation of the regulations through education and outreach, guidance development, and grant programs, with a particular focus on environmental justice issues in rural communities and the health of farmworkers and their families.

Under the Endangered Species Act (ESA),[54] EPA is responsible for ensuring that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife

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[47] Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[48] Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead level (BLL) was 3.0 µg/dL, and among those in families at or above the poverty level, it was 2.1 µg/dL, a difference that was statistically significant. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[49] Summary of Federal Insecticide, Fungicide, and Rodenticide Act: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.

[50] Summary of the Federal Food, Drug, and Cosmetic Act: https://www.epa.gov/laws-regulations/summary-federal-food-drug-and-cosmetic-act.

[51] Pesticide Registration Improvement Extension Act of 2018 (PRIA 4): https://www.epa.gov/pria-fees.

[52] Agricultural Worker Protection Standard: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.

[53] Revised Certification Standards for Pesticide Applicators: https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators.

[54] For additional information on the Endangered Species Protection Program, see: https://www.epa.gov/endangered-species/about-endangered-species-protection-program.

Service (FWS) or the National Marine Fisheries Service (NMFS), referred to collectively as the Services. This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 pesticide products—many of which have multiple uses. Endangered species risk assessments are extraordinarily complex, national in scope, and involve comprehensive evaluations that consider risks to over 1,700 listed endangered species and 800 designated critical habitats in the U.S. with diverse biological attributes, habitat requirements, and geographic ranges. In April 2022, EPA released a workplan outlining priorities for coming into compliance with ESA across the numerous types of actions it completes each year as well as the development of several pilots to begin to develop more programmatic approaches for ESA compliance.[55] EPA prioritized meeting its ESA obligations for all conventional new active ingredient applications whereby all new active ingredient registrations will only be registered under conditions that comply with ESA. EPA also prioritized ESA determinations in response to litigation commitments and court decisions (the ESA workplan includes a list of the FY 2024 litigation commitments regarding ESA determinations and implementations of biological opinions from the Services). The increase EPA received in the FY 2023 enacted budget serves as initial funding to support EPA efforts in meeting these specific workplan commitments. In November 2022, EPA released a workplan update that announced the incorporation of a focus on FIFRA interim ecological mitigations for non-target and ESA listed species, including listed species, that EPA plans to incorporate into registration review and additional initiatives to make even faster progress on some of our ESA goals.[56]

The FY 2024 Budget requests $75.4 million and 221.6 FTE for the EPM Pesticide: Protect the Environment from Pesticide Risk Program, an increase of $26.7 million and 22.5 FTE above the FY 2023 enacted level. Of this increased funding, $24.8 million and 20.0 FTE will support the ESA compliance work. In FY 2024, EPA will continue to develop and improve existing processes to allow EPA to protect listed species earlier in the regulatory and consultation processes and pursue other major improvements to its ESA compliance work in coordination with the Services.

Objective 7.2: Promote Pollution Prevention – *Encourage the adoption of pollution prevention and other stewardship practices that conserve natural resources, mitigate climate change, and promote environmental sustainability.*

The FY 2024 Budget includes $110.6 million and 276.9 FTE for Objective 7.2. This objective is directly supported by the following long-term performance goals in the *FY 2022 – 2026 EPA Strategic Plan*:

- By September 30, 2026, reduce a total of 6 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) released attributed to EPA pollution prevention grants.
- By September 30, 2026, EPA's Safer Choice Program will certify a total of 2,300 products compared to the FY 2021 baseline of 1,892 total certified products.

[55] For additional information, see: https://www.epa.gov/system/files/documents/2022-04/balancing-wildlife-protection-and-responsible-pesticide-use_final.pdf.
[56] For additional information, see: https://www.epa.gov/system/files/documents/2022-11/esa-workplan-update.pdf.

Pollution Prevention

EPA's implementation of the Pollution Prevention (P2) Program under the Pollution Prevention Act of 1990[57] is one of EPA's primary tools for advancing environmental stewardship and sustainability by federal, tribal, and state governments, businesses, communities, and individuals. These practices focus on reducing the amount of any hazardous substance, pollutant, or contaminant entering a waste stream or released into the environment prior to recycling of discarded material, treatment, or disposal, as well as conserving the use of natural resources. P2 grants – a key element of the P2 Program – contributed to the elimination of 18.6 million metric tons of greenhouse gases between 2011 and 2020.[58] In FY 2024, EPA will continue its work to prevent pollution at the source by awarding targeted P2 grants to tribes, states, and local governments, encouraging the use of products certified by EPA as safer for the environment, encouraging federal procurement of environmentally preferable products, and enhancing the use of TRI data to help prevent pollution and support the Administration's environmental justice priorities.

In FY 2024, EPA will continue to focus on carrying out sector focused P2 National Emphasis Areas[59] and enabling the replication and leveraging of business successes supported by the $5 million P2 grants awarded annually. The Agency will deliver training on green chemistry and engineering solutions to companies, consumers, and communities. EPA also will deliver training and conduct outreach for communities overburdened with pollution, as well as tribal, state, and local governments to help with product and service procurement choices that are environmentally sound and promote human and environmental health. The additional Infrastructure Investment and Jobs Act (IIJA) funding for the Program for FY 2022 to 2026 will significantly increase results and the generation of information on P2 approaches that other businesses can replicate, particularly in disadvantaged communities

In FY 2024, EPA plans to complete the process of updating and strengthening the standards of the Safer Choice (SC) Program,[60] which advances chemical safety by increasing the availability and identification of products containing ingredients that meet stringent health and environmental criteria, through a notice and comment process after consultation with stakeholders. The Agency will conduct outreach with federal, tribal, state, and local government procurement officials and institutional and industrial purchasers to communicate the benefits of SC and other environmentally preferable products, and work to make SC-certified products more widely available to disadvantaged communities. EPA will continue to partner with organizations serving disadvantaged communities with environmental concerns to help custodial staff and house cleaning companies fight occupational exposure-related conditions (e.g., asthma) and gain access to certified products. EPA also will update the Safer Chemical Ingredients List to enhance transparency and facilitate expansion of safer chemical choices and products, including increasing the number and volume of SC-certified products.[61]

The FY 2024 Budget includes $29 million and 69.2 FTE to support the P2 Program in the EPM appropriation, an increase of $16 million and 18 FTE above the FY 2023 enacted budget. This

[57] Summary of the Pollution Prevention Act: https://www.epa.gov/laws-regulations/summary-pollution-prevention-act.
[58] For additional information, see: https://www.epa.gov/system/files/documents/2021-07/p2flier_2021_0.pdf.
[59] P2 National Emphasis Areas may be found at: https://www.epa.gov/p2/p2-national-emphasis-areas-neas.
[60] For additional information on Safer Choice, please visit: https://www.epa.gov/saferchoice.
[61] The Safer Chemical Ingredients List (SCIL) may be found at: https://www.epa.gov/saferchoice/safer-ingredients.

increase will fund a new P2 grant program to support small businesses with transitioning to TSCA compliant practices and mitigate economic impacts. EPA's P2 Program has supported work by P2 grantees, over several years, to work with businesses and industry to identify technically and economically feasible alternatives to toxic chemicals, including some that are the focus of current TSCA risk evaluation and management (e.g., halogenated solvents used in a variety of industries such as degreasing in metal fabrication). Additionally, pollution prevention reporting under the TRI Program collects information on facility-level P2 practices associated with reductions in use and release of toxic chemicals. In FY 2024, EPA will evaluate and integrate P2 case studies and best practices relevant to TSCA risk management by small businesses, clarify technical and economic factors associated with such transitions, and develop and deploy pilot programs to leverage training and ongoing support for small businesses expected to be making transitions in response to TSCA risk management.

Toxics Release Inventory (TRI)

The TRI Program provides data to support partnerships between community groups and companies that has reduced toxic pollution.[62] With the FY 2024 request of $14 million and 37 FTE for the TRI/Right to Know Program, EPA will continue research on tools that can quickly and accurately identify disadvantaged communities near TRI facilities, which would support prioritization of P2 initiatives. In addition, in FY 2024, EPA will continue to publish the TRI and use analyses of toxic chemical releases from industrial facilities located near disadvantaged communities with environmental concerns to identify and develop sector specific P2 case studies, best practices, outreach, and training. This will help facilitate adoption of P2 practices in the facilities and in the communities themselves.

[62] For additional information, please visit the TRI for Communities webpage: https://www.epa.gov/toxics-release-inventory-tri-program/tri-for-communities.

Table of Contents – Science and Technology

APPROPRIATION: Science & Technology
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology				
Budget Authority	$740,947	$802,276	$967,838	$165,562
Total Workyears	2,005.4	2,022.0	2,265.7	243.7

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Bill Language: Science & Technology

For science and technology, including research and development activities, which shall include research and development activities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; necessary expenses for personnel and related costs, for executive oversight of regional laboratories, and travel expenses; procurement of laboratory equipment and supplies; hire, maintenance, and operation of aircraft; and other operating expenses in support of research and development, $967,838,000, to remain available until September 30, 2025.

Program Projects in S&T
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Clean Air and Climate				
Clean Air Allowance Trading Programs	$8,360	$7,117	$19,983	$12,866
Climate Protection	$6,723	$8,750	$10,724	$1,974
Federal Support for Air Quality Management	$8,494	$11,343	$10,666	-$677
Federal Vehicle and Fuels Standards and Certification	$101,348	$117,341	$179,617	$62,276
Subtotal, Clean Air and Climate	$124,925	$144,551	$220,990	$76,439
Indoor Air and Radiation				
Indoor Air: Radon Program	$116	$199	$173	-$26
Radiation: Protection	$2,224	$1,683	$2,349	$666
Radiation: Response Preparedness	$2,928	$3,596	$4,686	$1,090
Reduce Risks from Indoor Air	$136	$278	$183	-$95
Subtotal, Indoor Air and Radiation	$5,404	$5,756	$7,391	$1,635

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Enforcement				
Forensics Support	$14,815	$15,532	$18,657	$3,125
Homeland Security				
Homeland Security: Critical Infrastructure Protection	$9,941	$10,852	$34,205	$23,353
Homeland Security: Preparedness, Response, and Recovery	$24,536	$25,347	$39,539	$14,192
Homeland Security: Protection of EPA Personnel and Infrastructure	$501	$625	$501	-$124
Subtotal, Homeland Security	$34,978	$36,824	$74,245	$37,421
IT / Data Management / Security				
IT / Data Management	$2,799	$3,197	$3,313	$116
Operations and Administration				
Facilities Infrastructure and Operations	$68,347	$67,500	$72,043	$4,543
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$2,854	$2,894	$4,031	$1,137
Pesticides: Protect the Environment from Pesticide Risk	$2,487	$2,334	$2,339	$5
Pesticides: Realize the Value of Pesticide Availability	$941	$925	$1,002	$77
Subtotal, Pesticides Licensing	$6,282	$6,153	$7,372	$1,219
Research: Air, Climate and Energy				
Research: Air, Climate and Energy	$93,402	$100,448	$137,835	$37,387
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	$113,427	$116,141	$123,555	$7,414
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$133,808	$137,857	$146,642	$8,785
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$38,740	$39,918	$44,942	$5,024
Research: Chemical Safety for Sustainability				
Endocrine Disruptors	$16,325	$16,353	$17,530	$1,177
Computational Toxicology	$21,349	$21,606	$23,128	$1,522
Research: Chemical Safety for Sustainability (other activities)	$54,679	$54,591	$63,220	$8,629

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Subtotal, Research: Chemical Safety for Sustainability	$92,353	$92,550	$103,878	$11,328
Subtotal, Research: Chemical Safety for Sustainability	$131,092	$132,468	$148,820	$16,352
Ensure Safe Water				
Drinking Water Programs	$4,177	$5,098	$6,975	$1,877
Clean and Safe Water Technical Assistance Grants				
Congressional Priorities	$7,492	$30,751	$0	-$30,751
TOTAL S&T	**$740,947**	**$802,276**	**$967,838**	**$165,562**

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Clean Air

Clean Air Allowance Trading Programs
Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$15,423	$16,554	$30,535	$13,981
Science & Technology	***$8,360***	***$7,117***	***$19,983***	***$12,866***
Total Budget Authority	$23,783	$23,671	$50,518	$26,847
Total Workyears	66.3	66.7	86.1	19.4

Program Project Description:

This Program is responsible for managing the Clean Air Status and Trends Network (CASTNET), an ambient monitoring network that has been continuously collecting data for more than 30 years. CASTNET serves as the Nation's primary source for assessing long-term trends in rural air quality and atmospheric pollutant inputs to ecosystems. CASTNET sites are uniquely situated in remote and high elevation areas within 42 states and seven tribal boundaries. The network provides valuable data to support the ozone National Ambient Air Quality Standards (NAAQS) in many areas not monitored by state, local, and tribal monitoring agencies. Additionally, CASTNET ozone data are used for exceptional event assessments of international transport, background concentrations, wildfire events, and stratospheric ozone intrusions often leading to ozone exceedances. The CASTNET program also supports 71 ambient ammonia monitoring sites and 30 wet deposition sites through its contribution to the National Atmospheric Deposition Program (NADP) to assess atmospheric concentrations of PM precursors (e.g., ammonia), nitrogen impacts on air and water quality (e.g., eutrophication, algal blooms), and ecosystem effects (e.g., reduction in biodiversity). The Agency utilizes CASTNET data to support the development, evaluation, and validation of air quality models used to assess results under potential future emission and climate scenarios. Used in conjunction with other ambient air quality networks, CASTNET's data products also are used to determine the effectiveness of national and regional emission control programs, validate satellite measurements, and provide near-real time data to support AirNow and Air Quality Index (AQI) reporting tools.

The CASTNET program provides spatial and temporal trends in ambient air quality and is the largest network in the world reporting atmospheric deposition used to assess ecological impacts in sensitive ecosystems (e.g., national parks, freshwater bodies, and subalpine regions). The sites also fill critical data gaps needed to understand precursor emission contributions leading to air quality issues affecting downwind population centers, such as agricultural activity, oil and gas production, wildfire smoke, and wood smoke in mountain valleys. Rural CASTNET sites are intentionally located away from stationary emission sources but are often located in or near economically disadvantaged communities, tribal communities, or communities of color. Maintaining the CASTNET monitoring network continues to be critical for assessing the environmental benefits

realized from regional emission reduction programs (thereby reducing secondary pollutant formation of ozone and fine particles), and simultaneously evaluating how climate stressors may impact future improvements to air quality and ecosystem recovery. During the pandemic, EPA addressed the disparate impacts of COVID-19 on areas with poor air quality by using CASTNET data to track and assess how pandemic-related policies and changes in economic activity affected air quality.

EPA works closely with tribal governments to build tribal air monitoring capacity through partnerships with the CASTNET program. Since 2002, CASTNET has added seven sites on tribal lands, including two new sites in the northwest U.S. By expanding tribal partnerships, CASTNET can fill important spatial gaps in air quality and atmospheric deposition monitoring while providing tribes with the equipment and technical training to collect and report local air quality data. Tribes benefit from dedicated monitoring sites that build technical skills, provide near-real time air quality data to the community, and provide environmental data that help tribes assess the impacts of air pollution on cultural or natural resources on tribal lands. Tribal partners utilize the CASTNET data to review permit applications, assess impacts from upwind emissions sources, and provide hands-on educational training. CASTNET hosts quarterly calls with EPA Regions and tribal partners which provides a forum for sharing technical information, establishing training modules, and engaging directly with the user community.

To support modernization efforts, CASTNET will use the existing network infrastructure to fill in gaps in continuous measurements necessary to evaluate changes in atmospheric chemistry and global climate impacts on air quality and deposition. The Program is well-situated to measure background or regional levels of air toxics (e.g., ethylene oxide) and persistent chemicals of concern (e.g., PFAS compounds). Measuring speciated reactive nitrogen will provide valuable data that states can use to determine which precursors are driving PM formation and make more informed decisions on emission control strategies. Furthermore, continuing to expand capacity while modernizing the CASTNET infrastructure ensures data can be made available in near-real time to address short-term changes in air quality resulting from meteorological conditions, such as temperature inversions, or natural disasters, such as wildfires.

This program also is responsible for managing EPA's Long-Term Monitoring (LTM) program, which was created to assess the health of lakes and streams in response to changes in deposition of atmospheric pollutants. It also ensures that the Clean Air Act continues to be effective in reducing the impact of atmospheric pollutants (e.g., strong acid anions) on surface waters in New England, the Adirondack Mountains, the Northern Appalachian Plateau (including the Catskill mountains), and the Blue Ridge region. This program is operated cooperatively with partners in state agencies, academic institutions, and other federal agencies. The LTM surface water chemistry monitoring program provides field measurements for understanding biogeochemical changes in sulfur, nitrogen, acid neutralizing capacity, aluminum, and carbon in streams and lakes in relation to reductions in pollutant emissions and a changing climate. The LTM program is one of the longest running programs at EPA, providing a longitudinal dataset based on sampling and measurements since 1983.

This program also supports the Clean Air Allowance Trading Programs, which are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and

international boundaries. Programs designed to control SO_2 and NO_X include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update (which was revised in 2021 in response to a court remand), and the Revised CSAPR Update. The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO_2, hazardous air pollutants, and greenhouse gases.

Both the CSAPR and the CSAPR Update Rule require 27 states in the eastern U.S. to limit their emissions of SO_2 and/or NO_x in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states. These programs set emissions limitations that are defined in terms of maximum statewide "budgets" for emissions of annual SO_2, annual NO_x, and/or ozone-season NOx from each state's large electric generating units. EPA is supporting state efforts with respect to best available retrofit technology, reasonable progress, and interstate visibility transport, as those obligations relate to SO_2 emissions from electricity generating units.[1] The air quality and other environmental information gathered through this program also support other Clean Air Allowance Trading Program-related rulemakings, such as EPA's proposed Good Neighbor Plan to reduce emissions contributing to interstate air pollution under the 2015 ozone NAAQS and rulemakings associated with Regional Haze.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting funding to modernize the existing CASTNET network, focusing on greater system reliability, enhanced network automation, and "big data" improvements for enhanced assessments, maintain and provide additional monitoring sites and deployable monitors on tribal lands, and expand site functionality (i.e., measuring additional air pollutants). In FY 2024, EPA will:

- Continue to support 64 CASTNET sites, including seven tribal sites, 30 NADP National Trends Network (NTN), 71 NADP Ammonia Monitoring Network (AMoN), and LTM sites that provide long-term atmospheric concentrations, deposition, and surface water quality data. Data are used to analyze and assess air quality, trends in sulfur and nitrogen deposition, critical loads, and other indicators of ecosystem health.

- Provide support for independent audits and required performance evaluations to assure high-quality data to support the NAAQS and environmental assessments.

- Continue progress toward increasing monitoring capacity by working to identify new tribal partners and other underserved communities that would benefit from joining a national air monitoring program.

[1] Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.

- Invest in technology and small businesses by replacing aging equipment, repairing monitoring shelters more than 30 years old that have deteriorated due to extreme weather and deploying new equipment and monitoring sites in rural, often low-income/minority areas. The CASTNET contractor allocates 55 percent of their subcontract dollars to small businesses responsible for performing calibrations, managing site operators, and data analyses.

- Upgrade aging CASTNET equipment. To improve overall data quality EPA will replace continuous ozone analyzers, and procure new PM and gas analyzers (e.g., CO, VOCs, speciated nitrogen) that will support NAAQS assessments, emission control strategies, regulatory actions, and climate impacts on air quality and ecosystems in the future. Analyzers will be integrated into the existing automated calibration systems to improve network resiliency.

- Utilize existing infrastructure to expand network capacity by adding measurement systems for background and regional concentrations of air toxics and emerging pollutants of concern. Data will complement urban measurements and provide valuable information on atmospheric pathways and chemical transformations that will impact health risks.

- Continue to modernize the data reporting tools and visualizations to improve user experiences and data access, particularly during emergencies (e.g., COVID-19 pandemic). Strengthening front-end and back-end data management platforms will improve system reliability and allows state and local agencies to quickly make critical decisions. Providing real-time air quality data during such events is valuable for informing vulnerable populations about health risks.

- Assure the continuation of ongoing SO_2 and NO_X emission reductions from power plants in the eastern half of the U.S. by implementing CSAPR and the CSAPR Update, and across the contiguous U.S. by implementing the Acid Rain Program.[2]

- Ensure accurate and consistent results for the Clean Air Allowance Trading Programs. Continue work on performance specifications and investigating monitoring alternatives and methods to improve the efficiency of monitor certification and emissions data reporting.

- Work with states to implement emission reduction programs to comply with CAA Section 110(a)(2)(D)(i)(I) requirements, including conducting environmental justice analyses to consider the distributional impacts of emissions on overburdened and vulnerable communities.[3]

Performance Measure Targets:

(PM NOX) Tons of ozone season NOx emissions from electric power generation sources.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						355,000	344,000	332,000	Tons
Actual	464,999	443,764	389,170	341,082	359,124	326,722			

[2] Clean Air Act §§ 110(a)(2)(D) and 401.
[3] For more information on program performance, please see: https://www.epa.gov/airmarkets/progress.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$383.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$13,249.0 / +1.7 FTE) This program change is an increase to maintain and provide additional monitoring sites and deployable monitors, including on tribal lands, and expand site functionality (i.e., measuring additional air pollutants). This investment includes $302.0 thousand for payroll.

Statutory Authority:

Clean Air Act.

Climate Protection
Program Area: Clean Air and Climate
Goal: Tackle the Climate Crisis
Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$100,267	$101,000	$170,512	$69,512
Science & Technology	***$6,723***	***$8,750***	***$10,724***	***$1,974***
Total Budget Authority	$106,990	$109,750	$181,236	$71,486
Total Workyears	209.3	216.1	256.7	40.6

Program Project Description:

The Climate Protection Program supports implementation and compliance with greenhouse gas (GHG) emission standards for light-duty and heavy-duty vehicles developed under EPA's Federal Vehicle and Fuels Standards and Certification Program. Resources under this Program also support compliance activities for implementing the National Highway Traffic Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) standards. Under authorities contained in the Clean Air Act and the Energy Policy Act, EPA is responsible for issuing certificates and ensuring compliance with both the GHG and CAFE standards.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the *FY 2022 - 2026 EPA Strategic Plan.*

Resources will support the following activities:

Certification and Compliance
Implementation of the GHG emission standards for light-duty and heavy-duty vehicles and engines has significantly increased EPA's certification and compliance responsibilities. These responsibilities play a critical role in ensuring that the programs achieve their climate goals. Over time, in an effort to provide greater compliance flexibility for manufacturers, EPA has introduced numerous innovative features into the vehicle certification process. These features include new and more comprehensive trading programs, credits for off-cycle emission reductions, and new federal test procedures. In FY 2024, EPA will continue implementing Light-Duty and Heavy-Duty GHG programs based on the changes in the "near-term" Light-Duty final rule and the proposed changes in the Heavy-Duty 2027+ rulemaking. This implementation requires significant expansions of EPA's information technology systems, which provide an efficient means for manufacturers to apply for and receive certificates of conformity, and for EPA to audit and oversee manufacturer compliance.

Vehicle and Engine Testing Services

EPA's National Vehicle & Fuel Emissions Laboratory (NVFEL) has invested significant resources to maintain its critical vehicle and engine testing capabilities and to upgrade them as needed to implement new standards for fuel, vehicle, and engine emissions. These investments have included updates to its four-wheel drive dynamometers and analytical systems needed to perform regulation development and certification testing of light-duty, medium-duty, and heavy-duty vehicles, including battery electric and hybrid electric technologies. This modernized test environment has led to new developments, such as test methods for accurately measuring the efficiency and range of electrified vehicles and new processes for gathering and analyzing in-use fuel efficiency data from vehicles tested on the road.

In FY 2024, NVFEL will direct resources toward updating its electric vehicle charging infrastructure in the laboratory to support anticipated future test requirements for light-duty and heavy-duty vehicles and will prepare for testing of hydrogen fuel cell technologies. NVFEL's ongoing facility modernization has been essential to the implementation of testing requirements for EPA's existing GHG regulations and has expanded production of scientific data on new and emerging vehicle and engine technologies in support of EPA's current rulemaking activities. Continued equipment modernization is critical to NVFEL in keeping pace with technology advancements in the transportation sector, and in maintaining the lab's role as a trusted testing standard for regulated industry and as a credible deterrent against non-compliance.

In addition to investing in emerging needs, NVFEL will continue to maintain, repair, and replace aging laboratory equipment needed to sustain its core compliance testing activities. In FY 2024, NVFEL plans to extensively replace aging or obsolete test equipment supporting its vehicle and engine compliance programs. This represents a continuation of annual and ongoing capital equipment maintenance associated with the expansion of lab testing programs needed to implement light-duty and heavy-duty criteria pollutant and GHG regulations, which have increased NVFEL's operation and maintenance costs by an estimated $2.1 million per year.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$43.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,931.0 / +2.3 FTE) This program change is an increase in support of the National Vehicle and Fuel Emissions Laboratory compliance/certification work and mobile source vehicle emissions analysis. Additional resources at the lab support restoring capacity to test and certify engines, fuels, and vehicles to ensure compliance with regulatory standards, and to generate emissions data to support regulatory development work essential to tackling the climate change crisis. This investment includes $411.0 thousand for payroll.

Statutory Authority:

Clean Air Act; Pollution Prevention Act (PPA), §§ 6602-6605; National Environmental Policy Act (NEPA), § 102; Clean Water Act, § 104; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), § 8001; Energy Policy Act of 2005, § 756.

Federal Support for Air Quality Management
Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$148,894	$147,704	$356,016	$208,312
Science & Technology	***$8,494***	***$11,343***	***$10,666***	***-$677***
Total Budget Authority	$157,387	$159,047	$366,682	$207,635
Total Workyears	827.8	879.3	1,079.7	200.4

Program Project Description:

Federal support for the criteria pollutant and air toxics programs includes a variety of tools to characterize ambient air quality and the level of risk to the public from air pollutants and to measure national progress toward improving air quality and reducing associated risks. The Federal Support for Air Quality Management Program supports development of State Implementation Plans (SIPs) through modeling and other tools and assists states in implementing, attaining, maintaining, and enforcing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The Program also supports development and provision of information, training, and tools to assist state, tribal, and local agencies, as well as communities, to reduce air toxics emissions and risks specific to their local areas. In addition, the Program supports activities related to the Clean Air Act (CAA) stationary source residual risk and technology review program. EPA is required to assess the level of risk remaining after promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP) that are based on Maximum Available Control Technology (MACT) within eight years of that promulgation. In addition, the Agency is required to review all NESHAP at least every eight years to determine if revisions are needed to reflect developments in practices, processes, and control technologies.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan.*

During FY 2024, as part of implementing key activities in support of attainment of the NAAQS, EPA will provide states, tribes, and local air agencies with scientifically and technically sound assistance in developing SIPs/ Tribal Implementation Plans (TIPs) that meet requirements to attain and maintain the NAAQS. This assistance includes providing models, modeling inputs and tools, technical data and guidance, and identifying emission control options. EPA facilitates national consistency in how air quality modeling is conducted as part of regulatory decision-making, including federal and state permitting programs, SIP/TIP-related actions, as well as how conformity determinations are made across the U.S. The Agency will work with states, tribes, and

local air agencies to ensure that particulate matter (PM) hot-spot analyses are conducted in a manner consistent with the transportation conformity regulation and guidance.

One of EPA's priorities is to fulfill its statutory and court-ordered obligations, and EPA will continue to emphasize incorporating environmental justice considerations in the decision-making processes involved in meeting these obligations. In FY 2024, EPA will continue to conduct the periodically required "technology reviews" of NESHAP and conduct required risk assessments for MACT-based NESHAP. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Agency will share air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. In 2024, EPA will continue reporting the most current air toxics data each year in the annual Air Trends Report and in an online interactive tool instead of the previous three to four-year cycle for reporting air toxics data and provide that data at increased spatial resolution.

EPA will continue to provide information and assistance to states, tribes, and communities through documents, websites, webinars, and training sessions on tools to help them on environmental justice assessments that can inform risk reduction strategies for air toxics. EPA will continue to communicate and collaborate effectively with communities with environmental justice concerns to address air toxics issues. EPA will enhance its multi-pollutant air quality management support to state and local areas, factoring environmental justice into prioritization efforts, including providing tools to enable state, tribal, and local governments planning and strategy development. EPA will continue to look at multiple pollutants in an industrial sector and identify ways to encourage adoption of policies which optimize co-benefits of pollution control, including for greenhouse gases. The focus of these efforts is to address an individual sector's emissions comprehensively and to prioritize regulatory efforts to address the sources and pollutants of greatest concern to overburdened communities. In developing sector and multi-pollutant approaches, EPA will continue to improve its NEXUS tool and other multipollutant solutions that address the differing and cumulative nature of the multiple pollutants and associated industrial sectors.

In FY 2024, EPA will continue to work with internal and external stakeholders to improve ambient air quality monitoring networks and measurement techniques to fill data gaps and to provide better input to estimation of population exposure to criteria and toxic air pollutants. To ensure data quality, EPA will continue to implement and manage independent quality assurance programs for national monitoring networks as well as for federal and commercial laboratories that produce ambient air monitoring data.

In FY 2024, EPA will continue to work with partners to improve emissions factors and inventories, including the National Emissions Inventory (NEI). This effort includes gathering improved activity data from emissions monitoring and using geographic information systems and satellite remote sensing systems, where possible, for key point, area, mobile, and fugitive sources, and global emission events.

In FY 2024, EPA will continue to operate and maintain the Air Quality System (AQS), which houses the Nation's regulatory ambient air quality data. EPA will support the AQS Data Mart, which provides that same ambient air quality data to the scientific community and to the general public. The Agency's national real-time ambient air quality data system, AirNow, will maintain

baseline operations. The public increasingly relies on AirNow for ambient air quality information during wildfires. In FY 2024, EPA will continue improving the Fire and Smoke map by engaging tribal, state, and local agencies for input.

The Agency is developing a process that will allow all ambient air quality data to be submitted to a single information system. This single system will greatly improve the processing and availability of ambient air quality data to agency regulatory partners and to the public. FY 2024 funds are requested to develop the single system that will eventually modernize AirNow, AQS, and the AQS Data Mart.

EPA will continue to operate and maintain the Emissions Inventory System (EIS), which quality assures and stores current and historical emissions inventory data and supports the development of the NEI. EPA, states, and others use the NEI to aid in state and local air agency SIP development, serve as a vital input to air quality modeling, help analyze public health risks from air toxics, develop strategies to manage those risks, and support multi-pollutant analysis for air emissions. The Agency will enhance EIS to support the revised Air Emissions Reporting Requirements (AERR) rule and other user-focused needs.

EPA is streamlining emissions data reporting for multiple agency programs through the Combined Air Emissions Reporting System (CAERS). This system is a central hub that takes a single submission of data in a single format and sends it to the appropriate EPA program system. When fully developed, CAERS is expected to reduce the cost to industry by only reporting emissions data for multiple agency programs to one system and to the government by better managing emissions data and making that data available in a timely fashion.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$544.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$1,221.0 / +6.0 FTE) This net program change reflects a shift to fund additional FTE for the development of science, technology, and methodologies to better implement the Clean Air Act, including: enhancing risk assessment capabilities to better identify and determine impacts on communities; communicating and collaborating with environmental justice communities to address air toxics concerns; and improving ambient air monitoring networks and measurement techniques to fill data gaps and better estimate the population's exposure to criteria and toxic air pollutants. This net investment includes $1.221 million for payroll.

Statutory Authority:

Clean Air Act.

Federal Vehicle and Fuels Standards and Certification
Program Area: Clean Air and Climate
Goal: Tackle the Climate Crisis
Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$101,348***	***$117,341***	***$179,617***	***$62,276***
Total Budget Authority	$101,348	$117,341	$179,617	$62,276
Total Workyears	309.3	323.5	370.3	46.8

Program Project Description:

Under the Federal Vehicle and Fuels Standards and Certification Program, EPA develops, implements, and ensures compliance with national emission standards to reduce mobile source related air pollution from: light-duty cars and trucks; heavy-duty trucks and buses; nonroad engines and equipment; and from the fuels that power these engines. The Program also evaluates new emission control technology and provides state, tribal, and local air quality managers and transportation planners with guidance, tools, and other information to develop additional strategies and place-based transportation programs to reduce mobile source pollution.

As part of ensuring compliance with national emission standards, the Program tests vehicles, engines, and fuels, and establishes test procedures for federal emissions and fuel economy standards. The Program operates test cells that simultaneously measure criteria pollutants and greenhouse gas (GHG) emissions, reviews certification applications for light-duty vehicles and heavy-duty engines to approve applications for criteria pollutant and GHG emission standards and examines for potential violations.

National Vehicle and Fuel Emissions Laboratory (NVFEL)
The NVFEL ensures air quality benefits and fair competition in the marketplace by conducting testing operations on motor vehicles, heavy-duty engines, nonroad engines, and fuels to certify that all vehicles, engines, and fuels that enter the U.S. market comply with all federal clean air, GHG, and fuel economy standards. The NVFEL conducts vehicle and engine emission tests as part of pre-production tests, certification audits, in-use assessments, and recall programs to ensure compliance with mobile source programs. The NVFEL also produces critical test data on new and emerging vehicle and engine technologies to support the development of future greenhouse gas and criteria pollutant regulations. Through cooperative partnerships and committee involvement, the lab leads the development and implementation of test methods and procedures for vehicles, engines, and fuels to ensure consistent data quality among manufacturers' labs, measure fuel efficiency, and verify compliance of electrified and conventional vehicles with EPA standards.

Renewable Fuel Standard (RFS)
The RFS Program was created under the Energy Policy Act of 2005 (EPAct), which amended the Clean Air Act, and was expanded under the Energy Independence and Security Act of 2007 (EISA). The RFS Program requires a certain volume of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel, heating oil, or jet fuel.

Supporting Tribal, State and Local Governments
EPA works with tribal, state, and local governments to ensure the technical integrity of the mobile source control emission benefits, including in State Implementation Plans (SIPs) and transportation conformity determinations. EPA develops and provides information and tools to assist tribal, state, and local agencies, as well as communities, to reduce criteria pollutant and air toxics emissions and risks specific to their local areas. Reductions in emissions of mobile source air pollution, such as components of diesel exhaust, are achieved through: guidance and technical assistance for state and local Clean Air Act mobile source programs in nonattainment and maintenance areas for the National Ambient Air Quality Standards (NAAQS); establishing national emissions standards for vehicles, equipment, and fuels, research of public health impacts and mitigation options; methods for quantifying multi-pollutant emission reductions for place-based strategies; and partnership approaches working with tribal, state, and local governments, as well as a variety of non-governmental stakeholder groups.

Prioritizing Environmental Justice
In response to the Administration's priorities and goals, EPA's mobile source programs will further integrate environmental justice (EJ) and equity considerations. This includes: 1) outreach and inclusion throughout the regulatory development process; 2) analysis of current conditions to understand economic inequities potentially related to EPA's regulatory policies – as well as disparities in exposure to mobile source air pollution experienced by people of color, low-income populations, and tribal communities; 3) analysis of the equity and air quality improvements from EPA's regulatory actions and voluntary programs; 4) technical assistance to state, local, and tribal governments to reduce regional and localized criteria pollutant and other emissions through regulatory and non-regulatory strategies, including nearby communities with environmental justice concerns, and within the context of meeting Clean Air Act SIP, transportation conformity, and other air quality planning requirements; and 5) application of non-regulatory mitigation measures through partnership programs including the Diesel Emissions Reduction Act (DERA) Program and EPA's Ports Initiative, to further target improvements in air quality for those disproportionately exposed to air pollution from mobile sources.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the *FY 2022 - 2026 EPA Strategic Plan*.

To support both climate change and air quality work activities relating to EPA's mobile sources program, EPA is requesting additional resources in FY 2024. This includes funding for the development of analytical methods, regulations, and analyses by controlling greenhouse gas, criteria pollutant, and air toxics emissions from light-duty, medium-duty, and heavy-duty vehicles.

Federal Vehicle and Fuels Standards and Certification Program

In FY 2024, the Federal Vehicle and Fuels Standards and Certification Program will continue to focus its efforts on certification responsibilities. The Agency will continue to perform its compliance oversight functions on priority matters, conducting compliance oversight tests where evidence suggests noncompliance. EPA will continue to conduct pre-certification confirmatory testing activities for emissions and fuel economy for passenger cars and will increase on-road measurements of in-use vehicle emissions. EPA anticipates reviewing and approving about 4,900 vehicle and engine emissions certification requests from vehicle and engine manufacturers, including light-duty vehicles, heavy-duty diesel engines, nonroad engines, marine engines, locomotives, and others. EPA's certification services have sustained high demand, due to the number of industries we regulate as well as increasing complexities with each subsequent change in stringency and rulemaking action. Accordingly, NVFEL will increase compliance testing in each of these areas in FY 2024.

EPA utilizes in-use emissions data provided by light-duty vehicle manufacturers to measure compliance and determine if any follow-up evaluation or testing is necessary. Since calendar year (CY) 2000, light-duty vehicle manufacturers have been required to test a number of newer and older in-use vehicles and provide the data to EPA. The Agency receives over 6,000 emissions tests results from more than 2,000 vehicles annually. EPA reviews the data and determines if there are any specific vehicles, models, or manufacturers that are failing in-use emissions standards. The Agency will use this information submitted by light-duty manufacturers, together with emissions data collected at NVFEL, to determine if there are vehicle models which should be recalled and repaired to address excess in-use emissions and that should be identified for testing for the upcoming model year prior to granting the manufacturer a certificate of conformity, which allows the manufacturer to sell vehicles in the U.S.

Emission Standards for New Motor Vehicles

In FY 2024, EPA will take action to reduce air pollution and GHG emissions by focusing on the transportation sector's largest contributors to criteria pollutant and GHG emissions: light-duty vehicles (LDVs) and heavy-duty vehicles (HDVs). Work also supports EPA's long-term performance goal to promulgate final rules that will reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

In FY 2022, EPA completed a revision of the light-duty vehicle GHG standards established in April 2020 (the Safer Affordable Fuel-Efficient Vehicles Rule), setting revised "near-term" standards through model year (MY) 2026. In March 2022, EPA reinstated California's waiver of preemption under the Clean Air Act (CAA) for its own GHG emission standards and zero emission vehicle (ZEV) sales mandate. As a result of this action, other states may choose to adopt and enforce California's GHG emission standards in lieu of the Federal standards, consistent with section 177 of the Clean Air Act.

In FY 2024, EPA will promulgate a final rulemaking for new multi-pollutant emissions standards, including for greenhouse gas emissions, for light- and medium-duty vehicles beginning with MY 2027 and extending through and including at least MY 2030. These standards will account for technologies that allow zero and near-zero emissions. Many automakers have recently announced

ambitious plans for electrifying their new LDV fleets in the 2030 to 2040 timeframe. This rulemaking also will be a key measure in contributing to the President's commitment under the Paris Agreement to reduce U.S. GHG emissions by 50-52 percent from 2005 levels by 2030.

In December 2022, EPA finalized a rulemaking to reduce nitrogen oxides (NOx) emissions from MY 2027 and later heavy-duty engines and vehicles. Pollution from trucks has been a long-standing obstacle to advancing environmental justice, as many low-income communities and communities of color live near highways or in heavily polluted areas with frequent truck congestion and idling. Setting clear and stringent standards for truck pollution is critical to delivering on the President's commitment to delivering tangible benefits to historically underserved and overburdened communities.

In FY 2024, EPA will promulgate a final rulemaking under the CAA to establish new GHG emissions standards for heavy-duty engines and vehicles beginning with MY 2027. This rule will reduce GHG and other emissions from highway HDVs, the second-largest source of transportation GHG emissions. This action will build on the heavy-duty MY 2027 rulemaking and accelerate the transition to zero-emission vehicles. A key focus for the GHG elements of this effort will be the shift from HDVs powered by internal combustion engines to those powered by zero-emission technologies, such as battery electric and fuel-cell technologies.

EPA will invest significant resources to address a myriad of new technical challenges to support these two sets of long-term rulemakings, which will include added LDV and HDV testing and modeling capabilities at NVFEL. Key to this technical work is to understand the cost, feasibility, and infrastructure impacts of electrifying the broad range of products in the LDV and HDV sectors. This will include vehicle demonstration projects focused on emerging technologies, that are still in the pre-production stage with manufacturers, but are expected to be strategically important in achieving future standards.

Fuel Economy Labeling Requirements

In FY 2024, EPA also will oversee compliance with vehicle fuel economy labeling requirements. In past years, EPA conducted in-use audits of manufacturer "coast-down" data, revealing issues in manufacturer data submitted to EPA and, as a result, found inaccurate fuel economy labels on more than a million vehicles from several manufacturers. Due to the increasing consumer demand and subsequent increased electric vehicle offerings, EPA would like to begin a coast-down program for electric vehicles in FY 2024.

Tier 3 Light-Duty Vehicle Standards

In FY 2024, EPA will continue implementing the Tier 3 standards for light-duty vehicles and certifying manufacturers' fleets for vehicle MY 2023 and MY 2024. EPA is responsible for establishing the test procedures needed to measure tailpipe emissions and for verifying manufacturers' vehicle fuel economy data. As a result, the Agency will continue to maintain its critical laboratory equipment and testing resources to ensure that new cars and trucks comply with the Tier 3 emissions standards.

Marine and Aircraft Emission Reduction Measures

EPA will continue working with the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) on programs to control pollutant emissions from

marine and aircraft engines, respectively. EPA is supporting the State Department and Coast Guard on technical issues related to establishing measures to achieve GHG targets established at IMO. At ICAO, EPA will actively participate in the development of new CO2 standards for decision in February 2025 as well as technical work that could lead to future, more stringent NOx and PM emission standards.

In addition to the international efforts for aviation, EPA is continuing its work to address lead in aviation gasoline. In FY 2024 the EPA will finalize its evaluation, under the Clean Air Act, of whether emissions of lead from piston-engine aircraft cause or contribute to air pollution that endangers public health or welfare. In addition, in coordination with the Federal Aviation Administration and working with airports, local air agencies, and communities, EPA is evaluating potential exposures to lead from the use of leaded aviation gasoline in piston-engine aircraft as well as potential mitigation measures.

Locomotive and Land-based Nonroad Engines, Equipment, and Vehicles

EPA will perform technical assessments to support regulatory actions to reduce air pollution from locomotives as well as land-based nonroad engines, equipment, and vehicles. EPA last revised emission standards for these important sectors more than ten years ago (e.g., 2008 for locomotives, 2004 for land-based nonroad diesel engines), yet these mobile source sectors continue to contribute significantly to air pollution at the global, regional, and local level. In addition, technologies which can significantly reduce air pollution from these sources have evolved significantly in the past 10–15 years. EPA will perform assessments and other activities including technology evaluation, cost and economic assessments, emissions data collection, and modeling efforts.

Emissions Modeling

The Motor Vehicle Emission Simulator (MOVES) is the Agency's emission modeling system that estimates emissions for on-road and nonroad mobile sources at the national, county, and project levels for criteria air pollutants, GHGs, and air toxics. In FY 2024, the official version of EPA's model will be used to estimate impacts of the Agency's emission control programs and will be used by states and metropolitan planning organizations (MPOs) in their work to meet the NAAQS, including the development of SIPs and transportation conformity analyses. The Agency also will support users on any new model releases that incorporate the best available data and science and account for the latest emission standards.

National Vehicle and Fuel Emissions Laboratory Facility Infrastructure

NVFEL provides all laboratory testing and support functions necessary for the Agency to certify that all vehicles, engines, and fuels sold in the United States are in compliance with U.S. emission standards, representing 4,900 certificates issued to vehicle and engine manufacturers on an annual basis.

The Agency recently awarded a new Energy Savings Performance Contract (ESPC) to pursue an infrastructure upgrade project for the NVFEL facility with capital equipment costs in excess of $59 million. The ESPC replaces the mechanical, electrical, control and building management systems for the HVAC (heating, ventilation, and air conditioning) equipment that is at or beyond the end of its useful life. ESPCs, private/public partnership contract vehicles coordinated through

the Department of Energy, use facilities' energy and operational savings to offset many of the contract costs.

In FY 2024, EPA is requesting an additional $10 million to fund the ESPC. Resources to fund the ESPC are critical to support the ability of NVFEL to carry-out its mission-critical work of certifying vehicle compliance. Ensuring industry's compliance is a priority for EPA and an essential safeguard of fair market competition for manufacturers of vehicles and engines introduced into commerce in the United States. The energy savings to be realized when the ESPC is fully implemented in FY2025 is estimated to be 34,473 MBtu annually (39% energy reduction), water conservation of 1.7 million gallons annually (16% reduction), and annual greenhouse gas reduction of 3,158 metric tons of carbon dioxide equivalent.

Renewable Fuel Standard

EPA activity in the fuel sector will be centered on the implementation of the RFS program. Congress established renewable fuel volume targets through CY 2022, leaving it to the Agency to establish the volumes for CY 2023 and beyond. During FY 2023, EPA will be issuing a final rule to establish such volumes for CY 2023 and potentially later years (in the "RFS Set Rule"). During FY 2024, EPA will need to continue the work to develop proposed rulemaking(s) necessary to establish renewable fuel volume targets for the calendar years that did not have renewable fuel volumes established in the first "RFS Set rule."

In FY 2024, EPA will maintain oversight of the RFS program and continue to evaluate compliance with RFS provisions through EPA's Moderated Transaction System (EMTS), the program's dedicated information system, which is used to track the creation, trades, and use of billions of RINs for compliance. The tracking system handles 4,000 to 6,000 submissions per day, typically averaging more than 20,000 transactions per day, and the generation of more than 1.4 billion RINs per month. RINs are generated with the production of qualifying renewable fuel and are used to achieve national RFS programmatic goals of reducing or replacing the quantity of petroleum-based transportation fuel, heating oil, or jet fuel produced.

In addition, EPA will continue efforts associated with the ongoing general implementation of the program. These include: 1) updating and revising the regulations to improve program implementation and effectiveness and enable new sources of renewable fuel volumes; 2) registering new renewable fuel facilities to enable them to generate renewable fuel credits known as Renewable Identification Numbers (RINs); 3) building critical new capability in EMTS; 4) evaluating and implementing, if appropriate, enhancements to improve program operations, oversight and enforceability; 5) evaluating and implementing IT systems modifications and enhancements that provide the greatest returns on investment through continuous improvement; 6) ensuring the integrity of the RFS program through enforcement actions against those using the program for fraudulent gain; and 7) supporting the Department of Justice in defending the Agency's implementation of the RFS program in numerous challenges in court.

In FY 2024, EPA will continue its work related to assessing lifecycle GHG emissions associated with renewable fuels, as required to implement GHG threshold requirements under the Clean Air Act. Producers of new and advanced biofuels regularly seek to qualify their fuels under RFS, and EPA will continue to evaluate such feedstocks and fuels to determine eligibility for the program.

The Agency also will look at ways to update the science and data analysis that supports EPA's evaluation methodology.
EPA also will continue to implement gasoline and diesel fuel quality standards and obligations under the Clean Air Act. This includes many of the same compliance and enforcement oversight activities mentioned above for the RFS. In late 2020, EPA finalized a fuel regulation streamlining rule that included updated registration, recordkeeping, and reporting requirements. EPA will continue efforts in FY 2024 to implement these requirements through continuous improvement of IT registration and reporting systems to deliver the full impact and benefit of the investment made in the streamlined regulations. These include automation and reduced registration, administration, and reporting burdens for both the regulated community and EPA. Finally, in FY 2024 EPA will continue its ongoing research into new opportunities to improve and/or protect fuel quality in ways that can reduce air pollution and improve public health and welfare.

In FY 2024, EPA will continue to work with stakeholders to implement a new electronic reporting portal for its Fuel and Fuel Additive (FFA) program. EPA implemented an electronic registration system for the FFA program in FY 2020; companies once registered may then introduce FFA products into commerce. Companies still submit related quarterly and annual FFA reports to the Agency in formats that require EPA to manually transcribe the information into its fuels database. EPA plans to incorporate FFA reports into the *eReporting* system in FY 2024 after implementing higher priority implementation needs in FY 2023.

Supporting Tribal, State and Local Governments
In FY 2024, EPA will continue to respond to significant requests from tribal, state and local governments for assistance in air quality planning, including SIPs, CAA-required mobile source programs, and transportation conformity determinations, especially for nonattainment areas working to attain the ozone and PM2.5 NAAQS. EPA will continue to work with tribal, state, and local governments to ensure the technical integrity of the mobile source emission estimates in their SIPs and any Tribal Implementation Plans (TIPs). In addition, EPA will assist states in developing Clean Air Act-required programs—such as new and existing motor vehicle inspection and maintenance (I/M), fuels, and vehicle miles travelled (VMT) offset programs—as well as identifying place-based control options and provide policy, technical, and modeling guidance for ozone nonattainment areas for the 2008 and 2015 ozone NAAQS of higher Clean Air Act classifications. In FY 2024, I/M programs will be required in approximately 30 states, summertime fuel programs will be required in over 20 states, with other CAA mobile source programs required in the most polluted areas in the country. In addition, in partnership with the Department of Transportation, EPA will ensure national consistency in how transportation conformity determinations are conducted across the U.S. and in the development of motor vehicle emissions budgets in SIPs, EPA's adequacy findings on these budgets, and emission reduction strategies to ensure new transportation investments to support state air quality goals.

EPA will continue to provide regulations, guidance, state-of-the-science models (such as MOVES), and assistance to state and local agencies working on CAA-required PM2.5 and PM10 hot-spot analyses. This will help protect public health in local communities, including communities of color and low-income communities with environmental justice concerns, near new or expanded highway and freight terminal projects with significant increases in diesel truck traffic. In addition, EPA will continue to provide regulations, guidance, and support to states with respect

to existing I/M programs that focus on in-use vehicles and engines. Basic and/or Enhanced I/M testing is currently being conducted in almost 30 states with EPA technical and programmatic guidance. EPA also will continue to provide regulatory actions and technical assistance to certain states considering changes or removal of low Reid Vapor Pressure (RVP) fuel programs. Finally, EPA will continue to develop methods for tribal, state and local agencies to quantify multi-pollutant emission reductions to address the NAAQS and climate change from available and newly emerging emission reduction strategies.

Prioritizing Environmental Justice

In FY 2024, EPA will continue to work with a broad range of stakeholders - including communities with environmental justice concerns - to develop targeted, sector-based, and place-based incentives for diesel fleets (including school buses, ports, and other goods movement facilities) to limit emissions from older diesel engines not subject to stringent emissions standards. Millions of people in the U.S. currently live and work near ports and can be exposed to air pollution associated with emissions from diesel engines at ports, including particulate matter, nitrogen oxides, ozone, and air toxics.[4] The near-port communities that bear the brunt of air pollution from these diesel engines are often comprised of low-income populations and people of color. EPA will focus its efforts on reducing mobile source emissions in and around ports through EPA's Ports Initiative[5] and the IRA Clean Ports funding. EPA will assist tribal, state, and local governments to reduce emissions in or near communities with environmental justice challenges to meet CAA SIP, transportation conformity, and other air quality planning requirements. EPA also is working with industry to bring about field testing and emissions testing protocols for a variety of innovative energy-efficient, emissions reducing technologies for the legacy fleet. As discussed above, EPA also will be establishing and implementing new emission standards for highway heavy-duty commercial vehicles, which is a high priority for many communities with environmental justice concerns.

Performance Measure Targets:

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all applicable emission requirements and may be entered into commerce.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		5,200	5,000	5,000	4,700	4,700	4,900	4,900	Certificates
Actual	5,109	4,869	4,711	4,843	5,351	5,196			

(PM RUL) Number of final rules issued that will reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	No Target Established	No Target Established	Rules
Actual						1			

[4] For more information, please see the DERA Fifth Report to Congress, August 2022which may be found at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1015S8Q.pdf

[5] For more information, please visit https://www.epa.gov/ports-initiative.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$9,204.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$615.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (+$10,000.0) This program change is an increase for the Ann Arbor Facility Energy Saving Performance Contract (ESPC), which supports the ability of NVFEL to carry-out its mission-critical work of certifying vehicle compliance.

- (+$42,282.0 / +45.8 FTE) This program change is an increase that supports program activities to address the climate crisis. This includes the development of analytical methods, regulations, and analyses to support climate protection by controlling greenhouse gas emissions from light duty, medium-duty, and heavy-duty vehicles. This program change also invests in the maintenance, repair, and replacement of aging test equipment at NVFEL. This investment includes $9.295 million for payroll.

- (+$175.0 / +1.0 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

Title II of the Clean Air Act; Motor Vehicle Information Cost Savings Act; Alternative Motor Fuels Act of 1988; National Highway System Designation Act; Energy Policy Act of 1992; Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); Energy Policy Act of 2005; Energy Independence and Security Act of 2007.

Enforcement

Forensics Support
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$14,815***	***$15,532***	***$18,657***	***$3,125***
Hazardous Substance Superfund	$1,676	$1,240	$1,648	$408
Total Budget Authority	$16,491	$16,772	$20,305	$3,533
Total Workyears	71.6	70.3	76.3	6.0

Program Project Description:

The Forensics Support Program provides expert scientific and technical support for criminal and civil environmental enforcement cases, as well as technical support for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory analysis and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences.[6] The NEIC maintains a sophisticated chemistry and physical science laboratory and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA's Criminal Enforcement Program to provide technical support (*e.g.*, sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical support, consultation, on-site inspection, investigation, and case resolution services in support of the Agency's Civil Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA's criminal and civil enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

[6] Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, 2009, available at: http://www.nap.edu/catalog.php?record_id=12589.

In FY 2024, the Agency requests an additional $3.2 million and 4.8 FTE to ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport hydrofluorocarbons (HFCs). EPA will support critical climate change initiatives, including forensics support of climate change enforcement efforts both in civil and criminal enforcement. This is vital to EPA's ability to enforce the HFC phase down regulations which are imperative to reducing climate impacts. NEIC will be making significant investments to assist with HFC-related enforcement capabilities, including inspector training, acquisition of field sampling equipment, and expansion of laboratory analytical capabilities to meet the urgent demand for highly complex HFC analysis. The additional funding also will support further development and deployment of the Agency's Geospatial Measurement of Air Pollution (GMAP) van, a mobile tool to help identify Clean Air Act noncompliance throughout the United States.

In FY 2024, in addition to EPA's request for $22.1 million and 37.4 FTE to rebuild the inspector cadre through Compliance Monitoring and Civil Enforcement, the Agency requests an additional $483.0 thousand and 1.0 FTE in Forensics Support to increase the Agency's capacity to complete critical civil inspections of facilities that affect communities with environmental justice (EJ) concerns. This investment will help the Agency complete more highly complex inspections, as well as provide critical inspection training to agency, state, and local inspectors. The funding and FTE increase will bolster the Agency's impact by ensuring inspectors across the Agency and the United States have the basic technical knowledge to hold polluters accountable, especially in overburdened and underserved communities. The inspections and training provided by the additional FTE also will make an impact on combating climate change, identifying noncompliant facilities, and ensuring civil enforcement actions prevent further harm to the environment.

Effective enforcement relies on the best available science. In FY 2024, NEIC will strengthen our clean air and water protections, aligned with the Administration's goals to hold polluters accountable for their actions and provide relief to communities with EJ concerns across America. To achieve these goals, the Agency will employ NEIC's environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionally affected by pollution and environmental crime, and to target those areas more effectively. NEIC supports EJ concerns by targeting critical industry inspections in overburdened or vulnerable communities. The NEIC utilizes data to work with the EPA regional office to take an enforcement action that could ultimately improve air and water quality around the United States and in communities with EJ concerns.

In FY 2024, NEIC will continue to streamline its forensics work and identify enhancements to the Agency's sampling and analytical methods, by using existing and emerging technology. The NEIC will continue to build on its previous progress to maximize the efficiency and effectiveness of its operations, produce timely and high-quality civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. NEIC will continue to enhance the work completed in FY 2021 and FY 2022 to support criminal and civil program efforts while also growing its support of EPA enforcement and compliance assurance programs. During FY 2021 and FY 2022, the NEIC accepted over 320 requests from all ten EPA regions for technical enforcement support. The results of these efforts will inform EPA's work in FY 2024 and beyond.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$519.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, changes to benefits costs, and changes to lab utilities and security costs.

- (+$3,161.0.0 / +4.8 FTE) This program investment will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, transport, and store HFCs. This investment includes $877.0 thousand for payroll.

- (+$483.0 / +1.0 FTE) This program investment will rebuild EPA's inspector cadre to ensure EPA has the capacity to complete critical civil inspections of facilities that affect communities with environmental justice (EJ) concerns. The additional funding and FTE will allow the Agency to complete, at a minimum, an additional 2.5 highly complex inspections as well as provide critical inspection training to agency, state, and local inspectors. This investment includes $183.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); Asbestos Hazard Emergency Response Act; Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Mercury-Containing and Rechargeable Battery Management Act; Noise Control Act; Oil Pollution Act; Resource Conservation and Recovery Act; Rivers and Harbors Act; Safe Drinking Water Act; Small Business Regulatory Enforcement Fairness Act; Toxic Substances Control Act; American Innovation and Manufacturing Act.

Homeland Security

Homeland Security: Critical Infrastructure Protection
Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$873	$923	$1,023	$100
Science & Technology	***$9,941***	***$10,852***	***$34,205***	***$23,353***
Total Budget Authority	$10,814	$11,775	$35,228	$23,453
Total Workyears	26.1	26.6	57.6	31.0

Program Project Description:

Under the federal homeland security system, EPA is the Sector Risk Management Agency responsible for implementing statutory and Presidential directives relating to homeland security for the water sector. EPA's Water Infrastructure and Cyber Resilience program is implemented through close partnerships with the water sector, state emergency response and water program officials, and other federal agencies, most notably the Department of Homeland Security (DHS), the United States Army Corps of Engineers, and the Intelligence Community. The Water Security Program engages federal, state, and local entities in defining annual objectives and identifying high priorities for immediate action.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*.

This program provides critical resources to coordinate and support protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events. In FY 2024, EPA will continue to provide exercises and technical support to approximately 1,500 water utilities, state officials, and federal emergency responders to become more resilient to any natural or manmade incident that could endanger drinking water and wastewater services, with an emphasis on the threats posed by climate change and cybersecurity. EPA will provide tools, exercises, and technical assistance which will address the highest risks confronting the water sector. In providing this assistance, EPA will provide direct technical assistance and will seek to engage disadvantaged and underserved communities, some of which may lack the technical capacity and resources to undertake preparedness and response actions in the absence of such external support.

The Program also supports the Agency's Infrastructure Investment and Jobs Act (IIJA) implementation priorities including preparing for and responding to climate change events and cybersecurity challenges so that water systems are more resilient. For instance, in providing guidance and training associated with IIJA funding, EPA has leveraged its internal cybersecurity

expertise to identify the types of eligible projects for water systems, promote awareness of the availability of these funds as well as the application process, during the Agency's extensive training and technical assistance efforts with the sector.

Natural Disasters, Climate Change, and General Preparedness

Drought, floods, hurricanes, and other natural disasters represent a high risk to the water sector owing to their frequency of occurrence, their enormous potential for destruction, and the exacerbating effects of climate change. As evident from several recent natural disasters, the level of preparedness within the water sector varies significantly—with many utilities lacking adequate preparedness capabilities. In FY 2024, EPA will continue to improve the preparedness of the water sector by providing nationwide exercises and technical support to address natural disasters and general preparedness with the objective to train water and wastewater systems, state officials, and emergency response partners. In FY 2022, more than 1,000 drinking water and wastewater systems and water sector partners received training and technical assistance.

Climate change and associated extreme weather events directly threaten water systems' ability to fulfill their public health and environmental missions as evident from the devastation borne by events like hurricanes Ian and Fiona and the decadal long drought and wildfires in the West. The EPA Creating Resilient Water Utilities (CRWU) initiative advances the long-term sustainability of the water sector by enabling utility owners and operators to integrate climate change considerations into their routine planning practices. CRWU provides innovative, but readily accessible, electronic tools that enable water systems to adapt to climate change and enhance their resiliency, including through infrastructure improvement plans.

Specifically, EPA will:

- Provide in-person or virtual exercises, workshops, and technical assistance to the water sector, including Incident Command System / National Incident Management System exercises; drought response; flood response; state functional exercises (*e.g.*, scenarios of hurricanes, floods, and earthquakes); resource typing and site access workshops; and regional interstate emergency response exercises (*e.g.*, hurricane).

- Integrate new climate projection data into the flagship climate risk assessment tool, the Climate Resilience Evaluation and Awareness Tool (CREAT), which incorporates the latest projection data for precipitation, temperature, sea-level rise, storm surge components, and hydrologic changes. EPA will continue to provide extensive nationwide training sessions for drinking water and wastewater systems as well as a series of train-the-trainer forums for technical assistance providers to reach smaller utilities, with a significant focus on overburdened and underserved communities. EPA also will provide direct technical assistance to large, medium, and small drinking water and wastewater utilities across the country applying CREAT and other CRWU tools, including through developing infrastructure improvement plans and shepherding systems through the IIJA application process.

- Support the water sector in preparing for and responding to supply chain disruptions that have the potential to impact the availability of water treatment chemicals and other critical materials needed for drinking water and wastewater system operation by: 1) reviewing and

processing applications submitted under the authorities of the Safe Drinking Water Act (SDWA) Section 1441 and the Defense Production Act; 2) providing general guidance and direct technical assistance to water systems, state primacy agencies, and other water sector stakeholders experiencing supply challenges; 3) assessing the supply chain for critical water treatment chemicals in order to determine the risk of disruptions that could impact the water sector; and 4) offering a platform for tracking and sharing information about emerging and ongoing supply chain issues with the potential to impact water system operations.

- Conduct tabletop and functional exercises to improve the operation of intra-state and inter-state mutual aid agreements among water utilities.

- Implement lessons learned from the most recent hurricane seasons, as identified by reports from the Federal Emergency Management Agency (FEMA), the Water Agency Response Network, and EPA's Inspector General.

- Address high priority security areas, as identified in the stakeholder generated *Roadmap to a Secure and Resilient Water and Wastewater Sector* to be completed in 2023,[7] with an emphasis on the following four priorities: 1) promoting the awareness of the critical lifeline status of the drinking water and wastewater sector and translating that definition into strong support for the sector's needs and capabilities; 2) improving detection of, response to, and recovery from contamination incidents; 3) advancing preparedness and improving capabilities of the drinking water and wastewater sector for area-wide loss of water and power; and 4) advancing recognition of vulnerabilities and needed responses related to cybersecurity risk management.

- Conduct nationwide exercises with three critical, inter-dependent sectors: healthcare, emergency services, and energy. Most incidents, particularly natural disasters, have underscored the mutual reliance on the water sector with other lifeline sectors. Through exercises and technical support with officials at the local, state, and federal levels from these other sectors, EPA will seek to improve coordination among critical lifeline sectors.

- Sustain operation of the Water Desk in both the Agency's Emergency Operations Center and FEMA's National Response Coordination Center in the event of an emergency by updating roles and responsibilities, training staff in the incident command structure, ensuring adequate staffing during activation of the desk, and coordinating with EPA's regional field personnel and response partners.

- Develop annual assessments, as required under the National Infrastructure Protection Plan, to describe existing water security efforts and progress in achieving the sector's key metrics.

[7]For more information, please see: https://www.waterisac.org/sites/default/files/public/2017_CIPAC_Water_Sector_Roadmap_FINAL_051217.pdf.

Water Security Initiative (WSI)

WSI addresses the risk of contamination of drinking water distribution systems. It has designed and developed an effective system for timely detection and appropriate response to drinking water contamination threats and incidents through a pilot program that has broad application to the Nation's drinking water utilities in high-threat cities. The FY 2024 request includes $4.8 million for necessary WSI Surveillance and Response System (SRS) activities to: 1) continue refining technical assistance products based on the five full-scale SRS pilots; 2) implement a monitoring and response program for water utilities focused on source water chemical spills; and 3) provide direct technical assistance, as requested by water utilities, that seeks to leverage EPA's expertise in deploying their own warning system.

In FY 2024, EPA will:

- Continue efforts to promote the water sector's adoption of Water Quality Surveillance and Response Systems (WQ-SRS). EPA will facilitate user forums and promote the use of available tools and materials to design and implement a WQ-SRS. These capabilities will help water systems rapidly detect and respond to water quality problems, such as contamination in the distribution system, to reduce public health and economic consequences.

- Build upon the Drinking Water Mapping Application to Protect Source Waters (DWMAPS)[8] and the new chemical spill and storage notification requirements in the America's Water Infrastructure Act of 2018 (AWIA). EPA will continue to collaborate with water sector stakeholders, water utilities, and state environmental agencies, to identify specific information (*e.g.*, what chemicals are stored upstream from a surface water intake), including Emergency Planning and Community Right-to-Know Act (EPCRA) Tier 2 data, that is valuable to creating a comprehensive source water contamination threat inventory. EPA will develop guidance and a comprehensive listing of state and federal information resources that can be used to identify potential sources of contamination. This effort will help to ensure that drinking water utilities have access to the basic information (*e.g.*, what chemicals are stored upstream from a surface water intake) necessary for understanding the risk of releases to their sources of drinking water, as required under AWIA Section 2013, and take steps to mitigate those risks.

- Provide technical support to EPA regions, state primacy agencies, and water systems during response to contamination incidents. EPA's Water Program has been providing technical assistance on contamination response for several years (*e.g.*, following wildfires, the jet fuel contamination incident in Honolulu, Hawaii) and anticipates that requests for this type of support will continue.

Water Laboratory Alliance (WLA)

In a contamination event, the sheer volume or unconventional type of samples requiring analysis could quickly overwhelm the capacity or capability of a single laboratory. To address this potential deficiency, EPA has established the national WLA comprised of laboratories from the local (*e.g.*,

[8] For more information, please see: https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps.

water utility) to the federal level (*e.g.*, the Centers for Disease Control and Prevention's Laboratory Response Network). In FY 2024, EPA will continue to promote, through exercises, expert workshops, and association partnerships, the WLA Plan.[9] The plan provides a protocol for coordinated laboratory response to a surge of analytical needs. Approximately 30 exercises or workshops were completed in FY 2022. In FY 2024, under the WLA, EPA plans to train approximately 50 laboratories to improve their ability to handle potential problems associated with surge capacity and analytical method capabilities during an emergency.

In FY 2024, EPA will:

- Continue to work with regional and state environmental laboratories to conduct exercises and continue efforts to automate the exercises, enabling laboratories and other members of the water sector to participate in exercises simultaneously and continue the innovative practice of pursuing validation of methods through exercises.

- Continue to expand the membership of the WLA with the intention of achieving nationwide coverage. The WLA has 160 member laboratories that are geographically diverse and can provide a wide range of chemical, biological, and radiological analyses.[10] For the WLA to become a robust network that can cover major population centers and address a diverse array of high priority contaminants, membership must continue to increase.

- Develop guidance and training for flushing contaminated premise plumbing systems that are based on the best available science and validated through both pilot-scale demonstration and computer simulation.

Cybersecurity

Cybersecurity represents a substantial concern for the water sector, given the ubiquitous access to critical water treatment systems from the internet. Recent attacks by outside actors and their clear potential to disrupt essential lifeline services, such as drinking water supplies, are prompting a growing recognition that the federal government should adopt a more aggressive posture towards cybersecurity. In addition to expanding direct technical assistance, and in discussions with the National Security Council and the states, EPA, in FY 2023, issued an interpretive rule to clarify the existing obligation for states, under EPA regulations established under the SDWA, to consider cybersecurity of water systems in regular audits of public water systems. As water systems contend with a hostile cybersecurity environment in which state or state sponsored actors seek to disrupt the critical lifeline services of the water sector, this regulatory action will yield significant progress in the Nation's efforts to secure our critical infrastructure. Critical to this regulatory action, EPA will work to provide training and guidance to each state, territory, and tribe as well as to water systems in order to build their technical capacity to assess and mitigate cybersecurity risks during sanitary surveys.

[9] For more information, please see: https://www.epa.gov/waterlabnetwork.
[10] For more information, please see: https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water.

In FY 2024, EPA will continue to fulfill its obligations under Executive Order 13636: *Improving Critical Infrastructure Cybersecurity*,[11] which designated EPA as the lead federal agency responsible for cybersecurity in the water sector. EPA will continue to conduct nationwide exercises and provide technical support on cybersecurity threats and countermeasures for about 200 water and wastewater utilities.

In FY 2024, EPA is requesting additional resources and FTE to:

- Issue guidance documents and conduct a national training program on evaluating cybersecurity practices at public water systems to support states and tribes with direct implementation responsibilities (in support of the regulatory action in FY 2023). EPA expects to provide corresponding guidance materials and training to help public water systems understand and strengthen the cybersecurity practices that may be assessed during a state audit.

- Offer targeted training on the guidance documents to all public water systems and all states and intends to provide a Cybersecurity Technical Support Center which will function to respond rapidly to inquiries from both states and water systems regarding the assessment of cyber risk and the identification of countermeasures to mitigate risk. This training and technical assistance work represents an unprecedented and substantial effort necessary to ensure robust implementation of and compliance with the cybersecurity interpretive regulation.

- Transition the Water Sector Cybersecurity Evaluation Program from an onsite cybersecurity assessment effort targeting about 100 water systems each year to a virtual assistance program providing direct technical support to thousands of water systems. Under this initiative, EPA will assess cybersecurity practices at water systems as requested by the system or the state. EPA will provide a report to the system that shows gaps in cybersecurity, including potential significant deficiencies. The Public Water System (PWS) would provide this report to the state to review during the sanitary survey pursuant to the cybersecurity regulation.

- Implement the Cybersecurity Technical Assistance Program for the Water Sector. Under this program, states and PWS' can submit questions or request to consult with a subject matter expert (SME) regarding cybersecurity in PWS sanitary surveys, such as identifying whether a cybersecurity gap is a significant deficiency or selecting appropriate risk mitigation actions. EPA will strive to have an SME respond to the questioner within two business days. As with the cybersecurity training work, the Water Sector Cybersecurity Evaluation Program and the Cybersecurity Technical Assistance Program constitute a critical investment of resources vital to achieving the policy outcome of the regulatory action, i.e., the reduction of cybersecurity risk across the Nation's water systems.

[11] For more information, please see: https://www.dhs.gov/publication/executive-order-13636-improving-critical-infrastructure-cybersecurity.

- Conduct classroom exercises, at locations across the country, on water sector cybersecurity. The exercises will address cybersecurity threats (including ransomware), vulnerabilities, consequences, best practices, and incident response planning.

- Update and/or develop new course materials to respond to the evolving nature of cybersecurity threats. One example of such updates are the FY 2022 alerts and training concerning the potential for Russian-state actors to infiltrate water system industrial control processes and business enterprise functions.

- EPA also is requesting $25 million for a Cybersecurity grant, under the STAG appropriation, to help water systems establish or update the necessary cybersecurity infrastructure to address the rising threats from sophisticated state actors and criminal organizations. These funds would enable water systems to adopt basic cybersecurity hygiene measures, the inadequate adoption of which, across the sector, has rendered water systems and the communities they sustain at high risk from disabling cyberattacks.

AWIA

In FY 2024, EPA will continue its efforts to fulfill the requirements of the Community Water System Risk and Resilience section of AWIA. Specifically, EPA will prepare community water systems, subject to the law, for the second round of certifications which are due beginning in 2025. AWIA requires each community water system, serving more than 3,300 persons, to review its risk and resilience assessment at least once every five years to determine if it should be revised. Upon completion of such a review, the system must submit to EPA a certification that it has reviewed its assessment and revised it, if applicable. Further, each community water system, serving more than 3,300 persons, must review and, if necessary, revise its emergency response plan at least once every five years after the system completes the required review of its risk and resilience assessment. The emergency response plan must incorporate any revisions to the risk and resilience assessment. Upon completion of this review, but not later than six months after certifying the review of its risk and resilience assessment, the system must submit a certification that it has reviewed its emergency response plan and revised it, if applicable. EPA will apply lessons learned from the first round of certifications to refine guidance, tools (*e.g.*, emergency response plan templates), training, and the online certification portal. EPA also will provide individual technical assistance to water systems to help with the recertification requirements of AWIA.

Performance Measure Targets:

(PM DW-07) Number of drinking water and wastewater systems, tribal and state officials, and water sector partners provided with security, emergency preparedness, and climate resilience training and technical assistance.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2,000	3,500	3,500	Systems and Partners
Actual						3,939			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$84.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$19,559.0 / +25.0 FTE) This program change requests an increase of resources and FTE to implement regulatory actions to mitigate the risks of cyberattacks in the water sector as well as increase the Agency's ability to respond to cyber incidents. This investment includes $4,559.0 thousand for payroll.

- (+$3,878.0 / +6.0 FTE) This program change requests an increase of resources and FTE to support the Water Sector Cybersecurity Program to enhance cyber incident preparation, response, recovery, information sharing, and intelligence for water utilities to protect infrastructure. This investment includes $1,094.0 thousand for payroll.

Statutory Authority:

Safe Drinking Water Act, §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act, §§ 301-305.

Homeland Security: Preparedness, Response, and Recovery
Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$24,536***	***$25,347***	***$39,539***	***$14,192***
Hazardous Substance Superfund	$35,026	$34,661	$56,484	$21,823
Total Budget Authority	$59,561	$60,008	$96,023	$36,015
Total Workyears	121.8	124.1	138.3	14.2

Program Project Description:

Exposure to hazardous chemical agents, microbial pathogens, and radiological materials released into the environment could pose catastrophic consequences to the health of first responders and American citizens. EPA has responsibility, under legislation and Presidential Directives, to remediate contaminated environments created by incidents such as terrorist attacks, industrial accidents, or natural disasters.

EPA's disaster-related research topics under the Homeland Security Research Program (HSRP) are: 1) contaminant characterization and consequence assessment; 2) environmental cleanup and infrastructure remediation; and 3) community engagement and systems-based tools supporting resilience equity.

The research conducted supports EPA to carry out its primary mission essential function to help communities prepare for, endure, and recover from disasters – safeguarding their economic, environmental, and social well-being. Researchers, within the HSRP, collaborate with states, local communities, tribes, private sector organizations, and key federal agencies[12] to prioritize research needs and prevent the duplication of scientific and technical work. The HSRP delivers effective tools, methods, information, and guidance to local, tribal, state, and federal decision-makers that address both critical terrorism related issues and natural or manmade disasters.

EPA also is responsible for operating and maintaining the network of near real-time radiation monitors, known as RadNet, under the Nuclear/Radiological Incident Annex to the National Response Framework. This network is critical in responding to large-scale incidents such as the accident at the Fukushima nuclear facility and is an EPA Critical Infrastructure/Key Resource asset. This monitoring network is supported by the IT system known as ARaDS, the Analytical Radiation Data System.

[12] Partners include: Department of Homeland Security (DHS), Department of Defense (DOD), Centers for Disease Control and Prevention (CDC), Federal Bureau of Investigation (FBI), National Institute of Health (NIH), National Science Foundation (NSF), Department of Energy (DOE), and Department of Agriculture (USDA).

Recent Accomplishments of the Homeland Security Research Program Include:[13]

Supporting COVID-19 Response and Pandemic Preparedness:
EPA's HSRP researchers worked with program and regional office partners and other federal, state, and local stakeholders (including CDC, DHS, the New York City Metro Transit Authority, the Los Angeles Metro, and many others) to provide timely and reliable information to address Agency and stakeholder research needs related to COVID-19 and future pandemic preparedness. The research and technical support provided was used by EPA and other stakeholders to make informed decisions, develop federal guidance, and support strategies and investments. The research focused on determining the effectiveness against SARS-CoV-2 and viral surrogates for disinfection products, devices, and methods including:

- Hot-water laundering of clothing and PPE[14]
- Parameters influencing the use of electrostatic sprayers for applying disinfectants[15]
- Cleaning methods[16] and disinfectant application to real-world surfaces[17] and evaluation of potential long-lasting or residual disinfectants[18,19] and copper film in high-touch, high-traffic areas[20]
- Germicidal UV devices and their application[21]
- New analytical approaches for environmental samples that reduce time for analyses results[22]
- Aerosol treatment technologies to reduce transmission risk in indoor spaces including both physical (e.g., filters, germicidal UV) and chemical methods[23]

The Agency also held regular meetings with federal, tribal, state, and local governments to provide updates on the results and seek input related to on-going needs.

Improving Preparedness for Radiological/Nuclear Incident Response:
EPA's HSRP researchers significantly advanced capabilities to respond to a radiological and nuclear incident. Waste management is critical for effective response to radiological and nuclear incidents, specifically to address large amounts of radiological contaminants. Various waste management approaches and tools were developed and evaluated to minimize the waste amount and enable more effective decision making during cleanup efforts.[24,25,26] EPA's HSRP researchers developed a method to effectively treat radioactively contaminated washwater to remove

[13] For a more complete view of accomplishments, please see: https://www.epa.gov/research/national-research-programs.
[14] For more information, please see: https://dx.doi.org/10.3791/64164.
[15] For more information, please see: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0257434.
[16] For more information, please see: https://doi.org/10.1080/15459624.2021.2015075.
[17] For more information, please see: https://doi.org/10.1080/15459624.2022.2088768.
[18] For more information, please see: http://doi.org/10.1111/jam.15339.
[19] For more information, please see: https://doi.org/10.1111/jam.15437.
[20] For more information, please see: https://pubmed.ncbi.nlm.nih.gov/34695284/.
[21] For more information, please see: http://doi.org/10.1111/lam.13770.
[22] For more information, please see: https://doi.org/10.1016/j.jviromet.2021.114251.
[23] For more information, please see: https://www.epa.gov/covid19-research.
[24] For more information, please see: https://www.sciencedirect.com/science/article/pii/S2352186420314772.
[25] For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=CESER&dirEntryID=352958.
[26] For more information, please see: https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=544137.

radioactive contaminants via ad hoc sand/clay filtration beds and enable this treated washwater to be reused during continuing cleanup operations.[27]

Radiological release incidents can potentially contaminate widespread areas with radioactive materials and decontamination efforts are typically focused on populated areas, which means radionuclides may be left in forested areas for long periods of time. Large wildfires in contaminated forested areas have the potential to reintroduce these radionuclides into the atmosphere and cause exposure to first responders and downwind communities. EPA researchers investigated how radioactive contaminants would behave during wildland fires in contaminated forests.[28] These methods, tools, and information will help responders to prepare for and respond to wide area radiological and nuclear incidents.

Continued Efforts to Enhance Bio Incident Response:
EPA continues to develop extensive protocols and tools for sampling, analysis, and decontamination methods and strategies that continue to significantly enhance our collective national preparedness to respond to biological contamination incidents. Researchers developed a protocol for detection of ricin biotoxin in environmental samples and this protocol allows for easy comparison and interpretation of sample analysis results. This protocol helps local and state public health agencies, environmental unit leaders, and risk assessors to work together, in a unified way, to make the best decisions possible during a response to an incident.[29] EPA researchers also developed an interactive "ready-to-go" tool to design sampling and analysis plans for biological incident response.[30] Researchers identified and applied user-friendly tools that more easily facilitate the acquisition of field sampling data and subsequent management of sampling data following a wide-area incident.[31] EPA researchers provided decision makers with a practical summary of the latest information on the material compatibility of decontamination techniques that have been found to be effective in inactivating biological agents such as Bacillus anthracis spores on different materials.[32] EPA researchers recently worked with the United States Coast Guard (USCG) to apply EPA's analysis methods for biological incident response at USCG facilities and assets.[33] These research products have addressed essential capability gaps and significantly improved the preparedness of EPA and its partners (such as USCG) and stakeholders, for responding to and recovering from a wide-area release of a persistent biological agent.

Tackling Challenging Chemicals for Environmental Cleanup:
The release of toxic chemicals to the environment, such as chemical warfare agents (*e.g.,* venomous agent [VX], sulfur mustard [HD]), will create an acute and significant exposure risk to the public as well as remediation contractors who would be tasked to cleanup a contaminated site. It may be difficult to decontaminate such impacted environments safely and quickly. EPA tested several decontamination options to address this challenge. Researchers evaluated a hydrogen peroxide vapor method using low-cost indoor humidity control systems for the remediation of

[27] For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=353143&Lab=CESER.
[28] For more information, please see: https://www.sciencedirect.com/science/article/pii/S0048969721039449.
[29] For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=355320&Lab=CESER.
[30] For more information, please see: https://www.epa.gov/esam/sampling-and-analysis-plan-sap-template-tool-addressing-environmental-contamination-pathogens.
[31] For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=353479&Lab=CESER.
[32] For more information, please see: https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=544599&Lab=CESER.
[33] For more information, please see: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=353716&Lab=CESER.

surfaces contaminated with persistent chemical warfare agents and toxic pesticides.[34] In addition, the Agency evaluated various commercially available decontamination solutions for fentanyl, evaluating their effectiveness on common surfaces inside buildings. Fentanyl is a commonly abused substance in the class of drugs knowns as opioids that is 80–100 times more potent than morphine.[35] These research efforts provide practical information to make critical decisions during remediation of contaminated buildings or infrastructure.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*.

Research is planned and prioritized based on the needs of end-users of this science, including EPA program and regional offices (*e.g.,* Regional On-Scene Coordinators), water utility companies, states, local communities, territories, and tribes.

In FY 2024, the Homeland Security Research Program will conduct research under the three disaster-related research topics.

With respect to contaminant characterization and consequence assessment, HSRP will:

- Develop a sampling strategy for radioactive waste generated due to incident debris and by cleanup operations following a radioactive/nuclear wide area incident and develop Sampling and Analysis Plan (SAP) template tool for radioactively contaminated building materials.
- Update pathogen air sample processing methods in EPA's sampling and analysis method (Selected Analytical Methods [SAM]).[36]
- Improve a Gaussian dispersion model (such as the American Meteorological Society/Environmental Protection Agency Regulatory Model [AERMOD][37]) to better account for the flow and dispersion of chemical, biological, and radiological contaminants within built high rise environments.
- Investigate the effects of environmental conditions on the risk of exposure to resuspended bacterial spores in the outdoor environment during the first few weeks post-release to support the critical early period of response and recovery efforts.

With respect to Environmental Cleanup and Infrastructure Remediation, which includes biological incidence response preparation, water infrastructure protection, chemical incident response preparation, and waste management support, HSRP will:

[34] For more information, please see: https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=353126&Lab=CESER&personid=23379&role=Any.
[35] For more information, please see: https://www.sciencedirect.com/science/article/pii/S030147972101389X.
[36] For more information, please see: https://www.epa.gov/esam/selected-analytical-methods-environmental-remediation-and-recovery-sam.
[37] For more information, please see: https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models.

- Support future pandemic preparedness through conducting BSL-1 through BSL-3[38] research to support the development of standard efficacy testing methods and criteria for air treatment technologies for airborne biological agents. Research will include both physical (*e.g.,* germicidal ultraviolet, filtration) and chemical antimicrobial methods. In FY 2024, EPA is requesting an additional $1 million that will be used to expand EPA's capabilities and conduct research at its BSL-3 facility in Fort Meade, MD.
- Develop decontamination methods for biological agents at the appropriate BSL that can effectively minimize the risk of transmission from environmental matrices, including research useful to supporting reducing environmental transmission in pandemic or other naturally occurring outbreaks.
- Conduct cybersecurity research to assess the impact a cyberattack can have on drinking water infrastructure.
- Develop a searchable database that will allow users to select parameters and generate a data report on Water Infrastructure Decontamination methods in response to chemical, biological, and radiological contamination.
- Assess the efficacy of chlorine dioxide fumigation under various operational conditions for fentanyl decontamination and improve the decontamination strategy and technology selection tool (DeconST) to include fentanyl decontamination data.
- Assess the impact and effectiveness of natural rain wash-off from roads to hosing down areas for gross decontamination for chemical contamination.
- Develop a prototype drone platform for autonomously identifying and estimating amounts (mass, volume) of various types of waste following a radiological incident.
- Assess traditional sludge disposal methods (incineration and composting) for sludge contaminated with persistent bio agents (e.g., *Bacillus* spores).
- Improve usability and cost efficiency for the Homeland Security Research Program's waste staging and logistics tools in response to chemical, biological, radiological, nuclear, and natural disasters.
- Develop safe personal protective equipment (PPE) prototypes that can reduce waste and be re-printed/manufactured.

To advance Community Engagement and Systems-Based Tools Supporting Resilience Equity in FY 2024, HSRP research efforts will:

- Evaluate technologies for data collection and management, including geospatial and mapping applications, during all incident response and recovery phases. As part of the evaluation, recommendations for improving these existing technologies will be identified.
- Identify and evaluate tools for making decisions associated with sampling, decontamination, and waste management and the interdependencies among these decisions during all incident response and recovery phases.

[38] BSL: Biosafety Levels. BSL-1 is the basic level of protection and is appropriate for defined and characterized strains of viable biological agents that are not known to cause disease in immunocompetent adult humans. BSL-2 is for handling moderate-risk agents that cause human disease, of varying severity, by ingestion or through percutaneous or mucous membrane exposure. BSL-3 is appropriate for agents with a known potential for aerosol transmission, for agents that may cause serious and potentially lethal infections, and that are indigenous or exotic in origin. For further information, please see: https://www.cdc.gov/labs/BMBL.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fbiosafety%2Fpublications%2Fbmbl5%2Findex.htm.

- Improve the usability of the water and waste infrastructure systems tools by incorporating community needs determined by examining how communities are thinking and talking

  about climate change, specifically how they are incorporating projections into planning and preparedness.
- Conduct research to help state, local, tribal, and territorial agencies include social considerations as they make decisions about managing disaster wastes and debris by developing best practices, trainings, how-to guides, and decision-logic models to support organizations in their decision making. This research covers the design and testing of tools and resources to help communities build resilience and equity.

Radiation Monitoring

The RadNet fixed monitoring network provides near real-time radiation monitoring coverage near each of the 100 most populous U.S. cities, as well as expanded geographic coverage for a total of 140 monitoring sites. The RadNet air monitoring network provides the Agency, first responders, and the public with greater access to data. Should there be a radiological emergency, RadNet improves officials' ability to make decisions about protecting public health and the environment during and after the incident. Additionally, RadNet data is used by scientists to better characterize the effect of a radiological incident.

In FY 2024, the Agency will continue to operate the RadNet air monitoring network, continue to add exposure rate meter capability to the network, and provide essential maintenance to the network. To best maximize resources, exposure rate meter capability will be added to monitors when needed repairs are called for. This expansion will enhance the federal government's ability to effectively communicate radiation measurement information to the public and to non-technical decision makers after a radiological release. In addition to aiding in explaining data to the public and decision makers, the addition of exposure rate meters aligns EPA's monitoring system with that of the international community.

In FY 2024, EPA is requesting an additional $12.1 million and 9.5 FTE to update the aging equipment that monitors the nation's air for radiation. As a part of this, EPA also will modernize IT infrastructure for the ARaDS and support enhanced lab and field office facility operations and maintenance.

Research Planning

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published their fourth generation of the StRAPs[39], which continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

EPA's Office of Research and Development (ORD) ensures the integrity and value of its research through a variety of mechanisms that include:

[39] The StRAPs are available here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.

- EPA's Board of Scientific Counselors (BOSC)
    - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.
- State Engagement
    - EPA's state engagement[40] is designed to inform states about their role within EPA and EPA's research programs and to better understand the science needs of state environmental and health agencies.
- Tribal Partnerships
    - Key Tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between Tribal and agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety and Sustainability Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$474.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$109.0) This change to fixed and other costs is a decrease due to the recalculation of lab fixed costs.

- (+$1,000.0) This program change will expand EPA's capabilities and allow EPA to conduct research at its BSL-3 facility in Fort Meade, MD.

- (+$735.0 / +1.7 FTE) This program change is an increase in resources and FTE to support research efforts to identify and address emerging threats to the water sector. This includes $313.0 thousand for payroll.

- (+$12,092.0 / + 9.5 FTE) This program change is an increase to update the aging equipment that monitors the nation's air for radiation. This also will support and modernize IT infrastructure for ARaDS and support enhanced lab and field office facility operations and maintenance. This investment includes $1.764 million for payroll.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act, §§ 102, 103; Safe Drinking Water Act, §§ 1431-1435, 1442; Robert T. Stafford Disaster Relief and Emergency Assistance Act; National Defense

[40] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Authorization Act for Fiscal Year 1997, §§ 1411-1412; Public Health Security and Bioterrorism Preparedness and Response Act of 2002; Toxic Substances Control Act, § 10; Oil Pollution Act; Pollution Prevention Act; Resource Conservation and Recovery Act; Emergency Planning and Community Right-to-Know Act; Clean Water Act; Federal Insecticide, Fungicide, and Rodenticide Act; Federal Food, Drug, and Cosmetic Act; Food Quality Protection Act; Food Safety Modernization Act, §§ 203, 208.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$4,903	$5,188	$5,158	-$30
Science & Technology	***$501***	***$625***	***$501***	***-$124***
Building and Facilities	$7,049	$6,676	$6,676	$0
Hazardous Substance Superfund	$1,201	$1,029	$1,530	$501
Total Budget Authority	$13,653	$13,518	$13,865	$347
Total Workyears	12.0	13.3	9.2	-4.1

Total workyears in FY 2024 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

This program supports activities to ensure that EPA's physical structures and assets are secure and operational and that physical security measures are in place to help safeguard staff in the event of an emergency. These efforts also protect EPA's vital laboratory infrastructure and testing assets. Specifically, funds within this appropriation support security needs for the National Vehicle and Fuel Emissions Laboratory (NVFEL).

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Agency will continue to provide enhanced physical security for the NVFEL, its employees, visitors, and test articles, which include prototype vehicles and engines. This funding supports the cost of security enhancements required as part of an agency security assessment review.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$124.0) This change to fixed and other costs is a decrease due to the recalculation of lab fixed costs.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Indoor Air: Radon Program

Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$2,966	$3,364	$5,113	$1,749
Science & Technology	***$116***	***$199***	***$173***	***-$26***
Total Budget Authority	$3,082	$3,563	$5,286	$1,723
Total Workyears	8.4	9.0	12.4	3.4

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risks posed by exposures to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance to states, industry, and the public, advises the public on steps they can take to reduce exposure and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year.[41] EPA's non-regulatory Indoor Air: Radon Program promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that all homes be tested for radon and if radon levels above EPA's guidelines are confirmed, elevated levels should be reduced by home mitigation using proven, straightforward techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but millions of homes are still in need of mitigation. This voluntary program promotes partnerships between national organizations, the private sector, and more than 50 state, local, tribal and territory governmental programs to reduce radon risk.

These resources, combined with resources for the Indoor Air: Radon Program from the Environmental Programs and Management (EPM) account, supports the Radon Reference and Intercomparison Program (ERRIP) of the National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama. The ERRIP is the only federal National Institute of Standards and Technology (NIST) traceable primary radon reference and calibration program accessible to the U.S. radon industry and is a critical element of the framework for promoting the availability of reliable, quality radon services for the public.

FY 2024 Activities and Performance Plan:

[41] https://www.epa.gov/radon.

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will provide radon reference intercomparison samples to secondary radon chambers (known as ERRIP participants) operating in the United States to analyze. EPA then submits the radon reference data to the Radon Accrediting Board(s) to evaluate and assess the performance of the ERRIP participant. EPA will update and modernize program equipment and perform required QA/QC on program analytical process and procedures.

Performance Measure Targets:

(PM LCD) Number of lung cancer deaths prevented through lower radon exposure.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						1,881	1,981	2,083	Deaths Prevented
Actual	1,383	1,482	1,578	1,684	1,795	1,894			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$3.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$29.0) This program change decreases resources for radon reference intercomparison work.

Statutory Authority:

Title IV of the Superfund Amendments and Reauthorization Act (SARA); Title III Toxic Substances Control Act; Clean Air Act.

Radiation: Protection

Radiation: Protection
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$8,244	$9,088	$11,638	$2,550
Science & Technology	***$2,224***	***$1,683***	***$2,349***	***$666***
Hazardous Substance Superfund	$2,011	$2,472	$3,010	$538
Total Budget Authority	$12,479	$13,243	$16,997	$3,754
Total Workyears	53.9	54.8	67.2	12.4

Program Project Description:

EPA supports contaminated site characterization and cleanup by providing field and fixed laboratory environmental, radiological, and radioanalytical data and technical support, providing radioanalytical training to state and federal partners, and developing new and improved radioanalytical methods. Many of the sites with radioactive contamination are surrounded by economically disadvantaged communities including, for example, tribal lands in the southwestern United States and former industrial sites located outside major urban areas.

In the event of a radiological accident or incident, the National Analytical Radiation Environmental Laboratory in Montgomery, Alabama, and the National Center for Radiation Field Operations in Las Vegas, Nevada, provide analytical and field operation support for radioanalytical testing, quality assurance, analysis of environmental samples, and field measurement systems and equipment to support site assessment, cleanup, and response activities. Together, these organizations provide technical support for conducting site-specific radiological characterizations and cleanups.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA, in cooperation with states, tribes, and other federal agencies, will provide ongoing site characterization and analytical support for site assessment activities, remediation technologies, and measurement and information systems. EPA also will provide essential training and direct site assistance, including field surveys and monitoring, laboratory analyses, health and safety, and risk assessment support at sites with radioactive contamination.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$31.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$39.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (+$596.0 / +2.2 FTE) This program change is an increase that supports addressing critical gaps in EPA's radiological protection capacity including the ability to provide ongoing site characterization and analytical support for site assessment activities, radioactive waste storage and disposal approaches, remediation technologies, and measurement and information systems. This investment includes $401.0 thousand for payroll.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act; Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

Radiation: Response Preparedness

Radiation: Response Preparedness
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$2,658	$2,650	$3,143	$493
Science & Technology	***$2,928***	***$3,596***	***$4,686***	***$1,090***
Total Budget Authority	$5,586	$6,246	$7,829	$1,583
Total Workyears	31.0	33.3	41.4	8.1

Program Project Description:

The National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and the National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada, provide field sampling and laboratory analyses to respond to radiological and nuclear incidents. This work includes measuring and monitoring radioactive materials and assessing radioactive contamination in the environment. This program comprises direct scientific field and laboratory activities to support preparedness, planning, training, and procedure development. In addition, program personnel are members of EPA's Radiological Emergency Response Team (RERT), a component of the Agency's emergency response program, and are trained to provide direct expert scientific and technical assistance. EPA's RERT is part of the Nuclear Incident Response Team under the Department of Homeland Security.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA's RERT will provide critical support for federal radiological emergency response and recovery operations under the National Response Framework and the National Oil and Hazardous Substances Pollution Contingency Plan. When necessary, EPA's RERT will complement routine operations (e.g., on-site technical support/consultation and laboratory analyses) and provide for the rapid collection of field measurements/samples and accurate radionuclide analyses of environmental samples.[42]

In FY 2024, NAREL and NCRFO will build capacity in core levels of readiness for radiological emergency responses; participate in critical emergency exercises; and respond, as required, to radiological incidents. NAREL and NCRFO will prioritize rapid deployment capabilities to ensure that field teams and laboratory personnel are ready to provide scientific data, field measurement

[42] For additional information, please visit: https://www.epa.gov/radiation/radiological-emergency-response.

capabilities, analyses, and updated analytical techniques for radiation emergency response programs across the Agency.

Performance Measure Targets:

(PM RAD2) Percentage of radiation emergency response program personnel and assets that meet functional readiness requirements necessary to support federal radiological emergency response and recovery operation.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						90	92	92	Percent
Actual					92	88			
Numerator					128.24	122.78			Personnel and Assets
Denominator					140	140			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$196.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$124.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (+$1,162.0 / +5.0 FTE) This program change is an increase to support activities for preparedness work, including basic laboratory analytic functions and field operations. This investment includes $806.0 thousand for payroll.

Statutory Authority:

Homeland Security Act of 2002; Atomic Energy Act of 1954; Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

Reduce Risks from Indoor Air

Reduce Risks from Indoor Air
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$12,611	$13,593	$47,389	$33,796
Science & Technology	***$136***	***$278***	***$183***	***-$95***
Total Budget Authority	$12,748	$13,871	$47,572	$33,701
Total Workyears	40.1	39.2	71.4	32.2

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, tribal and local levels. Poor indoor air quality represents one of the most significant public health risks within EPA's responsibility.[43] EPA uses a range of strategies to reduce health risks from poor indoor air quality in homes, schools, and other buildings through partnerships with non-governmental, professional, federal, state, and local organizations. Through these partnerships EPA provides information, guidance, and technical assistance to equip industry, the health care community, the residential, school, and commercial building sectors, and the general public to take action. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

Tribes have identified indoor air quality as a high priority and often bear disproportionately high impacts from poor indoor air quality. For example, Native Americans and Alaska Natives disproportionately suffer from asthma, in part due to poor housing conditions and the associated increase in exposure to indoor air pollutants.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

This request, combined with resources for Reduce Risks from Indoor Air from the Environmental Programs and Management (EPM) account, will enable EPA to continue monitoring, assessing, and assisting communities in reducing risks from poor indoor air quality. Under this program, EPA will maintain indoor air monitoring and assessment equipment, conduct field measurements and

[43] For additional information, please see: https://www.epa.gov/iaq.

assessments, and provide technical support and guidance for indoor air quality remediations, with a primary focus on assistance to tribal communities. In addition, EPA will conduct training and capacity building for tribal air quality professionals on indoor air assessments and field measurement technology and practices, including radon.

Performance Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$8.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$87.0) This program change decreases resources for activities that reduce risk from indoor air quality, such as conducting field measurements and assessments and providing technical support and guidance.

Statutory Authority:

Title IV SARA; Title III Toxic Substances Control Act; Clean Air Act.

IT / Data Management

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$90,029	$91,821	$105,868	$14,047
Science & Technology	***$2,799***	***$3,197***	***$3,313***	***$116***
Hazardous Substance Superfund	$16,075	$19,764	$17,727	-$2,037
Total Budget Authority	$108,903	$114,782	$126,908	$12,126
Total Workyears	463.6	490.9	503.9	13.0

Total work years in FY 2024 include 172.0 FTE to support IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. Science and Technology (S&T) resources for EPA's IT/DM Program fund the following activities: Quality Program,[44] EPA National Library Network, and Web Infrastructure Management.

The Quality Program provides quality policy, procedures, standards, and guidance for environmental information collection, production, evaluation, and use activities. These activities are performed by or for the Agency to ensure sound decisions are based on quality to support their intended use as we strive to protect human health and the environment. The Quality Program provides Quality Assurance (QA) directives, training, oversight, and technical support to assist EPA organizations in implementing their Quality Program for environmental information operations. It also oversees the implementation of EPA's Information Quality Guidelines (IQGs).

EPA's National Library Network provides information resources and services to EPA staff and the public in support of EPA's mission. Web Infrastructure Management provides accessible, relevant, timely, accurate, and complete environmental information to EPA's employees, partners, and stakeholders, as well as the public, through the websites and digital services which constitute EPA's internet presence.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

[44] For more information about EPA's Quality Program, please see: http://www.epa.gov/quality.

EPA's Quality Program provides implementation support to all EPA organizations that have environmental information operations described in an approved Quality Management Plan (QMP). In FY 2024, the Quality Program will:

- Assess organizations that have an approved QMP and identify findings requiring corrective action, areas needing improvement, and leveraging best practices.

- Focus on promoting sound science and ensure scientific integrity by promoting better planning to produce improved environmental information. Evaluate environmental information through use of the QA Annual Report and Work Plan and annual certification by Assistant and Regional Administrators.

- Manage and provide oversight for the IQGs to ensure that information disseminated by or for EPA conforms with the *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by the Environmental Protection Agency* criteria.[45] The Quality Program will facilitate the development of the Agency's responses to public requests for correction and reconsideration of information disseminated by EPA and report this information to the Office of Management and Budget (OMB). The Quality Program also will continue to focus on implementing recommendations from the Office of Inspector General (OIG) Audit Report, *EPA Needs to Address Internal Control Deficiencies in the Agencywide Quality System*.[46] The Program will give priority to implementation of revised Quality Directives for QMPs and Quality Assurance Project Plans, and the IQGs.

- Engage as a resource with EPA's state and tribal partners and environmental justice communities and support the Climate Change Program to ensure QA processes and procedures are in place to protect human health and the environment.

The Agency's S&T resources for IT/DM also will help provide library services through the EPA National Library Network to all EPA employees and environmental information access to the public, as well as support the hosting of EPA's websites and web pages. One EPA Web will continue to manage content and support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes.

In FY 2024, EPA will work to transform the Agency's libraries to meet the needs of the 21st Century. This involves operating in an increasingly online and mobile environment; providing services and resources at the customer's point of need; prioritizing the thorough assessment of print materials to support strategic space usage; utilizing detailed data to ensure print collections are highly relevant to the Agency's needs and centralizing core services; and relying on technology and a team of professional librarians to disseminate information and connect people to resources they need to support the demands of both internal and external requests.

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[45] For more information, please see: https://www.epa.gov/quality/guidelines-ensuring-and-maximizing-quality-objectivity-utility-and-integrity-information.

[46] For more information, please see: https://www.epa.gov/office-inspector-general/report-epa-needs-address-internal-control-deficiencies-agencywide-quality.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$116.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Operations and Administration

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$291,501	$283,330	$305,753	$22,423
Science & Technology	***$68,347***	***$67,500***	***$72,043***	***$4,543***
Building and Facilities	$24,681	$42,076	$105,009	$62,933
Leaking Underground Storage Tanks	$922	$754	$727	-$27
Inland Oil Spill Programs	$854	$682	$641	-$41
Hazardous Substance Superfund	$76,108	$65,634	$71,540	$5,906
Total Budget Authority	$462,412	$459,976	$555,713	$95,737
Total Workyears	310.6	321.8	330.4	8.6

Total work years in FY 2024 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Science and Technology (S&T) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue to pursue agencywide climate sustainability and resiliency initiatives and EPA facilities projects. Investing in the reconfiguration of EPA's workspaces enables the Agency to release office space and avoid long-term rent costs, consistent with HR 4465, the *Federal Assets Sale and Transfer Act of 2016*.[47] EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate, and optimize space within remaining facilities, and reduce square footage wherever practical. The Agency's space consolidation efforts are expected to result in cost avoidances due to projected rent increases over ten years. EPA also will continue working to enhance its federal infrastructure and operations in a manner that increases efficiency. These enhancements also support the Future of Work as the

[47] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

Agency continues to implement hybrid, remote, and physical workspaces, consistent with OMB Memorandum M-21-25.[48] For FY 2024, the Agency is requesting $29.12 million for rent, $17.66 million for utilities, and $11.91 million for security in the S&T appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

EPA also will work to secure physical and operational resiliency for agency facilities. As part of this work, EPA will continue conducting climate resiliency assessments at all EPA-owned facilities to identify critical upgrades that are necessary to improve facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. In FY 2024, EPA will conduct climate assessments at the following facilities: Office of Air and Radiation Laboratory – Montgomery; Edison Environmental Center; Region 4 Field Annex – Athens; Athens Environmental Center; Corvallis Environmental Laboratory; and Newport Environmental Laboratory. EPA will initiate all high-priority projects within 24 months of the completion of a climate assessment.

Further, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce.[49] Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050.

In FY 2024, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs *(e.g.*, Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment in infrastructure (*e.g.*, architectural and design) and mechanical systems (*e.g.*, Optimized Building Managements Systems for heating and cooling with load demand driven controls) is necessary to meet the Administration's climate sustainability goals. Additionally, in FY 2024, EPA will continue the Agency's transition to electric vehicles through direct purchase (mobile lab vehicles) or lease through the General Services Administration (GSA) for all future fleet procurements where economically feasible. EPA also will identify opportunities to build out necessary charging infrastructure at EPA facility locations. In line with federal sustainability goals, EPA will work to utilize 100 percent carbon pollution-free electricity on a net annual basis by 2030.

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[48] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.

[49] Work in this program takes direction for climate change and sustainability related initiatives from the following:
EO 14008: *Tackling the Climate Crisis at Home and Abroad* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/).
EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/).

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (*e.g.,* inspections, monitoring, on-scene Coordinators), and track capital equipment of $25 thousand or more. The Agency will continue its partnership with GSA to utilize shared services solutions, *USAccess*, and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized Homeland Security Presidential Directive, HSPD-12, approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

Work under this program supports performance results in the Facilities Infrastructure and Operations Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$368.0) This net change to fixed and other costs is a decrease due to adjustments for rent, utilities, security, and transit subsidy needs.

- (+$4,911.0) This program change supports implementation of EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* requirements that will require EPA to increase facility resiliency against the impact of climate change and to advance sustainability of EPA operations. This investment increases support for EPA facilities projects to ensure EPA has optimal footprint to support the proposed FTE increase in the FY 2024 Budget request, continue ongoing EPA laboratory consolidation projects, and support agencywide climate sustainability and resiliency initiatives such as facility climate assessments and Optimized Building Managements Systems.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Pesticides Licensing

Pesticides: Protect Human Health from Pesticide Risk
Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$65,333	$62,125	$65,529	$3,404
Science & Technology	***$2,854***	***$2,894***	***$4,031***	***$1,137***
Total Budget Authority	$68,187	$65,019	$69,560	$4,541
Total Workyears	420.3	385.6	385.6	0.0

Total program work years in FY 2024 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

EPA's Pesticide Programs screen new pesticides before they reach the market and ensure that pesticides already in commerce are safe. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Act of 2022 (PRIA 5),[50] EPA is responsible for registering and re-evaluating pesticides to protect consumers, pesticide users, workers who may be exposed to pesticides, children, and other sensitive populations.

To make regulatory decisions and establish tolerances (*e.g.*, maximum allowable pesticide residues on food and feed) for food use pesticides and for residential or non-occupational use, EPA must find the pesticide safe. This involves considering cumulative and aggregate risks and ensuring extra protection for children as required by the FQPA. Aggregate assessments ensure that there is reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposure and all other exposure for which there is reliable information. For cumulative assessments, the Agency is required to consider available information concerning the cumulative effects of such residues and other substances that have a common mechanism of toxicity. The Agency must balance the risks and benefits of other uses. For antimicrobial pesticides with public health claims, EPA requires that manufacturers perform tests to ensure the efficacy (*i.e.*, performance) of products per the labelling. In anticipation of future public health emergencies, the Pesticide Program evaluates public health claims for antimicrobial products, including the accelerated availability of disinfectants determined to be effective against emerging pathogens and development of study designs to support the generation of innovative products, including those that can reduce airborne transmission of these pathogens. This program

[50] On December 29,2022, the Pesticide Registration Improvement Extension Act of 2022 (PRIA 5), which reauthorizes PRIA for 5 years through fiscal year 2027 and updates the fee collection provisions of the FIFRA, was signed into law.

operates two laboratories, the Microbiology Laboratory[51] and the Analytical Chemistry Laboratory.[52]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

The Analytical Chemistry Laboratory will continue to develop and validate methods for multi-residue pesticide analyses, including furthering test protocols, providing technical review of data and reports. The laboratory will also provide technical analyses and support to states, EPA Regions and the Office of Enforcement and Compliance Assurance (OECA) in enforcement cases related to the potential misuse of or illegal pesticides. Additionally, this lab maintains EPA's National Pesticide Standard Repository and distributes more than 5,000 standards yearly to States and Regions for use in validating test results, calibrating instruments, and/or for identifying and quantifying pesticide residues. In addition, the laboratory will continue to provide technical support to EPA's Office of Pesticide Programs to develop and standardize test protocols relating to the performance of portable monitoring devices measuring post-application levels. Finally, work will continue the development and release of additional testing methods related to identifying and quantifying PFAS residues in High Density Polyethylene (HDPE) containers. These efforts are critical to ensuring the safety of pesticide products within channels of trade, including those available for use by the public.

The Microbiology Laboratory will continue to protect human health by ensuring the availability of scientifically sound efficacy test methods for antimicrobial pesticides (*e.g.*, hospital disinfectants used to treat surfaces). By developing new methods for new uses and emerging pathogens, the regulated community can register new products as well as new claims for existing products. These efforts will benefit the public because of the critical support the Laboratory provides to inform regulatory actions for public health pesticides, identify pathways for approval of pathogen-specific claims, and allow for marketplace penetration of these products.

Specifically, in FY 2024, the Microbiology Laboratory will:

- Continue to work on the data collection, analysis, and development of new regulatory guidance and implementation materials on a quantitative method for bactericidal claims to support adoption of the method for regulatory purposes.
- Complete analysis of FY 2021-2022 multi-laboratory data and develop guidance materials and final method (including submission to and review by ASTM subcommittee) for *Legionella* in recirculating water for cooling tower remediation.
- Provide efficacy testing and technical support for workplans for the Antimicrobial Product Evaluation Program (APEP) pursuant to EPA's response to the Office of the Inspector General (Report No. 16-P-0316).[53]

[51] For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[52] For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.
[53] *See*, Report No. 16-P-0316, "Report: EPA Needs a Risk-Based Strategy to Assure Continued Effectiveness of Hospital-Level Disinfectants," found at: https://www.epa.gov/office-inspector-general/report-epa-needs-risk-based-strategy-assure-continued-effectiveness.

- Continue to revise the existing residual self-sanitizing disinfectant protocol and collect data to support the revisions and submit the method for comment and/or through ASTM.
- Continue to pursue the development of a regulatory guidance document and implementation strategy for evaluating the efficacy of antimicrobial towelettes.
- Continue to develop laboratory capacity for conducting efficacy testing with Biosafety Level 3 (BSL-3) microorganisms at the Environmental Science Center in Ft. Meade, Maryland. EPA's Pesticide Program has the only EPA laboratory with physical containment laboratories to manage BSL-3 microbes.
- Continue to expand viral testing and method development to respond to emerging viral pathogens.
- Continue work to finalize the guidance for efficacy claims on porous materials by responding to public comment on the draft guidance and proposing a final document for release in FY 2024.

In FY 2024, the Analytical Chemistry Laboratory will continue to protect human health by ensuring the availability of appropriate analytical methods for analyzing pesticide residues in food and feed and ensuring their suitability for monitoring pesticide residues and enforcing tolerances. In addition, the Laboratory will:

- Develop improved analytical methods and protocols using state of the art instruments to replace outdated ones, thus increasing laboratory efficiency and accuracy of the data.
- Continue to develop new methods to support EPA's overall efforts on identifying PFAS compounds and potential routes of exposure. Additional methods specific to types of pesticide formulations will continue to progress, including finalizing methods to quantify PFAS in High Density Polyethylene (HDPE) containers and methodology to quantify residues in pesticide formulations of varying chemistries (i.e., those containing surfactants).
- Provide analytical support to fill in data gaps for the Pesticide Programs' Section 18 emergency exemption applications, and to perform studies for use in risk assessments and ultimately, risk mitigation decisions.
- Provide analytical assistance and technical advice to the EPA Office of Enforcement and Compliance Assurance (OECA) and to all regional offices in support of their enforcement cases, including cases against domestic and especially imported disinfectant products with false label claims. This could disproportionately impact members of communities with environmental justice (EJ) concerns who might not speak English, who may be targeted by illegal imports, and who may not know how to look for approved products (*i.e.*, List N products).
- Verify that pesticides products are properly formulated.
- Operate EPA's National Pesticide Standard Repository.[54]

<u>Preventing Disease through Public Health Pesticides: Antimicrobial Testing</u>

EPA's Antimicrobial Testing Program (ATP), starting in 1991, was charged with testing hospital sterilants, disinfectants, and tuberculocides since 1991 to help ensure that products in the marketplace meet stringent efficacy standards. EPA is in the process of developing a new risk-

[54] For additional information, please visit: https://www.epa.gov/pesticide-analytical-methods/national-pesticide-standard-repository.

based testing strategy in response to OIG recommendations.[55] Consistent with the OIG recommendations, EPA suspended the ATP in November 2017. EPA released a draft risk-based strategy, renamed the Antimicrobial Performance Evaluation Program (APEP), in October 2019 for public comment and will continue to seek public input prior to implementation as early as FY 2024. Implementation of the APEP will benefit public health by ensuring approved antimicrobials meet contemporary efficacy standards.

The Microbiology Laboratory will continue to develop efficacy methods to support EPA's antimicrobial pesticide regulatory programs. The results of these efforts will help ensure products are available to control various bacteria (*e.g.*, *Clostridioides difficile)*, viruses (*e.g.*, Mpox (formerly monkeypox) and other emerging pathogens) and biofilms and to inform EPA's method development activities in FY 2024 and beyond.

This FY 2024 request includes an increase of $1.2 million to invest in a Biosafety Level 3 Lab at Fort Meade, MD, the only such lab at EPA. These funds are needed to replace some aging critical lab equipment and modernize the lab's capabilities to be responsive to homeland security & other emerging issues (i.e. - such as pandemics). The additional funding will support the following critical lab purchases:

- Update and/or purchase equipment to meet more current laboratory specifications for a biosafety level 3 (BSL-3).
- Conversion of current steam sterilizer (autoclave) in B202 (Federal Select Agent registered lab) to a pass-through autoclave.
- Replace autoclave in B207 (BSL-3 virus lab) with a new pass-through autoclave since both laboratory branches are currently covered under the existing environmental monitoring system contract.
- Modernization of IT in BSL-3 laboratory (LAN, scanner, tablets/software for paperless recordkeeping, etc.)
- Pass-through port for both BSL-3 laboratories (e.g., https://www.enviropass.com/products/medical-pass-throughs/specimen-pass-through/).
- Enlargement of BSL-3 anterooms to provide additional safety measures.
- Dedicated shower-out capability in the lab wing.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect Human Health from Pesticide Risk Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$36.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

[55] For additional information, please visit: https://www.epa.gov/pesticide-registration/antimicrobial-performance-evaluation-program-apep.

- (-$85.0) This change to fixed and other costs is a decrease due to the recalculation of laboratory fixed costs.

- (+$1,186.0) This increase provides $1.186 million to invest in a Biosafety Level 3 Lab at Fort Meade, MD. These funds are needed to replace aging critical lab equipment and modernize the lab's capabilities to be responsive to emerging issues such as pandemics.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA), §408.

Pesticides: Protect the Environment from Pesticide Risk
Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$43,688	$48,704	$75,391	$26,687
Science & Technology	***$2,487***	***$2,334***	***$2,339***	***$5***
Total Budget Authority	$46,175	$51,038	$77,730	$26,692
Total Workyears	312.7	259.6	282.1	22.5

Total program work years in FY 2024 include 53.2 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

EPA's Pesticide Program screens new pesticides before they reach the market and ensures that pesticides already in commerce are safe. As directed by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA), and the Pesticide Registration Improvement Act of 2022 (PRIA 5),[56] EPA is responsible for registering and re-evaluating pesticides to protect humans, plants, animals, and ecosystems that are not targets of the pesticide.

Under FIFRA, the Agency must balance the risks and benefits of other pesticide uses. For antimicrobial pesticides with public health claims, EPA requires that manufacturers perform tests to ensure the efficacy (*i.e.*, performance) of products per the labelling.

In addition to FIFRA responsibilities, the Agency has responsibilities under the Endangered Species Act (ESA).[57] Under ESA, EPA must ensure that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or result in jeopardy to the continued existence of species listed by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS). Where risks are identified, EPA must work with FWS and NMFS in a consultation process to ensure these pesticide registrations also will meet the ESA standard.

Under the Science and Technology appropriation, EPA's Pesticide Program operates two laboratories, the Microbiology Laboratory[58] and the Analytical Chemistry Laboratory,[59] that support the goal of protecting human health and the environment through diverse analytical testing and analytical method development and validation efforts. These laboratories provide a variety of

[56] On December 19, 2022, the Pesticide Registration Improvement Extension Act of 2022 (PRIA 5), which reauthorizes PRIA for 5 years through fiscal year 2027 and updates the fee collection provisions of the FIFRA was signed into law.
[57] *See*, ESA sections 7(a)(1) and 7(a)(2); Federal Agency Actions and Consultations (16 U.S.C. § 1536(a)), available at the U.S. Fish and Wildlife Service ESA internet site: https://www.fws.gov/service/section-7-consultations.
[58] For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[59] For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.

technical services to EPA, other federal and state agencies, tribal nations, and other organizations to ensure the protection of the environment from pesticide risk.

EPA's Pesticide Program laboratories provide a diverse range of environmental data that the Agency uses to make informed regulatory decisions. The Analytical Chemistry Laboratory and the Microbiology Laboratory each provide critical laboratory testing and support activities to assist the decision-making processes of the Agency. The laboratories develop standard methods to evaluate the performance of antimicrobial products such as disinfectants used in hospital settings, and validate analytical chemistry methods to ensure that EPA, the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), and the states have reliable methods to measure and monitor pesticide residues in food and the environment.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

Laboratory activities in FY 2024 will include continuing to lead collaborative studies with other laboratories to validate testing methods for antimicrobial products to determine their efficacy against pathogens such as *Legionella*; working with the Antimicrobials Division on the implementation of an appropriate performance standard for a revised method for measuring the efficacy of disinfectants quantitatively; working with state laboratories to share method development and analyze samples, as requested; and working with investigations to evaluate the composition of potentially illegal pesticides.

In FY 2024, the Microbiology Laboratory will continue to work with the U.S. Department of Homeland Security and USDA to evaluate various environmentally relevant materials such as porous materials (*e.g.*, wood, concrete, fabric, tile, etc.) which simulate use sites in livestock, poultry, and other food animal rearing operations. Outbreaks of avian influenza, African swine fever, Newcastle Disease virus, and other pathogens can devastate American agriculture, and the persistence of these viruses on surfaces is not well understood. Currently, due to the unavailability of standardized quantitative test methods to simulate real-world conditions, the response to an animal pathogen outbreak and submission of requests under FIFRA Section 18 to address these outbreaks rely on published, often antiquated, data. Thus, the use of commonly available chemicals for remediation (*e.g.,* citric acid, sodium hypochlorite, chlorine dioxide, etc.) of contaminated sites without extensive knowledge of their environmental impact from such widespread use is problematic.

The goal of the Microbiology Laboratory is to develop a quantitative approach for assessing the effectiveness of antimicrobial products against high consequence animal viruses and other pathogens. Through this approach, EPA will provide a tool for the development of high-quality efficacy data on relevant surface materials. The availability of the method to the regulated community will support the development of new antimicrobial products following contemporary regulatory requirements.

In FY 2024, the Analytical Chemistry Laboratory will continue to focus on analytical method development and validations as well as special studies to address specific, short-term, rapid-turnaround priority issues. Specifically, the development and release of new methods for the analysis of PFAS in formulated pesticide products containing surfactants and a second method for quantifying the amounts of PFAS in container walls. These methods, once validated, will provide standardized, critical tools for the analysis of pesticide residues for PFAS, supporting the first portion of EPA's strategic plan to effectively identify these compounds and potential routes of exposure. Additionally, this lab will continue to support registration review efforts related to testing devices used in clearing structures that were fumigated with sulfuryl flouride with the goal of increasing performance and overall reliability of data collected from these devices.

The Laboratory also will continue to provide technical and analytical assistance to EPA's Enforcement and Compliance Assurance Program and regional offices in support of their enforcement/complaint cases, including analysis of dicamba and its metabolites in soil and vegetation samples and analysis of products sold in online commerce.

The Analytical Chemistry Laboratory also will continue to provide national technical analytical support for the development of data needed for the Pesticides Program's risk assessments and for Section 18 emergency exemptions, and to perform studies for use in risk mitigation.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$42.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$39.0) This change to fixed and other costs is a decrease due to the recalculation of laboratory fixed costs for utilities and security.

- (+$86.0) This program change is an increase in laboratory Operations and Maintenance costs.

Statutory Authority:

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

Pesticides: Realize the Value of Pesticide Availability
Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$7,022	$7,637	$8,234	$597
Science & Technology	***$941***	***$925***	***$1,002***	***$77***
Total Budget Authority	$7,963	$8,562	$9,236	$674
Total Workyears	32.7	35.8	35.8	0.0

Program Project Description:

EPA's Pesticide Program laboratories provide significant contributions to help the Agency realize the value of pesticides. They consist of the Microbiology Laboratory[60] and the Analytical Chemistry Laboratory,[61] both of which support the goal of protecting human health and the environment through diverse analytical testing, analytical method development, and validation efforts. Laboratories provide a variety of technical services to EPA, other federal and state agencies, tribal nations, and other organizations to ensure the value of pesticide availability is realized.

The primary focus of the Microbiology Laboratory is standardization of existing test methods and the development and validation of methods for new uses and emerging pathogens for antimicrobial products with public health claims – products used to kill or suppress the growth of pathogenic microorganisms on inanimate objects and surfaces. The Microbiology Laboratory is instrumental in advancing the science of antimicrobial product testing and provides technical expertise to standard-setting organizations and various agency stakeholder groups.

The Analytical Chemistry Laboratory provides scientific, laboratory, and technical support through chemical analyses of pesticides and related chemicals to protect human health and the environment. The Analytical Chemistry Laboratory's responsibilities include providing technical support and chemical analyses of pesticides and related chemicals; developing new multi-residue analytical methods; and operating EPA's National Pesticide Standard Repository,[62] which collects and maintains pesticide standards (*i.e.*, samples of pure active ingredients or technical grade active ingredients, regulated metabolites, degradants, and related compounds).

[60] For additional information, please visit: https://www.epa.gov/aboutepa/about-microbiology-laboratory.
[61] For additional information, please visit: https://www.epa.gov/aboutepa/about-analytical-chemistry-laboratory-acl.
[62] For additional information, please visit: https://www.epa.gov/pesticide-analytical-methods/national-pesticide-standard-repository.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*. In FY 2024, EPA will realize the benefits of pesticides by ensuring the continued operation of the National Pesticide Standard Repository. The Microbiology Laboratory and the Analytical Chemistry Laboratory will continue to conduct chemistry and efficacy evaluations for antimicrobials. As the recognized source for expertise in pesticide analytical method development, EPA's Pesticide Program laboratories will continue to provide quality assurance review, technical support, and training to EPA's regional offices, state laboratories, and other federal agencies that implement the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

The Analytical Chemistry Laboratory will continue to maintain the National Pesticide Standard Repository (NPSR) and collect and maintain an inventory of analytical standards of registered pesticides in the U.S. EPA provides these pesticide standards (approximately 4,000 to 5,000 annually) to qualified federal, state, territorial, and tribal laboratories for food and product testing, environmental monitoring, and enforcement purposes. This lab has implemented several changes in the operation of the NPSR to increase its efficiency and to better serve regulatory laboratories. Changes included requiring requests to be grouped for pesticide standards, instituting an inventory control system focusing on high demand standards, asking registrants to package pesticide standards in ready-to-be-shipped quantities, and installing a chemist as the lead staff person to ensure adherence to new protocols. These changes resulted in the improvement in the operations of the lab including a decrease in the turnaround time for shipping repository samples from 15 to 10 days. These changes also helped federal agencies, states, and tribal laboratories expedite enforcement efforts. Further process enhancements will continue in FY 2024 and beyond, specifically in minimizing the number of non-usable expired standards that are shipped as chemical waste.

In FY 2024, the Analytical Chemistry Laboratory also will continue its work in: developing and validating multiresidue methods using state-of-the-art methodology and instrumentation; providing chemical analysis for assessing risk to human health and to the environment from agricultural use of pesticides; and providing technical support to EPA regional offices to ensure that pesticide products are formulated according to approved labels.

In FY 2024, the Microbiology Laboratory will continue to evaluate FIFRA Section 18 emergency exemptions and novel protocol requests for new uses and novel pathogens. The Laboratory also will continue the development of data and methods to support Section 18 for high consequence animal pathogens (*e.g.,* African swine fever, Newcastle disease virus, etc.). In addition, the continued work to develop new methods for emerging pathogens (*e.g., Legionella*, *Candida auris,* etc.) and clinical porous materials provides a pathway for registrants to add new claims to existing antimicrobial pesticides. In some cases, the methods will lead to the development of new products when currently registered formulations are not effective against emerging pathogens. The Laboratory anticipates supporting up to 25 requests for these activities in FY 2024.

The Microbiology Laboratory also will continue to refine and develop methods to support EPA's Section 3 and Section 18 regulatory programs, continuing to develop testing methods for

evaluating effectiveness of disinfectant products against airborne SARS-CoV-2 virus and other emerging pathogens. In addition, the Laboratory will collaborate with EPA's Homeland Security Research Program to develop guidance for registrants seeking to make long-term disinfectant efficacy claims and explore novel control and application options for disinfectant products. The Laboratory also will continue to develop a quantitative efficacy test method which may provide a pathway for evaluating disinfectant claims for porous material (vinyl, room divider curtains, etc.).

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$5.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$76.0) This change to fixed and other costs is a decrease due to the recalculation of lab fixed costs for utilities and security.

- (+$158.0) This program change is an increase to support laboratory Operations and Maintenance costs.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

Research: Air and Energy

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$93,402***	***$100,448***	***$137,835***	***$37,387***
Total Budget Authority	$93,402	$100,448	$137,835	$37,387
Total Workyears	263.8	264.0	298.7	34.7

Program Project Description:

Air pollution adversely affects human health and the environment, yet millions of Americans still live in or near geographic areas that do not meet national standards for air pollutants. Climate change is impacting public health, air, and water quality today and will exacerbate other environmental challenges in the future. Many air pollution sources are in communities with environmental justice concerns which can be further exacerbated by the impacts of climate change. To address these and other air pollution issues, including the growing threat of air pollution from wildfires exacerbated by climate change, EPA's Air, Climate, and Energy (ACE) Research Program provides scientific information to EPA program and regional offices, tribes states, and other partners. ACE advances the science needed to attain the National Ambient Air Quality Standards (NAAQS),[63] reduce emissions of hazardous air pollutants (HAPs), address the causes and consequences of climate change and environmental inequities, and develop more resilient communities to protect human health and ecosystems. The ACE Research Program also contributes to understanding the impacts of interventions that reduce air pollution exposures and protect public health; strategies to prepare, adapt, and build resilience; and responses to the transformation of our energy systems.

The ACE Research Program is centered around two inter-related research topic areas: 1) understanding air pollution and climate change and their impacts on human health and ecosystems; and 2) responding to risks and impacts and preparing for the future. The ACE Research Program relies on successful partnerships with a variety of organizations including academic and industry researchers, tribes, states, local and private sector organizations, as well as key federal agencies.

[63] Section 109 of the Clean Air Act identifies two types of national ambient air quality standards – primary standards provide public health protection, including protecting the health of "sensitive" populations such as children, older adults, and persons with pre-existing disease such as asthma or cardiovascular disease and secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, wildlife, soils, water, crops, vegetation, and buildings. Unless otherwise stated, in this document the term NAAQS will refer to both primary and secondary standards.

Recent Accomplishments of the ACE Research Program include:[64]

- **Air Pollution, Climate Change and Ecosystem Health:** In FY 2022, EPA researchers modeled atmospheric deposition of nitrogen to ecosystems including the Chesapeake Bay[65] and estimated critical loads of nitrogen for plants and trees in the U.S.[66] The research showed that while decreases in nitrogen emissions have reduced the percentage of vegetation exceeding critical loads for loss of species abundance, over a third of studied plots are still at risk and would benefit from additional nitrogen reductions. EPA researchers studied how ozone exposures impact growth of trees, finding that ozone responsiveness varies by species, and that black cherry, tulip poplar and ponderosa pine are among the most ozone-sensitive North American tree species.[67] EPA researchers also used flow models and high-resolution survey data to examine habitat suitability for Chinook salmon. They found that future climate conditions may have a substantial negative impact on spawning and limited impact on rearing conditions due to flow reduction.[11]

- **Modeling of Scenarios for Energy and Transportation System Emissions**: In FY 2022, EPA researchers employed state-of-the-art energy systems models to analyze transformations in the U.S. energy and transportation systems and characterize pollutant emission changes from adoption of various technologies and policies. Model results showed that increases in electric vehicles can have varying impacts on overall system-wide CO_2 and NO_x emissions, depending on how the electricity used to power those vehicles is produced. High adoption of electric vehicles would likely reduce CO_2 emissions, with greater reductions resulting if electricity production is produced with renewables or otherwise decarbonized sources[68]. Researchers also developed a new tool, the Global Change Analysis Model Long-term Interactive Multi-pollutant Scenario Evaluator (GLIMPSE), to assist in air quality, climate, and energy planning.[69]

- **Wildfire Smoke:** Climate change is contributing to increased size and intensity of wildfires, and states and communities are increasingly concerned about exposures to wildfire smoke. In FY 2022, EPA researchers conducted studies of smoke emissions and air quality measurement during wildfires. The research showed that small, lower-cost air quality sensors, while not as accurate as federal reference monitors, can provide useful data about community air quality and exposures during wildfire smoke events.[70] Researchers also evaluated how smoke plumes are represented in air quality models and reinforced that accurate information on meteorology, timing, and heat release during fires are critical for predicting smoke plume heights which affect downwind air quality.[71] In FY 2022, EPA researchers also applied their research on air quality sensors to develop the Wildfire Smoke Air Monitoring Response Technology

[64] For more information, please see https://www.epa.gov/research/national-research-programs.
[65] For more information, please see https://acp.copernicus.org/preprints/acp-2022-201/ and https://doi.org/10.1016/j.atmosenv.2021.118277.
[66] For more information, please see https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.16076.
[67] For more information, please see https://www.sciencedirect.com/science/article/pii/S1352231022002564?via%3Dihub.
[68] For more information, please see: https://www.sciencedirect.com/science/article/pii/S0306261921007698.
[69] For more information, please see: https://www.epa.gov/research-states/supporting-air-quality-and-climate-change-planning-glimpse-webinar-archive
[70] For more information, please see https://www.mdpi.com/2073-4433/13/6/877/htm and https://www.sciencedirect.com/science/article/pii/S1352231021005409.
[71] For more information, please see https://www.publish.csiro.au/wf/pdf/WF20140.

(WSMART) program which loans lower-cost air quality sensors to state, tribal, and local air quality organizations to improve characterization of air quality during wildfire smoke events.[72] Researchers also evaluated the performance of various portable air cleaners, including "do it yourself" or DIY models, and found that DIY air cleaners can effectively reduce indoor fine particle concentrations during simulated wildfire smoke events.[73]

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

The ACE Research Program prioritizes key activities to support attainment of the NAAQS and implementation of stationary and mobile source regulations, as well as foundational science to inform decision making with consideration of increasing climate change impacts. The ACE Research Program includes work to develop, evaluate, and apply measurement methods and models incorporating the latest physical science and understanding of behaviors that impact the system. The planned research responds to identified needs in areas of emerging concern to the Administration, EPA, tribes, and state policymakers, including climate change, environmental justice (EJ) and equity, PFAS, ethylene oxide, and wildland fires.

In FY 2024, the ACE Research Program will continue to:

- Assess human and ecosystem exposures and effects associated with air pollutants on individual, community, regional, national, and global scales, both today and in the future, under a changing climate.[74]

- Assess the consequences of climate change and the vulnerability of communities and ecosystems to climate change impacts, including wildfires and other extreme events; and identify and evaluate strategies to adapt and build resilience to these impacts.

- Advance the Administration's science-based approach to improving wildfire readiness by enhancing wildfire data and communications related to air quality and helping communities become "smoke ready." Smoke-ready communities benefit community health by coordinating community-level action related to monitoring outdoor air quality, creating clean indoor air, and communicating actionable public health messaging.

- Characterize disproportionate impacts of climate change and air pollution in vulnerable communities and identify and evaluate strategies to reduce impacts in those communities.

- Develop and evaluate innovative multi-pollutant and sector-based approaches to preventing pollution, particularly in vulnerable communities.

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[72] For more information, please see https://www.epa.gov/air-sensor-toolbox/wildfire-smoke-air-monitoring-response-technology-wsmart-pilot.
[73] For more information, please see https://onlinelibrary.wiley.com/doi/10.1111/ina.13163
[74] Beyond effects associated with ambient air exposures, consideration of potential human and ecosystem exposures and effects associated with deposition of air pollutants to water and land also are evaluated.

- Characterize the positive and negative environmental effects of energy efficiency and renewable energy and evaluate strategies to expand the benefits of transformations in transportation and energy systems, especially for vulnerable communities.

- Develop and evaluate low-cost approaches to measure methane from fugitive and area sources, including leaks from oil and gas production and emissions from municipal solid waste landfills, as well as approaches for measuring methane and other GHG from reservoirs and other water bodies.

- Provide human exposure and environmental modeling, monitoring, metrics, and information needed to inform air quality and climate change decision-making at the federal, tribal, state, and local level.

- Deliver state-of-the-art tools that tribes and states can use to identify effective emission reduction strategies to meet the NAAQS and enhance air quality measurement and modeling methods to ascertain current and future compliance with the NAAQS, including potential impacts from the changing climate.

- Develop and apply approaches to evaluate the positive and negative environmental impacts of the transition to a low-carbon energy system, including development of a report to Congress on the environmental and resource conservation impacts of the Renewable Fuel Standard.[75]

- Provide support to Regional Offices and state, tribal, and community partners to address increased needs for scientific information, tools, and data to inform effective climate change adaptation and mitigation actions at local scale.

- Produce a peer-reviewed scientific guidance document for ambient measurement approaches for ethylene oxide—a hazardous air pollutant of growing concern to states and communities.

In addition, the ACE Research Program will implement the EPA Climate Adaptation Action Plan, support increased resilience of EPA's programs, and strengthen the capacity of states, tribes, territories, and communities.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that is developed with and reflects the research needs of Agency programs and regional offices, states, and tribes. Each research program has developed and published their fourth generation of the StRAPs,[76] which

[75] Required by the Energy Independence and Security Act of 2007, PL110-140. For more information, please see: https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. More information about the report is available at: https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=IO&dirEntryId=341491.
[76] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.

continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various external groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
  - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
  - EPA's state engagement[77] is designed to inform states about their role within EPA and EPA's research programs and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program, which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local governments, and communities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	113	113	Activities
Actual						N/A			

(PM RD3) Percentage of Office of Research and Development (ORD) climate-related research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						93	94	94	Percent
Actual					100	100			
Numerator					5	7			Products
Denominator					5	7			

[77] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

(PM RD4) Percentage of Office of Research and Development (ORD) environmental justice-related research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						93	94	94	Percent
Actual						100			
Numerator						1			Products
Denominator						1			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,436.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$63.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.

- (+$34,700.0 / +33.7 FTE) This net program change reflects an increase to the Air, Climate, and Energy Research Program. This increase is targeted to EPA's commitment to enhance its efforts to combat the global issue of Climate Change. This increase will substantially advance research to assess the impacts of climate change on human health and ecosystems. This investment includes $6.522 million for payroll.

- (+$1,188.0 / +1.0 FTE) This program change will provide support to implement the EPA Climate Adaptation Action Plan, support increased resilience of EPA's programs, and strengthen the capacity of states, tribes, territories, and communities. This investment includes $182.0 thousand for payroll.

Statutory Authority:

Clean Air Act; Title II of Energy Independence and Security Act of 2007; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); National Environmental Policy Act (NEPA) § 102; Pollution Prevention Act (PPA); Global Change Research Act of 1990.

Research: Chemical Safety and Sustainability

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$178	$0	$0	$0
Science & Technology	***$92,353***	***$92,550***	***$103,878***	***$11,328***
Hazardous Substance Superfund	$2,579	$8,060	$8,060	$0
Total Budget Authority	$95,110	$100,610	$111,938	$11,328
Total Workyears	275.2	276.7	307.4	30.7

Program Project Description:

EPA's Chemical Safety for Sustainability (CSS) Research Program provides scientific and technical approaches, information, tools, and methods to support the Agency and others in making better-informed and more timely decisions about chemicals and their potential risks to human health and the environment.[78] Products under the CSS program strengthen the Agency's ability to use the best available science to evaluate and predict human health and ecological impacts from the use, reuse, recycling, and disposal of manufactured and naturally occurring chemicals and their by-products.

The CSS Research Program informs Agency decisions about chemicals, accelerates the pace of chemical assessment and decision-making, and helps replace, reduce, and refine the use of mammals in evaluating chemical risks to ecological systems and human health. CSS products inform various Agency programs established to implement environmental regulations and govern Agency actions – which includes evaluating existing and new chemicals (Toxic Substances Control Act [TSCA]); developing and using alternative testing protocols (TSCA, Federal Insecticide Fungicide and Rodenticide Act [FIFRA]); protecting the Nation's food supply (Food Quality Protection Act [FQPA]); addressing product safety (Federal Food Drug Cosmetics Act [FFDCA]); supporting chemical prioritization (TSCA, Safe Drinking Water Act [SDWA]); supporting the development of safer and more sustainable chemicals and alternatives (Pollution Prevention [P2] Act [PPA]); evaluating pesticide registrations (FIFRA, Endangered Species Act); and mitigating Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Superfund remediation sites.

Research activities under CSS are coordinated with the activities of other national research programs and the results produced inform several cross-cutting, high priority research topics. For example, planned research will address per- and polyfluoroalkyl substances (PFAS), climate change, and risks in communities with environmental justice (EJ) concerns. Coordination with the

[78] For the current CSS StRAP, please see: Strategic Research Action Plans Fiscal Years 2023-2026 (Drafts) | US EPA.

Health and Environmental Risk Assessment (HERA) Research Program ensures that the approaches, tools, and information produced under CSS can be used to improve chemical risk assessments, reduce uncertainties associated with those assessments, and increase the speed of delivering chemical information to the Agency.

The CSS Research Program is organized into eight integrated research areas that include research on toxicity, exposure, human health, ecological health, chemical modeling and prediction, and chemical integration and informatics. These research areas fulfill requirements for chemical evaluation under TSCA (as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act); as part of SDWA; pesticide evaluation under FIFRA; chemical testing for endocrine system impacts under FQPA; Agency implementation of TSCA Section 5 (New Chemicals) and Section 6 (Existing Chemicals); the development of safer and more sustainable chemicals and alternatives under PPA and TSCA, and identification of contaminants of emerging concern. The CSS Research Program provides ongoing support to the Agency's Chemical Safety and Pollution Prevention Program for the successful implementation of these TSCA activities, as well as their evaluation of pesticides under FIFRA.[79]

Recent Accomplishments of the CSS Research Program include:

- **Development and Advancement of New Approach Methods (NAMs):** EPA objectives and research activities under CSS are strongly supporting the development of NAMs that will improve the Agency's understanding of chemical toxicity. NAMs focus on using faster, less expensive approaches that reduce the use of mammals for toxicity testing. CSS continues to collaborate closely with the Chemical Safety and Pollution Prevention Program to implement the June 2018 TSCA Strategic Plan[80] that emphasizes the development and implementation of alternative test methods. Additionally, research under CSS is a key component of the December 2021 NAMs Workplan.[81] Critical to this effort is implementation of a tiered hazard evaluation strategy. Agency researchers are currently advancing methods in high-throughput phenotypic profiling (HTPP) and high-throughput transcriptomics (HTTr). NAMs can be used to group and prioritize chemicals, e.g., as illustrated in the recent PFAS categorization paper.[82] Additionally, researchers are exploring approaches and models for species extrapolation in the ecotoxicology domain, and development of high-throughput exposure and toxicokinetic models. Documented in an EPA report from May 2021,[83] Agency research enabled development of a method to integrate publicly available hazard, exposure, persistence, and bioaccumulation information for more than 33,000 chemical substances, including both traditional and NAM data. The method allows for discriminating between chemicals that have the potential to present hazard or exposure concerns and those that do not.

- **Continued Release, Evolution, and Updating of Multiple Digital Information Products to Inform Decision Making:** The *CompTox Chemicals Dashboard*[84] is the Agency's 'first-stop-

[79] For more information, please see: https://www.epa.gov/chemical-research.
[80] For more information, please see: https://www.epa.gov/sites/production/files/2018-06/documents/epa_alt_strat_plan_6-20-18_clean_final.pdf.
[81] For more information, please see: https://www.epa.gov/chemical-research/new-approach-methods-work-plan.
[82] For more information, please see: https://www.sciencedirect.com/science/article/pii/S246811132200038X.
[83] For more information, please see: https://cfpub.epa.gov/si/si_public_pra_view.cfm?dirEntryID=349776&Lab=CCTE.
[84] For more information, please see: https://comptox.epa.gov/dashboard.

shop' for information on chemical properties, characteristics, structure, toxicity, exposure, and persistence. The *Dashboard* is used by the Agency and its external partners to generate real-time quantitative structure-activity relationship (QSAR) predictions for chemical property and toxicity endpoints. It allows for flexible searches including chemical and functional use and has batch search functionality. As of the December 2022 release, the *Dashboard* contains curated data on over 1.2 million chemicals. The *ECOTOX Knowledgebase*[85] serves as the comprehensive, publicly available source of environmental toxicity data on aquatic life, terrestrial plants, and wildlife. The December 2022 release of the *ECOTOX Knowledgebase* contains over 1.1 million records and provides information on over 12,000 chemicals and over 13,000 species from over 50,000 references. The *Chemical Transformation Simulator* continues to develop as a web-based tool for predicting environmental and biological transformation pathways for organic chemicals. Recently, the *Simulator* was expanded to include environmental transformation information for PFAS chemicals. *SeqAPASS*[86] – Sequence Alignment to Predict Across Species Susceptibility – is a tool enabling extrapolation of toxicity information across species. Version 6.1, released in June 2022, features updated protein and taxonomy data and improved functionalities and visualization of results. Research and development for all these systems continues to meet the information needs of decision makers.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

The objective of research activities under the CSS program is to inform risk-based decisions made by EPA programs, states, tribes, and others. Of particular importance are 'chemicals of immediate and emerging concern', such as PFAS, which heighten the need for rapid scientific approaches to evaluate potential chemical safety. In FY 2024, research activities will continue to support implementation of the *PFAS Strategic Roadmap*.[87] With additional FY 2024 investment in TSCA, CSS will support a collaborative research program for new chemicals with the Chemical Safety and Pollution Prevention Program that is focused on modernizing the process and incorporating scientific advances in new chemical evaluations under TSCA.

In FY 2024, research efforts also will focus on replacing, reducing, and refining the use of mammals in testing, while accelerating the pace of chemical assessment and decision-making. Agency research products will continue to use innovative *in vitro* and *in silico* (computer modeling) approaches to provide more timely and comprehensive information about chemical hazard and exposure while still providing information of equal or greater biological predictivity than current *in vivo* animal models.

[85] For more information, please see: https://cfpub.epa.gov/ecotox/.
[86] For more information, please see: https://www.epa.gov/chemical-research/sequence-alignment-predict-across-species-susceptibility.
[87] See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf.

Selected research areas are highlighted below for work in FY 2024.

- **High-Throughput Toxicity (HTT) Testing:** This research is focused on developing, testing, and applying NAMs to evaluate chemical hazards, with an emphasis on developmental neurotoxicology, inhalation toxicology, thyroid disruption, and methodologically challenging chemicals. These will enable EPA to make better, more timely decisions about chemicals by increasing available toxicological information for more chemicals.

- **Rapid Exposure and Dosimetry (RED) and Ecotoxicological Assessment and Modeling (ETAM):** This research parallels work in the HTT research area to provide information to inform Agency chemical risk assessment activities. Chemical exposure research also includes the continued development of advanced analytical and computational tools, such as non-targeted analysis, to detect and identify unknown chemicals in complex environmental media, biological media, and consumer products. Non-targeted analysis has been critical for the identification of previously unknown PFAS chemicals in the environment. Ecotoxicological Assessment and Modeling efforts support the Agency's work considering the impacts to pollinators. Specifically, research includes assessing the impacts of pesticides on honeybees and pollen bees to support pesticide assessments.

- **PFAS Research:**[88] PFAS are a class of substances of concern and EPA is committed to helping states, tribes, and local communities understand and manage risks associated with these chemicals.[89] For most PFAS chemicals, there are little or no published toxicity data available. The Agency is addressing this gap by conducting high-throughput toxicological screening assays on hundreds of PFAS chemicals. In FY 2024, the CSS Research Program will build upon the research foundation formed from completed work outlined in the *PFAS Strategic Roadmap*.[90] For more information on Agency PFAS research, please see the CSS Research Program narrative for the Superfund appropriation.

- **Improved Understanding of Biological Impacts:** This research helps decision-makers understand the significance of chemical impacts on biological systems. This is especially important as EPA seeks to understand chemical impacts on developmental and reproductive biology. This program will employ data generated from its chemical evaluation research to develop interpretive frameworks and models to place complex information into biological, chemical, and toxicological context. Data developed in the HTT and Virtual and Complex Tissue Modeling research areas will contribute to the study of adverse outcome pathways (AOPs), which link molecular initiating events at the cellular level to apical outcomes expressed at the whole animal level.

- **Delivery and Translation of Chemical Information:** The Chemical Characterization and Informatics and Integration, Translation, and Knowledge Delivery research areas will continue to provide computational, predictive tools to estimate physicochemical, toxicological, and

[88] For more information, please see: https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf.
[89] For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.
[90] For more information, please see: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024.

exposure information for data poor chemicals. Collaborative efforts are underway in the Agency to build program-specific applications such as RapidTox that facilitate access and use of relevant information to support different decision contexts. These applications will give risk assessors and decision-makers confidence that the new approaches, data, and tools developed in under the CSS program are both scientifically robust and relevant to environmental decision making.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published the fourth generation of the StRAPs,[91] which will continue the practice of conducting innovative scientific research aimed at comprehensively assessing and solving the problems encountered by the Agency and its stakeholders.

EPA works with various groups, including communities, to ensure the integrity and value of its research and research planning efforts through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
    - The Office of Research and Development (ORD) meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
    - EPA's state engagement[92] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
    - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

[91] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.
[92] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Performance Measure Targets:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		No Target Established	77	80	81	93	94	94	Percent
Actual		77	79	80	94	94			
Numerator		171	154	120	60	77			Products
Denominator		222	196	150	64	82			

(PM RD5) Number of actions implemented for EPA scientific integrity objectives.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	21	21	Actions
Actual						N/A			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$2,118.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$39.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.

- (+$2,981.0 / +6.5 FTE) This program change supports a collaborative research program for new chemicals with OCSPP that is focused on modernizing the process and incorporating scientific advances in new chemical evaluations under TSCA. This increase in funding will lead to the development and translation of science towards effectively and efficiently informing regulatory and policy decisions by the Agency and external partners, and thus increasing access to clean and safe air, land, and water for all communities across the Nation. This investment includes $1.219 million for payroll.

- (+$6,190.0 / +22.0 FTE) This program change reflects an increase in resources and FTE that will support providing scientific and technical approaches, information tools, and methods to better inform decision-making. This investment includes $4.124 million for payroll.

Statutory Authority:

Clean Air Act §§ 103, 104; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Children's Health Act; 21st Century Nanotechnology Research and Development Act; Clean Water Act; Federal Food, Drug, and Cosmetic Act (FFDCA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA).

Health and Environmental Risk Assessment

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$38,740***	***$39,918***	***$44,942***	***$5,024***
Hazardous Substance Superfund	$9,405	$4,901	$5,005	$104
Total Budget Authority	$48,145	$44,819	$49,947	$5,128
Total Workyears	159.5	155.9	177.9	22.0

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Research Program is focused on the science and practice of assessments that inform decisions made by EPA and others, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws, including the: Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA), Toxic Substances Control Act (TSCA), and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The HERA Research Program is multidisciplinary and aimed at leveraging scientific innovations to advance the analytic approaches and applications needed to address wide-ranging risk assessment requirements in support of these various statutes.

The current portfolio of products under HERA encompasses these two topic areas:

- **Science Assessments and Translation:** The HERA Research Program produces a portfolio of assessment products that both optimizes the application of the best available science and technology and remains responsive to Agency priorities and timelines. The current portfolio of 'fit-for-purpose' assessment includes both traditional assessment lines – Integrated Risk Information System (IRIS), Integrated Science Assessment (ISAs), and Provisional Peer-Reviewed Toxicity Values (PPRTVs) – as well as a wide range of other innovative assessment products. Additionally, significant emphasis is placed on providing scientific and technical support to decision-makers throughout the lifecycle of decisions, from the development to the translation and application of assessment products.

- **Advancing the Science and Practice of Risk Assessment:** Research under this topic is targeted to enhance hazard characterization, expand the repertoire of dose-response methods and models, and characterize the utility of emerging data and new computational tools as applied to risk assessment. It also enhances and maintains critical assessment infrastructure such as databases, models, and software to ensure transparency and facilitate understanding and translation by Agency and external partners as well as other users. Refinements to current approaches are expected to improve the accuracy, efficiency, flexibility, and utility of applications across a large landscape of assessment activities.

Recent Accomplishments of the HERA Program include:

The HERA Research Program has developed assessment products that inform science-based decision making, enhance timely responses, improve screening capabilities, and augment toxicity value derivations for use in risk assessments.

- **Portfolio of Assessment Products:** As EPA reconsidered the particulate matter and ozone National Ambient Air Quality Standards, HERA provided the scientific foundation for the reexamination; a *Supplement to the 2019 ISA for Particulate Matter*;[93] which was finalized in April 2022. Agency researchers under HERA continue to deliver on EPA's commitment to address Per- and polyfluoroalkyl substances (PFAS) in the environment and released the final *IRIS Assessment for Perfluorobutanoic Acid and Related Salts*[94] in December 2022, and the draft *IRIS Assessment for Perfluorohexanoic Acid and Related Salts*[95] in April 2022. In FY 2023, EPA anticipates publicly releasing the final IRIS assessment for perfluorohexanoic acid and related salts.[96] In FY 2022, the Agency released seven PPRTV assessments. In FY 2023, EPA anticipates delivering four to nine additional high-priority PPRTV assessments to support Superfund priorities[97]. In FY 2022, the agency publicly released the draft *IRIS Toxicological Review of Formaldehyde-Inhalation*.[98] In FY 2023, the Agency also anticipates publicly releasing scoping and problem formulation materials such as systematic review protocols for ethylbenzene, uranium, vanadium and compounds (inhalation exposure), and naphthalene; and draft assessments for chloroform (inhalation) and hexavalent chromium. In addition, HERA finalized the *Office of Research and Development (ORD) Staff Handbook for Developing IRIS Assessments*[99] in December 2022.

- **Innovations in Risk Assessment:** Research under the HERA Program continues to advance assessment science and modernize its assessment infrastructure through tool and model advancements. In FY 2021, the agency released updates to the Integrated Exposure Uptake Biokinetic (IEUBK) model to support lead biokinetic modeling in children. In FY 2023, EPA anticipates finalizing 1) updates to the All-Ages Lead Model (AALM) which will include improved lead biokinetic modeling in adults and children; and 2) EPA's version of the multi-path particle dosimetry (MPPD) model and software for improved mechanistic modeling of inhalation dosimetry for particles. Continued advancements are being made to the dose-response analysis tool, Benchmark Dose Software (BMDS),[100] as well as critical information management databases including *Health and Environmental Research Online*[101] and the *Health Assessment and Workplace Collaborative*,[102] contributing to the improvement in the science, structure, and interoperability of these critical assessment infrastructure tools. Accompanying innovations in assessment science in FY2022, staff under the HERA Program have emphasized and coordinated training in risk assessment practice, methods, and tools for

[93] For more information, please see: https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=354490.
[94] For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=350051.
[95] For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=352767.
[96] For more information, please see: https://www.epa.gov/iris/iris-recent-additions.
[97] For more information, please see: https://www.epa.gov/pprtv.
[98] For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=248150.
[99] For more information, please see: https://cfpub.epa.gov/ncea/iris_drafts/recordisplay.cfm?deid=356370.
[100] For more information, please see: https://www.epa.gov/bmds.
[101] For more information, please see: https://hero.epa.gov/hero/.
[102] For more information, please see: https://hawcprd.epa.gov/.

a wider audience of EPA staff and stakeholders to enhance communication, understanding, and engagement.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, the HERA Program's work will focus on efforts integral to achieving EPA priorities and informing the Agency's implementation of key environmental decisions. Specifically, the program will:

- Continue developing additional assessments of perfluorinated compounds, as well as other priority chemicals identified by EPA's Water Program, Air and Radiation Program, and Land and Emergency Management Program. These assessments include ethylbenzene, hexavalent chromium, chloroform, methylmercury, mercury salts, inorganic arsenic, and formaldehyde.

- Provide assessment, methodology, and modeling support to the Chemical Safety and Pollution Prevention Program (OCSPP) on TSCA implementation for an array of chemicals, as well as support to the Air and Radiation Program, including the development of the ISA for Lead to support review of the National Ambient Air Quality Standards (NAAQS). With additional FY 2024 investment in TSCA, HERA will support a collaborative research program for new chemicals with OCSPP that is focused on modernizing the process and incorporating scientific advances in new chemical evaluations under TSCA.

- Provide high-priority PPRTV human health assessments to support the Land and Emergency Management Program on CERCLA and Resource Conservation and Recovery Act (RCRA) implementation.

- Focus on providing support for specific decision contexts through a modernized assessment infrastructure, applying state of the science tools, databases, and models in assessment development and program management. Continue to develop and apply evidence mapping to provide a better understanding of the extent and nature of evidence available to address priority needs of the Agency and its partners.

- Provide the resources and workflow to two of the five Superfund technical support centers (TSCs)[103] to provide localized and tailored technical assistance and scientific expertise on human and ecological risk assessments to states, tribes, and EPA's program and regional offices. This includes direct support in cases of emergencies and other rapid response situations.

- Apply new and alternative approaches, methods, and data to risk assessment products, and technical support to better respond to the needs of the states, tribes, and EPA's program and

[103] HERA supports the Superfund Health Risk Technical Support Center (STSC) and the Ecological Risk Assessment Support Center (ERASC). For more information on EPA's five TSCs, please see: https://www.epa.gov/land-research/epas-technical-support-centers.

regional offices, in cooperation with the Chemical Safety for Sustainability (CSS) Research Program.

- Conduct research to expand the identification and consideration of information on susceptibility in assessments, advance the evaluation of chemical mixtures, and improve cumulative risk assessment practices to better characterize and assess health disparities in communities with environmental justice and equity concerns.

- Provide training to staff, partners, and stakeholders on risk assessment practice, assessment tool literacy, and standard operating procedures for assessment development via easy-to-access modules.

Please note that certain activities within this program could support the Administration's Cancer Moonshot Initiative.

In addition to the activities listed above, EPA also conducts research across programs in the following areas:

- **PFAS Research:** PFAS are a class of chemicals of concern in the environment, and EPA is committed to pursuing all options to address PFAS pollution and protect human health and the environment. There are still large numbers of PFAS of high interest to stakeholders which currently have no federal published, peer-reviewed toxicity values. As described in the *PFAS Strategic Roadmap*,[104] within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values. This will result in an expanded set of high-quality peer-reviewed toxicity values for use by federal, state, and tribal decision makers in making risk assessment and management decisions. In addition, EPA is identifying, reviewing, organizing, and presenting relevant health information on PFAS through systematic evidence mapping to identify data gaps, inform prioritization and hazard characterization, and facilitate human health assessments for PFAS.

- **Lead:** Childhood lead exposure continues to be one of the highest priorities for EPA. To advance the application of lead exposure and biokinetic models in EPA regulatory decisions and site assessments, agency research will enhance, evaluate, and apply lead biokinetic models used to estimate potential blood lead levels for regulatory determinations.[105] Additionally, the Exposure Factors Handbook[106] provides up-to-date data on various human factors, including soil and dust ingestion rates, used by risk assessors.

Research Planning:

EPA is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active

[104] For more information, please see EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf.
[105] For more information, please see: https://www.epa.gov/superfund/lead-superfund-sites-software-and-users-manuals.
[106] For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.

involvement. Each research program has developed and published the fourth generation of the StRAPs,[107] which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
  - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
  - EPA's state engagement[108] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$203.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,039.0 / +3.0 FTE) This increase supports a collaborative research program for new chemicals with OCSPP that is focused on modernizing the process and incorporating scientific advances in new chemical evaluations under TSCA. This increase in funding will lead to the development and translation of science towards effectively and efficiently informing regulatory and policy decisions by the Agency and external partners, and thus increasing access to clean and safe air, land, and water for all communities across the Nation. This investment includes $564.0 thousand for payroll.

[107] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026
[108] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

- (+$3,782.0 / +19.0 FTE) This net program change reflects an increase for the Health and Environmental Risk Assessment program. This increase will assist in advancing science assessments, such as IRIS, as well as analytical approaches for the application of risk assessments. This investment includes $3.580 million for payroll.

Statutory Authority:

Clean Air Act §§ 103, 108, 109, and 112; Clean Water Act §§ 101(a)(6), 104, 105; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 3(c)(2)(A); Safe Drinking Water Act (SDWA) § 1458; Toxic Substances Control Act (TSCA).

Research: Safe and Sustainable Water Resources

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$113,427***	***$116,141***	***$123,555***	***$7,414***
Total Budget Authority	$113,427	$116,141	$123,555	$7,414
Total Workyears	361.4	358.1	378.1	20.0

Program Project Description:

The quality and availability of water, upon which human and ecosystem health and a robust economy depend, face multiple challenges. These challenges include aging water infrastructure, contaminants of existing and emerging concern, waterborne pathogens, antimicrobial resistance, harmful algal blooms and hypoxia, stormwater runoff, and diminished quality and loss of aquatic habitat. Many of these challenges can be exacerbated by the impacts of a changing climate, including greater frequency, duration and intensity of precipitation, flooding, extreme heat, wildland fire, and drought. These concerns can be more prevalent in disadvantaged and rural communities.

To address these current, emerging, and long-term water resource challenges, EPA's Safe and Sustainable Water Resources (SSWR) Research Program produces robust research and scientific analyses for decision-making and the development of innovative, practical solutions for the Agency and its partners to protect and restore America's watersheds and water infrastructure.

Efforts under the SSWR Research Program are integrated with the activities of other national research programs to address water quality and quantity concerns related to water infrastructure and coastal resilience, existing and emerging chemical and biological contaminants, stormwater runoff, and biosolids treatment and management.

Recent Accomplishments of the SSWR Research Program[109]

- **SARS-CoV-2 Wastewater Surveillance.**
  As the SARS-CoV-2 virus continued to spread and evolve, wastewater surveillance research helped detect emerging variants, such as Omicron. EPA researchers optimized methods for detecting SARS-CoV-2 and its variants in wastewater and provided analysis results to the State of Ohio to incorporate into a state dashboard used by public health officials. EPA built partnerships nationally and internationally, leading to several presentations and publications that demonstrate the effectiveness of the implemented wastewater monitoring network.

[109] For a more complete view of accomplishments, please see: https://www.epa.gov/research/national-research-programs.

- **Per- and Polyfluoroalkyl Substances (PFAS).**
  - **PFAS Treatment in Drinking Water**. EPA's Drinking Water Treatability Database was updated to include 54 PFAS chemicals from 184 sources. The database provides information on best practices and technologies for PFAS treatment in drinking water. Information on cost models for PFAS treatment in drinking water also was generated. EPA provides support to the Office of Water (OW) on PFAS treatment modeling for the development of the PFAS drinking water regulation.

  - **PFAS Treatment in Thermal Processes**. The PFAS Thermal Treatment Database (PFASTT) was brought live. The PFASTT is a publicly available database that contains more than 2,000 records of 80 sources documenting the treatability of PFAS in different media via various thermal processes.[110]

  - **PFAS Analytical Methods**.
    - EPA completed a draft method for adsorbable organic fluorine in wastewater, which was released by OW as Draft Method 1621 in April 2022. This screening method can detect PFAS chemicals for which analytical standards may not exist. SSWR Research Program researchers will support OW in validation of the method over the next year.
    - Researchers also continue to provide technical support to OW and the Department of Defense for the multi-laboratory validation of Draft Method 1633, which will be used to measure up to 40 PFAS in aqueous and solid samples.

- **Technical Support to Communities.**
  EPA responded to the Benton Harbor, MI, lead (Pb) in drinking water public health emergency by designing and implementing a drinking water filter study. EPA coordinated with the Michigan Department of Environment, Great Lakes, and Energy; Benton Harbor water utility; and homeowners to collect and analyze samples. The data collected from more than 200 homes provided confidence that filters are effective in removing Pb from drinking water.

- **Climate Modeling Tools:**
  EPA released updates to key stormwater tools including, Storm Water Management Model (SWMM), National Stormwater Calculator (SWC), and SWMM Climate Adjustment Tool (SWMM-CAT). SWMM 5.2 added new features for modeling the capture of street runoff by inlet drains, new pump and storage curve options, and other improvements. SWC 3.4.0 improvements include incorporating updated meteorological and cost data. SWMM-CAT 1.1 updates include incorporating 24-hour design storms and climate change data along with estimating changes in evaporation.

- **Recreational Water Quality and Public Health Protection:**
  EPA published more than 40 peer-reviewed publications during the last five years supporting EPA's anticipated 2022 Five-Year Review of the 2012 Recreational Water Quality Criteria. Recent accomplishments achieved in partnership with EPA program offices and regions, other federal agencies, state authorities, and academia include:

[110] For more information, please see: https://pfastt.epa.gov/.

- Implementation of quantitative polymerase chain reaction (qPCR) EPA methods targeting E. coli for same-day recreational water testing in the Great Lakes region.
- Development of Standard Reference Material 2917 in collaboration with the National Institute of Standards and Technology. Release of EPA Methods 1696 and 1697 for microbial source tracking and characterization of human fecal pollution in recreational waters.
- Performance assessment of virus-based fecal indicator methodologies and an epidemiological assessment of public health risks for children.
- Advancement of salivary immunoassay methods for identification of waterborne infections.

- **Harmful Algal Blooms (HABs) and Nutrients:**
  - EPA released a new tool – *CyANWeb* – expanding digital platforms beyond its CyAN Android app. The new tool updates include daily imagery from two satellites, desktop and iOS access, and a video sequence option with a new fact sheet[111] to help federal, state, tribal, and local partners identify when a harmful algal bloom may be forming in waters where people swim, fish, and boat.
  - Advancement of HAB characterization, including vulnerability and early indicators.
  - Technical support and translation of research results for state agencies and other partners through training workshops, public presentations, and social media events.
  - Completion of a summary report on the Reduction of Nutrients solution-driven research project – an extensive, on-going collaboration with local stakeholders to co-design and co-implement research that will inform watershed-based solutions for nonpoint source nutrient loading to achieve nutrient reduction and water quality goals.
  - Completion of a national assessment of cumulative impacts of nutrient loading in estuaries in conjunction with acidification and climate change.

- **Improved Aquatic Resource Mapping:**
  EPA scientists conducted a comprehensive review and synthesis of existing federal and state stream and wetland geospatial datasets and made recommendations to advance future efforts to map headwater streams and inland wetlands. These accomplishments will help to better characterize their contributions to essential functions, such as floodwater retention, drought protection, and water quality mediation and inclusion in implementation of the Clean Water Act.

- **Coastal Community Resilience through Blue Carbon Resources.**
  EPA initiated a *Coastal Community Resilience through Blue Carbon Resources* solution-driven research project to evaluate how "Blue Carbon" or long-term carbon sequestration by wetlands, tidal marshes, and sea grasses can support coastal community adaptation to sea level rise, erosion, and flooding while improving water quality and aquatic habitat.

[111] For more information, please see: https://www.epa.gov/sites/default/files/2019-06/documents/cyan_app_fact_sheet_final_19jun19_508_compliant.pdf.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, the SSWR Research Program will continue to focus on:

Water Infrastructure:

- Conduct research and provide technical support to assess the distribution, composition, and potential health risks of known and emerging chemical and biological contaminants. Protocols for sampling lead and identification of lead service lines will support the availability of safe drinking water, especially in disadvantaged communities.
- Continue work with CDC and the Ohio Network to develop appropriate methodologies and approaches for wastewater surveillance to inform public health. Assist states, communities, and utilities to address stormwater and wastewater infrastructure needs through applied models and technical assistance.

Climate Change Impacts/Resiliency:

- Integrate the impacts of climate change with research on water bodies and water infrastructure; for example, warmer temperatures and increased nutrient runoff impacts on harmful algal blooms and hypoxia, prolonged drought and extreme heat impacts on water availability and aquatic ecosystems, more frequent and intense precipitation impacts on flooding and stormwater runoff and increased severe storm events on aging water infrastructure.
- Continue the *Coastal Community Resilience through Blue Carbon Resources* solutions driven research project to evaluate coastal resilience capabilities of Blue Carbon resources (e.g., wetlands, tidal marshes, and sea grasses) and co-benefits (e.g., flood protection, improved water quality, habitat for sensitive and commercially valuable species).

Water Reuse:

- Expand the integrated assessment of cost, carbon footprint, and risk assessment of fit-for-purpose use of alternative water sources to include industrial reuse, potable end uses, and aquifer recharge. Results will inform the safe and effective implementation of new approaches to manage water resources and mitigate drought.

Harmful Algal Blooms/Nutrients:

- Expand toxicity evaluation of additional planktonic cyanobacteria cells and cyanotoxins and begin new research on benthic species that can form highly toxic algal mats.
- Develop the science needed to forecast harmful algal blooms.
- Prepare a report on the effectiveness of 16 enhanced efficiency fertilizers in reducing nutrient pollution based on greenhouse trials from the EPA and United States Department of Agriculture Challenge.
- Evaluate on-the-ground conservation practices in a watershed context by applying models.

Recreational Waters and Public Health Protection:

- Develop and characterize rapid fecal indicator, bacteriophage, microbial source tracking, and antimicrobial resistance tools for monitoring recreational waters.

- Develop human health risk and water quality predictive modeling tools to support recreational water quality criteria development and implementation.
- Conduct a performance assessment of new recreational water quality assessment tools in sub-tropical and tropical marine waters.
- Use an applied economic benefits analysis to evaluate the economic impacts of beach closures based on different water quality monitoring technologies.

Antimicrobial Resistance:

- Conduct national scale and watershed focused studies of antimicrobial resistant bacteria and associated resistance genes in surface waters to inform risk modeling of recreational and drinking water exposures. Apply similar techniques in wastewater systems to define best approaches for mitigating risks with discharges of wastewater effluents and solids.

Biosolids:

- Focus on biological and chemical contaminants and health effects by: investigating the occurrence of antimicrobial resistant *E. coli* during the treatment of Class B biosolids; assessing the human health risks of biosolids using molecular tools; developing a Voluntary Consensus Standard analytical method for the analysis of PFAS precursors in biosolids; evaluating anaerobic biotreatment of PFOA/PFAS in wastewater biosolids; and determining the applicability of molecular techniques in treatment performance evaluation.

Microplastics:

- Develop and evaluate sediment and water extraction and identification methods focusing on plastic particles smaller than one micrometer.
- Begin developing approaches to evaluate human health and ecological effects of micro- and nanoplastics.
- Collaborate with the National Institute of Standards and Technology, American Chemistry Council, and members of the National Nanotechnology Initiative to develop essential standard reference materials needed for microplastic analyses.

In addition to the activities listed above, EPA also will conduct research across programs in the following areas:

- **PFAS Research:** PFAS are a class of chemicals of growing concern in the environment, and EPA has committed to taking action to support states, tribes, and local communities to understand and manage risks associated with these chemicals. Significant challenges for risk managers include how to identify and quantify different PFAS in water, how to remove or treat PFAS when detected, and how to estimate the cost of different treatment alternatives so that utilities can make informed investment decisions. EPA will increase its PFAS research efforts, with specific emphasis on implementing the *PFAS Strategic Roadmap*.[112]

  Within the SSWR Research Program, activities will include:
  - Developing and validating methods for measuring different PFAS in water and water treatment residuals (e.g., biosolids).

[112] See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf.

- Reviewing available literature on effectiveness and cost data for different water treatment technologies applied to different PFAS.
- Conducting pilot- and bench-scale testing of the most promising technologies to further evaluate effectiveness.
- Evaluating the bioaccumulation of PFAS in aquatic organisms and identifying the toxicity of selected PFAS (including mixtures of PFAS) to aquatic organisms.

This work is being done in collaboration with water utilities and water treatment technology suppliers. The results of this work will be posted to EPA's public Drinking Water Treatability Database and will be widely available to stakeholders.[113]

- **Lead:** EPA, the Centers for Disease Control and Prevention, and the American Academy of Pediatrics unanimously agree that there is no safe level of lead in a child's blood and that even low levels can result in behavior and learning problems, lower IQ, and other health effects.[114] In response to overwhelming scientific consensus and continued public health concern, reducing childhood lead exposure is one of the highest priorities for EPA.[115]

  Research focuses on:
  - Establishing reliable models for estimating lead exposure from drinking water.
  - Developing improved sampling techniques and strategies for identifying and characterizing lead in plumbing materials, including lead service lines.
  - Developing guidance on optimizing lead mitigation strategies.
  - Testing and evaluating treatment processes for removing lead from drinking water.

  The overall impact of this research will be to provide information and tools that EPA, states, Tribes, utilities, and communities can use to minimize or eliminate lead exposure in drinking water.

Research Planning:
EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and Tribes, and is planned with their active involvement. Each research program has developed and published their fourth generation of the StRAPs,[116] which continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)

[113] For more information, please see: https://iaspub.epa.gov/tdb/pages/general/home.do#content.
[114] For more information, please see: https://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.
[115] For more information, please see: https://www.epa.gov/lead.
[116] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.

- ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
  - EPA's state engagement[117] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		No Target Established	77	80	81	93	94	94	Percent
Actual		77	79	80	94	94			
Numerator		171	154	120	60	77			Products
Denominator		222	196	150	64	82			

(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local governments, and communities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	113	113	Activities
Actual						N/A			

(PM RD4) Percentage of Office of Research and Development (ORD) environmental justice-related research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						93	94	94	Percent
Actual						100			
Numerator						1			Products
Denominator						1			

[117] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

(PM RD5) Number of actions implemented for EPA scientific integrity objectives.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	21	21	Actions
Actual						N/A			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,606.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$202.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.

- (+$5,606.0 / + 20.0 FTE) This net program change reflects an increase to the Safe and Sustainable Water Research Program. This increase will help address the challenges of aging water infrastructure, contaminants of concern, harmful algal blooms, and diminished water availability. This investment includes $3.719 million for payroll.

Statutory Authority:

Safe Drinking Water Act (SDWA) § 1442(a)(1); Clean Water Act §§ 101(a)(6), 104, 105; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203; Title II of Ocean Dumping Ban Act of 1988 (ODBA); Water Resources Development Act (WRDA); Wet Weather Water Quality Act of 2000; Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA); National Invasive Species Act; Coastal Zone Amendments Reauthorization Act (CZARA); Coastal Wetlands Planning, Protection and Restoration Act; Endangered Species Act (ESA); North American Wetlands Conservation Act; Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Toxic Substances Control Act (TSCA).

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	***$133,808***	***$137,857***	***$146,642***	***$8,785***
Leaking Underground Storage Tanks	$312	$341	$351	$10
Inland Oil Spill Programs	$782	$675	$681	$6
Hazardous Substance Superfund	$16,562	$16,937	$17,364	$427
Total Budget Authority	$151,463	$155,810	$165,038	$9,228
Total Workyears	422.1	421.8	444.3	22.5

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program supports and empowers communities to make science-based decisions to improve public and environmental health through: 1) application of technologies, methods, and other tools to expedite remediation and restoration of contaminated sites; 2) enhanced approaches to materials management practices, including the beneficial reuse or redirection of waste materials to advance waste management toward a circular economy; and 3) increased understanding of linkages between the total environment (built, natural, and social) and public and ecosystem health. These efforts support communities that are revitalizing former contaminated sites, addressing cumulative impacts (from both chemical and nonchemical stressors), and pursuing climate resilience and environmental justice (EJ) goals.

Specifically, the SHC Research Program provides state-of-the-science methods, models, tools, and technologies to the Office of Land and Emergency Management (OLEM) for use in programmatic guidance and to support EPA decision makers with in-site cleanup. These approaches will address contaminated sediments and groundwater, as well as health risks posed by vapor intrusion and chemicals of immediate concern, such as per- and polyfluoroalkyl substances (PFAS) and lead. To support prevention of future land contamination problems, researchers under the SHC program develop life cycle analysis tools and explore opportunities for beneficial reuse of materials to reduce environmental impact. Finally, efforts also will provide programs, regional partners, and local communities with research and tools they can apply to assess how they can become more resilient to and adapt to climate change. This community-oriented research is designed to revitalize communities, support the protection of children's health, and address cumulative impacts on vulnerable populations. These efforts support community sustainability and increase community resilience to natural disasters including those impacted by climate change. These efforts also build the methods and evidence base for doing cumulative impact assessment.

Recent Accomplishments of the SHC Research Program include:

Development and Application of Methods for Identifying High Exposure Lead (Pb) Locations and the Key Drivers at Those Locations (published July and Sept. 2022):[118] SHC researchers developed and published a methodology to map lead hot spots which was used to identify high exposure locations, with an environmental justice focus. For example, the Michigan lead (Pb) paper (Xue et al., EHP) includes analyses of approximately 1.9 million children's blood lead level (BLL) test results over 11 years. Based on 2014-2016 percent elevated BLL data, census tracts were identified using two statistical methods and three available lead indices were assessed as surrogates. This research supported regulatory needs, compliance assistance and outreach, and partnerships with states on lead and environmental justice. EPA plans to use the results of this work for their lead targeting efforts with state partners. EPA, HUD, and CDC plan to collaborate on a whole-of-government blueprint supporting EPA's Lead Strategy Goal 2.

Environmental Impacts of Wasted Food – Part 1: Producing Wasted Food (published November 2021):[119] This state-of-the-science report quantifies the environmental impact of producing, processing, and distributing food that is ultimately wasted. In addition to the environmental impacts, uneaten food contains enough calories to feed more than 150 million people each year. This product is a collaboration with the Office of Resource Conservation and Recovery (ORCR) to support the U.S. in meeting the 2030 Food Loss and Food Waste Reduction Goal, including state and local governments taking action to curb food waste. This work informs further SHC research, including development of the U.S. Environmentally-Extended Input-Output (USEEIO) model.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

The SHC Research Program will continue guiding innovative, cost-effective solutions to meet current, emerging, and long-term contaminated site clean-up and sustainable materials management challenges. This includes technical support for program and regional partners and communities as well as exploratory research that may lead to future sustainable solutions. In addition, research efforts will continue to emphasize healthy and resilient communities. Increased focus will be given to Administration priorities, such as working with communities to identify solutions to address cumulative impacts and EJ concerns, including those dealing with impacts from climate change. Other areas of increased emphasis include research addressing critical minerals and innovative strategies to reduce generation of wastes, including plastics, through recycling and reuse.

[118] For more information, please see: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9327739/ and https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9528653/.
[119] For more information, please see: https://www.epa.gov/system/files/documents/2021-11/from-farm-to-kitchen-the-environmental-impacts-of-u.s.-food-waste_508-tagged.pdf.

Specifically, in FY 2024 the SHC Research Program will conduct research in the following areas:

- **Advancing Remediation and Restoration of Contaminated Sites:** EPA research under this topic will primarily focus on developing and testing remedial alternatives for treating contaminated soils, sediments, groundwater sites, vapor intrusion sites, and sites with PFAS and lead contamination; along with providing technical support to OLEM, regions, tribes, and states to translate the research into usable approaches. SHC has an increased focus on remediation of mine waste sites and potential recovery for reuse of critical minerals from contaminated sites.

- **PFAS Research:** EPA researchers will develop methods to evaluate PFAS in wastes, soils, and sediments and investigate PFAS fate and transport in the environment to support the needs of EPA partners, states, tribes, and local communities. The research will identify and characterize PFAS concentrations and distributions at contaminated sites and solid waste sites. Additionally, researchers will identify locations and source contributors to high potential human PFAS exposure for children and other populations by evaluating multimedia PFAS sources and pathways for human exposure. The SHC Research Program also will investigate approaches, methodologies, and technologies to treat, remove, destroy, and dispose of PFAS in environmental matrices. This research supports implementation of the *PFAS Strategic Roadmap*.[120]

- **Lead Research:** The SHC Research Program is working to identify locations with high exposures and elevated blood lead levels, especially in children, to target lead sources for mitigation. The research program also will develop innovative methods to clean up lead at Superfund and other contaminated sites and strengthen the scientific basis of the Agency's lead-related regulatory and clean-up decisions. EPA's research in this area is essential to support ongoing Agency efforts, as well as filling in the data gaps for federal partners, tribes, states, and local communities.

- **Materials Management and Beneficial Reuse of Waste:** Research under this program aims to strengthen the scientific basis for the Nation's materials management decisions and guidance at the tribal, state, and community levels. The overall goal of this research is to increase sustainability through reducing waste and increasing support for circular economies, including supporting the implementation of the 2021 National Recycling Strategy.[121] Primary research efforts will focus on: 1) developing lifecycle-based assessment tools for sustainable materials management; 2) evaluating the design, application, and use of landfills, including liner material degradation, improvements to landfill monitoring strategies, and long-term landfill impacts on human health and the environment; and 3) developing waste-management methodologies that can minimize adverse impacts to human health and the environment through proposed beneficial use and reuse. Food waste and plastics are two areas of research under this topic.

- **Integrated Systems Approach to Building Healthy and Resilient Communities:** The SHC Research Program will address the impacts of contamination, remediation, and redevelopment on the revitalization of a community. Research will address cumulative impacts of stressors

[120] See EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf.
[121] See EPA's National Recycling Strategy at: https://www.epa.gov/recyclingstrategy.

and exposures, especially in overburdened and under-resourced communities. The goal of the research is to increase community resilience by reducing potential risks, promoting health, and revitalizing communities and the environment that supports them, and to increase research translation to benefit communities. Research and development under this topic will provide data and tools to support Agency and delegated programs, such as Superfund, Brownfields, Great Lakes Restoration Initiative, civil rights, enforcement, and permitting.

Please note that certain activities within this program could have implications associated with the Administration's Cancer Moonshot Initiative.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published their fourth generation of the StRAPs[122], which continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
    - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
    - EPA's state engagement[123] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
    - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

[122] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.
[123] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Performance Measure Targets:

(PM RD1) Percentage of Office of Research and Development (ORD) research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		No Target Established	77	80	81	93	94	94	Percent
Actual		77	79	80	94	94			
Numerator		171	154	120	60	77			Products
Denominator		222	196	150	64	82			

(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local governments, and communities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	113	113	Activities
Actual						N/A			

(PM RD4) Percentage of Office of Research and Development (ORD) environmental justice-related research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						93	94	94	Percent
Actual						100			
Numerator						1			Products
Denominator						1			

(PM RD5) Number of actions implemented for EPA scientific integrity objectives.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	21	21	Actions
Actual						N/A			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,315.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$184.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.

- (+$6,826.0 / +20.0 FTE) This net program change reflects an increase to help address the acceleration of cleanup and return of contaminated sites to beneficial use, protection of vulnerable populations, and the revitalization of vulnerable communities. This investment includes $4.194 million for payroll.

- (+$460.0 / +2.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This includes $460.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute).

Water: Human Health Protection

Drinking Water Programs

Program Area: Ensure Safe Water
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$117,205	$121,607	$142,583	$20,976
Science & Technology	***$4,177***	***$5,098***	***$6,975***	***$1,877***
Total Budget Authority	$121,382	$126,705	$149,558	$22,853
Total Workyears	473.1	539.4	554.5	15.1

Program Project Description:

EPA's Drinking Water Program is responsible for a range of activities to address drinking water contamination. The Program:

- Leads the collection of national occurrence data for unregulated contaminants in drinking water;
- Develops, evaluates, and approves analytical methods that are used to monitor drinking water contaminants accurately and reliably;
- Leads the national program under which laboratories are certified to conduct the analyses of drinking water contaminants with approved analytical methods; and
- Collaborates with states and public water systems to implement tools that optimize treatment and improve water quality by helping systems achieve compliance and maximize technical capacity while reducing operational costs.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The Program also supports the Agency's implementation of the Infrastructure Investment and Jobs Act of 2021 (IIJA).

In FY 2024, EPA's Drinking Water Program will continue to carry out the activities listed below:

- Lead development and implementation activities for the Unregulated Contaminant Monitoring Rule (UCMR), a federal direct implementation program coordinated by EPA, as required by the Safe Drinking Water Act (SDWA).
  - The data collected pursuant to this rule support the Agency's determination of whether to establish health-based standards for unregulated drinking water contaminants to protect public health.

- In December 2021, the Agency published the final rule for the UCMR's fifth cycle (UCMR 5). EPA is managing UCMR 5 sampling through December 2025 and leading the data collection through 2026.
- UCMR 5 is the first cycle of the Unregulated Contaminant Monitor Rule to implement the monitoring provisions of America's Water Infrastructure Act of 2018 (AWIA), which requires, subject to the availability of appropriations and adequate laboratory capacity, sampling at all small public water systems (PWSs) serving between 3,300 and 10,000 persons. AWIA also requires monitoring at a representative sample of small PWSs serving fewer than 3,300 persons. EPA implementation responsibilities have significantly expanded to address a 7.5-fold increase in the number of small-system samples as a result of AWIA.
- EPA is responsible for managing UCMR 5 implementation at all large PWSs serving more than 10,000 persons, all small PWSs serving between 3,300 and 10,000, and a representative sample of PWS serving fewer than 3,300 persons. EPA is additionally responsible for funding the required monitoring at small PWSs. Key activities for EPA include ensuring laboratories are available to perform the required analyses, managing the field sample collection and sample analysis for small systems, and managing data reporting. In addition, EPA makes the UCMR data available to state and tribal partners and to the public.
- By conducting sampling and data collection/reporting at all small PWSs serving between 3,300 and 10,000 persons and a representative sample of those serving fewer than 3,300 persons, the UCMR program also supports the Agency's implementation of the IIJA.
- Concurrent with managing the implementation of UCMR 5 in FY 2024, EPA will be developing the proposed rule to support the sixth cycle of UCMR (UCMR 6) monitoring, with publication of the proposal anticipated in FY 2025.

- Lead the development, revision, evaluation, and approval of analytical methods for unregulated and regulated contaminants in drinking water to assess and ensure protection of public health (*e.g.,* polyfluoroalkyl substances [PFAS]). This work supports the activities underway for the Agency's PFAS Roadmap and supports priorities identified by the EPA Council on PFAS.

- Implement EPA's Drinking Water Laboratory Certification Program,[124] which sets direction for oversight of state, municipal, and commercial laboratories that analyze drinking water samples. EPA will conduct regional laboratory certification program reviews and deliver laboratory certification officer training courses (chemistry and microbiology) for state and regional representatives. The FY 2024 certification program oversight activities and trainings will help ensure the quality of drinking water compliance monitoring analyses.

- Partner with states and water systems to optimize their treatment technology and distribution systems under the drinking water Area Wide Optimization Program (AWOP).[125] AWOP is a highly successful technical/compliance assistance and training program that enhances the ability of public water systems to comply with existing microbial, disinfectant, and disinfection byproduct standards, and to address distribution system integrity and water quality issues

[124] For more information, please see: https://www.epa.gov/dwlabcert.
[125] For more information, please see: https://www.epa.gov/sdwa/optimization-program-drinking-water-systems.

caused by the source, aging infrastructure, or other concerns. During FY 2024, EPA expects to work with states and tribes to expand efforts to train and assist systems, including those in disadvantaged and tribal communities. This effort includes identifying performance limiting factors at public water systems and developing and applying tailored tools to help them overcome operational challenges, achieve performance and optimization levels, and address health-based compliance challenges. The technical assistance provided by AWOP can be instrumental in supporting public water systems with limited capacity to effectively address drinking water quality issues. The AWOP program also supports the Agency's implementation of IIJA.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance and requirements in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision Programs under the STAG appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$188.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,689.0 / +4.0 FTE). This increase of resources and FTE supports regulatory analysis, development and training, and technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This investment also includes $759.0 thousand for payroll.

Statutory Authority:

SDWA.

Congressional Priorities

Congressional Priorities
Program Area: Clean and Safe Water Technical Assistance Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$21,700	$30,700	$0	-$30,700
Science & Technology	***$7,492***	***$30,751***	***$0***	***-$30,751***
Total Budget Authority	$29,192	$61,451	$0	-$61,451

Program Project Description:

In FY 2023, Congress appropriated $30.8 million in the Science and Technology appropriation to Congressional priorities including $9.5 million for extramural grants. EPA was instructed by Congress to award grants on a competitive basis, independent of the Science to Achieve Results (STAR) Program, and to give priority to not-for-profit organizations that: 1) conduct activities that are national in scope; 2) can provide a 25 percent match, including in-kind contributions; and 3) often partner with the Agency. Additionally, Congress provided $8.0 million to fund research that will help farmers, ranchers, and rural communities manage PFAS impacts in agricultural settings and communities as well as $13.3 million on other Congressionally Directed Projects.

FY 2024 Activities and Performance Plan:

There are no resources for this Program in FY 2024.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$30,751.0) Resources are proposed for elimination for this program in FY 2024. The goals of this Program can be accomplished through core statutory programs.

Statutory Authority:

Clean Air Act (CAA) 42 U.S.C. 7401 et seq. Title 1, Part A – Sec. 103 (a) and (d) and Sec. 104 (c); CAA 42 U.S.C. 7402(b) Section 102; CAA 42 U.S.C. 7403(b)(2) Section 103(b)(2); Clinger Cohen Act, 40 U.S.C. 11318; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Superfund, 1980) Section 209(a) of Public Law 99-499; Children's

Health Act; Clean Water Act (CWA), Sec. 101 - 121; Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA); Coastal Zone Amendments Reauthorization Act (CZARA); Coastal Zone Management Act (CZMA) 16 U.S.C. 1451 - Section 302; Economy Act, 31 U.S.C. 1535; Energy Independence and Security Act (EISA), Title II Subtitle B; Environmental Research, Development, and Demonstration Authorization Act (ERDDAA), 33 U.S.C. 1251 – Section 2(a); Endangered Species Act (ESA), 16 U.S.C. 1531 - Section 2; Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. Sec. 346; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. s/s 136 et seq. (1996), as amended), Sec. 3(c)(2)(A); Food Quality Protection Act (FQPA) PL 104-170; Intergovernmental Cooperation Act, 31 U.S.C. 6502; Marine Protection, Research, and Sanctuaries Act (MPRSA) Sec. 203, 33 U.S.C. 1443; North American Wetlands Conservation Act (NAWCA); NCPA; National Environmental Education Act, 20 U.S.C. 5503(b)(3) and (b)(11); National Environmental Protection Act (NEPA) of 1969, Section 102; National Invasive Species Act (NISA); Ocean Dumping Ban Act of 1988 (ODBA) Title II; PPA, 42 U.S.C. 13103; Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA) (1996) 42 U.S.C. Section 300j-18; SDWA Part E, Sec. 1442 (a)(1); Toxic Substances Control Act (TSCA), Section 10, 15, 26, U.S.C. 2609; U.S. Global Change Research Act (USGCRA) 15 U.S.C. 2921; Water Resources Development Act (WRDA); Water Resources Research Act (WRRA); and Wet Weather Water Quality Act of 2000 (WWWQA).

Table of Contents – Environmental Programs and Management

APPROPRIATION: Environmental Programs & Management
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management				
Budget Authority	$2,988,189	$3,286,330	$4,511,011	$1,224,681
Total Workyears	8,623.8	9,592.7	11,082.4	1,489.7

Bill Language: Environmental Programs and Management

For environmental programs and management, including necessary expenses not otherwise provided for, for personnel and related costs and travel expenses; hire of passenger motor vehicles; hire, maintenance, and operation of aircraft; purchase of reprints; library memberships in societies or associations which issue publications to members only or at a price to members lower than to subscribers who are not members; administrative costs of the brownfields program under the Small Business Liability Relief and Brownfields Revitalization Act of 2002; implementation of a coal combustion residual permit program under section 2301 of the Water and Waste Act of 2016; and not to exceed $40,000 for official reception and representation expenses, $4,511,011,000, to remain available until September 30, 2025: Provided further, That of the funds included under this heading—

(1) $682,053,000, to remain available until expended, shall be for Geographic Programs as specified in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act).
(2) $20,000,000, to remain available until expended, shall be for grants, including grants that may be awarded on a non-competitive basis, interagency agreements, and associated program support costs to establish and implement a program to assist Alaska Native Regional Corporations, Alaskan Native Village Corporations, federally-recognized tribes in Alaska, Alaska Native Non-Profit Organizations and Alaska Native Nonprofit Associations, and intertribal consortia comprised of Alaskan tribal entities to address contamination on lands conveyed under or pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.) that were or are contaminated at the time of conveyance and are on an inventory of such lands developed and maintained by the Environmental Protection Agency: Provided, That grants awarded using funds made available in this paragraph may be used by a recipient to supplement other funds provided by the Environmental Protection Agency through individual media or multi-media grants or cooperative agreements: Provided further, That of the amounts made available in this paragraph, in addition to amounts otherwise available for such purposes, the Environmental Protection Agency may reserve up to $2,000,000 for salaries, expenses, and administration of the program and any other grants related to such program that address contamination on lands conveyed under or pursuant to the Alaska Native Claims

Settlement Act (43 U.S.C. 1601 et seq.) that were or are contaminated at the time of conveyance and are on the EPA inventory of such lands.
(3) $130,000,000, to remain available until expended, shall be for environmental justice implementation and training grants and associated program support costs, of which $65,000,000 shall be for an environmental justice community grant program for grants to community-based nonprofit organizations; $40,000,000 shall be for an environmental justice government grant program for grants to states, tribes, including intertribal consortia that meet the requirements in 40 CFR 35.504, local and territorial governments, and Freely Associated States; $15,000,000 shall be for a community-based participatory research grant program for grants to institutions of higher education as defined in 2 CFR 200.1 or nonprofit organizations; and $10,000,000 shall be for an environmental justice training program for grants to community-based nonprofit organizations or partnerships between community-based nonprofit organizations and institutions of higher education as defined in 2 CFR 200.1: Provided, That up to 5 percent of the funds made available under this paragraph may be reserved for salaries, expenses, and administration.

Program Projects in EPM

(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Clean Air and Climate				
Clean Air Allowance Trading Programs	$15,423	$16,554	$30,535	$13,981
Climate Protection	$100,267	$101,000	$170,512	$69,512
Federal Stationary Source Regulations	$26,821	$30,344	$47,468	$17,124
Federal Support for Air Quality Management	$148,894	$147,704	$356,016	$208,312
Stratospheric Ozone: Domestic Programs	$7,937	$6,951	$72,152	$65,201
Stratospheric Ozone: Multilateral Fund	$8,326	$9,244	$18,000	$8,756
Subtotal, Clean Air and Climate	$307,667	$311,797	$694,683	$382,886
Indoor Air and Radiation				
Indoor Air: Radon Program	$2,966	$3,364	$5,113	$1,749
Radiation: Protection	$8,244	$9,088	$11,638	$2,550
Radiation: Response Preparedness	$2,658	$2,650	$3,143	$493
Reduce Risks from Indoor Air	$12,611	$13,593	$47,389	$33,796
Subtotal, Indoor Air and Radiation	$26,479	$28,695	$67,283	$38,588
Brownfields				
Brownfields	$23,716	$26,189	$38,626	$12,437
Compliance				
Compliance Monitoring	$108,996	$112,730	$162,105	$49,375
Environmental Justice				
Environmental Justice	$20,455	$102,159	$369,106	$266,947

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Enforcement				
Civil Enforcement	$179,062	$205,942	$242,585	$36,643
Criminal Enforcement	$55,343	$62,704	$66,487	$3,783
NEPA Implementation	$17,177	$20,611	$25,760	$5,149
Subtotal, Enforcement	$251,582	$289,257	$334,832	$45,575
Geographic Programs				
Geographic Program: Chesapeake Bay	$90,309	$92,000	$92,094	$94
Geographic Program: Gulf of Mexico	$21,194	$25,524	$25,558	$34
Geographic Program: Lake Champlain	$19,096	$25,000	$25,000	$0
Geographic Program: Long Island Sound	$29,758	$40,002	$40,005	$3
Geographic Program: Other				
Lake Pontchartrain	$1,899	$2,200	$2,200	$0
S.New England Estuary (SNEE)	$6,017	$7,000	$7,078	$78
Geographic Program: Other (other activities)	$4,881	$5,000	$4,934	-$66
Subtotal, Geographic Program: Other	$12,797	$14,200	$14,212	$12
Great Lakes Restoration	$349,157	$368,000	$368,154	$154
Geographic Program: South Florida	$6,917	$8,500	$8,503	$3
Geographic Program: San Francisco Bay	$2,631	$54,500	$54,505	$5
Geographic Program: Puget Sound	$34,746	$54,000	$54,022	$22
Subtotal, Geographic Programs	$566,606	$681,726	$682,053	$327
Homeland Security				
Homeland Security: Communication and Information	$4,054	$4,692	$6,051	$1,359
Homeland Security: Critical Infrastructure Protection	$873	$923	$1,023	$100
Homeland Security: Protection of EPA Personnel and Infrastructure	$4,903	$5,188	$5,158	-$30
Subtotal, Homeland Security	$9,830	$10,803	$12,232	$1,429
International Programs				
US Mexico Border	$2,886	$2,993	$5,088	$2,095
International Sources of Pollution	$7,220	$7,323	$26,044	$18,721
Trade and Governance	$6,252	$5,510	$7,153	$1,643
Subtotal, International Programs	$16,358	$15,826	$38,285	$22,459
IT / Data Management / Security				
Information Security	$10,450	$9,142	$23,889	$14,747

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
IT / Data Management	$90,029	$91,821	$105,868	$14,047
Subtotal, IT / Data Management / Security	$100,480	$100,963	$129,757	$28,794
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$10,534	$11,297	$71,722	$60,425
Administrative Law	$5,022	$5,395	$6,116	$721
Alternative Dispute Resolution	$1,196	$972	$2,194	$1,222
Civil Rights Program	$10,061	$12,866	$31,462	$18,596
Legal Advice: Environmental Program	$63,795	$60,061	$85,252	$25,191
Legal Advice: Support Program	$18,246	$18,957	$20,322	$1,365
Regional Science and Technology *(proposed to be moved to Operations and Administration)*	$1,345	$1,554	$0	-$1,554
Science Advisory Board	$3,854	$4,155	$4,124	-$31
Regulatory/Economic-Management and Analysis	$16,725	$17,475	$16,930	-$545
Subtotal, Legal / Science / Regulatory / Economic Review	$130,778	$132,732	$238,122	$105,390
Cross-Agency Coordination, Outreach and Education				
State and Local Prevention and Preparedness	$14,957	$15,446	$23,884	$8,438
TRI / Right to Know	$13,064	$15,052	$14,018	-$1,034
Tribal - Capacity Building	$13,735	$14,715	$34,674	$19,959
Exchange Network	$13,016	$14,995	$14,685	-$310
Executive Management and Operations	$55,872	$56,160	$67,600	$11,440
Public Engagement, Partnerships and Environmental Education	$8,303	$9,500	$23,972	$14,472
Small Minority Business Assistance	$2,564	$2,056	$1,996	-$60
Small Business Ombudsman	$1,564	$2,250	$2,227	-$23
Children and Other Sensitive Populations: Agency Coordination	$6,098	$6,362	$6,500	$138
Subtotal, Cross-Agency Coordination, Outreach and Education	$129,173	$136,536	$189,556	$53,020
Operations and Administration				
Central Planning, Budgeting, and Finance	$82,781	$87,099	$99,812	$12,713
Facilities Infrastructure and Operations	$291,501	$283,330	$305,753	$22,423
Acquisition Management	$36,051	$37,251	$41,609	$4,358
Human Resources Management	$56,709	$51,261	$71,093	$19,832
Financial Assistance Grants / IAG Management	$29,070	$30,188	$34,350	$4,162
Regional Science and Technology *(proposed to be moved from LSRE)*	$0	$0	$4,972	$3,418
Subtotal, Operations and Administration	$496,113	$489,129	$557,589	$68,460

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$65,333	$62,125	$65,529	$3,404
Pesticides: Protect the Environment from Pesticide Risk	$43,688	$48,704	$75,391	$26,687
Pesticides: Realize the Value of Pesticide Availability	$7,022	$7,637	$8,234	$597
Science Policy and Biotechnology	$1,185	$1,811	$1,627	-$184
Subtotal, Pesticides Licensing	$117,227	$120,277	$150,781	$30,504
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$43,061	$40,512	$41,669	$1,157
RCRA: Waste Management	$77,838	$75,958	$90,634	$14,676
RCRA: Waste Minimization & Recycling	$12,603	$10,252	$12,668	$2,416
Subtotal, Resource Conservation and Recovery Act (RCRA)	$133,502	$126,722	$144,971	$18,249
Toxics Risk Review and Prevention				
Endocrine Disruptors	$6,629	$7,614	$7,680	$66
Pollution Prevention Program	$11,988	$12,987	$29,009	$16,022
Toxic Substances: Chemical Risk Review and Reduction	$85,218	$82,822	$130,711	$47,889
Toxic Substances: Lead Risk Reduction Program	$12,404	$14,359	$14,437	$78
Subtotal, Toxics Risk Review and Prevention	$116,242	$117,782	$181,837	$64,055
Underground Storage Tanks (LUST / UST)				
LUST / UST	$11,807	$12,021	$14,451	$2,430
Protecting Estuaries and Wetlands				
National Estuary Program / Coastal Waterways	$33,958	$40,000	$32,514	-$7,486
Wetlands	$21,103	$21,754	$26,671	$4,917
Subtotal, Protecting Estuaries and Wetlands	$55,061	$61,754	$59,185	-$2,569
Ensure Safe Water				
Beach / Fish Programs	$1,209	$2,246	$2,381	$135
Drinking Water Programs	$117,205	$121,607	$142,583	$20,976
Subtotal, Ensure Safe Water	$118,414	$123,853	$144,964	$21,111
Ensure Clean Water				
Marine Pollution	$8,699	$10,187	$12,624	$2,437
Surface Water Protection	$217,125	$224,492	$267,969	$43,477
Subtotal, Ensure Clean Water	$225,825	$234,679	$280,593	$45,914

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Clean and Safe Water Technical Assistance Grants				
Congressional Priorities	$21,700	$30,700	$0	-$30,700
TOTAL EPM	**$2,988,189**	**$3,266,330**	**$4,491,011**	**$1,224,681**

Alaska Contaminated Lands

Alaska Contaminated Lands

Program Area: Alaska Contaminated Lands
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$0***	***$20,000***	***$20,000***	***$0***
Total Budget Authority	$0	$20,000	$20,000	$0
Total Workyears	0.0	5.0	5.0	0.0

Program Project Description:

The Alaska Contaminated Lands Program supports President Biden's Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* and seeks to address environmental injustices regarding the 44 million acres transferred from federal ownership to Alaska Native corporations as part of the Alaska Native Claims Settlement Act (ANCSA).[1] Many of these lands were contaminated while not under Alaska Native ownership, and the contaminants on some of these lands – arsenic, asbestos, lead, mercury, pesticides, polychlorinated biphenyls (PCBs), and other petroleum products – pose health concerns to Alaska Native communities, negatively impact subsistence resources, and hamper economic activity.

EPA is initiating a whole-of-government approach to help advance the cleanup of contaminated ANCSA lands through the Arctic Executive Steering Committee.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will:

- Compile and maintain a contaminated ANCSA sites inventory and maintain a public facing dashboard to provide site information, including cleanup status.

- Engage with State of Alaska, Alaska Native Corporations, Alaska Native Organizations, and other federal agencies to further develop and modify the comprehensive approach to advancing cleanup efforts.

[1] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.

- Establish and manage the Contaminated ANCSA Lands Grant Program to facilitate assessment and cleanup work at contaminated ANCSA lands.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Consolidated Appropriations Act, 2023, Pub. L. 117-328.

Brownfields

Brownfields

Program Area: Brownfields
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$23,716***	***$26,189***	***$38,626***	***$12,437***
Total Budget Authority	$23,716	$26,189	$38,626	$12,437
Total Workyears	112.3	129.5	187.5	58.0

Program Project Description:

Brownfields sites are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields can be found in the heart of America's main streets and former economic centers. The Brownfields Program supports efforts to revitalize these sites by awarding grants and providing technical assistance to states, tribes, local communities, and other stakeholders to work together to plan, inventory, assess, safely cleanup, and reuse brownfields sites. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that receives EPA funding.[2] Similarly, within a half mile of a brownfields site receiving EPA funding, 21 percent of people live below the national poverty level, 17 percent have less than a high school education, 56 percent are people of color, and seven percent are linguistically isolated. As of February 2023, grants awarded by the Program have led to over 10,000 properties made ready for productive use and over 197,000 jobs and over $37.2 billion leveraged.[3]

The Brownfields Program directly supports the goals of the Administration's Justice40 initiative. Operating activities include: 1) conducting the annual, high volume cooperative agreement competitions; 2) awarding new cooperative agreements; 3) managing the ongoing cooperative agreement workload; 4) providing technical assistance and ongoing support to grantees; 5) providing contractor supported technical assistance to non-grantee communities with brownfields sites; 6) collaborating with other agency programs; 7) operating the Assessment Cleanup and Redevelopment Exchange System (ACRES) online grantee reporting tool; 8) assisting communities to explore land reuse opportunities under the Land Revitalization Program; and 9) developing guidance and tools that clarify potential environmental cleanup liabilities.

[2] U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: 1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; 2) UST/LUST information as of late-2018 to mid-2019 depending on the state; and 3) 2015-2018 American Community Survey (ACS) Census data.

[3] From EPA website: https://www.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits#:~:text=Enrolled%20over%2034%2C191%20properties%20annually,3%2C478%2C000%20acres%20ready%20for%20reuse.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan*.

Today, there are more than 1,000 active Brownfields cooperative agreements (CAs) and hundreds of land revitalization projects, targeted assessments, financial planning, and visioning sessions taking place, funded by regular appropriations and by the historic investment from the Infrastructure Investment and Jobs Act (IIJA). All are supported and invigorated by the Brownfields Program's best tool – community development specialists. Specialists are the backbone of the success of the Agency broadly and they bring unique technical and program management experience, as well as public and environmental health expertise, to individual brownfields communities. The communities the Program works with have achieved incredible things, but without the skilled guidance of EPA community development specialists, the Program would not have had the success that characterizes its history at the nexus between environmental revitalization and community development.

To continue to build on these successes, along with the historic investment from IIJA, the Agency proposes to invest an additional $12.4 million and 58.0 FTE in FY 2024. In FY 2022, a detailed Workload Model Analysis identified a significant barrier to engaging with communities related to the availability of on-the-ground resources to conduct outreach and communication. This investment of regional FTE will provide expanded technical assistance and build capacity in small, rural, Environmental Justice (EJ), and other historically disadvantaged communities and support the Program as it implements a responsive, expansive, and innovative environmental and economic community redevelopment program.

In FY 2024, community development specialists will continue to manage approximately 1,000 assessment, cleanup, Revolving Loan Fund (RLF), multi-purpose, and Environmental Workforce Development and Job Training (EWDJT) CAs, as well as state and tribal assistance agreements. In addition, EPA will be managing training, research, and technical assistance agreements; Targeted Brownfields Assessments; and land revitalization projects. The Brownfields Program also will continue to foster federal, state, tribal, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged communities and communities with EJ concerns.

In addition, IIJA invests $1.5 billion to scale up community-led brownfields revitalization from FY 2022 through FY 2026. This work includes $1.2 billion in direct grants and technical assistance to assess and clean up brownfield sites, train and place people in environmental jobs, and assist hundreds of communities in identifying equitable reuse options to cultivate healthy, resilient, livable neighborhoods. An additional $300 million will support State and Tribal Response programs that can provide necessary funds to states and territories and over 100 tribes to grow their brownfields programs. EPA will continue to manage an estimated 400 cooperative agreements funded under IIJA.

In FY 2024, the Brownfields Program will support the following activities:

- **Compete and Award New Cooperative Agreements**: Review, select, and award an estimated 210 new cooperative agreements, which will lead to approximately $2.6 billion and 13,480 jobs leveraged in future years.

- **Oversight and Management of Existing Cooperative Agreements:** Continue federal fiduciary responsibility to manage approximately 1,000 existing brownfields CAs funded under regular appropriations while ensuring the terms and conditions of the agreements are met, as well as provide limited technical assistance. The Program also will provide targeted environmental oversight support to grantees (*e.g.*, site eligibility determinations, review of environmental site assessment and cleanup reports).

- **Technical Assistance:** Provide technical assistance to states, tribes, and local communities in the form of research, training, analysis, and support for community-led planning workshops. This can lead to cost effective implementation of brownfields redevelopment projects by providing communities with the knowledge necessary to understand market conditions, economic development, and other community revitalization strategies, and how cleanup and reuse can be catalyzed by small businesses.

- **Collaboration:** Work collaboratively with our partners at the state, tribal, and local levels on innovative approaches to help achieve land reuse. The Program also will continue to develop guidance and tools that clarify potential environmental cleanup liabilities, thereby providing greater certainty for parties seeking to reuse these properties. In addition, the Program can provide direct support to facilitate transactions for parties seeking to reuse contaminated properties.

- **Accomplishment Tracking**: Support the maintenance of the ACRES online grantee reporting tool. This enables grantees to track accomplishments and report on the number of sites assessed and cleaned up, and the amount of dollars and jobs leveraged with brownfields grants.

- **Land Revitalization Program Support:** Provide support for approximately two communities as part of EPA's Land Revitalization Program. The Land Revitalization Program supports communities in their efforts to restore contaminated lands into sustainable community assets.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$772.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$11,665.0 / +58.0 FTE) This increase is for community development specialists to manage land revitalization projects, provide one-on-one financial planning support, and educate tribal, rural and EJ communities on how to address brownfields. This investment includes $10.4 million for payroll.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), §§ 101(39), 104(k), 128(a); Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, § 8001.

Clean Air

Clean Air Allowance Trading Programs
Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$15,423***	***$16,554***	***$30,535***	***$13,981***
Science & Technology	$8,360	$7,117	$19,983	$12,866
Total Budget Authority	$23,783	$23,671	$50,518	$26,847
Total Workyears	66.3	66.7	86.1	19.4

Program Project Description:

The Clean Air Allowance Trading Programs are nationwide and multi-state programs that address air pollutants that are transported across state, regional, and international boundaries. The programs are designed to control sulfur dioxide (SO_2) and nitrogen oxides (NO_x), key precursors of both fine particulate matter ($PM_{2.5}$) and ozone (O_3). These programs include Title IV (the Acid Rain Program) of the Clean Air Act, the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update, the revised CSAPR Update, and the Good Neighbor Plan (the most recent CSAPR proposal), once finalized. The infrastructure for the Clean Air Allowance Trading Programs also supports implementation of other state and federal programs to control SO_2, hazardous air pollutants, and greenhouse gases.

The Clean Air Allowance Trading Programs establish a total emission limit across affected emission sources, which must hold allowances as authorizations to emit one ton of the regulated pollutant(s) in a specific emission control period. The owners and operators of affected emission sources may select among different methods of compliance—installing pollution control equipment, switching fuel types, purchasing allowances, or other strategies. By offering the flexibility to determine how the sources comply, the programs lower the overall cost, making it feasible to pursue greater emission reductions. These programs are managed through a centralized database system operated by EPA.[4] Data collected under these programs are made available to the public through EPA's Clean Air Markets Data Resources website,[5] which provides access to both current and historical data collected as part of the Clean Air Allowance Trading Programs through charts, reports, and downloadable datasets. To implement these programs, EPA operates an emission measurement and reporting program, market operations program, environmental monitoring programs, and a communication and stakeholder engagement program.

In 2021, total annual SO_2 emissions from Acid Rain Program-affected emission sources were 942,000 tons, or over 90 percent below the statutory nationwide emissions cap, a level not seen since early in the 20th Century. Total annual 2021 NO_X emissions were 782,000 tons, an almost

[4] Clean Air Act § 403(d).
[5] For additional information, please refer to https://www.epa.gov/airmarkets/data-resources.

nine-million-ton reduction from projected levels, exceeding the Program's goal of a two-million-ton reduction.[6]

The Part 75 monitoring program requires almost 4,300 affected sources to monitor and report emission and operation data.[7] The Part 75 monitoring program requires high degrees of accuracy and reliability from continuous emission monitoring systems (CEMS) or approved alternative methods at the affected sources. EPA provides the affected emission sources with technical assistance to facilitate compliance with the monitoring requirements, and software—the Emissions Collection and Monitoring Plan System (ECMPS)—to process, quality assure, and report data to EPA. To assess the quality of the data, the Agency conducts electronic audits, desk reviews, and field and virtual audits of the emission data and monitoring systems. EPA also conducts a Protocol Gas Verification Program (PGVP) in cooperation with National Institute of Standards and Technology (NIST) to ensure calibration gases used for CEMS quality assurance/quality control are of high quality. In addition to the Clean Air Allowance Trading Programs, the emission measurement program and ECMPS software support several state and federal emission control and reporting programs, including the Texas SO_2 Trading Program, Regional Greenhouse Gas Initiative (RGGI), Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units, and Mercury and Air Toxics Standards (MATS). It also interfaces with the Greenhouse Gas Reporting Program (GHGRP), ensuring the Part 75 data is seamlessly transferred to that program's infrastructure (Electronic Greenhouse Gas Reporting Tool (eGGRT)).

EPA's centralized market operation system (the allowance tracking system) manages accounts and records allowance allocations and transfers.[8] At the end of each compliance period, working directly with and supporting stakeholders, allowances are reconciled against reported emissions to determine compliance for every facility with affected emission sources. For over 25 years, the affected facilities have maintained near-perfect compliance under the trading programs.[9] The market operation system also supports several state and federal emission control and reporting programs, including the Texas SO_2 Trading Program, RGGI, and MATS.

The Clean Air Act's Good Neighbor provision[10] requires states or, in some circumstances the Agency, to reduce interstate pollution that significantly contributes to nonattainment or interferes with maintenance of the National Ambient Air Quality Standards (NAAQS). Under this authority, EPA issued CSAPR, which requires 27 states in the eastern U.S. to limit their state-wide emissions of SO_2 and/or NO_X to reduce or eliminate the states' contributions to $PM_{2.5}$ and/or ground-level ozone non-attainment of the NAAQS in downwind states. The emission limitations are defined in terms of maximum statewide "budgets" for emissions of annual SO_2, annual NO_X, and/or ozone-season NO_X emissions from certain large stationary sources in each state. In 2016, EPA issued the CSAPR Update to address interstate transport of ozone for the 2008 ozone NAAQS in the eastern United States. EPA revised the CSAPR Update on March 15, 2021, to address a ruling of the U.S. Court of Appeals for the D.C. Circuit. In 2022, EPA proposed the Good Neighbor Plan to address interstate transport of ozone for the 2015 ozone NAAQS and included a proposed ozone-season NO_X trading program for EGUs in 25 states. EPA expects to finalize this rulemaking by Mid- 2023

[6] For more information, please refer to: https://www.epa.gov/airmarkets/power-plant-emission-trends.
[7] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821.
[8] Clean Air Act § 403(d).
[9] For more information, please refer to: http://www3.epa.gov/airmarkets/progress/reports/index.html.
[10] Clean Air Act § 110(a)(2)(D); also refer to Clean Air Act § 110(c).

and implement the resulting program beginning in the 2023 ozone season. In addition, EPA is supporting state efforts to address regional haze including best available retrofit technology and reasonable progress, as well as interstate air pollution transport contributing to downwind nonattainment of NAAQS as those obligations relate to emissions from electricity generating units.[11] EPA is conducting environmental justice analyses of the distribution of these emissions and associated public health impacts on overburdened communities.

EPA manages the Clean Air Status and Trends Network (CASTNET), a rural ambient air monitoring program supporting NAAQS determinations, model validation and ecological impacts. CASTNET measures ambient ozone and nitrogen and sulfur particles and gases to evaluate air quality effects on human health and environmental loadings. In addition, EPA participates in the National Atmospheric Deposition Program, which monitors wet deposition of sulfur, nitrogen, and mercury, as well as ambient concentrations of mercury and ammonia. EPA also manages the Long-Term Monitoring (LTM) Program to assess how lakes, streams, and aquatic ecosystems are responding to reductions in sulfur and nitrogen emissions. Data from these air quality and environmental monitoring programs, in conjunction with SO_2, NO_X, mercury, and CO_2 emissions data from the Part 75 monitoring program and mercury emissions data from the MATS reporting program, have allowed EPA to develop a comprehensive accountability framework to track the results of its air quality programs. EPA applies this framework to the programs it implements and issues annual progress reports on compliance and environmental results achieved by the Acid Rain Program, CSAPR, the CSAPR Update, and the Revised CSAPR Update, and pollution controls installed and emissions reductions achieved by MATS.[12] Required by Congress since FY 2019 in the appropriations reports, these annual progress reports highlight reductions in SO_2 and NO_X emissions, and impacts of these reductions on air quality (e.g., ozone and $PM_{2.5}$ levels), acid deposition, surface water acidity, forest health, and other environmental indicators.

EPA produces several tools to inform the public and key stakeholders about power sector emissions, operations, and environmental data. The Emissions & Generation Resource Integrated Database (eGRID)[13] is a comprehensive source of data on the environmental characteristics of almost all electric power generated in the U.S. Data from eGRID are used by other EPA programs, state energy and air agencies, and researchers. Between 2015 and 2021, eGRID was cited by more than 1,600 academic papers. Power Profiler[14] is a web application where electricity consumers can see the fuel mix and air emissions rates of their region's electricity and determine the air emissions associated with their electricity use. In keeping with the Agency's renewed commitment to energy equity and environmental justice, EPA published the Power Plants and Neighboring Communities web application[15] where consumers and advocates can find information about the demographics of communities located near power plants. EPA is developing analytical tools to better understand and communicate the impact of electricity generation on low-income communities and communities of color. EPA also operates several initiatives to engage key stakeholders, including working closely with tribal governments to build tribal air monitoring capacity through

[11] Clean Air Act § 110 and § 169A; refer to 40 CFR 52.2312.
[12] To view the progress reports, please refer to: http://www3.epa.gov/airmarkets/progress/reports/index.html.
[13] To view eGRID, please refer to https://www.epa.gov/egrid.
[14] To view Power Profiler, please refer to https://www.epa.gov/egrid/power-profiler.
[15] To view the Power Plants and Neighboring Communities, please refer to https://www.epa.gov/airmarkets/power-plants-and-neighboring-communities.

partnerships with the CASTNET Program. The EmPOWER Air Data Challenge[16] encourages academic researchers to propose how to integrate the EPA emissions and/or environmental data in their research. The Ask Clean Air Markets Division (CAMD) webinars provide an opportunity for stakeholders to ask EPA about the Clean Air Allowance Trading Programs, Part 75 emission reporting program, and the emission and environmental data programs.

EPA also develops multiple models and tools to project future emissions from the power sector to inform EPA's air quality modeling, as well as water and land regulations affecting power plants. The Integrated Planning Model (IPM) is a state-of-the-art, peer-reviewed, dynamic linear programming model that EPA develops to project power sector behavior under future business-as-usual conditions and to examine prospective air pollution control policies throughout the contiguous United States for the entire electric power system. EPA uses IPM, along with the National Energy Modeling System (NEMS) and the Regional Energy Deployment System (ReEDS), to estimate future electricity market conditions and associated pollutant emissions scenarios resulting from legislative and regulatory policies under consideration by Congress and the Administration. The National Electric Energy Data System (NEEDS) includes geographic, operating, air emissions, and other data on existing and planned grid-connected electric generating units across the contiguous United States. EPA updates and publishes NEEDS on a quarterly basis to inform emission modeling projections and to provide timely information to air quality planners and policymakers developing regulations to address power sector pollution. EPA is augmenting these power sector models and tools to include important information pertinent to environmental justice analyses and community-level impacts.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to operate the Clean Air Allowance Trading Programs and the systems to assess compliance with the Programs' regulatory requirements and the Programs' progress toward the environmental goals required by the Clean Air Act. EPA will work to meet requirements and requests for modeling in support of the power sector and for legal defense of regulatory actions. The Programs will continue to support emission reporting for other state and federal programs, including RGGI, MATS, and GHGRP.[17] In FY 2024, EPA anticipates work on several regulatory actions related to power plants including greenhouse gas emission guidelines for existing power plants (replacing the previously promulgated Clean Power Plan and the Affordable Clean Energy Rule); interstate ozone transport obligations under the 2015 ozone standard; and continued review of the appropriate and necessary finding and risk and technology review for MATS. If finalized, the programmatic, operational, and/or data collection and management requirements will be expanded.

[16] For more information about the challenge, refer to https://www.epa.gov/airmarkets/empower-air-data-challenge.

[17] Refer to, 40 C.F.R. Part 63, Subpart UUUUU (*National Emission Standards for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units*) and 40 C.F.R. Part 98, Subpart D (*Mandatory Greenhouse Gas Reporting: Electricity Generation*).

This request also expands EPA's ability to perform advanced power sector analyses to tackle the climate crisis, including developing environmental justice tools to consider the distributional impacts of emissions on overburdened communities.

Allowance tracking and compliance assessment

EPA will allocate SO_2 and NO_X allowances to affected emission sources and other account holders as established in the Clean Air Act[18] and state and federal CSAPR implementation plans. These allowance holdings and subsequent allowance transfers will be maintained in an allowance tracking system (i.e., central database).[19] EPA will annually reconcile each facility's allowance holdings against its emissions to ensure compliance for all affected sources.[20]

Emission measurement, data collection, review, and publication

EPA will operate the Part 75 emission measurement program to collect, verify, and track emissions of air pollutants and air toxics from approximately 4,300 fossil-fuel-fired electric generating units.[21] In FY 2024, EPA also will implement several new regulatory actions, including the MATS e-reporting rule[22] and the Good Neighbor Plan and Part 75 regulatory update.[23] These emissions, operations, and compliance data will be maintained in an emissions tracking system (i.e., central database) and made publicly available.[24]

Program assessment and communication

EPA will continue to monitor ambient air, deposition, and other environmental indicators through the CASTNET and LTM Programs, contribute to the National Atmospheric Deposition Program, publish the power sector progress reports required by Congress, and produce additional information to communicate the extent of the progress made by the Clean Air Allowance Trading Programs.[25] EPA will publish emissions, environmental, and EJ-related demographic data on our Air Markets, eGRID, Power Profiler, and Power Plants and Neighboring Communities websites.

Redesign system applications

EPA will continue the redesign of its markets operation system (CAMD Business System, CBS) and Emission Collection Monitoring Plan System (ECMPS) software. These mission critical systems support the trading programs, as well as other emissions reporting programs operated by the states (e.g., RGGI) and EPA (e.g., MATS, GHGRP). Reengineering these decade-old systems will enable EPA to enhance the user experience, comply with EPA security and technology requirements, consolidate software systems, and reduce long-term operation and maintenance costs. EPA released the Clean Air Markets Program Data (CAMPD) website in FY 2022 to enhance the public's access to the emission and allowance data. ECMPS modules will be released in FY 2023 with additional functionality added in FY 2024.

[18] Clean Air Act §§ 110 and 403.
[19] Clean Air Act §§ 110 and 403.
[20] Clean Air Act §§ 110 and 404-405, and state CSAPR implementation plans.
[21] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821; and 40 C.F.R. Part 63, Subpart UUUUU.
[22] 40 C.F.R. Part 63, Subpart UUUUU.
[23] 40 C.F.R. Part 75.
[24] Clean Air Act § 412; Clean Air Act Amendments of 1990. P.L. 101-549 § 821.
[25] Government Performance and Results Act § 1115.

Assistance to states
EPA will work with states to develop emission reduction programs to comply with the Clean Air Act Good Neighbor Provision and Regional Haze program requirements.[26] As part of the emission measurement, data collection, review, and publication, EPA will provide a web portal for states with delegated authority for MATS to access and review emissions and compliance data.

CASTNET will continue to support states in meeting their minimum monitoring requirements and assist with developing exceptional event demonstrations, as needed. Additionally, CASTNET will continue to provide data that can be used for permitting and ecological assessments within state boundaries (e.g., Colorado).

Stakeholder engagement
EPA will continue to engage our stakeholder communities through efforts to maintain and strengthen current tribal air monitoring partnerships and build new ones to the extent possible. In addition, EPA has new efforts underway to identify how power plant pollution impacts historically marginalized and underserved communities, and how EPA air rules can mitigate those impacts. EPA also seeks to communicate information about power plant emissions and the contributions to low-income communities and communities of color and encourage the use of the Clean Air Allowance Trading Programs' data for scientific analysis and communication through various programs and tools, such as Power Plants and Neighboring Communities, EmPOWER Air Data Challenge, and Ask CAMD webinars.

Policy and regulatory development
EPA will contribute multi-pollutant and multi-media (air, water, land) power sector analyses informing EPA's policy agenda to tackle the climate crisis and protect public health and the environment, including environmental justice analyses to consider the distributional impacts of emissions on overburdened communities. Analytic and policy topics addressing climate change and air pollution that could be analyzed include a wide range of power sector actions under the CAA, as well as analysis of interactions between alternative vehicle electrification futures and associated changes in electric power generation.

Performance Measure Targets:

(PM NOX) Tons of ozone season NOx emissions from electric power generation sources.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						355,000	344,000	332,000	Tons
Actual	464,999	443,764	389,170	341,082	359,124	326,722			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$293.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

[26] Clean Air Act § 110(a)(2)(D).

- (+$14,274.0 / +17.7 FTE) This program change is an increase in support for emissions trading programs, including associated data systems, that protect human health and the environment by delivering substantial emissions reductions in the power sector of SO_2, NO_x, and hazardous air pollutants. This proposal expands EPA's ability to perform advanced power sector analyses to tackle the climate crisis, including developing environmental justice tools to consider the distributional impacts of emissions on overburdened communities. This investment includes $3.205 million in payroll costs.

Statutory Authority:

Clean Air Act.

Climate Protection
Program Area: Clean Air and Climate
Goal: Tackle the Climate Crisis
Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$100,267***	***$101,000***	***$170,512***	***$69,512***
Science & Technology	$6,723	$8,750	$10,724	$1,974
Total Budget Authority	$106,990	$109,750	$181,236	$71,486
Total Workyears	209.3	216.1	256.7	40.6

Program Project Description:

EPA's Climate Protection Program is working to tackle the climate crisis at home and abroad through an integrated approach of regulations, partnerships, and technical assistance. This Program takes strong action to limit carbon dioxide (CO_2) and methane emissions as well as working to reduce high-global warming potential greenhouse gases (GHG), like hydrofluorocarbons (HFCs), that will help the U.S. realize near-term climate benefits. Through this program, EPA works with federal, state, tribal, local government agencies and key GHG emitting sectors to tackle the climate crisis and deliver environmental and public health benefits for all Americans. EPA builds partnerships, provides tools, and verifies and publishes GHG data, economic modeling, and policy analysis, all of which increase the understanding of climate science, impacts, and protection. EPA also extends this expertise internationally and plays critical roles in shaping and advancing international agreements and solutions. This international collaboration helps to both improve public health and air quality in the United States and level the global playing field for American businesses.

Greenhouse Gas Reporting Program:
EPA implements the U.S. Greenhouse Gas Reporting Program under the Clean Air Act. In 2007, Congress directed EPA to "require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the U.S." EPA annually collects data from over 8,100 facilities from 41 industrial source categories, including suppliers (*e.g.*, producers, importers, and exporters of GHGs) and uses this data to: 1) improve estimates included in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks*; 2) support federal and state-level policy and regulatory development; 3) share GHG emissions; and 4) share data with state and local governments, tribes, community groups, industry stakeholders, academia, the research community, and the general public.

Inventory of U.S. Greenhouse Gas Emissions and Sinks:
To fulfill U.S. Treaty obligations under Article 4 of the 1992 Framework Convention on Climate Change, which was ratified by the U.S. Senate, EPA prepares the annual *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (*Inventory*). The *Inventory* provides information on total

annual U.S. emissions and removals by source, economic sector, and GHG. The *Inventory* is used to inform U.S. policy and for tracking progress towards the U.S. Nationally Determined Contribution under the Paris Agreement. EPA leads the interagency process of preparing the *Inventory*, working with technical experts from numerous federal agencies, including the Department of Energy's Energy Information Administration, Department of Agriculture, Department of Defense, U.S. Geological Survey, and academic and research institutions.

Managing the Transition from Ozone-Depleting Substances:
EPA implements efforts directed by Section 612 of the CAA to ensure a smooth transition away from ozone-depleting substances (ODS) to safer alternatives. Applying a comparative risk assessment, the Significant New Alternatives Policy (SNAP) Program evaluates the health and environmental effects of alternatives in the sectors and subsectors where ODS and high-global warming potential HFCs are used, providing additional substitute options in key sectors such as refrigeration and air conditioning.

Phasing Down HFCs:
EPA implements the American Innovation and Manufacturing (AIM) Act, enacted to address climate damaging HFCs by phasing down its production and consumption; maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment; and facilitating the transition to next-generation technologies through sector-based restrictions. This phasedown will decrease the production and import of HFCs in the United States by at least 85 percent by 2036, resulting in significant climate benefits.

ENERGY STAR:
ENERGY STAR is the national symbol for energy efficiency, recognized by more than 90 percent of American households, and is a critical tool to fight the climate crisis. ENERGY STAR addresses barriers in the market so that consumers and businesses can make informed decisions to reduce energy use, save money, and reduce harmful air pollutants. By reducing energy use, ENERGY STAR lowers costs for states and local governments as they design and implement plans to meet their air quality and climate goals.

ENERGY STAR achieves significant and growing GHG reductions by promoting the adoption of cost-effective, energy-efficient technologies and practices in the residential, commercial, and industrial sectors. The Program yields significant environmental and economic results through its network of thousands of partners. In 2020 alone, ENERGY STAR and its partners helped American families and businesses save more than 520 billion kilowatt-hours of electricity and avoid $42 billion in energy costs. These savings resulted in emission reductions of more than 400 million metric tons of GHGs (roughly equivalent to more than five percent of U.S. total GHG emissions) and more than 440 thousand tons of criteria air pollutants (SO_2, NO_X, $PM_{2.5}$). ENERGY STAR's criteria pollutant reductions are estimated to result in $7 billion to $17 billion in public health benefits.[27] These investments in turn drive job creation across the economy. More than 700,000 Americans are employed in manufacturing or installing ENERGY STAR certified

[27] For more information on ENERGY STAR's environmental, human health, and economic impacts, please see here: https://www.energystar.gov/ impacts. For more information on ENERGY STAR calculation methods, see the Technical Notes, available here: https://cmadmin.energystar.gov/sites/default/files/asset/document/Technical%20Notes.pdf.

equipment alone – roughly 35 percent of all energy efficiency jobs in 2020, with energy efficiency accounting for 40 percent of all energy sector jobs overall.[28]

EPA manages the ENERGY STAR Program with clearly defined support from the U.S. Department of Energy. Specifically, EPA manages and implements the specification development process for more than 75 product categories and the ENERGY STAR Most Efficient recognition program; the ENERGY STAR Residential New Construction Program for single-family homes, manufactured homes, and multifamily buildings; and the ENERGY STAR commercial and industrial programs. This work includes activities such as certification monitoring and verification; setting performance levels for building types; managing and maintaining the ENERGY STAR Portfolio Manager tool to measure and track energy use in buildings; and managing the integrity of the ENERGY STAR brand.

ENERGY STAR's IT portfolio is the foundation for program operation, partner communications, data collection, and analysis. The portfolio includes Portfolio Manager, which is the backbone of roughly 50 mandatory local benchmarking programs across the country; the qualified products exchange, the repository of information on ENERGY STAR products; the ENERGY STAR website, which is the program's primary means of communication with partners and citizens and receives over eight million visits per year; and ES Connect, a customer database used to track and communicate with thousands of stakeholders. All of these resources are supported by a robust cloud-based IT infrastructure to ensure performance, reliability, and security for ENERGY STAR stakeholders.

ENERGY STAR also supports equitable energy solutions that can deliver significant cost savings for low-income families and other overburdened and underserved populations. The Program prioritizes outreach to low-income populations on products that have the greatest opportunity to save energy and dollars. The ENERGY STAR Program also looks for affordable alternatives to products that may be cost-prohibitive, such as replacement windows (*e.g.*, storm windows). In the residential new construction sector, a quarter of active home builders that partner with ENERGY STAR are involved in the construction of affordable housing, and more than 75 percent of ENERGY STAR certified multifamily high-rise buildings are identified as affordable housing. Over 675 Habitat for Humanity affiliates have built a total of 19,500 ENERGY STAR certified homes and apartments to date, and over 150 manufactured housing plant partners have constructed more than 155,000 ENERGY STAR certified manufactured homes.[29]

Renewable Energy Programs*:*

EPA works with industry and other key groups to promote climate leadership and encourage efficient, clean technologies. For example, EPA's Green Power Partnership drives voluntary participation in the U.S. green power market. This program provides information, technical assistance, and recognition to companies that use green power at or above minimum partnership benchmarks. At the end of calendar year 2020, more than 700 EPA Green Power Partners reported the collective use of nearly 70 billion kilowatt-hours of green power annually. This amount of

[28] NASEO and Energy Futures Initiative. (2020). U.S. Energy and Employment Report. https://www.energy.gov/useer (link is external). The survey does not account for retail employment.

[29] For more information on ENERGY STAR's residential program, including affordable new construction, please visit: https://www.energystar.gov/about/origins_mission/energy_star_overview/about_energy_star_residential_sector; https://www.energystar.gov/about/origins_mission/energy_star_overview/about.

green power use represents nearly 43 percent of the U.S. voluntary green power market (that goes beyond required purchases under state renewable portfolio standards). Since 2001, the Program has helped prevent nearly 320 million metric tons of GHG emissions.[30] In addition, EPA's Green Power Partnership also recognizes more than 100 EPA Green Power Communities nationwide that advance green power access and use to their community members. EPA also establishes norms of climate leadership by encouraging organizations with emerging climate objectives to identify and achieve cost-effective GHG emission reductions, while helping more advanced organizations drive innovations in reducing their greenhouse gas impacts in their supply chains and beyond.

State, Tribal and Local Climate and Energy Programs:
EPA works with state, tribal and local governments to identify and implement cost-effective programs that reduce GHG emissions, save energy, improve air quality, and mitigate heat islands. EPA provides the necessary tools, data, and technical expertise to help subnational governments implement energy efficiency and clean energy policies and programs that reduce emissions, maximize co-benefits, and prioritize low-income and vulnerable communities. Through trainings, webinars, outreach, and technical assistance, the Programs help dozens of state and local governments develop emissions inventories and analyze the emissions impacts and health benefits of energy efficiency and clean energy strategies. Many more subnational governments use the Programs' resources and policy guidebooks to discover best practices for emissions reductions and heat island mitigation. These programs also highlight best practices on how to deliver inclusive climate programs that benefit low-income communities and improve energy justice.

SmartWay Transport:
Launched in 2004, SmartWay is the only voluntary program working across the entire freight system to comprehensively address economic and environmental goals related to sustainability. Nearly 4,000 businesses that receive, ship, or carry freight rely upon SmartWay supply chain accounting tools and methods to assess, track, and reduce transportation-related carbon, energy use, and air emissions. By accelerating deployment of cleaner, more efficient technologies and operational strategies across supply chains, SmartWay partners have avoided significant amounts of pollution, helping to address the climate crisis and contributing to healthier air for underserved and overburdened communities living close to freight hubs and routes. Improving supply chain efficiency also helps grow the economy and protect and create jobs while contributing to energy security.

EPA is the SmartWay brand manager and is responsible for the specification process for hundreds of product and vehicle categories, including both family (passenger) vehicles and commercial (heavy-duty freight truck and trailer) vehicles, and the SmartWay Partnership and SmartWay Affiliate recognition programs. EPA's technology verification program enables manufacturers to voluntarily demonstrate fuel saving and emission reduction performance using standard testing protocols. SmartWay partner fleets as well as others in the trucking industry use EPA's verified technology lists to identify products that have been demonstrated to save fuel and reduce emissions.

[30] For more information on EPA's Green Power Partnership's environmental, human health, and economic impacts, please visit: https://www.epa.gov/greenpower/green-power-partnership-program-results.

Partnerships to Reduce Methane Emissions:
EPA operates several partnership programs that promote cost-effective reductions of methane by working collaboratively with industry. Methane programs offer excellent opportunities for reducing the concentration of GHGs in the atmosphere and providing an energy resource in the process. Methane is a significant source of GHG emissions and has a relatively short atmospheric lifetime of about 9 to 15 years, which means that reductions made today will yield positive results in the near term.

Unlike other GHGs, methane is an important energy resource that allows for cost-effective mitigation. There are many opportunities to recover and re-use or sell methane from the agriculture (manure management), coal mining, oil and gas, and landfill sectors. The AgSTAR program, which is a collaboration between EPA and the U. S. Department of Agriculture, focuses on methane emission reductions from livestock waste management operations through biogas recovery systems. The Coalbed Methane Outreach Program promotes opportunities to profitably recover and use methane emitted from coal mining activities. The Landfill Methane Outreach Program promotes abatement and energy recovery of methane emitted from landfills. The Natural Gas STAR Methane Challenge Program spurs the adoption of cost-effective technologies and practices that reduce methane emissions from the oil and natural gas sector through collaborative partnerships with companies.

EPA also manages the implementation of the Global Methane Initiative (GMI), a U.S. led international public-private partnership that brings together over 45 partner governments and over 700 private sector and non-governmental organizations to advance methane recovery and use. GMI builds on the success of EPA's domestic methane programs and focuses on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater. With assistance from several agencies—particularly EPA and U.S. State Department—the U.S. Government has supported identification and implementation of more than 1,100 methane mitigation projects since 2005. These projects have reduced methane emissions by about 500 million tonnes of carbon dioxide equivalent (MMTCO2e), including approximately 42 MMTCO2e in 2020. Since 2005, U.S. efforts under the auspices of GMI leveraged more than $650 million for project implementation and training and provided trainings for more than 50,000 people in methane mitigation.[31]

Partnerships to Reduce Fluorinated Greenhouse Gas Emissions:
EPA operates partnership programs that promote cost-effective reductions of fluorinated greenhouse gases (FGHG) by working collaboratively with industry. EPA's FGHG partnership programs continue to make significant reductions in potent GHG emissions, such as perfluorocarbons, HFCs, nitrogen trifluoride, and sulfur hexafluoride. Through its partnership programs, EPA works closely with participating industries to identify cost-effective emissions reduction opportunities, recognize industry accomplishments, and facilitate the transition toward environmentally friendlier technologies and chemicals and best environmental practices. Although FGHGs account for a small portion of total U.S. GHG emissions, they have very high global warming potentials.

[31]For more information on the Global Methane Initiative's environmental, human health, and economic impacts, please visit: https://www.epa.gov/gmi/us-government-global-methane-initiative-accomplishments.

Science, Economic, and Technical Analyses:
EPA conducts a range of economic, scientific, and technical analyses for CAA regulatory actions and to support the Administration's efforts to address climate change. These efforts include the communication of the science of climate change to the public by providing information on the indicators of climate change, climate risks, and actions that can be taken to mitigate the impacts. EPA applies an analytical framework to evaluate avoided risk and economic impacts of GHG mitigation. These efforts also include the development of multiple models and tools to project future multipollutant emissions (including GHGs) from the power sector to inform EPA's air quality modeling and air, water, and land regulations affecting power plants. EPA applies modeling tools and expertise across a wide range of high priority work areas, including supporting U.S. participation in the Paris Agreement, providing analysis and technical expertise to the U.S. Special Presidential Envoy for Climate and other interagency partners to support U.S. engagement with foreign governments on climate change, and conducting legislative analyses as requested by Congressional staff. Furthermore, EPA provides critical, world-renowned non-CO_2, agriculture, and forestry analyses and participates in the interagency process to improve and apply the models and analyses as needed. Moreover, EPA is expanding its ability to conduct equity and environmental justice analyses to identify policy implications and improve collaboration with underserved and frontline communities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting additional resources to help reduce greenhouse gas emissions while also addressing environmental justice through an integrated approach of regulations, partnerships, and technical assistance. The increase enables EPA to take strong action on CO_2 and methane as well as high-global warming potential climate pollutants such as HFCs, as directed by the AIM Act; restores the capacity of EPA's climate partnership programs to provide essential contributions to our Nation's climate, economic, and justice goals; and strengthens EPA's capacity to apply its modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement. EPA also is requesting $5 million in additional resources to support implementation of the Greenhouse Gas Reduction Fund under the Inflation Reduction Act. Finally, in coordination with NASA, EPA is also requesting an additional $5 million to study and prototype capabilities for a greenhouse gas monitoring and information system that will integrate data from a variety of sources with a goal of making data more accessible and usable to federal, state, and local governments, researchers, the public, and other users.

EPA will continue to implement the Greenhouse Gas Reporting Program, which currently covers a total of 41 sectors with approximately 8,100 reporters. In FY 2024, resources are requested for anticipated rule making actions including revisions to the Greenhouse Gas Reporting Program to require enhanced reporting of emissions from U.S. industrial sectors, including methane emissions from the oil and natural gas sector. In FY 2024, EPA will verify 98 percent of Annual Greenhouse Gas Reports from these sectors. Focus areas for the Program will include:

- Completing a pending rulemaking to update, streamline, and enhance the scope and quality of the Greenhouse Gas Reporting Program across multiple sectors, including oil and gas as well as carbon capture projects.
- Aligning the electronic greenhouse gas reporting tool (e-GGRT) with those regulatory amendments and perform system enhancements to accommodate HFC supply data submitted by industry to meet the reporting requirements of the AIM Act regulations.
- Conducting a verification process through a combination of electronic checks, staff reviews, and follow-up with facilities.
- Publishing reported data while enhancing the Facility Level Information on Greenhouse Gases Tool (FLIGHT) mapping feature to visually display the distribution of GHG emissions and sources of GHG supply in areas of the country having environmental justice and equity concerns.
- Continuing the review and decision-making on the increased number of Carbon Capture and Storage Monitoring Reporting and Verification plans that are submitted to the GHG Reporting Program due to changes in the IRS 45Q tax code; and
- Initiating administrative actions, including one or more rulemakings, using Inflation Reduction Act appropriated funds to revise the GHGRP subpart W – Petroleum and Natural Gas Systems and develop the Waste Emissions Charge. It is expected that implementation of the resulting programs will continue after FY 2024 under this Climate Protection Program.

In addition, EPA will work to complete the annual *Inventory of U.S. Greenhouse Emissions and Sinks (Inventory).* In FY 2024, resources are requested to enhance the data collection, reporting and publication processes, while also supporting reconciliation and convergence of bottom-up and top-down approaches to measuring methane emissions, ensuring EPA continues to meet the legally binding treaty obligations. Focus areas will include:

- Continuing improvements to inventory methodologies in areas such as oil and gas, land-use, and waste, consistent with Intergovernmental Panel on Climate Change guidelines, and to meet upcoming Paris reporting requirements.
- Disaggregating the national *Inventory* to the state level and publishing the results annually through the online Data Explorer tool.
- Furthering work to make use of advanced observation technologies, including through developing the capacity to publish an annual gridded methane inventory, which is essential for use by atmospheric researchers and as input to other studies.
- Creating a new GHG emission calculator, linked to Portfolio Manager, to develop building GHG inventories that fully comply with accounting protocols and local mandates; and
- Enhancing GHG inventory tools and technical assistance to states, local governments, and tribes.

In FY 2024, EPA will continue to implement the ENERGY STAR Program, partnering with more than 840 utilities (representing an annual collective investment of $7.6 billion in energy efficiency programs) from state and local governments, plus nonprofits. These partners leverage ENERGY STAR in their efficiency programs to achieve GHG reductions in major economic sectors, consistent with national commitments. In FY 2024, ENERGY STAR also will continue to modernize its IT infrastructure, including moving existing software to open-source, cloud-

based solutions to improve system performance and reliability while also reducing operational costs. ENERGY STAR will further prioritize usability of its web-based tools and resources for both partners and the general public.

All 40+ cities and states that have developed mandatory energy requirements for existing commercial and multifamily buildings (e.g., benchmarking, disclosure, and energy or climate performance) rely on EPA's Portfolio Manager (EPA's online tool for building managers to measure and track energy and water consumption, as well as greenhouse gas emissions) and work with EPA on implementation. In FY 2024, additional resources would be used to ensure the systems and tools that are needed for state and local legal compliance are both able to meet those state/local needs (including streamlined access and data entry for small and under-resourced building owners) and meet Federal IT requirements (e.g., privacy, security, 508).

The Climate Protection Partnerships Division also will support the Inflation Reduction Act's expanded incentives – including tax credits and/or rebates for consumers, businesses, and owners of commercial and multifamily buildings that explicitly rely on ENERGY STAR – through both an information hub and targeted outreach and technical assistance to potential users of these incentives.

In accordance with an MOU with DOE, EPA has an obligation to review and update ENERGY STAR specifications on a regular cycle. Failure to update these specifications undermines EPA's commitments under this MOU and risks a situation where ENERGY STAR specifications would be less rigorous than DOE's regulatory standards, or national model energy codes and advanced state-level codes for new construction, which introduces the possibility of legal risk to the Agency. In FY 2024, the Agency is requesting additional resources to address the growing backlog of ENERGY STAR specifications that are overdue for review and update.

ENERGY STAR will work in the Residential Sector to enable and accelerate the adoption of energy efficiency. In FY 2024, the Program will:

- Update up to five product specifications for ENERGY STAR-labeled products to ensure top efficiency performance and complete development of a specification for up to one new product type.
- Further amend up to two ENERGY STAR specifications in response to changes in Department of Energy (DOE) minimum efficiency standards and test procedures.
- Complete the stakeholder process across all relevant commercial product specifications to prioritize labeling of efficient, electric products.
- Administer third-party certification to ensure consumer confidence in more than 75 categories for ENERGY STAR labeled products, which includes overseeing 500 recognized laboratories worldwide and more than 20 certification bodies.
- Further drive long-term climate goals by advancing the cutting edge of the current and future market through the ENERGY STAR Emerging Technology Awards and the ENERGY STAR Most Efficient recognition program, which recognizes over 3,300 product models from nearly 260 manufacturers.
- Leverage the market power of the ENERGY STAR brand through the ENERGY STAR Home Upgrade to quickly scale home energy retrofits featuring the high impact, broadly

applicable measures (*e.g.*, heat pumps and heat pump water heaters) that are critical to efficiently decarbonizing the residential sector.

- Target energy-saving resources to underserved and energy burdened households with expanded efforts to leverage the ENERGY STAR market power to advance utility-scale uptake of equitable financing approaches for home energy upgrades, a key opportunity to support environmental justice goals.
- Continue to develop and implement critical updates of program requirements for EPA's ENERGY STAR Residential New Construction programs in response to newly developed and adopted national model codes and unique states codes, such as California, to ensure that the program continues to deliver at least 10 percent energy savings; and
- Accelerate deployment of the ENERGY STAR NextGen Homes and Apartments program that provides additional recognition for new homes and apartments that include efficient electric technologies and electric vehicle charging capability.

In addition, ENERGY STAR will continue to partner with businesses and public-sector organizations to advance energy efficiency in the commercial sector. In FY 2024, the program will:

- Continue to operate and maintain ENERGY STAR Portfolio Manager, as well as deliver critical enhancements to accommodate the more than 300 commercial software vendors and utilities that use the tool, and add reporting and tracking functionality and enhanced data quality checks to increase support to corporate and federal, state and local government users;
- Update and expand ENERGY STAR building scores, used to understand how a building's energy consumption compares with similar buildings nationwide.
- Verify the efficiency of more than 6,000 buildings with EPA's ENERGY STAR label, including conducting approximately 250 spot audits.
- Provide guidance and technical assistance to the many local governments and states that are exploring or have adopted building performance standards, as well as continue to support jurisdictions that have adopted mandatory or voluntary energy benchmarking and disclosure policies that rely on EPA's ENERGY STAR Portfolio Manager and related tools; and
- Deploy a new ENERGY STAR-based certification program to recognize the next generation of existing commercial and multifamily buildings that demonstrate achievement of top efficiency plus low carbon emissions through efficient electrification and use of renewable energy.

ENERGY STAR will continue to work with partners in the industrial sector to improve efficiency and reduce costs while protecting the environment. In FY 2024, the Program will:

- Continue to support ENERGY STAR industrial partners across 33 diverse industrial sectors through webinars, focus industry meetings, company-to-company mentoring, and recognition of efficient plants.
- Update and develop new Energy Performance Indicators to incorporate key factors that impact energy use in the plant and convert electricity inputs to source energy.
- Work with, review, and audit an expected 200 industrial plants applications registered to

achieve the ENERGY STAR Challenge for Industry in which industrial sites commit to reducing their energy intensity by 10 percent within five years; and
- Deploy scalable guidance and technical assistance to increase efficiency in lower-resourced small and medium sized industries.

EPA will implement the Green Power Partnership and other activities to accelerate the transition to a carbon-pollution free electricity sector. In FY 2024, the Program will:

- Update and develop new credible resources, educational tools, and recognition of actions and leadership to incentivize all sectors of Green Power Partners.
- Foster market leadership through the Green Power Leadership Awards that focus on the aggressive actions of Partners to facilitate use of green power within their own operations, supply chains, underserved communities, and among Partner employees.
- Partner with over 130 Green Power Communities to encourage local efforts to increase their use of and investment in renewable electricity, including underserved communities that have traditionally lacked adequate access to green power.
- Promote cost-effective corporate GHG management practices that support the measurement and management of corporate-wide emissions through expanded staffing and outreach capabilities for the Center for Corporate Climate Leadership; and
- Maintain, update, and expand widely utilized tools, such as the Emissions Factor Hub, that are key to ensuring accurate and credible estimations of corporate greenhouse gas emissions and reporting practices in the measurement and management of greenhouse gas emissions.

In FY 2024, EPA will implement the State and Local Climate and Energy Program to support state, local, and tribal actions that are essential to tackling the climate crisis, reducing pollution, and promoting equity and environmental justice in clean energy programs. Focus areas of the Program will include:

- Providing technical support to dozens of state, tribal, and local governments as they implement climate and clean energy policies for efficiency, renewables, and efficient electrification; provide increased support on equity and environmental justice in clean energy policy design;
- Updating major analytical tools to enable state, tribal and local governments to develop and analyze GHG inventories, pollutant emissions reductions, and public health co-benefits of efficiency, renewables, and efficient electrification.
- Conducting outreach and training on tools to hundreds of state and local officials as well as increased collaboration with other EPA offices and regions. Focus on energy efficiency and efficient electrification analytics.
- Providing guidebooks and best practices to states and local governments on energy efficiency and efficient electrification program design through webinars and convenings for state and local policymakers; and
- Helping local governments implement heat island reduction initiatives that are a priority of vulnerable communities by promoting best practices, updating technical resources, and engaging stakeholders.

In FY 2024, EPA will continue to achieve significant reductions in climate and other harmful emissions from freight transportation by expanding SmartWay efforts to:

- Develop and refine GHG accounting protocols for freight carriers and their customers.
- Continue to provide expertise and serve as a technical test bed in support of the Agency's efforts to reduce GHG emissions.
- Continue to transition SmartWay partner tools to an online platform making it easier to benchmark and track performance and expanding access to SmartWay for smaller businesses.
- Encourage adoption of SmartWay approaches globally under international frameworks and agreements, including co-administering SmartWay with Canada and continue a SmartWay pilot in Mexico.
- Contribute to development and dissemination of an International Organization for Standardization (ISO) standard to calculate GHG from transportation operations; and,
- Update GHG requirements for federal purchases of passenger vehicles under the Energy Independence and Security Act as needed.

In FY 2024, EPA will continue to mitigate domestic methane and fluorinated greenhouse gases emissions by implementing partnership outreach programs focused on providing technical information on best practices and cost-effective technologies in the petroleum and natural gas systems, municipal solid waste landfills, livestock manure anaerobic digestion and biogas systems, coal mining, and electric power transmission sectors. EPA's *GreenChill* Advanced Refrigeration Partnership Program will continue to work with key sectors transitioning from ODS and HFCs to promoting lower global warming potential and improved more energy-efficient technologies. The Responsible Appliance Disposal Program partners achieve emissions reductions by collecting and disposing of appliances containing ODS and HFCs.

EPA also will continue implementing and promoting global methane mitigation opportunities across multiple sectors (oil and gas, coal mining, municipal solid waste, wastewater, agriculture/manure management) in support of the GMI by:

- Running the secretariat of the GMI, coordinating and organizing overall activities.
- Providing technical leadership across multiple sectors.
- Coordinating with key methane-focused initiatives such as United Nations Economic Commission for Europe, Climate & Clean Air Coalition, and the International Energy Agency; and
- Serving Administration-level priorities, such as the Global Methane Pledge.

In FY 2024, EPA will maintain and enhance the climate change website by updating scientific material and further developing web products that reach the American public and effectively communicate the causes and effects of climate change and Administration priorities. EPA also will support the State Department as the technical lead in developing both current and additional measure projections and compiling information on GHG mitigation policies and measures to assess our progress towards meeting our Nationally Determined Contribution goal. These projections and actions will be included in the upcoming first U.S. Biennial Transparency Report, as required by the U.N. Framework Convention on Climate Change and its Paris Agreement.

EPA will continue our United Nations Framework Convention on Climate Change engagement by serving as negotiators on U.S. delegations, for example, on transparency and markets, and working to assess mitigation potential and information from other countries. EPA also will review national inventory and related reports submitted by other countries, including other major economies such as Brazil, Germany, and China.

EPA will continue to improve work on climate change impacts modeling including how risks and economic impacts can be reduced under mitigation and adaptation scenarios by:

- Advancing the scientific literature on climate impacts through the Climate Change Impacts and Risk Analysis project by publishing and applying sectoral impact methodologies and reduced form approaches to improve analytical and communication capacity.
- Quantifying and monetizing the disproportionate risks of climate change on socially vulnerable populations.
- Continuing to make the Climate Change Indicators more accessible through enhanced visualization tools; and
- Collaborating with the interagency U.S. Global Change Research Program through participation in the National Climate Assessment and other key Program activities.

EPA also will analyze program data on GHG emissions from petroleum and natural gas facilities and support Agency regulatory development by:

- Developing more detailed oil and gas projections to support the nationally determined contributions under the Paris Agreement; and
- Performing technical analyses, regulatory development, regulatory impact analyses, and litigation support.

EPA also will analyze program data on greenhouse gas emissions from power plants by:

- Developing regulations, conducting regulatory impact analyses, and model emission projections to address criteria and toxic air pollutants as well as greenhouse gases from the power sector;
- Providing economic analyses and power sector modeling to inform a holistic picture of multipollutant and multimedia regulation of the sector; and
- Conducting detailed analytics and extensive public engagement to integrate environmental justice into policy development for power sector rules.

Performance Measure Targets:

(PM CPP) Million metric tons of carbon dioxide equivalent reduced annually by EPA's climate partnership programs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						486.9	500.7	513.9	$MMTCO_2e$
Actual	442.2	505.6	518.4	529.6	Data Avail 11/2023	Data Avail 11/2024			

(PM REP) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	95	65				98	98	98	Percent
Actual	96	97	96	95	99	97			
Numerator	7,828	7,821	7,867	7,722	7,935	7,877			Reports
Denominator	8,127	8,061	8,165	8,126	8,029	8,141			

(PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						273.5	273.5	182.3	$MMTCO_2e$
Actual						Data Avail 11/2023			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$951.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$60,278.0 / +37.3 FTE) This program change is an increase for programs under this program project that help reduce greenhouse gas emissions while also addressing environmental justice through an integrated approach of regulations, partnerships, and technical assistance. The increase enables EPA to take strong action on CO_2 and methane as well as high-global warming potential climate pollutants such as HFCs, as directed by the AIM Act; restores the capacity of EPA's climate partnership programs to provide essential contributions to our nation's climate, economic, and justice goals; and strengthens EPA's capacity to apply its modeling tools and expertise across a wide range of high priority work areas including supporting U.S. participation in the Paris Agreement. This investment ensures the Agency will achieve the intended outputs and outcomes represented by its climate partnership, GHG report verification, and HFC phaseout performance targets. This investment includes $7.159 million for payroll.

- (+$5,000.0) This program change is an increase for EPA, in coordination with NASA, to study and prototype capabilities for a greenhouse gas monitoring and information system that will integrate data from a variety of sources with a goal of making data more accessible and usable to federal, state, and local governments, researchers, the public, and other users.

- (+$5,000.0) This program change is an increase to support implementation of the Greenhouse Gas Reduction Fund under the Inflation Reduction Act.

- (+$185.0 / +1.0 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

Clean Air Act; Global Change Research Act of 1990; Global Climate Protections Act; Energy Policy Act of 2005 § 756; Pollution Prevention Act §§ 6602-6605; National Environmental Policy Act (NEPA) § 102; Clean Water Act § 104; Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) § 8001; American Innovation and Manufacturing (AIM) Act.

Federal Stationary Source Regulations
Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$26,821***	***$30,344***	***$47,468***	***$17,124***
Total Budget Authority	$26,821	$30,344	$47,468	$17,124
Total Workyears	103.9	124.5	165.3	40.8

Program Project Description:

The Clean Air Act (CAA) requires EPA to take action to improve and protect air quality and limit emissions of harmful air pollutants from a variety of sources. The CAA directs EPA to set National Ambient Air Quality Standards (NAAQS) for six "criteria" pollutants considered harmful to public health and the environment. The criteria pollutants are particulate matter (PM), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead (Pb). The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment. Section 109 of the CAA Amendments of 1990 established two types of NAAQS. Primary standards are set at a level requisite to protect public health with an adequate margin of safety. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects.

Sections 111, 112, and 129 of the CAA direct EPA to take actions to control air emissions of toxic, criteria, and other pollutants from stationary sources. Specifically, to address air toxics, the CAA Section 112 program provides for the development of National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of the NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed.

The CAA Section 111 program requires issuing, reviewing, and periodically revising, as necessary, New Source Performance Standards (NSPS) for certain pollutants from listed categories of new, modified, or reconstructed sources of air emissions; issuing emissions guidelines for states to apply to certain existing sources; and providing guidance on Reasonably Available Control Technology through issuance and periodic review and revision of control technique guidelines. The CAA Section 129 program further requires EPA to develop and periodically review standards of performance and emissions guidelines covering air emissions from waste combustion sources.

Sections 169A and 169B of the CAA require protection of air quality related values (AQRV) for 156 congressionally mandated national parks and wilderness areas, known as Class I areas. Visibility is one such AQRV, and Congress established a national goal of returning visibility in the Class I areas to natural conditions, *i.e.*, the visibility conditions which existed without manmade air pollution. The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting additional resources to finalize review of the Residual Risk and Technology Review (RTR) for the Mercury and Air Toxics Standards for power plants, as well as rules to limit GHG emissions from new and existing sources in the power sector and new and existing facilities in the oil and gas sector. This increase also implements a strategy to meet statutory deadlines for Risk and Technology Reviews of Maximum Achievable Control Technology standards, per corrective action commitments made in response to OIG recommendations in FY 2022 which include requesting required resources,[32] and propose or finalize actions in rulemakings with court-ordered deadlines occurring in FY 2024.

NAAQS

The President directed EPA to review the 2020 PM NAAQS and the 2020 Ozone NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. EPA requests resources for FY 2024 to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee and assess information received during the public process for rulemakings to complete these reviews. In FY 2024, EPA will continue reviewing additional NAAQS, including lead, primary nitrogen and NOx/SOx/PM Secondary reviews, make revisions, as appropriate, and requests resources commensurate to support these reviews. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

With FY 2024 resources, EPA will initiate a multi-phased process for improving air pollution benefits analysis methods to improve the science it uses to quantify benefits from air quality regulations. This is one of the learning priority areas as part of the Agency's Learning Agenda in the *FY 2022-2026 EPA Strategic Plan.* EPA will develop a draft benefits *Guidelines* document outlining best practices for incorporating new scientific information into methods for benefits analysis. This will be followed by additional reviews of specific methods and applications. This effort will help ensure transparency and confidence in the process for selecting and applying the latest science in benefits analysis. EPA also will improve tools and approaches to enable more robust analysis of program impacts on vulnerable communities. EPA will work to achieve and

[32] The EPA Needs to Develop a Strategy to Complete Overdue Residual Risk and Technology Reviews and to Meet the Statutory Deadlines for Upcoming Reviews. March 30, 2022. Pages: At-A-Glance, 6, 8, 11, 12, 14, 25, 26, & 27. https://www.epa.gov/system/files/documents/2022-03/_epaoig_20220330-22-e-0026.pdf.

maintain compliance with any existing standards. These include the ozone standards established in 2015, 2008, 1997, and 1979; the 1987 PM_{10} standards; the 2012, 2006, and 1997 $PM_{2.5}$ standards; the 2008 and 1978 lead standards;[33] the 2010 NO_2 standard;[34] the 1971 CO standard; and the 2010 SO_2 standard.[35] EPA, in close collaboration with states and tribes, will work to improve air quality in areas not in attainment with the NAAQS, including assisting states and tribes in developing CAA-compliant pollution reduction plans.

Air Toxics

Section 112(d)(6) of the CAA requires EPA to review and revise, as necessary, all NESHAP (for both major and area sources) every eight years. These reviews include compiling information and data already available to the Agency; collecting new information and emissions data from industry; reviewing emission control technologies; and conducting economic analyses for the affected industries needed for developing regulations. Similarly, Section 112(f) of the CAA requires EPA to review the risk that remains after the implementation of MACT standards within eight years of promulgation. In addition, Section 112 requires EPA to periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. The CAA Section 129 Program further requires EPA to develop and periodically review standards of performance and emissions guidelines covering air emissions from waste combustion sources.

In FY 2024, EPA will undertake multiple CAA reviews and associated rulemakings. The air toxics program will prioritize conducting reviews of NESHAP and CAA Section 129 rules, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts. EPA expects to propose or promulgate more than 15 air toxics rules in FY 2024, including those that apply to ethylene oxide source categories such as commercial sterilizers and chemical sectors. As part of this work and to meet the requirements of Executive Order 13990, EPA expects to finalize its review of the Mercury and Air Toxics Standards for power plants in FY 2024. EPA will enhance risk assessment capabilities to better identify and determine impacts of exposures to air toxics on communities. The Program will prioritize its work, as resources allow, with an emphasis on meeting court-ordered deadlines, incorporating environmental justice considerations as part of the decision-making process. FY 2024 funds also will be used to provide outreach, training, technical assistance, and capacity building to communities that may be affected by the rules we promulgate.

As called for in the Administrator's April 27, 2021, *Memorandum Regarding Per- and Polyfluoroalkyl Substances,*[36] EPA will take actions to address PFAS pollution. The Agency's new EPA Council on PFAS will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; and engage with affected states, tribes, communities, and stakeholders. This includes consideration of appropriate actions using existing CAA authorities.

As part of a forward-looking air toxics strategy, EPA will address these regulatory and emerging issues and improve access to air toxics data. The Agency will continue its transition to an approach

[33] In September 2016, EPA completed the review of the 2008 Lead NAAQS and retained the standards without revision.
[34] In April 2018, EPA completed the review of the 2010 NO_2 NAAQS and retained the standards without revision.
[35] In February 2019, EPA completed the review of the 2010 SO_2 NAAQS and retained the standards without revision.
[36] https://www.epa.gov/sites/default/files/2021-04/documents/per-and_polyfluoroalkyl_substances.memo_.signed.pdf.

that develops and shares air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. By 2024, EPA will report the most current air toxics data each year in the annual Air Trends Report and an online interactive tool instead of the previous three to four - year cycle for toxics data reporting and provide that data at increased spatial resolution.

NSPS

Section 111 of the CAA requires EPA to set NSPS for new, modified, or reconstructed stationary sources of air emissions in categories that have been determined to cause, or significantly contribute to, air pollution that may endanger public health or welfare. Section 111 also requires EPA, at least every eight years, to review and, if appropriate, revise NSPS for each source category for which such standards have been established. Under CAA Section 111, EPA must establish emission guidelines for existing sources for which air quality criteria have not been issued, are not included in the list published under Section 108(a) or are emitted from a source category that is regulated under Section 112, but to which a standard of performance would apply if such an existing source were a new source.

In meeting the requirements of Executive Order 13990 and as part of the Administration's comprehensive approach to tackling the climate crisis, EPA also will continue its work to reduce GHGs from fossil-fuel fired power plants through new and updated Clean Air Act standards. Electricity production generates the second largest share of GHG emissions. EPA will carefully craft an equitable approach informed by engagement with communities and a fresh look at pertinent policies, technology, and data. In FY 2024, EPA plans to finalize amended new source performance standards and emission guidelines applicable to power plants that it will have proposed under Section 111 in FY 2023. As part of this effort, EPA also will provide support for implementation and development of state plans. These actions are key steps toward EPA's commitment to deliver public health protections from these pollutants for communities across America.

In FY 2024, EPA will work to fulfill the CAA's Section 111 requirements for approximately six source categories in multiple rulemaking actions, all of which are subject to court or executive orders or are in litigation.

EPA also will undertake other projects, such as those required by statute or executive order, such as overdue NSPS and area source technology reviews related to source categories in addition to those described above. EPA will continue work on case-by-case regional and national NESHAP and NSPS applicability determinations.

Performance Measure Targets:

(PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						7	8	9	Percent
Actual	3	3	7	8	10	Data Avail 11/2023			

(PM NAAQS2) Percentage of people with low socioeconomic status (SES) living in areas where the air quality meets the PM2.5 NAAQS.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						90	93	97	Percent
Actual	86	82	82	81	85	Data Avail 11/2023			
Numerator	54,121,495	52,044,172	51,560,102	48,678,558	50,304,779				People
Denominator	62,631,596	63,150,683	62,687,368	60,053,454	59,241,268				

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands)

- (+$1,645.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$15,479.0 / +40.8 FTE) This program change is an increase to support the regulation of stationary sources of air pollution through developing and implementing emissions standards, regulations, and guidelines. This includes resources to finalize review of the Residual Risk and Technology Reviews (RTR) for the Mercury and Air Toxics Standards for power plants, as well as rules to limit GHG emissions from new and existing sources in the power sector and new and existing facilities in the oil and gas sector and to meet statutory and court-ordered legal deadlines. This investment includes $7.575 million in payroll costs.

Statutory Authority:

Clean Air Act.

Federal Support for Air Quality Management
Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$148,894***	***$147,704***	***$356,016***	***$208,312***
Science & Technology	$8,494	$11,343	$10,666	-$677
Total Budget Authority	$157,387	$159,047	$366,682	$207,635
Total Workyears	827.8	879.3	1,079.7	200.4

Program Project Description:

The Federal Support for Air Quality Management Program assists state, tribal, and local air pollution control agencies in the development, implementation, and evaluation of programs for the National Ambient Air Quality Standards (NAAQS); establishes standards for reducing air toxics; and helps reduce haze and improve visibility in some of America's largest national parks and wilderness areas.

Under this program, EPA develops federal measures and regional strategies that help to reduce emissions from stationary and mobile sources. Delegated states have the primary responsibility (and tribes may choose to take responsibility) for developing clean air measures necessary to meet the NAAQS and protect visibility. At the core of this program is the use of scientific and technical air quality and emissions data. EPA, working with states, tribes, and local air agencies, develops methods for estimating and measuring air emissions and monitoring air quality concentrations, collects these data, and maintains databases (*e.g.*, Emissions Inventory System, Air Quality System, etc.). EPA also supports training for state, tribal, and local air pollution professionals.

NAAQS Development

The Clean Air Act (CAA) requires EPA to set the NAAQS for six "criteria" pollutants considered harmful to public health and the environment. The criteria pollutants are particulate matter (PM), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), and lead (Pb). Section 109 of the CAA Amendments of 1990 established two types of NAAQS - primary and secondary standards. Primary standards are set at a level requisite to protect public health with an adequate margin of safety, including the health of at-risk populations. Secondary standards are set at a level requisite to protect public welfare from any known or anticipated adverse effects, such as decreased visibility and damage to animals, crops, vegetation, and buildings. The CAA requires EPA to review the science upon which the NAAQS are based and the standards themselves every five years. These national standards form the foundation for air quality management and establish goals that protect public health and the environment.

Air Pollution Information Tracking

For each of the six criteria pollutants, under Section 110 of the CAA, EPA tracks two kinds of air pollution information: air pollutant concentrations based on actual measurements in the ambient (outside) air at monitoring sites throughout the country; and pollutant emissions based on engineering estimates or measurements of the total tons of pollutants released into the air each year.

Air Quality Management Planning

Under CAA Section 110, EPA develops regulations and guidance to clarify requirements for state and local air agencies for developing State Implementation Plans (SIPs) for implementing the NAAQS. SIPs are the plans that ensure attainment and maintenance of the NAAQS. EPA works with state and local governments to ensure the technical integrity of emission source controls in SIPs and with tribes on Tribal Implementation Plans (TIPs). EPA also reviews SIPs to ensure they are consistent with applicable requirements of the CAA and takes regulatory action on SIP submissions consistent with CAA responsibilities.

New Source Review (NSR) Preconstruction Permit Program

The NSR preconstruction permit program in Title I of the CAA is a part of state plans to attain and maintain the NAAQS. The two primary aspects of this program are the Prevention of Significant Deterioration program, described in Section 165 of the CAA, and the Nonattainment NSR program, described in various parts of the CAA, including Sections 173 and 182.

Outer Continental Shelf (OCS) Air Permit Program

Section 328 of the CAA establishes requirements for managing and minimizing air pollution through the permitting of activities located offshore of the United States along the Pacific, Arctic (except the North Slope Borough of Alaska), and Atlantic Coasts, and in certain parts of the Gulf Coast. Additional specific requirements are codified in rulemaking. To support the nation's transition to clean energy, EPA is developing policy and guidance applicable to offshore wind projects being constructed on the OCS and will devote increased resources to this work in FY 2024 to support the Administration's goal of deploying 30 gigawatts of offshore wind power by 2030 as part of the federal government's efforts to tackle climate change.

Protection of Visibility in Class I Areas

Sections 169A and 169B of the CAA require protection of visibility for 156 congressionally mandated national parks and wilderness areas known as Class I areas. Congress established a national goal of returning visibility in the Class I areas to natural conditions (*i.e.*, the visibility conditions that existed without manmade air pollution). The Regional Haze Rule sets forth the requirements that state plans must satisfy to make reasonable progress towards meeting this national goal.

Control of Air Toxics

Toxic air pollutants are known to cause or are suspected of causing increased risk of cancer and other serious health effects, such as neurological damage and reproductive harm. EPA assists state, tribal, and local air pollution control agencies in characterizing the nature and scope of their air toxics issues through modeling, emission inventories, monitoring, and assessments. For example, EPA maintains updated air toxic emission and exposure data, incorporating current

toxicity data to provide recent information on air toxics risks from a national perspective and at a local scale, where possible. EPA also supports programs that reduce inhalation risk and multi-pathway risk posed by deposition of air toxics to water bodies and ecosystems, facilitates international cooperation to reduce transboundary and intercontinental air toxics pollution, develops and improves risk assessment methodologies for toxic air pollutants, and provides training for air pollution professionals.

The provisions of the CAA that address the control of air toxics are located primarily in Section 112 and 129. Section 112 requires issuing National Emission Standards for Hazardous Air Pollutants (NESHAP) for major sources and area sources; the assessment and, as necessary, regulation of risks remaining after implementation of NESHAP that are based on Maximum Available Control Technology (MACT); the periodic review and revision of all NESHAP to reflect developments in practices, processes, and control technologies; and associated national guidance and outreach. In addition, EPA must periodically review, and, where appropriate, revise both the list of air toxics subject to regulation and the list of source categories for which standards must be developed. EPA has promulgated rules for approximately 180 source categories to control air toxics under Section 112 and is continually engaged in their periodic review and revision. EPA will enhance risk assessment capabilities to better identify and determine impacts of exposures to air toxics on communities, including communities impacted by environmental justice issues.

The Program will prioritize its work, as resources allow, with an emphasis on meeting court-ordered deadlines and incorporating environmental justice considerations as part of the decision-making process. Section 129 of the CAA requires a similar approach to review regulations applicable to solid waste incinerators, as well as issuance of new source performance standards and emission guidelines pursuant to CAA Section 111, the review of state plans to implement those guidelines, and development of federal plans to do so if necessary. EPA has promulgated rules for approximately six categories of solid waste incineration units to control air toxics and criteria pollutants under Section 129, and EPA is continually engaged in their periodic review and revision. In addition to this regulatory work, EPA also provides determinations to states and industry seeking information about source-specific applicability of these regulations. EPA also is making improvements to the database that tracks applicability determinations.

Climate Change

The President has prioritized action to tackle climate change with a focus on an equitable transition to clean energy. These plans call for cuts in greenhouse gas (GHG) pollution to reduce the contribution of human activities to climate change and its impacts on public health, while investing in communities that are on the front line of impacts. EPA issues regulations to limit GHGs and assists states, tribes, and local air pollution control agencies in the development, implementation, and evaluation of programs to reduce GHG pollution. The Program also supports the Agency's work with international partners to combat short-lived climate pollutants. These air pollutants, including black carbon (a component of PM), methane, and tropospheric ozone, are contributing to and accelerating the impacts of climate change. In addition, wildfire smoke is expected to increase as a result of a changing climate, and this increase will impact an increasingly greater number of people.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting an additional $90.1 million and 193.4 FTE to support critical work to implement climate and clean air regulations and programs both at headquarters and in the regions. This includes activities such as reviewing and taking action on state plans required under forthcoming GHG standards, priority NAAQS work, taking timely action on SIPs, reducing the SIP backlog, air monitoring and analysis, and environmental justice activities. Also, the OIG[37,38,39,40] and the GAO[41] have documented several programmatic goals that are not being fulfilled as a result of insufficient resources year after year in both Headquarters and the Regions. EPA's corrective actions commit the Agency to seeking resources for these activities.

Section 111(d) of the Clean Air Act provides states with a lead implementing role and considerable flexibility, and the development and implementation of the emission guidelines will require extensive work to develop program implementation infrastructure; engage states, tribal nations, and communities; assess environmental justice impacts; evaluate state plans; and ensure consistent application of the emissions guidelines nationwide. Resources will be used to continue developing a standard reporting system for states to use, or adapt as needed, for submitting plans and tracking their compliance data, and ensuring that communities have access to that data.

The request also includes support for NAAQS review work and implementation activities, many of which are increasingly complex. Critical to successful implementation is timely issuance of rules and guidance documents, ongoing outreach to states and other entities as well as development of NAAQS implementation and permitting-related tools. EPA will engage with states and Tribes to develop guidance to assist air programs with meeting implementation deadlines. These critical resources also will support efforts to reduce the SIP backlog as well as ensure timeliness of review of incoming SIPs, permitting needs (both NAAQS and GHG-related, onshore and offshore), and air quality monitoring and analysis needs. This increase also will enhance EPA's abilities to forecast where smoke will impact people; identify and communicate when and where smoke events are occurring through monitoring and *AirNow*'s Fire and Smoke Map; build community capacity to be Smoke Ready and reduce smoke exposure; and strengthen internal as well as state, local, and tribal capacity to better coordinate and communicate regarding wildfire smoke and address related regulatory activities.

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[37] EPA Has Reduced Its Backlog of State Implementation Plans Submitted Prior to 2013 but Continues to Face Challenges in Taking Timely Final Actions on Submitted Plans. June 14, 2021. Pages: At-A-Glance, 11, 13, 14, 15, 16, 23, 25, 27, 29, & 32. https://www.epa.gov/sites/default/files/2021-06/documents/_epaoig_20210614-21-e-0163__0.pdf.

[38] EPA's Title V Program Needs to Address Ongoing Fee Issues and Improve Oversight. January 12, 2022. Pages: At-A-Glance, 15, 19, 22, & 25. https://www.epa.gov/system/files/documents/2022-01/_epaoig_20220112-22-e-0017.pdf.

[39] The EPA Needs to Develop a Strategy to Complete Overdue Residual Risk and Technology Reviews and to Meet the Statutory Deadlines for Upcoming Reviews. March 30, 2022. Pages: At-A-Glance, 6, 8, 11, 12, 14, 25, 26, & 27. https://www.epa.gov/system/files/documents/2022-03/_epaoig_20220330-22-e-0026.pdf.

[40] EPA's Processing Times for New Source Air Permits in Indian Country Have Improved, but Many Still Exceed Regulatory Time Frames. April 22, 2020. Pages: At-A-Glance, 9, 15, 16, 24, & 31. https://www.epa.gov/sites/default/files/2020-04/documents/_epaoig_20200422-20-p-0146.pdf.

[41] AIR POLLUTION: Opportunities to Better Sustain and Modernize the National Air Quality Monitoring System. November 12, 2020. https://www.gao.gov/assets/gao-21-38.pdf.

Addressing Climate Change

EPA expects to take final action under Sections 111 and 112 in FY 2024 for actions that were proposed in FY 2023 in accordance with Executive Order 13990, which directed EPA to revise and address as appropriate the regulation of GHGs from fossil-fuel fired power plants. Electricity production generates the second largest share of GHG emissions. EPA will carefully craft an equitable approach informed by engagement with communities and a fresh look at the policies, technology, and data. In FY 2024, EPA plans to finalize amended new source performance standards and emission guidelines applicable to power plants that it will have proposed under Section 111 in FY 2023. Additionally, EPA expects to finalize its review of the Mercury and Air Toxics Standards for power plants in FY 2024.

EPA will continue to work with other countries to take action to address climate change. EPA will consider the results of a range of international assessments to address the climate impacts of short-lived climate pollutants. Reducing emissions of these pollutants can create near-term climate and public health benefits. EPA will continue to identify the most significant domestic and international sources of black carbon and ozone precursor emissions by working with the multilateral Climate and Clean Air Coalition (CCAC), the Arctic Council, the Convention on Long-Range Transboundary Air Pollution (LRTAP), and other related international efforts. Based on these findings and enhanced analytical capabilities, EPA will pursue effective steps for reducing these emissions. For instance, EPA is scaling up on-line tools and resources focused on assisting low-and middle-income countries to implement best practices for addressing air pollution in ways that achieve climate co-benefits.

In FY 2024, the Agency will provide on-the-ground resources to assist overburdened and underserved communities as they work to engage on EPA's regulatory efforts and address the impacts of climate change. These community resource coordinators will work with external partners, such as community stakeholder organizations, other federal agencies, state, local and regional governments, private sector entities, academic institutions, and foundations to assist communities as they begin to plan for climate change and implement actions to increase resilience to climate impacts.

Finally, in FY 2024 EPA is requesting an increase of $1.1 million, including payroll, and one FTE to support implementation of EPA's Climate Adaptation Action Plan. In particular, this increase will support priority commitments, such as actions to integrate climate adaptation into EPA programs, policies, and processes, efforts to address climate adaptation science and data needs, and efforts to consult and partner with outside stakeholders.

Improving Air Quality

In FY 2024, EPA requests increased resources to support efforts to maintain and rebuild programmatic capabilities that focus on protecting clean air. Air quality has improved significantly for communities across the country since passage of the CAA in 1970 (with amendments in 1977 and 1990). Between 1990 and 2021, for example, national average levels have decreased by 21 percent for ozone, 32 percent for coarse particulate matter, 91 percent for sulfur dioxide, and 98 percent for lead.[42] In FY 2024, EPA will continue to prioritize key activities in support of attainment

[42] For additional information on air quality trends, please see the Air Quality -National Summary at: https://www.epa.gov/air-trends/air-quality-national-summary and at *Our Nation's Air: Status and Trends Through 2021*.

of the NAAQS and implementation of stationary source regulations by state, tribal, and local air agencies. This includes activities in key nonattainment areas along the U.S.-Mexico border as part of U.S. commitments under the *Border 2025* agreement.

NAAQS Review

In FY 2024, EPA will continue its CAA-mandated responsibilities to review the science upon which the NAAQS are based and the standards themselves. Periodic review of the NAAQS requires significant resources and analysis of scientific and technical information to ensure for each NAAQS that public health is protected with an adequate margin of safety, considering at-risk populations.

The President directed EPA to review the 2020 PM NAAQS and the 2020 Ozone NAAQS in accordance with Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. EPA expects to complete this review in FY 2023, and resources in FY 2024 are needed to better incorporate science and input from the reestablished Clean Air Scientific Advisory Committee and to assess information received during the public process for rulemakings to finalize other NAAQS reviews, as required under the Clean Air Act. In FY 2024, EPA will continue reviewing the lead, primary nitrogen oxides and secondary NAAQS for sulfur oxides, nitrogen oxides, and particular matter, and has requested resources commensurate to support these reviews. Each review involves a comprehensive reexamination, synthesis, and evaluation of scientific information, the design and conduct of complex air quality and risk and exposure analyses, and the development of a comprehensive policy assessment providing analysis of the scientific basis for alternative policy options.

EPA will continue to administer the NAAQS by reviewing state implementation plans and decisions consistent with statutory obligations; taking federal oversight actions, such as action on SIP and TIP submittals; and developing regulations and policies to ensure continued health and welfare protection during the transition between existing and new standards. EPA will work with air agencies to determine the need for additional federal rulemakings and guidance documents to support state and tribal efforts to meet CAA SIP/TIP requirements, in alignment with capacity and priorities. EPA will provide technical and policy assistance to states and tribes developing or revising SIPs/TIPs. To the extent that the above-referenced NAAQS reviews result in a change to the standards, air quality designations related activities for the changed standard(s) would be required. The timing of this work would depend on when the final NAAQS are promulgated.

NAAQS Nonattainment Areas

EPA, in close collaboration with states and tribes, will work to improve air quality in areas not in attainment with the NAAQS, including identifying and, where necessary, redesignating to nonattainment areas that previously were in attainment. The Agency will continue to implement changes to improve the efficiency and effectiveness of the SIP process, with a goal of maximizing the timely processing of state-requested SIP actions and reducing the backlog. The Agency also will act on redesignation requests of nonattainment areas to attainment in a timely manner. EPA will maximize use of its comprehensive, online State Planning Electronic Collaboration System (SPeCS) to promote efficiencies for states to submit SIP revisions to EPA, and for EPA to track and process state submittals. Since it launched in January 2018, more than 1,500 SIP submittals (about

90 percent official submissions and 10 percent draft submittals) have come through SPeCS, and more than 400 users have registered from all 50 states and eight air districts. EPA also will further improve SPeCS functionality and work to provide additional transparency to the public about NAAQS nonattainment areas, state SIP requirements, and related EPA actions.

SIPs for Regional Haze

In FY 2024, EPA will continue reviewing and taking action on regional haze SIP revisions for the second planning period (and working on any remaining first planning period obligations). EPA will continue to work on any outstanding SIP matters and continue providing technical assistance to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory obligations. Consistent with this, EPA may be undertaking work on Federal Implementation Plans (FIPs) as needed to fully implement the Regional Haze requirements. Under the Regional Haze Rule, states are required to submit updates to their plans to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals. EPA may also be working on regulatory updates for future planning periods.

Fulfilling Legal Obligations

One of EPA's priorities is to fulfill its statutory and court-ordered obligations. Section 112 of the CAA sets deadlines for EPA to review and update, as necessary, all NESHAP every eight years, accounting for developments in practices, processes, and technologies related to those standards. Section 112 also requires that EPA conduct risk assessments within eight years of promulgation of each MACT-based NESHAP to determine if it appropriately protects public health and to revise it as needed and that EPA review and revise, as appropriate, the list of hazardous air pollutants. Sections 111 and 129 similarly require review of rules promulgated under those programs to address air pollution. In FY 2024, EPA will undertake these required reviews and associated rulemakings. EPA will enhance risk assessment capabilities to better identify and determine impacts on communities. The Program will prioritize conducting reviews of NESHAP and rules issued under Sections 111 and 129, many of which are subject to court-ordered or court-entered dates or are actions otherwise required by courts and incorporating environmental justice considerations as part of the decision-making process. From this work, EPA expects to propose or promulgate more than 20 rules in FY 2024.

Technical Assistance to External Government Partners

EPA will continue to assist other federal agencies and state and local governments in implementing the conformity regulations promulgated pursuant to Section 176 of the CAA. These regulations require federal agencies undertaking activities in nonattainment and maintenance areas to ensure that the emissions caused by their activities will conform to the SIP.

In FY 2024, EPA also will continue to provide technical assistance to state, local, and tribal air agencies for NSR, OCS, and Title V (operating) permits. This support will occur at appropriate times and as requested, consistent with applicable requirements, before and during the permitting process. EPA expects to implement such support in an efficient manner and consistent with established timeframes for applicable oversight of state, tribal, and local air agencies during the permitting process. Where EPA is the permitting authority for wind energy projects located on the OCS, the Agency will prioritize timeliness in providing guidance, feedback, and review of permit applications consistent with CAA and FAST Act (Title 41) requirements. EPA's Electronic

Permitting System and Title V petition submittal portal will improve EPA interaction with state, local, and tribal air agencies and the general public, and improve data availability and transparency.

EPA will assist state, tribal, and local air agencies with various technical activities. EPA develops and provides a broad suite of analytical tools, such as: source characterization analyses; emission factors and inventories; statistical analyses; source apportionment techniques; quality assurance protocols and audits; improved source testing and monitoring techniques; source-specific dispersion and regional-scale photochemical air quality models; and augmented cost/benefit tools to assess control strategies.[43] The Agency will maintain the core function of these tools (*e.g.*, integrated multiple pollutant emissions inventory, air quality modeling platforms, etc.) to provide the technical underpinnings for scientifically sound, efficient, and comprehensive air quality management by state, local, and tribal agencies.

In FY 2024, EPA will continue to provide information and assistance to Tribes, states, and communities through documents, websites, webinars, and training sessions on tools to help them build capacity and to provide input into environmental justice assessments that can inform risk reduction strategies for air toxics. The Agency will continue to communicate and effectively collaborate with communities to address a myriad of environmental concerns.

In FY 2024, EPA will provide support for critical response to the growing number of wildfire smoke events through real-time, accessible air quality information, as well as supporting communication documents and websites. The Agency will also enhance its partnerships across the federal government, such as the Center for Disease Control and the U.S. Forest Service to ensure a consistent and coherent response and deployment of technical assistance to address the public health impacts of wildland fire smoke. EPA expects this work to support tribal, state, local, and community needs to prepare for an increasing number of wildfires and the impacts those fires have on public health across the country.

In FY 2024, state and local air agencies will continue to lead the implementation of the National Air Toxics Trends Sites (NATTS). The NATTS Program is designed to capture the impacts of widespread air toxics and is comprised of long-term monitoring sites throughout the Nation.[44] EPA will continue to consult on priority data gaps to improve the assessment of population exposure to toxic air pollution.

Maintaining Analytical Capabilities and Continuing Data Management

EPA will maintain baseline analytical capabilities required to develop effective regulations including: analyzing the economic impacts and health benefits of regulations and policies; developing and refining source sampling measurement techniques to determine emissions from stationary sources; updating dispersion models for use in source permitting; and conducting air quality modeling that characterizes the atmospheric processes that disperse a pollutant emitted by a source. Resources from the Science and Technology appropriation component of this program support the scientific development of these capabilities.

[43] For additional information, please see: https://www.epa.gov/technical-air-pollution-resources.
[44] For additional information, please see: https://www.epa.gov/amtic/air-toxics-ambient-monitoring.

The President's FY 2024 budget request maintains the $100 million for a community air quality monitoring and notification program requested in the FY 2023 President's Budget to support efforts to deliver environmental justice for overburdened and marginalized communities. This community air quality monitoring and notification program will be able to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution, as described in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. In FY 2024, the Agency will continue to work closely with states, tribes, and local air quality agencies to develop the most effective approach to meet community concerns. The community air quality monitoring and notification program funds will support several efforts, including tribal, state, and local grants that supplement the national ambient air quality monitoring network, including enhancement of air quality characterization in communities; systems to manage and deliver real-time air quality data to the public; and management and implementation activities performed by the Agency.

The American Rescue Plan provided resources for the Agency to award community monitoring grants and to support air quality monitoring at the community level. In FY 2024, EPA is requesting additional resources to support community monitoring grants and to deploy and maintain mobile monitoring equipment acquired with American Rescue Plan funds to help address short-term community monitoring needs.

In FY 2024, EPA will continue to operate and maintain the Air Quality System (AQS), which houses the Nation's regulatory ambient air quality data. EPA also will continue to support the AQS Data Mart, which provides that same ambient air quality data to the scientific community and to the general public. The Agency's national real-time ambient air quality data system, AirNow, will maintain baseline operations. The public increasingly relies on AirNow for ambient air quality information during wildfires. In FY 2024, EPA will continue improving the Fire and Smoke map by engaging tribal, state, and local agencies for input.

The Agency has started a multi-year development process that, when completed, will allow all ambient air quality data to be submitted to a single information system. This single system will greatly improve the processing and availability of ambient air quality data to Agency regulatory partners and to the public. Additional FY 2024 funding is requested to start the development of this system, which will modernize AirNow, AQS, and the AQS Data Mart.

EPA will continue to operate and maintain the Emissions Inventory System (EIS), which quality assures and stores current and historical emissions inventory data and supports the development of the National Emissions Inventory (NEI). EPA, states, and others use the NEI to aid in state and local air agency SIP development, serve as a vital input to air quality modeling, help analyze public health risks from air toxics, develop strategies to manage those risks, and support multi-pollutant analysis for air emissions. The Agency will enhance EIS to support the revised Air Emissions Reporting Requirements (AERR) rule and other user-focused needs.

EPA is streamlining emissions data reporting for multiple Agency programs through the Combined Air Emissions Reporting System (CAERS). This system is a central hub that takes a single submission of data in a single format and sends it to the appropriate EPA program system. When fully developed, CAERS is expected to reduce the cost to industry by only reporting emissions data for multiple Agency programs to one system and to the government by better managing emissions data and making that data available in a timely fashion.

In FY 2024, EPA will continue a multi-phased process for strengthening air pollution benefits analysis methods to improve the science it uses to quantify benefits from air quality regulations. EPA will develop a draft benefits *Guidelines* document outlining best practices for incorporating new scientific information into methods for benefits analysis. This will be followed by additional reviews of specific methods and applications. This effort will help ensure transparency and confidence in the process for selecting and applying the latest science in benefits analysis. EPA also will improve tools and approaches to enable more robust analysis of program impacts on communities with environmental justice concerns and vulnerable populations.

As part of a forward-looking air toxics strategy, EPA will address regulatory and emerging issues and improve access to air toxics data. The Agency will continue implementation of a new approach that develops and shares air toxics data faster and more regularly to the public, allowing for increased transparency and the ability to see trends and risks over time. By 2024, EPA will continue reporting the most current air toxics data each year in the annual Air Trends Report and an online interactive tool, instead of the previous three to four-year cycle for reporting air toxics data, and providing that data at an increased spatial resolution.

Performance Measure Targets:

(PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						7	8	9	Percent
Actual	3	3	7	8	10	Data Avail 11/2023			

(PM NAAQS2) Percentage of people with low socioeconomic status (SES) living in areas where the air quality meets the PM2.5 NAAQS.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						90	93	97	Percent
Actual	86	82	82	81	85	Data Avail 11/2023			
Numerator	54,121,495	52,044,172	51,560,102	48,678,558	50,304,779				People
Denominator	62,631,596	63,150,683	62,687,368	60,053,454	59,241,268				

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$17,125.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$100,000.0) This program change is an increase to develop and implement a community air quality monitoring and notification program to provide real-time data to the public in areas with greatest exposure to harmful levels of pollution. This increase supports work to

reduce GHG emissions to tackle the climate crisis and ensure equitable environmental outcomes to advance environmental justice.

- (+$89,903.0 / +193.4 FTE) This program change is an increase to support critical work to implement climate and clean air regulations and programs. This includes activities such as reviewing and taking action on state plans required under forthcoming GHG standards, priority NAAQS work, taking timely action on SIPs, reducing the SIP backlog, air monitoring and analysis, and environmental justice activities. This investment includes $35.870 million in payroll costs.

- (+$1,284.0 / +1.0 FTE) This program change is an increase to support implementation of EPA's Climate Adaptation Action Plan. In particular, this increase will support priority commitments, including the actions within the Office of Air and Radiation's Climate Change Adaptation Implementation Plan to integrate climate adaptation into EPA programs, policies, and processes, efforts to address climate adaptation science and data needs, and efforts to consult and partner with outside stakeholders. This investment includes $184.0 thousand in payroll costs.

Statutory Authority:

Clean Air Act.

Stratospheric Ozone: Domestic Programs
Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$7,937***	***$6,951***	***$72,152***	***$65,201***
Total Budget Authority	$7,937	$6,951	$72,152	$65,201
Total Workyears	21.8	28.2	52.2	24.0

Program Project Description:

EPA's stratospheric ozone protection program implements provisions of the Clean Air Act (CAA) which facilitates a global phaseout of ozone-depleting substances (ODS); the American Innovation and Manufacturing (AIM) Act of 2020 to phase down climate-damaging hydrofluorocarbons (HFCs); and the *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol). These actions help protect both the climate system and the stratospheric ozone layer, which shields all life on Earth from harmful solar ultraviolet (UV) radiation.

Scientific evidence demonstrates that ODS used around the world destroy the stratospheric ozone layer,[45] which raises the incidence of skin cancer, cataracts, and other illnesses through overexposure to increased levels of UV radiation.[46] Based on recent updates to EPA's peer-reviewed Atmospheric and Health Effects Framework model, the Montreal Protocol is expected to prevent approximately 443 million cases of skin cancer, 2.3 million skin cancer deaths, and 63 million cases of cataracts for people in the United States born in the years 1890–2100.[47] EPA developed this model to better understand the benefits to public health of stratospheric ozone protection. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century.

The AIM Act addresses the climate impact of HFCs by phasing down their production and consumption, maximizing reclamation and minimizing releases of HFCs and their substitutes from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. A global phasedown of HFCs is expected to prevent up to 0.5 °C of global warming by 2100.

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[45] World Meteorological Organization (WMO). Scientific Assessment of Ozone Depletion: 2014. Global Ozone Research and Monitoring Project–Report No. 56, Geneva, Switzerland, 2014.
[46] Fahey, D.W., and M.I. Hegglin (Coordinating Lead Authors), Twenty questions and answers about the ozone layer: 2014 Update, In Scientific Assessment of Ozone Depletion: 2014, Global Ozone Research and Monitoring Project–Report No. 56, World Meteorological Organization, Geneva, Switzerland, 2014.
Available on the internet at: https://csl.noaa.gov/assessments/ozone/2014/twentyquestions/.
[47] U.S. Environmental Protection Agency (EPA). Updating the Atmospheric and Health Effects Framework Model: Stratospheric Ozone Protection and Human Health Benefits. EPA: Washington, DC. May 2020. Available on the internet at: https://www.epa.gov/sites/production/files/2020-04/documents/2020_ahef_report.pdf.

EPA uses a combination of regulatory and partnership programs to implement Title VI of the CAA and the AIM Act and to further the protection of the ozone layer and climate system. Title VI provides for a phaseout of production and consumption of ODS and requires controls on their use, including banning certain emissive uses, requiring labeling to inform consumer choice, and requiring sound servicing practices for the use of refrigerants in air conditioning and refrigeration appliances. Title VI also prohibits venting ODS and their substitutes and requires listing of alternatives that reduce overall risks to human health and the environment, ensuring that businesses and consumers have alternatives that are safer for the ozone layer than the chemicals they replace.

The AIM Act provides for a phasedown of production and consumption of HFCs in the United States by 85 percent, supports industry's transition to next-generation technology, and requires management of HFCs and its substitutes. In 2021, EPA issued a final rule establishing an allowance allocation program to implement the phasedown, as well as robust compliance assurance and enforcement mechanisms to provide a level playing field for producers and importers of HFCs and ensure the program delivers the intended environmental benefits. EPA also worked with U.S. Customs and Border Protection to create an interagency task force to prevent and deter illegal trade in HFCs and support the enforcement of the phasedown.

As a signatory to the Montreal Protocol, the U.S. is committed to ensuring that our domestic program is at least as stringent as international obligations, and to regulating and enforcing the terms of the Montreal Protocol respective of domestic authority. In 2007, with U.S. leadership, the Parties to the Montreal Protocol agreed to a more aggressive phaseout for ozone-depleting hydrochlorofluorocarbons (HCFCs) equaling a 47 percent reduction in overall emissions during the period 2010 – 2040. The adjustment in 2007 also called on Parties to the Montreal Protocol to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate.[48] The CAA provides the necessary authority to ensure EPA can collect and validate data, and where appropriate, report data on production and consumption of ODS on behalf of the United States.[49] The Parties to the Montreal Protocol also agreed to the Kigali Amendment in 2016,[50] which seeks to globally phase down the production and consumption of HFCs consistent with the AIM Act. The United States ratified the Kigali Amendment on October 31, 2022. EPA will use the authority in the AIM Act to collect and validate data and report data on production and consumption of HFCs on behalf of the United States.

Partnership programs are calibrated to increase benefits by focusing on specific areas where the Agency has identified significant opportunities. The Responsible Appliance Disposal (RAD) Program[51] is a partnership that protects the ozone layer and reduces emissions of greenhouse gases through the recovery of ODS and HFCs from old refrigerators, freezers, window air conditioners, and dehumidifiers prior to disposal. RAD has more than 50 partners, including manufacturers, retailers, utilities, and state governments. The GreenChill Partnership[52] helps

[48] *Montreal Protocol Decision XIX/6: Adjustments to the Montreal Protocol with regard to Annex C, Group I, substances (hydrochlorofluorocarbons).*

[49] The United States ratified the Kigali Amendment on September 21, 2022, providing EPA the authority under the AIM Act to collect the data needed for reporting on HFCs under the Montreal Protocol.

[50] Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Kigali 15 October 2016, found at: https://treaties.un.org/doc/Publication/CN/2016/CN.872.2016-Eng.pdf.

[51] For more information, please visit: https://www.epa.gov/rad.

[52] For more information, please visit: http://www.epa.gov/greenchill.

supermarkets transition to environmentally friendlier refrigerants, reduce harmful refrigerant emissions, and move to advanced refrigeration technologies, strategies, and practices that lower the industry's impact on the ozone layer and climate. The Program includes stores in all 50 states and represents over 30 percent of the United States' supermarkets. GreenChill partners are reducing refrigerant leak rates to half the estimated national average and developing annual plans for further improvements.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024 an additional $59.4 million and 24 FTE are requested to implement provisions in the American Innovation and Manufacturing Act to phase down the use of HFCs, to facilitate U.S. entry to the Kigali amendment to the Montreal Protocol, and to restore staff capacity around efforts to tackle the climate crisis. An additional $5 million is requested for the development of a new grant program to assist small businesses with the purchase of specialized equipment for the recycling, recovery, or reclamation of a substitute for a regulated substance as authorized in the AIM Act.

Title VI of the Clean Air Act and Montreal Protocol Activities

In carrying out the requirements of the CAA and the Montreal Protocol in FY 2024, EPA will continue to meet its ODS consumption caps and work toward the required gradual reduction in production and consumption of ODS. To meet the FY 2026 long-term performance goal for lowering consumption of HCFCs to 76.2 tons per year of ozone-depletion potential,[53] EPA will: issue allocations for HCFC production and import in accordance with the requirements established under CAA Sections 605 and 606; review petitions to import used ODS under sections 604 and 605; manage information that industry identifies as confidential under CAA Section 603; and implement regulations concerning the production, import, and export of ODS and maintenance of the tracking system used to collect the information. In FY 2024, EPA anticipates finalizing a rule on feedstock uses of ODS that was proposed in FY 2023. EPA also will prepare and submit the annual report under Article 7 of the Montreal Protocol on U.S. consumption and production of ODS consistent with the treaty.[54]

EPA will continue to implement the CAA Section 608 and 609 refrigerant management requirements related to the use and emission of ODS, HFCs, and other substitutes.

CAA Section 612 requires continuous review of alternatives for ODS through EPA's Significant New Alternatives Policy (SNAP) Program[55] to both find those that pose less overall risk to human health and the environment and ensure a smooth transition to safer alternatives. Through these

[53] The HCFC consumption cap of 15,240 ODP-weighted metric tons for the U.S. was effective January 1, 1996, and became the U.S. consumption baseline for HCFCs.
[54] The Article 7 report prepared by EPA on behalf of the United States contains chemical-specific production, import and export data that is not available publicly. To protect potential confidential information the report is not available on the internet; however, the data included in the report is aggregated and available at: https://ozone.unep.org/countries/profile/usa.
[55] For more information, please visit: https://www.epa.gov/snap.

evaluations, SNAP generates lists of acceptable and unacceptable substitutes for approximately 50 end-uses across eight industrial sectors. In FY 2024, EPA expects to list through notice as well as propose notice-and-comment rulemaking that would expand the list of acceptable lower-GWP alternatives, particularly for end-uses where there is an urgent need for more options such as certain air-conditioning and refrigeration applications as well as fire suppression, which also will support implementation of the AIM Act. EPA also will continue to work towards ensuring the uptake of safer alternatives and technologies, while supporting innovation, and ensuring adoption of alternatives through support for changes to industry codes and standards. EPA also anticipates finalizing a rule in FY 2024 that addresses court decisions concerning the extent to which manufacturers must replace HFCs with substitute substances.

With the decline in allowable ODS production, a significant stock of equipment that continues to use ODS will need access to recovered and recycled/reclaimed ODS to allow for proper servicing. EPA will continue to review available market and reported data to monitor availability of recycled and reclaimed ODS where production and import of new material is phased out to support this need. In addition, EPA will continue to implement a petition process to allow for the import of used ODS (primarily halon) for fire suppression purposes. EPA also will implement other provisions of the Montreal Protocol, including exemption programs to allow for a continued smooth phaseout of ODS, particularly for laboratory and analytical uses, feedstock, process agents, and HCFCs used consistent with the servicing tail.[56]

AIM Act Implementation Activities

In FY 2024, the Agency will continue to implement the AIM Act HFC phasedown through an allowance allocation program established in FY 2021, and this work will support implementation of EPA's Agency Priority Goal. In FY 2024, as resources allow, the Agency will promulgate rulemakings to establish requirements for the management of HFCs and HFC substitutes in equipment, distribute grants to support technology transition and equipment transition, and provide program support for and coordination of implementation efforts within EPA as well as with other federal agencies.

The Agency will continue to implement and administer an electronic HFC reporting system and develop additional tracking, review, and data tools to better ensure compliance with the phasedown regulations, and work with other agencies to prevent illegal imports. In FY 2024, additional resources are requested to implement innovative IT solutions, such as a QR system and database integration across EPA and Customs and Border Patrol databases. Specifically, EPA will: ensure that the phasedown is not undermined by illegal imports; finalize multi-pronged set of rulemakings to be proposed in FY 2023 that will establish requirements for the management of HFCs and HFC substitutes in equipment servicing, repair, disposal, or installation, as appropriate; support enforcement by EPA and across the government by continuing to lead the interagency HFC taskforce, and stand up new protocols for rules finalized in FY 2023 addressing products containing HFCs. EPA also will educate stakeholders on HFC phasedown requirements and launch a container tracking system. EPA will implement a regulation finalized in FY 2023 to issue allowances for HFC production and consumption for calendar years 2024 and future years. The Agency also will complete a review required by the AIM Act and undertake rulemaking on whether to reauthorize the issuance of application-specific allowances for the six uses of HFCs

[56] EPA will implement a rule on process agents that was finalized in FY 2023.

identified in subsection (e)(4)(B) beyond 2025. Subsection (e)(4)(B) includes the following applications that use HFCs:

- a propellant in metered dose inhalers.
- defense sprays.
- structural composite preformed polyurethane foam for marine use and trailer use.
- the etching of semiconductor material or wafers and the cleaning of chemical vapor deposition chambers within the semiconductor manufacturing sector.
- mission-critical military end uses, such as armored vehicle engine and shipboard fire suppression systems and systems used in deployable and expeditionary applications; and
- onboard aerospace fire suppression.

In FY 2024, under subsection (h) of the AIM Act, EPA will finalize and begin implementing a notice and comment rulemaking proposed in FY 2023 to control certain practices, processes, or activities regarding: 1) the servicing, repair, disposal, or installation of equipment that involves a regulated substance; 2) a substitute for a regulated substance; 3) the reclaiming of a regulated substance used as a refrigerant; or 4) the reclaiming of a substitute for a regulated substance used as a refrigerant.

In FY 2024, under subsection (i) of the AIM Act, the Agency will finalize and begin implementing regulations to restrict use of HFCs in products and equipment within certain specific sectors or subsectors where HFCs are used, promoting a transition to next-generation technologies. EPA will implement new reporting tools, upgrade existing data systems, and develop additional compliance mechanisms to implement this regulation. Other activities under subsection (i) include granting and/or denying petitions for sector-based restrictions on HFCs.

The AIM Act also authorizes EPA to establish a grant program for small businesses for purchase of recycling, recovery, or reclamation equipment for HFC substitutes, including for servicing motor vehicle air conditioners. In FY 2024, $5 million is requested to fund distribution of grants to support technology transition already underway and equipment transition.

In FY 2024, EPA will continue to provide technical expertise for the Montreal Protocol's Technology and Economic Assessment Panel and its Technical Options Committees, advancing reductions of ODS and HFC consumption and ensuring U.S. interests are represented.

In FY 2024, EPA will continue to support a level playing field for companies operating legally under the CAA and AIM Act regulations and those that have transitioned to alternatives for ODS and HFCs. Under both the AIM Act and the Montreal Protocol, in FY 2024, EPA will be implementing a 40% reduction in HFCs from historic levels. EPA exchanges data with U.S. Customs and Border Protection and Homeland Security Investigations on ODS and HFC importers and exporters to determine admissibility and target illegal shipments entering the United States, as well as reviews and approves imports flagged in the Automated Commercial Environment. With the significant reduction of available HFC allowances in FY 2024, this data exchange will increase in importance as accurate data will be needed on a near real-time basis. EPA also will continue to work with partner agencies, including through the Interagency Task Force on Illegal HFC Trade, to detect, deter, and disrupt any attempt to illegally import or produce HFCs in the United States, as well as work with State Department and other Departments to carry out the Administration's

whole of government approach. These efforts also include EPA's work to support federal sector management and transition from HFCs through continued cooperation with organizations such as Department of Defense and the General Services Administration.

Performance Measure Targets:

(PM HCFC) Remaining U.S. consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, in ozone depletion potential (ODP)-weighted metric tons.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						76.2	76.2	76.2	Metric Tons
Actual	374.6	434.1	224.2	-110.8	20.8	Data Avail 11/2023			

(PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						273.5	273.5	182.3	MMTCO2e
Actual						Data Avail 11/2023			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$765.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$59,436.0 / +24.0 FTE) This program change is an increase to implement provisions in the American Innovation and Manufacturing Act to phase down the use of HFCs, to facilitate U.S. entry to the Kigali amendment to the Montreal Protocol, and to restore staff capacity around efforts to tackle the climate crisis. This investment includes $4.357 million in payroll costs.

- (+$5,000.0) This program change is an increase for the development of a new grant program to assist small businesses with the purchase of specialized equipment for the recycling, recovery, or reclamation of a substitute for a regulated substance as authorized in the AIM Act.

Statutory Authority:

Title VI of the Clean Air Act and the American Innovation and Manufacturing Act.

Stratospheric Ozone: Multilateral Fund

Program Area: Clean Air and Climate
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$8,326***	***$9,244***	***$18,000***	***$8,756***
Total Budget Authority	$8,326	$9,244	$18,000	$8,756

Program Project Description:

The *Montreal Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol) is the international treaty designed to protect the stratospheric ozone layer by facilitating a global phaseout of ozone-depleting substances (ODS) and since 2016, phasing down climate-damaging hydrofluorocarbons (HFCs) under its Kigali Amendment. EPA is phasing down ODS under Title VI of the Clean Air Act and HFCs under the American Innovation and Manufacturing (AIM) Act of 2020. As a result of global action to phase out ODS, the ozone layer is expected to recover to its pre-1980 levels by mid-century. A global phasedown of HFCs is expected to prevent up to 0.5 °C of global warming by 2100.

The *Multilateral Fund for the Implementation of the Montreal Protocol* (Multilateral Fund) was created by the Parties to the Montreal Protocol to provide funds that enable developing countries to comply with their obligations following agreed upon schedules. The United States and other developed countries contribute to the Multilateral Fund. The United States holds a permanent seat on the Multilateral Fund's governing body (the Executive Committee) and can help focus efforts on cost-effective assistance and encourage climate-friendly transitions. The U.S. contribution to the Multilateral Fund is split between EPA and the Department of State.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA's contributions to the Multilateral Fund in FY 2024 will primarily continue to support cost-effective projects designed to build capacity and eliminate ODS production and consumption in over 140 developing countries and provide early support for the global phasedown of HFCs. Through 2021, the Multilateral Fund supported over 8,146 activities in 145 countries that, have phased out 497,463 ozone-depletion potential metric tons and 305,336 CO2-equivalent tonnes of consumption of controlled substances. Additional projects will be submitted, considered, and approved in accordance with Multilateral Fund guidelines.

In FY 2024, the United States will continue to promote developing country transitions to climate-friendly alternatives and will begin to support projects to phase down HFCs under the Kigali Amendment. A small number of demonstration projects aimed at furthering climate projection are anticipated. These projects will concern either proper refrigerant disposal or energy efficiency upgrades. The United States also will support preparatory activities such as establishing HFC baselines and phasedown starting points and will consider the first Kigali HFC Implementation Plans (KIPs) to phase down HFCs in developing countries, as well as projects to reduce HFC-23 byproduct emissions ensuring that the global HFC phasedown will leverage the expertise and experience gained during the 30-year history with phasing out ODS. Taken together, this work will support developing countries' compliance with Protocol obligations.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$8,756.0) This program change reflects an increase to help fund additional activities associated with the adoption of the Kigali Amendment and developing country phase down of HFCs while continuing to support ODS phaseout activities.

Statutory Authority:

Title VI of the Clean Air Act.

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$108,996***	***$112,730***	***$162,105***	***$49,375***
Inland Oil Spill Programs	$278	$649	$2,152	$1,503
Hazardous Substance Superfund	$1,278	$1,017	$1,032	$15
Total Budget Authority	$110,552	$114,396	$165,289	$50,893
Total Workyears	438.5	478.9	520.4	41.5

Program Project Description:

The Compliance Monitoring Program is a key component of EPA's Office of Enforcement and Compliance Assurance (OECA) that supports both compliance with federal environmental laws as well as efforts to identify noncompliance. Compliance monitoring activities, such as inspections and investigations, or review of self-reported compliance monitoring information and other forms of offsite compliance monitoring, are conducted by EPA and other co-regulators (states, federally recognized tribes, and territories) to determine if regulated entities are complying with environmental statutes, applicable regulations, and permit conditions. A robust inspection and enforcement program is essential to advancing the promise of clean air, land, and water to many communities across the country, including those historically underserved and overburdened, and for implementing Executive Order 14008 on *Tackling the Climate Crisis at Home and Abroad*.

Compliance information gathered from these activities is reported into EPA's data systems for analyses and targeting, and to make information available to co-regulators and the public. These activities and data also can be utilized to identify programs and sectors with high noncompliance to be the subject of national enforcement and compliance initiatives. These initiatives help identify conditions that may present an imminent and substantial endangerment to human health and the environment and thereby warrant immediate attention. Given the large number of regulated entities, effective targeting of compliance monitoring and analysis of compliance data play a critical role in achieving the goals EPA has set forth for protecting health and the environment. Tools in the Compliance Monitoring Program include:

Compliance Program Data Management and Electronic Reporting: EPA has a national enforcement and compliance data system, the Integrated Compliance Information System (ICIS), which supports both the compliance monitoring and civil enforcement programs. As EPA's largest mission-focused data system, ICIS is a critical infrastructure tool used by the Agency, state, tribal, local, and territorial governments as well as the regulated community, to track compliance and enforcement of all EPA statutes, which facilitates greater compliance and thus protection of human health and the environment. States are a major user of this resource. For instance, 21 state

governments depend on ICIS to directly manage their clean water permitting and compliance activities. EPA utilizes ICIS enforcement and compliance data and other information technology tools to: (1) identify potential violations of the federal environmental laws; (2) facilitate efficient enforcement; and (3) promote compliance with these requirements. ICIS data is available to the public via the internet-accessible Enforcement and Compliance History Online (ECHO) system as well as the companion data change notification tool ECHO Notify. Using ICIS and ECHO to electronically track its civil enforcement work allows EPA to better ensure that its enforcement resources are used to facilitate transparency and address the most significant noncompliance problems, including noncompliance affecting overburdened or vulnerable communities and noncompliance that leads to climate impacts. EPA, through the National Targeting Center, also utilizes the data in ECHO to help identify the worst problem areas to align inspections and enforcement activities. EPA collaborates with state, local, federal, tribal, and industry partners, through the E-Enterprise initiative, to leverage technologies such as in promoting electronic reporting and permitting. EPA and states implement the National Pollution Discharge Elimination System (NPDES) Electronic Reporting Rule through ICIS, one key tool for improving the availability of clean water compliance data to EPA, states, and the public.[57]

- **Support for the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) Program:** The Agency will continue to implement Phases 1 and 2 of the NPDES Electronic Reporting Rule which covers electronic permitting, compliance monitoring reporting, and data sharing requirements for EPA and states. EPA will continue to work with states to ensure complete and high-quality data acquisition from permits, compliance, and enforcement data. EPA also will evaluate and prioritize the development of additional electronic reporting tools that support states. EPA will continue to provide EPA and states with tools and support for tracking, interpreting, and reducing their NPDES noncompliance rate and will provide support to states in strengthening their NPDES compliance programs. In FY 2022, EPA reduced the percentage of permittees in significant noncompliance with their NPDES permits from a FY 2018 baseline of 20.3 percent to 9.0 percent. This includes a 75 percent reduction in significant noncompliance (SNC) rates for federal facilities from their FY 2018 baseline.

- **Compliance Monitoring - Building Capacity in the Compliance Assurance Program's Inspector Cadre for EPA, State, Tribal and Local Governments:** To ensure the quality of compliance monitoring activities, EPA develops national policies, updates inspection manuals, establishes training requirements for inspectors, and issues inspector credentials. Boots on the ground that can identify public health concerns and environmental regulatory violations is critical to protect communities that are underserved or disproportionately impacted. Building capacity in EPA's inspector cadre is critical for advancing the *FY 2022 -2026 EPA Strategic Plan* "Goal 3: Enforce Environmental Laws and Ensure Compliance." This includes OECA's goal to conduct 55 percent of annual inspections at facilities affecting vulnerable or overburdened communities by September 30, 2026, an estimated 25 percent increase over EPA's historical average. In FY 2022, EPA outperformed and achieved nearly 57 percent of on-site inspections in overburdened communities. EPA delivers critical in-person and online training courses to new and experienced federal, state, tribal, and local inspectors to ensure the integrity of the national Compliance Monitoring Program, as well as other training for federal

[57] For more information, please see: https://www.epa.gov/compliance/npdes-ereporting.

and state personnel on critical and emerging compliance issues. EPA hosts several in-person inspector training programs, such as the annual Clean Water Act NPDES Technical Inspector Workshop, the SDWA Public Water System Supervision (PWSS) Inspector Training Program, and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Pesticide Inspector Residential Training Program.

- **Compliance Assistance:** Compliance assistance is a valuable tool to assist regulated facilities in understanding their compliance obligations and achieving and maintaining compliance. EPA provides compliance assistance by working with third-party organizations and federal agencies to support 17 web-based, sector-specific compliance assistance centers and other web-based assistance resources. In addition, the Enforcement and Compliance Assurance Program develops webinars, Compliance Advisories, and other assistance materials to help EPA, state regulators, and the regulated community to understand compliance rules and obligations. EPA also provides facility specific technical assistance to regulated entities such as the CWA and Safe Drinking Water Act (SDWA) regulated entities under the Compliance Advisor Program discussed in greater detail below.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, in addition to EPA's request for $9.0 million and 6.4 FTE to rebuild the inspector cadre through Civil Enforcement and Forensics Support resources, the Agency requests an increase of $13.6 million and 32.0 FTE in Compliance Monitoring resources to rebuild the inspector cadre, with most of the FTE being invested in EPA's ten regional offices. Rebuilding EPA's inspector corps is a priority for EPA in FY 2024. A robust inspection and enforcement program is essential to advancing the promise of clean air, land, and water to the many communities across the country that have not received the full benefits from EPA's decades of progress. Having staff on the ground that can identify public health concerns and potential environmental regulatory violations is critical to protect communities that are underserved or overburdened.

EPA's inspection programs have been under-resourced for over a decade leading to a loss of agency expertise and a decline in the numbers of inspections. To meet EPA's Environmental Justice (EJ) goals and the mission to protect human health and the environment and ensuring that Americans have clean air, land and water, EPA must rebuild and strengthen its inspection program with increased hiring and training of new and existing inspectors, including in-person basic inspector training and travel resources for the following programs: Clean Air Act; Safe Drinking Water Act; Clean Water Act; Resource Conservation and Recovery Act; Federal Insecticide, Fungicide, & Rodenticide Act; and Toxic Substances Control Act. Additionally, funding will allow EPA to purchase health and safety equipment and inspection monitoring equipment such as Forward Looking InfraRed (FLIR) cameras, Data Acquisition Real-Time (DART), flame ionization detectors/photo ionization detectors, fenceline monitors, and Smart Tools software and hardware for inspectors. In addition, travel funding for inspections also is essential for inspectors to conduct on-site field inspections.

The increased resources and FTE for rebuilding the inspector cadre also will be used to assess federal facility compliance with all environmental statutes. EPA proposes to hire additional inspectors for federal facility investigations to increase sampling capabilities to identify regulatory violations. This investment will assist in dispute resolution and case development against federal agencies that are responsible for contamination (*e.g.*, of per- and poly-fluoroalkyl substances (PFAS)), thereby protecting public health of surrounding communities affected by those contaminants.

Funds also will be used to continue the operation and development of the PFAS Analytic Tools, a data integration platform currently used by EPA and states to analyze national PFAS data sets. The funding will provide enhancements including increasing data availability to the public, including communities with EJ concerns. Compliance monitoring funds will advance protection of communities by increasing inspections and compliance assistance to ensure nearby facilities adhere to regulations designed to protect vulnerable populations. The increased funding will help create and expand programs to further environmental protections and increase monitoring capabilities.

In addition, the Agency will continue to modernize its national enforcement and compliance data system as it expands its compliance monitoring and technical assistance efforts to address EJ issues (including the Compliance Advisors for Sustainable Water Systems Program), Smart Tools for inspectors, implementation of the Evidence Act, PFAS, and climate change concerns including resilience and reduction in the use of hydrofluorocarbons (HFCs).

EPA will continue its customer-focused, evidence-based targeting approaches to help inspectors find environmental problems with software and technical assistance from the National Targeting Center (NTC). The NTC utilizes media-specific Communities of Practice for collaboration with EPA, regions and programs, state and tribal partners, relationships with academic data science labs, and cutting-edge data science approaches to develop training and tools. ECHO (and ECHO Gov) serves as the data integration hub used by the NTC for developing the models, publishing the developed tools, and providing a means for accessing the results.

EPA will continue to implement its comprehensive action plan for integrating EJ and climate change considerations throughout all aspects of the Program, including a performance measure tracking the percentage of inspections affecting communities with potential EJ concerns. This effort answers the President's call to "strengthen enforcement of environmental violations with disproportionate impact on overburdened or underserved communities through the Office of Enforcement and Compliance Assurance" [*EO 14008, sec. 222(b)(i)*], and to "combat the climate crisis with bold, progressive action" (*EO 14008, sec. 201*).[58] This work includes, but is not limited to, multi-state/multi-regional matters, issues of national significance, complex contamination at and from federal facilities, and emergency situations.

[58] For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

In addition, EPA also will provide some targeted oversight and support to state, local, tribal, and other federal agency programs. To accomplish this objective, the Agency will prioritize work with states to develop methods that successfully leverage advances in both monitoring and information technology. The Agency also will maintain accessibility to ICIS for EPA, states, tribes, and federal partners.

With the resources approved in FY 2022 and received in FY 2023 by the Inflation Reduction Act (IRA), EPA will continue its data system modernization effort to better support states, tribes, local governments, other federal agencies, and the public's need for information.[59] System modernization will facilitate EPA's efforts to better target noncompliance that impacts overburdened or vulnerable communities and will increase the availability of information about environmental conditions in those communities and elsewhere.

In FY 2024, EPA is requesting an increase of $22.9 million and 5.0 FTE to continue its efforts to modernize ICIS and support better integration with the public ECHO database. As a result of this data integration, EPA will be in a better position to focus compliance monitoring resources on areas of highest human and environmental risk, increase transparency to the public and improve data quality. EPA also will continue to improve ICIS and ECHO, including future integration of the data collected using Smart Tools, which will facilitate better access of compliance data and community information (*e.g.*, from EPA's EJ screening tool) to EPA, states, tribes, other federal agencies, and to the public.

In FY 2024, EPA is requesting an increase of $2.0 million to continue expansion of its software solutions for field inspectors to improve the effectiveness and efficiency of compliance inspections conducted by EPA and authorized states. In Fiscal Years 2020 and 2021, EPA rolled out its Smart Tools for inspectors in the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Program, and the CWA-NPDES Program respectively. Smart Tools software makes the process of documenting field inspections and preparing inspection reports more efficient. This tool allows EPA to use its compliance monitoring resources more efficiently, including monitoring for noncompliance, which affect overburdened or vulnerable communities, or which may have climate impacts. It also allows EPA to make inspection reports more readily and timely available to the regulated entity and to the public in affected communities. The work on the design and development of software for additional inspection programs will continue through FY 2024 and beyond (*e.g.*, Underground Storage Tanks, Clean Air Act, Toxic Substances Control Act, FIFRA, Good Laboratory Practices Standards).

EPA will increase its implementation of the Evidence Act[60] through the "Drinking Water Systems Out of Compliance" priority area in EPA's Learning Agenda. Safe drinking water is critical to the health of communities and each year, thousands of community water systems violate one or more health-based drinking water standards. Drinking water noncompliance is greatest in small, under-resourced communities and may be higher than EPA data suggests due to failures to monitor and report. In FY 2024, EPA will continue to collect new information and conduct studies under this

[59] Inflation Reduction Act: https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf.
[60] Foundations for Evidence-Based Policymaking Act (Public Law 115–435): https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf .

learning priority area to develop statistically valid data to identify effective policy instruments. Additional resources will allow for the involvement of more state partners in assessing drinking water data to determine how accurately the data measures national compliance and substantiates EPA policy decisions. EPA will evaluate other questions on noncompliance root causes and corresponding factors and the efficacy of technical assistance, enforcement, and state oversight. EPA also will conduct an analysis to identify metrics of system technical, managerial, and financial capacity for early identification of at-risk drinking water systems. The analysis will test existing and new predictive analytic tools designed to identify at-risk systems. EPA will continue to reach out to and work with states, tribes, and academic experts to implement OECA's compliance learning agenda. The compliance learning agenda will improve the effectiveness of enforcement and compliance programs, approaches, and tools by prioritizing the most pressing programmatic questions; planning evidence-based studies to address these questions; and identifying effective and innovative approaches for improving compliance. The first two priority projects identified through this effort will focus on assessing the effectiveness of offsite compliance monitoring and identifying the root causes of municipal noncompliance and interventions that are effective at overcoming impediments to compliance.

In FY 2024, EPA will continue the Agency's Compliance Advisors for Sustainable Water Systems Program, which reduces noncompliance at small public water systems (PWSs) and small wastewater treatment facilities (WWTFs) by providing hands-on technical assistance. Many small drinking water and wastewater systems are under-resourced, in overburdened or vulnerable communities, and are unable to achieve and maintain compliance due to lack of technical, managerial, and financial capacity. These communities are impacted by factors such as aging infrastructure, workforce shortages, and declining rate bases. These challenges are the root cause of most violations of the SDWA and CWA. Part trainer and part consultant, Compliance Advisors troubleshoot issues, develop plans to return systems to compliance, and increase the technical capacity of operators. The Compliance Advisors may revisit systems as needed, promoting sustainable compliance.

Through FY 2022, Compliance Advisors have provided technical assistance to approximately 199 small PWSs and 63 WWTFs in under-resourced communities nationwide, across all Regions – covering 25 states, Puerto Rico, and seven tribes. There are thousands more small systems and facilities that need technical support to help them achieve and stay in compliance and provide clean and safe water to the communities they serve. In general, the systems supported by the Compliance Advisor Program are small (serving populations of less than 10,000). Over 90 percent are in overburdened or vulnerable communities.[61] As of early 2023, Compliance Advisors have delivered more than 140 Recommendations Reports to small drinking water and wastewater systems and have provided more than 1,000 standard operating procedures, checklists, and other tools to help these small systems return to sustained compliance. There is significant demand for assistance that is targeted where existing technical support efforts cannot meet the needs of the community. The Compliance Advisor Program supplements other technical assistance efforts across the Agency. As funds are available, the Regions are requested to work with their states to identify and nominate systems to receive Compliance Advisor help returning to and sustaining compliance.

[61] OECA protocols for identifying Areas of Potential EJ Concern.

In FY 2024, EPA will continue to support inspections and fund compliance monitoring efforts to support development of civil enforcement cases. The Agency will use compliance monitoring funds to continue supporting enforcement and compliance inspections adhering to Clean Air Act requirements for motor vehicles, engines and fuels, stationary sources, chemical accident prevention, wood heaters, municipal solid waste landfills, and stratospheric ozone; Clean Water Act requirements for preventing and addressing oil spills and spills of sewage or other hazardous substances, wetlands protection, and biosolids use and disposal; Toxic Substance Control Act requirements for new and existing chemicals, lead based paint and polychlorinated biphenyls (PCBs); FIFRA requirements for pesticide registration; and Emergency Planning and Community Right to Know Act requirements for emergency planning; Toxics Release Inventory reporting; American Innovation and Manufacturing (AIM) Act requirement efforts to reduce the harmful effects of climate-change causing chemicals like HFCs; Resource Conservation and Recovery Act requirements for hazardous and non-hazardous solid waste; and Safe Drinking Water Act requirements for public water systems.

In FY 2024, EPA will continue efforts to develop actions to address PFAS. PFAS can present an urgent public health and environmental threat to communities across the United States, with significant equity and EJ implications. While these compounds have for decades played an important role to many areas of society, the Nation is now realizing the potential adverse effects of their widespread use. Today, PFAS have been found in drinking water, surface water, groundwater, soil, and air across the country – from remote rural areas to densely populated urban centers. Adverse health effects from PFAS contamination may most strongly threaten vulnerable populations (including pregnant women, children, and the elderly).[62]

In FY 2024, the Agency is requesting an increase to support EPA's PFAS Strategic Roadmap. Resources will be used to investigate and identify releases of PFAS to the air, land, and water by actively investigating under RCRA, Toxic Substances Control Act (TSCA), CWA, SDWA, and CAA at the yet-unknown number of processing facilities, waste disposal facilities, and federal facilities where PFAS are suspected of contaminating various environmental media. Funds will support case development and issuance of information requests, including the potential identification of imminent and substantial endangerment issues under CWA, SDWA, or RCRA.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	14,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	Inspections & Evaluations
Actual	11,800	10,600	10,300	8,500	10,800	13,900			

[62] For additional information, please see: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7530144/pdf/nihms-1627933.pdf.

(PM 444) Percentage of EPA inspection reports sent to the facility within 70 days of inspection.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target				75	75	75	75	75	Percent
Actual				83	85	83			
Numerator				4,177	1,940	4,362			Reports
Denominator				5,037	2,287	5,237			

(PM 450) Percentage of EPA inspections at facilities affecting communities with potential environmental justice concerns.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						45	50	50	Percent
Actual						57			
Numerator						3,333			Inspections
Denominator						5,861			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$3,820.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$22,891.0 / +5.0 FTE) This program increase will allow EPA to accelerate the modernization of the Integrated Compliance Information System (ICIS) and enhance its integration with the Enforcement and Compliance History Online (ECHO) family of internet-based services. The increased resources will fund adjustments to ICIS and ECHO that will facilitate better access of compliance data and community information (*e.g.*, from EPA's EJSCREEN tool) to EPA, states and to the public. This modernization will enhance EPA's efforts to address compliance concerns in disadvantaged communities. This investment includes $891.0 thousand for payroll.

- (+$13,556.0 / +32.0 FTE) This program increase will rebuild EPA's inspector cadre. Additional funding will build capacity for inspections, case development, and to supplement this program's training and travel budget. This funding will enhance EPA's compliance monitoring programmatic capabilities to improve efforts to address pollution in overburdened and vulnerable communities. This investment includes $5.7 million for payroll.

- (+$3,000.0) This program increase will allow EPA to investigate and identify releases of PFAS to the air, land, and water by actively investigating under RCRA, TSCA, CWA, and SDWA at the yet-unknown number of processing facilities and waste disposal facilities where PFAS are suspected of contaminating various environmental media. In addition,

these funds will allow EPA to continue operation and development of the PFAS Analytic Tools, a data integration platform currently used by EPA and States to analyze national PFAS data sets.

- (+$2,000.0) This program increase will allow the Compliance Advisor Program to provide critical technical assistance to an additional 80-100 systems to achieve and maintain compliance. Funding also will be used to support inspections and case development in the Regions. Funds may be used to support underserved communities identified by the Regions and States as having concerns because of lead Action Level exceedances.

- (+$2,000.0) This program increase will allow EPA to advance work on the Smart Tools for Field Inspectors to develop the tool for some of the smaller programs that have more of a direct impact for EJ communities such as the TSCA lead-based paint programs.

- (+$1,057.0 / +2.0 FTE) This program increase will allow EPA to evaluate priority questions in the Drinking Water Learning Agenda, developed under the Evidence Act, and thereby test the efficacy of policies to address drinking water noncompliance. The increase also will allow EPA to conduct studies with broader participation (such as involving the States) to test the effectiveness of inspection and enforcement approaches to improve compliance in the drinking water program. This investment includes $357.0 thousand for payroll.

- (+$644.0 / +0.5 FTE) This request for climate change adaptation funding will support implementation of the OECA Climate Adaptation Implementation Plan. Resources will support completion of priority actions including continued staff training to build climate change knowledge and consideration of climate change in all aspects of enforcement. This investment includes $89.0 thousand for payroll.

- (+$357.0 / +2.0 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $357.0 thousand for payroll.

- (+$50.0) This program increase will continue to provide compliance oversight and perform follow up from recent inspections of the Red Hill Fuel Facility to prevent future fuel leaks into the military's drinking water.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); American Innovation and Manufacturing Act: Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act; Resource Conservation and Recovery Act; Rivers and Harbors Act; Safe Drinking Water Act; Toxic Substances Control Act.

Cross-Agency Coordination, Outreach and Education

Children and Other Sensitive Populations: Agency Coordination
Program Area: Cross-Agency Coordination, Outreach and Education
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$6,098***	***$6,362***	***$6,500***	***$138***
Total Budget Authority	$6,098	$6,362	$6,500	$138
Total Workyears	18.3	18.4	18.4	0.0

Program Project Description:

The Children's Health Program coordinates and advances the protection of children's environmental health across EPA by assisting with developing regulations, improving risk assessment and science policy, implementing community-level outreach and education programs, and tracking indicators of progress on children's health. Children's environmental health refers to the effect of the environment on children's growth, wellness, development, and risk of disease. EPA strives for all parts of the Agency to apply and promote the use of the best available science, policy, partnerships, communications, and action to protect children from adverse health effects resulting from harmful environmental exposures. The Children's Health Program is directed by the *2021 Policy on Children's Health,*[63] Executive Order (EO) 13045: *Protection of Children's Health from Environmental Health Risks and Safety Risks,*[64] statutory authorities addressing children's environmental health, and other existing guidance.[65] The Program works to tackle the climate crisis and advance environmental justice (EJ) by identifying and reducing inequitable impacts of climate change and adverse environmental exposures on children, particularly children in underserved communities.

In FY 2022, the Children's Health Program supported Pediatric Environmental Health Specialty Units by providing programming on children's health in EJ communities;[66] hosted a workshop to provide technical assistance to grantees to support the improvement of school facilities with an emphasis on underserved communities;[67] implemented a partnership with the Association of State and Territorial Health Officials to support inclusion of children's environmental health at the state level; funded publication of a report and interactive website based on a workshop by the National Academy of Science to identify the latest priorities to protect children's health; conducted an internal workshop to prioritize children's health research needs and the inclusion of research findings in EPA decision-making; partnered with Boys and Girls Clubs of America to provide students in tribal nations, military installations, and underserved communities with actionable information to protect children's health, particularly in the face of climate change; updated 28

[63] For more information, please see: https://www.epa.gov/children/epas-policy-childrens-health.
[64] For more information, please see: https://www.govinfo.gov/content/pkg/FR-1997-04-23/pdf/97-10695.pdf.
[65] For more information, please see: https://www.epa.gov/children/rules-and-regulations-impact-childrens-health.
[66] For more information, please see: https://www.pehsu.net/.
[67] For more information, please see: https://www.epa.gov/newsreleases/epa-announces-selection-organizations-receive-funding-healthy-learning-environments.

indicators in America's Children and the Environment and continued to modernize data visualization capabilities; conducted two plenary meetings of the Children's Health Protection Advisory Committee (CHPAC),[68] and received advice on 1) American's Children and the Environment, 2) Climate Change Priorities for Children's Health; implemented CHPAC's recommendations on health learning environments, pesticides and TSCA, and initiated a new request for advice regarding prevention of lead exposure in infants; hosted a series of events to educate the public about children's health protection, including webinars regarding the Pediatric Environmental Health Specialty Units; updated website pages and conducted events and outreach to stakeholders to reinvigorate EPA's presence and voice, among other initiatives. The Program supported several Interagency Policy Councils on Child and Maternal Health to assist their development of all-of-government approaches for protecting children's health in schools and improving maternal health outcomes. OCHP contributed to the Lead Exposure and Prevention Advisory Committee and the National Committee on Children, Climate and Disasters hosted by the Department of Health and Human Services, the Cancer Moonshot, and others.

The Children's Health Program has a successful track record of collaboration with non-governmental organizations, state, local and tribal governments, and other federal agencies. To further protect children in EJ communities, and those affected by climate change, the Program led the steering committee of the President's Task Force on Environmental Health Risks and Safety Risks to Children to conduct a landscape analysis on opportunities for interagency collaboration on climate, emergencies, and disasters. Work continued to scope the agenda for a new subcommittee to focus on children's environmental health and chemicals. OCHP played a key role in the development and publication of EPA's Final Strategy to Reduce Lead Exposures and Disparities in U.S. Communities and prepared a companion high-level update to the interagency Federal Lead Action Plan to Reduce Lead Exposures report. Within EPA, OCHP and the regional coordinators collaborate closely with EPA's national program managers and regional offices, as well as with EPA's Office of Environmental Justice and External Civil Rights, to develop effective tools and messages in support of children in underserved communities who disproportionately suffer from adverse environmental exposures, and to advance information and messaging to address health risks to children from climate change.

In FY 2023, the Children's Health Program will contribute to the development of 100 regulations, scientific assessments and/or policies, including actions under the Toxic Substances Control Act, Safe Drinking Water Act, Food Quality Protection Act and Clean Air Act, among others. To implement EPA's updated *2021 Policy on Children's Health*[69]*,* OCHP will identify and train children' health champions in each EPA program office, updated guidance documents for use by EPA rule managers, and deliver associated training on how to conduct children's health evaluations. In FY 2023, OCHP also will implement the first year of its first long term performance goal for advancing protection of children's environmental health applicable to relevant EPA national programs. Together, EPA programs aim to complete 163 actions toward this long-term performance goal in FY 2023. OCHP continued a coordinated national approach among regional Healthy Schools programs. With its newly updated webpages, OCHP will reach stakeholders

[68] For more information, please see: https://www.epa.gov/children/childrens-health-protection-advisory-committee-chpac.
[69] For additional information, please see: https://www.epa.gov/system/files/documents/2021-10/2021-policy-on-childrens-health.pdf.

through more than 161,000 page views, and institute approaches to better coordinate headquarters and regional children's environmental health activities.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to protect children in underserved communities who suffer disproportionately from the effects of exposures magnified by socio-economic determinants of health, and to address children's exposures, which are exacerbated by climate change. EPA actions will be informed by two important considerations: first, the scientific understanding of childhood as a sequence of life stages, and second, the recognition that protecting children's health is necessary to protect human health, because every adult was once a child.

In FY 2024, the Children's Health Program will work to tackle the climate crisis and advance EJ by following up on recommendations from the National Academy of Science, which highlighted the latest scientific advancement and challenges to protecting children's health. The Program will continue to implement the *2021 Policy on Children's Health* and its associated long-term performance goal to ensure that EPA consistently and explicitly considers early life exposures and lifelong health in all human health decisions. OCHP will continue to engage with EPA national programs to appropriately include assessment and consideration of risk to children's environmental health in risk assessment, risk management decisions, regulations, policies, guidance documents, program initiatives and public engagement. The Program will convene the Steering Committee of President's Task Force on Environmental Health Risks and Safety Risks to Children to report on progress across the federal government in the areas of climate change and disasters, childhood lead; asthma disparities; and climate, emergencies and disasters, exposure to toxic chemicals, and other topics. The Program also will continue to build on partnerships with key stakeholders such as the Boys and Girls Clubs of America and others and leverage resources and work for durable, nationally relevant improvements in children's health protection.

The Program will host a variety of activities to mark Children's Health Month in October to educate parents, caregivers, teachers, and others on how to better protect children from adverse environmental exposure and continue to modernize its social media presence to improve outreach to affected communities. The Program also will coordinate two meetings of the CHPAC, with delivery of expert responses to additional charge questions related to high priority children's environmental health issues.

Performance Measure Targets:

(PM CH01) Number of EPA actions that concern human health that include assessment and consideration of environmental health information and data for children at all life stages to the extent relevant data are available.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						50%	163	TBD	Actions
Actual						N/A			

(PM CH02) Number of EPA regional offices with stakeholder engagement on children's environmental health designed to provide durable, replicable, and widespread results.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						3	6	7	Regional Offices
Actual						6			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$55.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$83.0) This program change is an increase to provide additional support for existing programs and workforce in the Children's Health Program. This includes updating and expanding indicators and trends in America's Children and the Environment by gathering evidence to better represent impacts of environmental exposures on children in underserved communities and by making improvements in the accessibility and presentation of the underlying data.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Toxic Substances Control Act (TSCA); Safe Drinking Water Act (SDWA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and Food Quality Protection Act (FQPA).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$55,872***	***$56,160***	***$67,600***	***$11,440***
Total Budget Authority	$55,872	$56,160	$67,600	$11,440
Total Workyears	266.5	278.6	311.6	33.0

Total workyears in FY 2024 include 6.2 FTE to support Executive Management Operations working capital fund (WCF) services.

Program Project Description:

The Executive Management and Operations Program supports various offices that provide direct executive and logistical support to EPA's Administrator. In addition to the Administrator's Immediate Office (IO), the Program supports the Office of Congressional and Intergovernmental Relations (OCIR), Office of Administrative and Executive Services (OAES), Office of the Executive Secretariat (OEX), the Office of Public Affairs (OPA), and the Office of Public Engagement (OPE).

The Program also supports EPA's 10 regional offices. The Program's management, coordination, and policy activities link the Agency's engagement with outside entities, including Congress, state and local governments, tribes, nongovernmental organizations, national and community associations, and the public.

Within the Program, key functions include responding to congressional requests for information; coordinating and providing outreach to state and local governments, tribes, and rural communities; and supporting press and other communications activities. The Program also resources mission support functions, including but not limited to administrative management services involving correspondence control and records management systems, human resources management, budget formulation and execution, outsourcing, and information technology management services.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Agency requests an additional $11.4 million and 33.0 FTE for the Executive Management and Operations Program. These additional resources will support engagement with state and local partners; enhance training of healthcare providers in underserved communities on the prevention, diagnosis, management, and treatment of children's exposure to lead; implement and strengthen the Agency's ability to carry out effective risk communication; restore core capacity to the Executive Management and Operations Program; provide contract support for the Agency's management operations and multi-media and risk communications; and support

evidence building activities in support of the Foundations for Evidence-Based Policymaking Act of 2018. This investment also provides an annual payroll increase for existing FTE; essential workforce support costs; support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support; implementation of Trusted Vetting 2.0; and FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements, including data officer support and information technology and information management support.

OCIR serves as EPA's principal point of contact for Congress, regions, states, and local governments and as the coordination point for interaction with other agency offices and officials. OCIR is comprised of two main components: the Office of Congressional Affairs (OCA) and Office of Intergovernmental Relations (OIR). OCA facilitates all legislative activity and interactions with Congress. OIR manages interactions with state and local governments and serves as the liaison for the Agency with national associations for state and local officials.

In FY 2024, OCA will continue to prepare EPA officials for hearings, oversee responses to written inquiries and oversight requests from members of Congress, and coordinate and provide technical assistance and briefings on legislative areas of interest to members of Congress and their staff.

In FY 2024, OIR will continue to inform and consult with state and local governments on regulations and other EPA activities. Additionally, OIR will continue to lead the Agency's efforts to support and build partnerships with the states, local governments, and tribes on environmental priorities through regular engagements with intergovernmental associations and state and local officials, as well as through the National Environmental Performance Partnership System and the increased use of Performance Partnership Agreements and Grants with a focus on addressing climate change and ensuring underserved communities are considered throughout the process. OIR also will continue to operate its Local Government Advisory Committee and Small Communities Advisory Subcommittee, which provide critical advice to the Administrator.

In addition, OCIR will continue to regularly review and evaluate its processes for responding to congressional and intergovernmental correspondence and Freedom of Information Act (FOIA) requests; prepare for hearings or briefings; provide technical assistance; and coordinate with EPA's program offices, regional offices, states, local officials, and associations. In addition, the Program will support EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018. OCIR's activities supporting the Grant Commitments Met learning priority area in EPA's Learning Agenda, will include conducting reviews of select agency grant programs to learn if the commitments established and met are achieving the intended environmental results, and provide recommendations, as appropriate, to inform future grants management.

OPA facilitates the exchange of information between EPA and the public, media, Congress, and state and local governments; broadly communicates EPA's mission; assists in public awareness of environmental issues; and informs EPA employees of important issues that affect them. Annually, OPA issues nearly 1,500 press releases; responds to approximately 8,000 media inquiries; and oversees more than 150 audio-visual productions, 500 graphic productions, 2,700 event photographs, and 40 portraits. In addition, in terms of digital media, OPA receives over 160 million

impressions on the internet, including www.epa.gov and EPA social media accounts, and posts nearly 100 unique EPA homepage internet news banners. Also, to facilitate communications with EPA employees nationwide, OPA annually posts over 200 intranet banners; issues 48 issues of a weekly e-newsletter - *This Week @ EPA* - with a total of 240 articles; and sends more than 100 agencywide employee Mass Mailers from EPA's Administrator, Deputy Administrator, and other senior leaders. In FY 2024, OPA will continue to inform the media of agency initiatives and deliver timely, accurate information. The Office will continue to update the Agency's internet site to provide stakeholders with transparent, accurate, and comprehensive information on EPA's activities and policies. OPA will continue using social media, multimedia, and new media tools to provide stakeholders with information. The Office also will work with EPA's program and regional offices to improve employee communication; external communication on relevant environmental and human health risks; collaboration and engagement with internal and external stakeholders; updates to the Agency's intranet site; and the use of other communication tools.

OPA also is responsible for ensuring that EPA carries out effective risk communication by sharing critical information on how we are addressing human health and environmental risks with the American public, communities, public officials, and other stakeholders in a way that it is tailored to their needs, reaching a wide audience, and providing meaningful actions they can take to reduce risk. This is integral to most of the work done across the Agency's offices and regions and is essential to carrying out EPA's mission of protecting human health and the environment.

EPA will keep working to ensure that risk communicators at the Agency are connected to best practices from the field, high quality training opportunities, and agencywide efforts underway to improve risk communication. Further, EPA regularly faces intractable risk communication issues that often need sustained focus by highly trained staff who can apply evidence-based practices. Addressing these issues and meeting the challenges of the future requires creating sustained culture change, building agency knowledge and a robust community of practice, and developing strong relationships with the academic community and our federal, state, and tribal partners.

In FY 2024, the Agency will continue to strengthen EPA's ability to carry out effective and consistent risk communication and position the Agency to meet the risk communication challenges of the future by:

(1) Significantly expanding training across the Agency and with its partners, to create a community of practice and increase staff knowledge in a meaningful and sustainable way. This will increase the number of staff at the Agency and among partners who are using the same best practices in their risk communication efforts while at the same time building a network of staff located across all regions and offices who are well-positioned to share their risk communication expertise.

(2) Launching an internal risk communication fellowship program to increase EPA's progress on the most difficult risk communication issues. The fellowship program will be open to EPA employees and will provide 10 weeks of intensive risk communication study and training followed by 10 to 13 weeks of applying the knowledge gained to an intractable risk communication problem facing the home office or region.

(3) Developing academic partnerships to study EPA's risk communication challenges and improve the Agency's reliance on evidence-based practices. This includes increasing research partnerships to develop a research portfolio with the explicit goal of studying EPA-relevant risk communication questions, and then translating findings into usable tools, applications, and best practices for use across the Agency.

In FY 2024, the President's Task Force on Environmental Health Risks and Safety Risks will convene to report on progress across the federal government in the areas of climate change and disasters, childhood lead, asthma disparities, and exposure to toxic chemicals. The Lead Subcommittee will continue to focus on an all of government approach to reducing exposures to lead. There is an opportunity to improve the environmental education and training of healthcare providers and medical professionals in identifying and communicating the causes and impacts of childhood lead exposure in underserved communities in an effort to prevent and reduce exposures. EPA will work with healthcare providers and families to address this problem directly. To further support the Administration's Lead Exposure Reduction Initiative, and in coordination with EPA's program and regional offices, in FY 2024, the Agency will continue to lead ongoing efforts to: 1) strengthen EPA's communications with the public on the risks of lead exposure by working with external leaders in the field to build upon the way the Agency conducts its outreach; and 2) leverage EPA's existing relationship with Pediatric Environmental Health Specialty Units (PEHSUs)[70] to enhance and support training of healthcare providers in underserved communities to prevent and reduce children's exposure to lead.

There are several unique risk communication challenges regarding lead, but also unique assets for the Agency to deploy to reduce risk to the American public—especially to children. Lead exposure to children can result from multiple sources and can cause irreversible and life-long health effects. There is no level of lead exposure which is safe. This means that anything the Agency can do to reduce exposure and lower children's blood lead levels will lead to significant improvements in public health and brighter, more productive futures for America's children. The specific goals for FY 2024 include: implementing coordinated federal strategies to prevent lead exposure and associated effects; disseminating information to diverse audiences, including policy makers, health care providers, the general public, and other stakeholders; and coordinating and disseminating an inventory of federal actions to reduce childhood lead exposures.

As the central mission support administrative management component of the Administrator's Office (AO), the OAES provides advice, tools, and assistance to the AO's programmatic operations across 11 offices. In FY 2024, OAES will continue to conduct the following mission support functions: human resources management, budget and financial management, information technology and security, outsourcing, facilities management, and Government Accountability Office/Office of the Inspector General audit management.

In FY 2024, OEX will continue to provide critical administrative support to the Administrator, Deputy Administrator, chief of staff, senior agency officials, and staff to comply with the statutory

[70] Pediatric Environmental Health Specialty Units (https://www.pehsu.net/) provide expert information, training and consultation for health care professionals and the public on evidence-based prevention, diagnosis, management, and treatment of children's environmental health conditions. The PEHSU Program increases the ability of the general public to take simple steps to reduce harmful exposures by raising awareness among parents, school officials and community leaders.

and regulatory requirements under the Federal Records Act, Freedom of Information Act, Plain Writing Act, Privacy Act and related statutes and regulations. OEX will continue to manage the AO's correspondence management, records management, records digitization, Privacy Act implementation, Controlled Unclassified Information and FOIA response activities. OEX also will continue to manage EPA's enterprise correspondence tracking and workflow management information technology application.

OEX also will continue to process correspondence for the Administrator and Deputy Administrator; review and prepare documents for their signature; manage the Administrator's primary email account; serve as custodian of the Administrator's, Deputy Administrator's and IO senior officials' records; oversee the records management program for all AO staff offices; oversee the Controlled Unclassified Information program for all AO staff offices; and review and issue ethics determinations for gifts received by the Administrator and Deputy Administrator. OEX also will manage the privacy program for the AO and monitor, review, and audit AO systems of records. Finally, OEX will continue to manage the AO FOIA program and respond to all requests for records held by any of the AO's five associate administrator offices, six staff offices, and the Immediate Office of the Administrator.

In FY 2024, OPE will continue providing advice to the Administrator and senior staff on activities surrounding different stakeholder groups, including generating and distributing outreach plans for most regulatory actions. Such plans often include meeting regularly with stakeholder groups to communicate the Administration's agenda at EPA; providing advance notification communications to relevant stakeholder groups on upcoming regulatory actions; facilitating in-state visits by the Administrator and/or senior staff to collect regulatory feedback; communicating key dates to stakeholders pertaining to opportunities to comment on EPA rulemakings; and organizing conference calls on regulatory topics with impacted stakeholders.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,009.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$5,640.0 / +20.0 FTE) This program change is an increase to support engagement with state and local partners, enhanced training of healthcare providers in underserved communities on the prevention, diagnosis, management, and treatment of children's exposure to lead, and increased funding to implement and strengthen the Agency's ability to carry out effective risk communication. This investment includes $3.8 million for payroll.

- (+$2,550.0 / +8.0 FTE) This program change is an increase to support evidence building activities in support of the Foundations for Evidence-Based Policymaking Act of 2018. This investment includes $1.5 million for payroll.

- (+$1,752.0 / +2.5 FTE) This program change is an increase to restore core capacity to the Executive Management and Operations Program and provide contract support for the Agency's management operations and multi-media and risk communications. This investment includes $0.5 million for payroll.

- (+$489.0 / +2.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes approximately $0.5 million for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Environmental Research, Development, and Demonstration Authorization Act (ERDDAA).

Exchange Network
Program Area: Cross-Agency Coordination, Outreach and Education
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$13,016***	***$14,995***	***$14,685***	***-$310***
Hazardous Substance Superfund	$1,137	$1,328	$1,328	$0
Total Budget Authority	$14,153	$16,323	$16,013	-$310
Total Workyears	25.2	30.2	30.2	0.0

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA's Digital Strategy (EEDS), and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision-making.

The Central Data Exchange (CDX) is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency.[71] CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA's System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes, including environmental justice (EJ). EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA's Digital Strategy that

[71] For more information on the Central Data Exchange, please see: https://cdx.epa.gov/.

supports business process change agencywide. Under this strategy and the 21st Century Integrated Digital Experience Act,[72] the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. EPA also is responsible for managing EN technical governance groups and administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secure approach for EPA and its state, tribal, and territorial partners to efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency provisioned Virtual Exchange Services (VES), or virtual nodes, to facilitate data transactions supporting states and tribal partners. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. This includes providing a technology framework – shared CROMERR services – which reduces the burden on programs and external reporters by providing CROMERR compliant solutions. For example, the shared electronic identity proofing and signature services for CROMERR supports 29 partner regulatory reporting programs to date. EPA estimates that partners adopting shared CROMERR services save $120 thousand in development and at least $30 thousand in operations each year, which results in a cost avoidance of greater than $2.5 million for EN partners.

In FY 2024, EPA will continue to improve the functionality and use of the System of Registries.[73] In addition to streamlining the Registries, EPA will continue to implement a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services through Cloud technology and Representational State Transfer (REST or RESTful) application programming interfaces (API). Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example of the Agency's effort to promote the adoption of data services is the integration of the tribal identification services (TRIBES) across EPA systems.

In FY 2024, EPA will continue implementing a solution related to shared facility identification information. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Like facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks a wide range of data for each registry to measure customer usage and engagement. The Agency also tracks web service hits to measure the number of users leveraging publicly available APIs. For example, the SRS website has approximately 90 thousand pageviews per month; many of these pageviews are users visiting the SRS web area to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per month

[72] For more information on the 21st Century Integrated Digital Experience Act, please refer to: https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf.
[73] For more information, please see: https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp.

(depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. FY 2024 priorities for EPA registries include continually improving registry technologies by migrating the registries to a cloud-based environment open-source platform to make them easier to locate, access, and utilize.

In FY 2024, EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

In FY 2024, EPA will continue to work with the Department of Homeland Security's Customs and Border Protection (CBP) to maintain, utilize, and improve systems to facilitate the import and export of legitimate goods and leverage big data and artificial intelligence tools to identify and prevent or stop illegal goods from entering or leaving the United States. EPA supports over 16 data exchange types within EPA and with CBP to automate and streamline over 8 million annual import and export filings. This automation is essential for managing a significantly increasing number of imports and exports (due to e-Commerce) and allows coordinators/officers to focus on compliance monitoring and key high value targeting activities for non-compliant imports and exports, and to better coordinate with CBP.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$852.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$1,162.0) This program change in the Exchange Network reflects the completion of a one-time investment to migrate the TRIBES, SRS, and READ applications to a cloud-based open-source platform.

Statutory Authority:

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

Public Engagement, Partnerships, and Environmental Education
Program Area: Cross-Agency Coordination, Outreach and Education
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$8,303***	***$9,500***	***$23,972***	***$14,472***
Total Budget Authority	$8,303	$9,500	$23,972	$14,472
Total Workyears	10.5	11.2	24.2	13.0

Program Project Description:

The Public Engagement, Partnerships and Environmental Education Program coordinates critical stakeholder outreach across all the EPA's programs and environmental education, supporting the Agency's mission and Administration priorities.

Public Engagement and Partnerships

EPA's Public Engagement and Partnerships Program initiates and maintains the Agency's relationship with principal stakeholders to enhance the effectiveness of environment decision-making. EPA is committed to engaging with all stakeholders on important issues and policies and communicating stakeholder input and concerns to EPA leadership. The achievement of EPA's environmental goals requires the active engagement of all stakeholders and organizations that are impacted by EPA policies and regulations, including environmental justice, climate change, and infrastructure. Resources support communicating and fostering strong relationships with the public, convening briefings and meetings, organizing events, and gathering timely and relevant information to inform agency decision making. The Program proactively establishes relationships with stakeholders to ensure a broad range of voices are captured in the Agency's work.

In FY 2022, the Program coordinated numerous stakeholder and community engagements for the Administrator and senior leadership. Most notable was the Administrator's Journey to Justice work to foster community engagement. The three Journey to Justice tours highlighted longstanding environmental justice concerns in under-served communities at the forefront of environmental burdens. From these tours, the Agency delivered bold action to address environmental justice concerns, including increasing enforcement measures for out of compliance facilities and creating direct lines of communication with the communities and senior EPA officials. These relationships have been maintained in the months since and residents on the ground have become a part of agency engagement for announcements on rules and regulations. In FY 2022, EPA also established EPA's Historically Black Colleges and Universities (HBCU) Council to foster stronger relationships with HBCUs and Minority Serving Institutions (MSIs); and to explore enhanced

opportunities for recruitment of students and ways to support HBCUs/MSIs through grants, contracts, transparent data sharing, and community engagement.

Environmental Education

In 1990, the National Environmental Education Act (NEEA) was established with the objective of improving the public's understanding and knowledge of the natural and built environment, enabling people to effectively solve environmental problems. NEEA states "there is growing evidence of international environmental problems, such as global warming…that pose serious threats to human health and the environment."[74] The Environmental Education Program implements environmental education (EE) programming that helps EPA address these issues from the local community to national and international levels with a focus on communities that are pollution-burdened and as well as underserved communities. Staff manage the National Environmental Education Act Federal Advisory Committee (NEEAC). Congress established the Agency's NEEAC under the NEEA, to advise the Administrator on a wide range of environmental education matters.

The Program provides management and technical support to these advisory committees. The Committee provides EPA's Administrator with independent advice on environmental issues, addresses environmental issues, like climate change, that impact frontline and underserved communities, through education, a commitment to equity, and stakeholder grants authorized by the NEEA. The Program supports the Agency's environmental and public health protection goals by empowering communities with expanded access to quality environmental and climate education, providing educational materials for teachers, hosting educational events, and engaging stakeholders through the National Environmental Education and Training Program (teacher training program), the Presidential Environmental Youth Award (PEYA) Program, and the Presidential Innovation Award for Environmental Educators (PIAEE) Program. These programs promote civic action to reduce the impacts of climate change and promote environmental and climate equity through an educational lens.

Each year, our Nation's youth are recognized for their outstanding dedication to environmental stewardship projects and teachers are honored for promoting environmental awareness and education. In FY 2022, EPA recognized 13 educators and 49 students for their leadership and commitment to environmental education and environmental stewardship. The PIAEE awards recognize outstanding kindergarten through grade 12 teachers who employ innovative approaches to environmental education and use the environment as a context to engage their students. The PEYA honors and highlights a wide variety of projects developed by K through 12th grade students, school classes and clubs, youth camps, and youth organizations to promote environmental awareness and action in their schools and communities. Students in all 50 U.S. states and territories are invited to participate in the Program.

[74] For more information, please see: https://www.epa.gov/sites/production/files/documents/neea.pdf.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1, Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an investment of $14.3 million and 13.0 FTE for the Public Engagement, Partnerships and Environmental Education Program to expand activities established in FY 2022, to explore the creation of a National Environmental Youth Advisory Council, and improve the Agency's public engagement, partnership, and outreach initiatives at the regional level and across the Agency. The increased investment will not be used to fund the NEEA, or environmental education activities as defined under the NEEA.

Public Engagement and Partnerships

In FY 2024, this investment will enable the Program to increase efforts to coordinate critical stakeholder outreach that supports the Agency's mission and Administration priorities. A key priority of this Administration is to integrate local communities into agency activities and environmental initiatives to address disproportionate environmental and public health harms and risks in underserved communities through a range of local initiatives. With the additional resources, EPA will provide additional public engagement capacity in the regional and headquarters offices to foster greater public engagement across the Agency and to communicate and engage local communities on environmental initiatives. The Program will support local public engagement activities by developing key partnerships with local stakeholders and community members to ensure the environmental concerns of local communities are heard. Local, on-the-ground engagement will further connect the Agency with the American people and foster relationships across the Agency to implement HBCU and MSI initiatives, and establish a National Advisory Youth Council.

In FY 2024, resources will support:

- *Regional Community Engagement*. The Program will work directly with the regional offices to coordinate and communicate on agency public engagement initiatives (*e.g.*, Justice40; Journey to Justice and other community tours; HBCU/MSI engagements). This will support the Administrator to ensure visibility with local stakeholders, community members and greater coordination with the Regional Administrators. EPA will maintain ongoing, proactive communications with stakeholders, and will facilitate opportunities for the Agency to benefit from stakeholders and community interest groups, who can provide independent perspective, expertise, and advice.

- *Journey to Justice.* The Program will continue to manage and plan the Administrator's Journey to Justice tours, highlighting longstanding environmental justice concerns in under-severed communities at the forefront of environmental burdens. The Program will work with the regional offices, community members, stakeholders, and local leaders to

ensure EPA delivers action to address environmental justice concerns and to maintain community-level relationships for agency announcements on rules and regulations.

- *Public Private Partnerships.* The Program will explore, engage, and foster public and private partnerships with outside stakeholders to elevate the Agency and the Administrator to non-traditional stakeholders, ensuring a broader group of people are engaged with the work EPA is doing.

- *Historically Black Colleges and Universities (HBCUs) and Minority Serving Institution (MSIs)*. EPA will create an HBCU/MSI Consortium and Federal Advisory Committee to increase engagements with EPA and help develop the next generation of environmental leaders. The HBCU Consortium will establish a funding mechanism for HBCU and MSI schools toward technical assistance and workforce development related to environmental justice, climate change, and environmental education. It also will help to create sustainable partnerships with HBCUs and MSIs resulting in tangible improvements for schools and students as environmental leaders in underserved communities and increase outreach and recruitment opportunities for EPA. The HBCU-Federal Advisory Committee will help to create sustainable partnerships with HBCUs and MSIs resulting in tangible improvements for schools and students as environmental leaders in underserved communities and increase outreach and recruitment opportunities for EPA.

- *National Environmental Youth Advisory Council.* The Program will explore the creation of a National Environmental Youth Advisory Council. The Council will provide independent advice and recommendations to the EPA Administrator on how to increase EPA's efforts to address a range of environmental issues including but not limited to environmental justice, pollution reduction, energy, climate change mitigation and resiliency, environmental health, and racial inequity. Efforts will include a broad range of strategic, scientific, technological, regulatory, community engagement, and economic issues related to the above categories and more.

- *Environmental Education Outreach.* The Program will work to enhance public engagement to amplify the environmental education work that's happening on the local level. This includes scheduling regional events and visits with EE grantees and PEYA/PIAEE award winners to highlight their leadership and commitment to environmental education. The Program also is creating a digital newsletter as an engagement tool to showcase what climate action and environmental education looks like across the country. The publication will include articles, feature stories, videos, resources, events, grantee spotlight, announcements and more. The content also will be posted throughout EPA's social networks and on its website.[75]

[75] For additional information, please see: https://www.epa.gov/education.

Environmental Education

In FY 2024, EPA requests approximately $9.3 million for the Environmental Education Program. The Program will implement the teacher training program and regional grant program with a focus on fighting climate change and protecting public health through EE and improved engagement with frontline communities that are pollution-burdened as well as underserved communities.

In FY 2024, resources will**:**

- Support career development through education by funding innovative EE grant projects in frontline communities that can lead to inclusive, just, and pollution-free communities and an economy that supports high-quality jobs.

- Create a grant website tool for the public that provides detailed and valuable information on all EE regional grants, including information on audience, project format and duration, environmental topic, and the environmental and educational impacts achieved.

- Ensure formal and non-formal educators have the knowledge and teaching skills necessary to help advance environmental and climate literacy in America through the National Environmental Education and Training Program.

- Build strategic partnerships that include underserved and overburdened communities to increase the conversation around using EE as a tool to achieve environmental protection goals while achieving environmental justice, climate equity, and economic prosperity.

- Ask the National Environmental Education Advisory Council (NEEAC) to provide a set of national recommendations on how frontline and underserved communities can use EE to build capacity to become resilient to the effects of climate change.

- Continue the long-standing partnership with NEEF (National Environmental Education Foundation) as we work collaboratively to identify opportunities to achieve environmental education goals. EPA and NEEF will have an MOU to work together on water infrastructure and safe drinking water, public health, climate change, environmental justice, and citizen and climate science. EPA and NEEF will seek to work together on additional education and public outreach efforts as appropriate.

- Create a whole of federal government approach to environmental and climate education that promotes environmental stewardship and prioritizes equity, inclusion, EJ, and an improved economy. For example, collaborate with the Department of Education to enlist colleges and universities focusing on Minority Serving Institutions to assist underserved communities through student internships, practicums, and capstone projects.

- Utilize an information management system that will track outputs and outcomes for each grant to ensure program effectiveness, improve program efficiency, and improve overall customer service. The information tracking system also will be used for the PEYA and PIAEE Programs.

- Partner with the Center of Science and Industry on their Learning Lunchboxes. These EPA branded kits (water infrastructure themed) will help to make STEM (science, technology, engineering, and math) learning opportunities more accessible to underserved youth. COSI plans to distribute 130,000 Learning Lunchbox kits over the next two years.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$170.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$14,302.0 / +13.0 FTE) This program change is an increase for the Public Engagement, Partnerships and Environmental Education Program to expand activities established in FY 2022, explore the creation of a National Environmental Youth Advisory Council and improve the Agency's public engagement, partnership, and outreach initiatives at the regional level and across the Agency. This investment includes approximately $2.35 million for payroll and will not be used to fund environmental education activities as defined under the National Environmental Education Act.

Statutory Authority:

National Environmental Education Act (NEEA); Clean Air Act (CAA), § 103; Clean Water Act (CWA), § 104; Solid Waste Disposal Act (SWDA), § 8001; Safe Drinking Water Act (SDWA), § 1442; Toxic Substances Control Act (TSCA), § 10; Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), § 20, and the Federal Advisory Committee Act (FACA).

Small Business Ombudsman
Program Area: Cross-Agency Coordination, Outreach and Education
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$1,564***	***$2,250***	***$2,227***	***-$23***
Total Budget Authority	$1,564	$2,250	$2,227	-$23
Total Workyears	3.3	5.6	5.6	0.0

Program Project Description:

The Small Business Ombudsman Program includes the Asbestos and Small Business Ombudsman (ASBO),[76] housed within the Office of Small and Disadvantaged Business Utilization (OSDBU). It also includes the Small Business Advocacy Chair and other small business activities located within the Office of Policy's (OP) Office of Regulatory Policy and Management. These activities within OP collectively lead EPA's responsibilities under the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act.[77]

The ASBO Program provides a suite of resources, technical assistance, and opportunities for small business engagement, training, and advocacy for fair consideration. The ASBO Program operates through two roles: EPA's Asbestos Ombudsman and EPA's Small Business Ombudsman. The Asbestos Ombudsman role services a toll-free hotline, functioning as an informational liaison and guide in responding to asbestos-related questions and concerns from the public. The Small Business Ombudsman role provides informal guidance and support in the rulemaking process and offers environmental compliance assistance and resources for small business. The ASBO advocates for a fair process in working with small business, and in so doing, partners with a variety of internal and external stakeholders, including EPA programs and regional offices, State Small Business Environmental Assistance Programs (SBEAPs),[78] and the U.S. Small Business Administration Office of Advocacy, and Office of the National Ombudsman. The ASBO also engages with various small business groups and associations.

Overall, the core functions of the ASBO include:

- Assisting the public with hotline questions and complaints.
- Improving access to federal and state environmental information and assistance.
- Supporting EPA in better understanding small business perspectives when considering

[76] For more information, please see: https://www.epa.gov/resources-small-businesses/asbestos-small-business-ombudsman.
[77] For more information, please see: https://www.epa.gov/aboutepa/about-office-policy-op#ORPM.
[78] For more information, please see: https://nationalsbeap.org/.

regulatory impacts or enforcement issues.

- Advocating for and facilitating informal small entity engagement activities.

- Developing recommendations or reports on EPA's asbestos and small business compliance assistance programs.

Based on the Agency's overall small business regulatory and environmental compliance assistance activities, EPA has earned a grade of "A" in the last 16 SBA Office of the National Ombudsman Annual Reports to Congress.[79]

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

Consistent with EPA's priorities for addressing climate change, equity, and Environmental Justice (EJ) in FY 2024, the ASBO will:

- Develop and issue ASBO program reporting to help guide the Agency on issues related to asbestos, small business regulatory impacts and adherence to the 507 Program requirements. Under the 1986 Asbestos Hazard Emergency Response Act (AHERA) (15 U.S.C. §2641-2656) and the 1990 Clean Air Act (CAA) Amendments' Small Business Stationary Source Technical and Environmental Compliance Assistance Program (42 U.S.C. §7661f), the ASBO is statutorily required to monitor and report on the effectiveness of EPA's asbestos and small business environmental compliance assistance programs. In FY 2022, the ASBO developed, vetted, and issued an integrated strategy for carrying out these monitoring and reporting responsibilities. In FY 2024, the ASBO will fully implement these responsibilities, building on its activities in gathering relevant data, including information collected in FY 2023. This implementation will help identify opportunities to strengthen operational efficiency and effectiveness in the delivery of program services and support.

- Continue to support state small business stakeholder engagement with EPA's EJ activities through ASBO's ongoing collaboration and cooperative assistance agreement with the Kansas State University. ASBO funds the cooperative agreement in support of the National SBEAP. SBEAPs are a key stakeholder on EJ activities as they work directly within the EJ community and service small and disadvantaged businesses located within their state. In response to Executive Order (EO) 13985,[80] the SBEAPs recently created an EJ Subcommittee to provide targeted support to small and disadvantaged businesses located in underserved communities. In FY 2024, the ASBO will support the SBEAP's EJ Subcommittee efforts through outreach and event planning activities, and assistance with EPA EJ coordination within states. Through ASBO's cooperative agreement with the

[79] For more information, please see: https://www.sba.gov/sites/default/files/2022-04/SBA_ONO_AnnualReport_2020-508_0.pdf.
[80] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

National SBEAP, the ASBO also will continue to support, enhance, and promote the SBEAP website's foreign language page, which is a key EJ resource for assisting the underserved, non-English speaking business community.

- Continue to strengthen small business access to regulatory and environmental compliance resources, training, and stakeholder collaboration. This includes leveraging the ASBO direct hotline assistance and small business engagement activities to target technical assistance to overburdened and marginalized small business communities. As an example, in FY 2023, the ASBO began utilizing an off-the-shelf subscription tracking and management technology for its monthly newsletter to conduct data analytics to better identify small business communities for outreach and engagement activities. Additionally, ASBO will continue to review, update, and expand its portfolio of small business resources.

- Foster stronger internal communication and collaboration within EPA and its rule writers, especially EPA's Office of Air and Radiation, which has specific implementation responsibilities for Tackling the Climate Crisis At Home and Abroad, under EO 14008.[81] ASBO will offer EPA rule writers virtual facilitation and coordination support for early and informal small business engagement during the rulemaking process. Early and informal engagement with the small business community will allow the Agency to better understand industry practices and business impacts early in the rule development process to better understand, and when possible, mitigate, regulatory burdens on small and disadvantaged businesses.

- Continue to convene and manage Small Business Advocacy Review Panels, under OP's Small Business Advocacy Chair, which help to inform agency rule writers of EPA rules that may have a significant impact on a substantial number of small entities.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$23.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This funding change includes a slight reduction to this program. The Agency will prioritize activities to continue to maintain compliance with its statutory obligations under the Small Business Act.

Statutory Authority:

Asbestos Hazard Emergency Response Act (AHERA), 1986 (adding Title II to the Toxic Substances Control Act (TSCA)) (15 U.S.C. §2641-2656); Clean Air Act, Title 5, Section 507;

[81] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Small Business Stationary Source Technical and Environmental Compliance Assistance Program (42 U.S.C. §7661f); Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. 104-121, as amended by Pub. L. 110-28; Small Business Paperwork Relief Act, 44 U.S.C. 35; 42 U.S.C. § 7661f; and 15 U.S.C. §§ 2641-2656.

Small Minority Business Assistance

Program Area: Cross-Agency Coordination, Outreach and Education
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$2,564***	***$2,056***	***$1,996***	***-$60***
Total Budget Authority	$2,564	$2,056	$1,996	-$60
Total Workyears	8.4	7.6	7.6	0.0

Program Project Description:

EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) manages the Agency's Small Business Contracting Program mandated under Section 15(k) of the Small Business Act, 15 U.S.C. § 644(k). As prescribed under that section, the Program provides expertise in ensuring small business prime and subcontracting opportunities to help promote procurement equity and expand EPA's competitive supplier base in carrying out the Agency's mission. Under the Program, OSDBU provides EPA's contracting community statutorily required counseling and training on all aspects of governing small business requirements throughout the federal acquisition cycle. It also engages in statutorily mandated advocacy on behalf of the various categories of small businesses, including disadvantaged businesses; small businesses located in Historically Underutilized Business Zones (HUBZones); service-disabled veteran-owned small businesses (SDVOSBs); and women-owned small businesses (WOSBs). In accordance with Section 15(k), OSDBU further hosts or participates in an average of one small business outreach and training conference each month, providing needed technical assistance to hundreds of small and disadvantaged businesses across the country.

In implementing the statutory responsibilities required under Section 15(k), OSDBU reviews acquisition strategies to maximize small business prime and subcontracting opportunities; provides expertise in conducting market research for EPA acquisitions; performs contract bundling reviews to avoid unnecessary or unjustified limitations on small business utilization; reviews purchase card transactions within the statutory threshold; and evaluates large prime contractor subcontracting plans. In addition, OSDBU assists in the coordination of unsolicited proposals for agency acquisitions and in the resolution of small business payment issues under EPA acquisitions. It further provides a broad range of training, outreach, and technical assistance to new and prospective small business contract awardees.

Historically, data reported in the Federal Procurement Data Systems (FPDS) indicates that EPA awards an average of 40 percent of total acquisition dollars to small businesses annually – far exceeding the government-wide goal of 23 percent. EPA most recently earned the highest grade of "A+" on the FY 2021 Small Business Procurement Scorecard, outperforming the Agency's record of an "A" grade for the last 12 consecutive Scorecards.[82]

[82] For more information, please see: https://www.sba.gov/agency-scorecards/scorecard.html?agency=EPA&year=2021.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

Consistent with EPA's priorities to advance Environmental Justice (EJ), further procurement equity to support underserved businesses and communities, and expand the Nation's supplier base, in FY 2024, the Program will:

- Leverage technology to foster more efficient and effective vendor engagement as a pivotal component in expanding small and socioeconomic business participation in EPA acquisitions. Industry has specifically indicated in various EPA listening sessions held in FY 2022, that ensuring small business access to federal procurement opportunities and corresponding officials is indispensable to furthering procurement equity. In FY 2024, OSDBU will deploy a new system to simplify matching small and socioeconomic vendors with EPA contracting opportunities and responsible EPA officials. Utilizing matchmaking technology will take advantage of available artificial intelligence to ensure small and disadvantaged businesses have meaningful access and opportunities to market their solutions, experience, and capabilities to EPA officials. Also in FY 2024, OSDBU will continue to build on its successful deployment of its enhanced electronic vendor profile database. OSDBU will institute additional reconfigurations to enable EPA officials to customize discrete vendor lists for specific categories of spend. This will streamline acquisition planning and market research, resulting in reductions in the overall procurement action lead time.

- Engage in more dynamic acquisition planning and market research by strengthening OSDBU's role as an essential member of the Agency's integrated acquisition team. In FY 2024, OSDBU will continue to strengthen agencywide compliance with internal vendor engagement metrics to expand the Agency's market intelligence and familiarity with socioeconomic small business sources available in the federal marketplace. OSDBU will assume a leading role in providing small business expertise and counsel in tailoring and coordinating innovative vendor engagement strategies to maximize meaningful small and socioeconomic business procurement opportunities.

- Implement a new policy to expand large business utilization of small and socioeconomic businesses in the performance of prime contracts. In FY 2022, OSDBU initiated a pilot for an optional small and socioeconomic business utilization strategy in EPA Superfund remedial acquisitions. The utilization strategy is intended to incentivize prime contractors to maximize small business contracting teaming arrangements consistent with the efficient performance of prime contracts. In FY 2024, OSDBU will partner with EPA's Office of Acquisition Solutions (OAS) to adopt a formal policy expanding application of the strategy more broadly to other agency acquisitions, and to provide related training to EPA officials and industry. Significantly, implementing the strategy more broadly will encourage large business joint venture, mentor-protégé, and subcontracting relationships with small businesses. This will help build small and socioeconomic business capabilities, capacity,

and experience, and thereby diversify and expand the federal supplier base in accordance with governmentwide procurement equity directives[83] on expanding procurement equity.

- Conduct robust EPA in-reach activities to educate the Agency's acquisition workforce on structuring acquisitions to expand small business contracting opportunities and reduce barriers to procurement equity. In FY 2024, OSDBU also will collaborate with OAS to develop a bootcamp training curriculum to equip and enhance small business proficiency in competing for EPA contract awards and effective contract administration.

Performance Measure Targets:

(PM SB1) Percentage of EPA contract spending awarded to HUBZone businesses.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						3.0	3.2	3.4	Percent
Actual	1.6	2.4	2.2	2.0	4.9	3.1			
Numerator	25	37	35	30	75	59			Millions of Dollars
Denominator	1,500	1,500	1,500	1,500	1,500	1,900			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$60.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This funding change includes a slight reduction to the Program. The Agency will prioritize activities to continue to maintain compliance with its statutory obligations under the Small Business Act.

Statutory Authority:

Small Business Act, 15 U.S.C § 644(k).

[83] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/ and https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-03.pdf.

State and Local Prevention and Preparedness
Program Area: Cross-Agency Coordination, Outreach and Education
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$14,957***	***$15,446***	***$23,884***	***$8,438***
Total Budget Authority	$14,957	$15,446	$23,884	$8,438
Total Workyears	57.7	67.1	93.1	26.0

Program Project Description:

The State and Local Prevention and Preparedness Program establishes a structure composed of federal, state, local, and tribal partners who work together with industry to protect emergency responders, local communities, facility workers, the environment, and property from chemical accident risks through accident prevention and emergency response programs, community and facility engagement, and improved safety systems. This framework provides the foundation for community and facility chemical hazard response planning and reduction of risk posed by chemical facilities.

Under Section 112(r) of the 1990 Clean Air Act (CAA) Amendments, chemical facilities that store more than a threshold quantity of listed extremely hazardous substances are required to implement a Risk Management Plan (RMP) program. These facilities, known as RMP facilities, take preventive measures, report data, mitigate and/or respond to chemical releases, and work with communities, first responders, and planning groups to increase understanding of risks.[84]

The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 was enacted to help communities plan for chemical emergencies and to inform the public about chemicals in their community. Under EPCRA, facilities are required to report about the chemicals they produce, use, and store to state and local governments. States, tribes, and local governments use this information to prepare communities for potential chemical releases from these facilities through the development of local emergency response plans.[85]

Under Section 311(j)(5) of the Clean Water Act (CWA), EPA is required to issue and implement regulations requiring certain facilities to develop plans to respond to worst case discharges of hazardous substances that could threaten navigable waters.

[84] For additional information, please refer to: https://www.epa.gov/rmp.
[85] For additional information, please refer to: https://www.epa.gov/epcra.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the State and Local Prevention and Preparedness Program will perform the following activities:

- Support inspection of RMP and EPCRA facilities to ensure compliance with accident prevention and preparedness regulations, and work with chemical facilities to reduce chemical risks and improve safety. There are approximately 12,000 chemical facilities that are subject to the RMP regulations. Of these, approximately 1,700 facilities have been designated as high-risk based upon their accident history, quantity of on-site dangerous chemicals stored, and proximity to large residential populations.[86] EPA prioritizes inspections at high-risk facilities.

- The Program generally aims to conduct approximately 300 inspections a year, or three percent of all RMP facilities. EPA will focus on high-risk facilities located in communities with environmental justice concerns and communities with increased climate-related risks (*e.g.*, extreme weather, flooding, wildfires, etc.). Additional resources will allow the Program to complete approximately 200 more inspections per year once the new inspectors are trained and credentialed.

- Protect fenceline communities through regulatory updates and outreach, compliance assistance, and inspections at regulated facilities, thereby reducing risks to human health and the environment by decreasing the likelihood and impacts of chemical accidents.

- Provide basic and advanced RMP and EPCRA inspector training for federal and state inspectors.

- Maintain and upgrade the RMP national database, which is the Nation's premier source of information on chemical process risks and contains hazard information on all RMP facilities. Industry electronically submits updated RMPs to this secure database. Using funding requested in FY 2024, EPA will continue improvements to the RMP national database to accommodate new risk management plan submission elements resulting from recent regulatory changes and providing increased public access to non-sensitive portions of the RMP database and subsequent analytics.

- Develop updates to the Computer-Aided Management of Emergency Operations (CAMEO) software suite (*i.e.,* the CAMEO Chemicals, CAMEO*fm,* Areal Locations of Hazardous Atmospheres and Mapping Application for Response, Planning, and Local Operational Tasks applications), which provides free and publicly available information for firefighting, first aid, emergency planning, and spill response activities.

[86] Located in EPA's RMP database.

- Implement the changes made in the RMP Safer Communities by Chemical Accident Prevention final rule, which the Agency expects to be completed in August 2023. This rule will initiate the updating of EPA interpretive guidance and training EPA, state, and local inspectors on new and updated regulatory provisions to address Administration priorities on environmental justice and climate change.

- Under Section 311(j)(5) of the CWA, EPA will continue developing regulations requiring certain facilities to develop plans for responding to a worst-case discharge, or to a substantial threat of such a discharge, of CWA-listed hazardous substances. EPA requests $300 thousand and 2 FTE in FY 2024 to begin implementation efforts for this new regulatory program. These additional funds and staff will be used to develop implementation guidance and training and outreach materials and begin training regional staff on conducting inspections and exercises for the new regulatory provisions.

- Conduct outreach to regulated industry concerning changes or updates to RMP and EPCRA regulations and interpretive guidance.

- Coordinate and collaborate with state, tribal, and local response entities on emergency response plans and procedures to ensure cohesive and effective responses to chemical releases.

Performance Measure Targets:

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness program under the Superfund appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$419.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$7,519.0 / +26.0 FTE) This program change is an increase to support a multi-pronged approach to protect fenceline communities at risk from nearby chemical facilities, including providing increased outreach and inspections at regulated facilities to ensure facilities have measures in place to prevent chemical accidents. This investment includes $4.5 million for payroll.

- (+$500.0) This program increase is to upgrade and support operations and maintenance of the existing RMP database.

Statutory Authority:

The Emergency Planning and Community Right-to-Know Act (EPCRA); the Clean Air Act (CAA) § 112(r); Clean Water Act (CWA) § 311(j)(5).

TRI / Right to Know

Program Area: Cross-Agency Coordination, Outreach and Education
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Promote Pollution Prevention

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$13,064***	***$15,052***	***$14,018***	***-$1,034***
Total Budget Authority	$13,064	$15,052	$14,018	-$1,034
Total Workyears	36.8	37.0	37.0	0.0

Program Project Description:

EPA's success in carrying out its mission to protect human health and the environment depends on collecting and making available timely, accurate, and relevant information to communities, non-governmental organizations, industry, academia, and government agencies at the local, state, tribal, federal, and international levels. EPA's Toxics Release Inventory (TRI) Program[87] supports the Agency's mission by annually collecting and publishing in a publicly accessible form: release, other waste management (*e.g.,* recycling), and pollution prevention (P2) data on TRI-listed chemicals and chemical categories that include almost 200 per- and polyfluoroalkyl substances (PFAS).[88] Approximately 21,000 industrial and federal facilities report to TRI annually.

The TRI Program is a premiere source of cross-media toxic chemical release information for stakeholders. Using technological advances, the TRI Program has developed several analytical tools that provide the public with easy access, mapping, and analysis of information on TRI chemicals released or otherwise managed as waste at facilities in communities across the United States and its territories. Some of these tools incorporate demographic indicators such as low income, people of color, unemployment, education level, linguistically isolated households, and young and elderly populations, as well as tribal land and risk indicators.

The Program collaborates with other EPA programs on data analyses to describe relevant trends in pollutant releases, waste management, and P2 practices with respect to toxic chemicals and to support innovative approaches by industry and other partners to reduce pollution. As a robust, community-focused, annual, cross-media dataset on toxic chemical information, the TRI lends itself to comparative analyses with other program-specific data managed by the Agency, providing insights that may not be apparent when viewing the datasets independently. Such insights are especially valuable for 1) identifying opportunities based on TRI-reported, location-specific release trends to reduce toxic chemical releases in disadvantaged communities in accordance with the Administration's environmental justice (EJ) priorities, and 2) promoting TRI-reported

[87] For additional information, please visit: http://www.epa.gov/tri/.
[88] Many per- and polyfluoroalkyl substances (PFAS) were added to the TRI chemical list as a component of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) when the Act was signed into law on December 20, 2019. The first year of TRI reporting these PFAS was calendar year 2020.

pollution prevention (P2) practices that reduce the release of toxic chemicals and/or emissions of greenhouse gases (GHGs).

The TRI Program serves as a central component of EPA's strategy to increase access to environmental pollution information and enable communities, scientists, policymakers, and other stakeholders to apply the information in their decisions and engagements to address impacts and deter adverse burdens, particularly to low-income and disadvantaged communities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention in the *FY 2022 – 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to build upon the regulatory foundation of TRI to ensure that communities have access to timely and meaningful data on toxic chemical releases and other waste management and pollution prevention activities at facilities. As part of this effort, the TRI Program will continue to clarify toxic chemical reporting requirements, pursue additional chemical listings, expand the scope of industry coverage (as applicable), respond to petitions, improve the reporting experience, take steps to further optimize the quality of TRI data, explore enhanced access and analytical capability with respect to this valuable information, identify opportunities to reduce toxic chemical releases, and share and promote pollution prevention approaches with industry.

This work supports the Administration's EJ priorities as the Program will play an important role in conducting analyses to support EPA's goals for disadvantaged communities with EJ concerns. Additionally, the Program will work to identify instances where TRI-reported P2 practices reduce releases of TRI-listed toxic chemicals and/or GHGs in alignment with the Administration's climate priorities.

EPA also will continue to provide its online reporting application, *TRI-MEweb ("TRI Made Easy web"* reporting tool), to assist reporting facilities with the electronic preparation and submission of TRI reports through EPA's Central Data Exchange (CDX),[89] which manages TRI access and authentication services and provides identity proofing. *TRI-MEweb* has built-in functionality to help prevent facilities from making reporting errors. In addition, the TRI data collected by EPA are shared with states, tribes, and territories that are partners of the TRI Data Exchange (TDX).[90] EPA will continue to maintain *TRI-MEweb* and the TDX throughout FY 2024. The Agency also will continue to support the TRI Processing System (TRIPS) database, which is the repository for TRI data.

In FY 2024, as a key element of its data quality assurance strategy, the Program will conduct at least 600 data quality checks to help optimize the accuracy and completeness of the reported data and thereby improve the Program's analyses and the utility of the data to the public. EPA also will continue to improve its systems, processes, and products based on feedback from users (*i.e.*, communities; academia; industry; and state, tribal and local governments). Additionally, EPA will

[89] To access the CDX, please visit: https://cdx.epa.gov/.
[90] For additional information, please visit: https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-exchange.

explore opportunities to streamline the TRI listing process to enhance efficiencies in the TRI program.

The Program also will continue to publish English and Spanish versions of the annual TRI National Analysis,[91] which describes relevant trends in toxic chemical releases and waste management practices and highlights innovative approaches by industry to reduce pollution. The Analysis will include industry sector profiles, parent company analyses, and TRI information reported from facilities in specific urban communities, watersheds, and tribal lands. The TRI Program also will continue to make the preliminary data available to the public shortly after the reporting deadline as downloadable data files and through online analytical tools such as Envirofacts.[92] The Program will continue to provide support to EPA's Enforcement and Compliance Assurance programs by supplying facility target lists developed through the comparison of TRI reporting with facility reporting to other EPA programs (e.g., air permits required by the Clean Air Act). The TRI Program will continue to foster discussions and collaborations in analyzing and using its data with stakeholders such as industry, government, academia, non-governmental organizations, and the public. Engagement will include organizing targeted webinars, hosting a TRI National Conference and, if resources permit, launching a TRI University Challenge.

Section 7321 of the National Defense Authorization Act of 2020 requires EPA to assess certain Per- and Polyfluoroalkyl Substances (PFAS) to determine whether they meet Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 chemical listing criteria. During FY 2024 EPA will finalize a rulemaking to add certain PFAS to the TRI list based on the TRI-listing criteria. Further, the TRI Program's information, data, and analyses will support the Toxic Substances Control Act (TSCA) Program, helping to identify conditions of use and to evaluate and estimate occupational, general population, and potentially exposed and susceptible subpopulation exposures for those chemicals undergoing risk evaluation and that are included on the TRI chemical list. This work will assist Agency chemical programs in their prioritization work, from the identification of candidate chemicals for future risk evaluations to the support of other chemical assessments across program and regional offices, advancing the work of chemical safety agencywide.

The TRI Program will additionally pursue chemical listings, including TSCA Work Plan chemicals and other substances of interest to the Agency that are not included on the TRI chemical list, as well as respond to TRI chemical listing petitions. Additional chemicals or sectors may be assessed for TRI listing suitability and associated listing actions, and as required by EPCRA, the Agency will respond to EPCRA chemical petitions regarding TRI within 180 days after receipt.[93] The quantity and complexity of petitions are unknown until submitted to EPA. EPA will continue to respond to any TRI chemical petitions received during FY 2024.

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[91] To access the *TRI National Analysis*, please visit: https://www.epa.gov/trinationalanalysis. EPA publishes each National Analysis approximately six months after that year's data are reported.
[92] *EnviroFacts* may be accessed at: https://enviro.epa.gov/.
[93] Additional information on current petitions may be found at: https://www.epa.gov/toxics-release-inventory-tri-program/toxics-release-inventory-laws-and-regulatory-activities.

Because electronic systems that collect and disseminate TRI data largely have been developed, FY 2024 work will focus on the operations and maintenance of TRI-MEweb, TRIPS, and processes that contribute to quality control in the development of the annual TRI National Analysis. By leveraging agency cloud services, the TRI systems will improve system performance, reliability, efficiencies, portability, and administrative services (security, upgrades, patches, etc.). This also will improve integration/consistency with other cloud-based systems and applications and will provide quicker data processing. Moreover, this will enhance the capabilities of EPA's public-facing TRI analytical tools.

In FY 2024 the TRI Program will analyze and identify facilities and sectors releasing TRI-listed substances proximal to disadvantaged communities (using functionalities within EPA's analytical tools, such as TRI Toxics Tracker and EJScreen). The Program also will develop maps and other products to help facilitate exploration and understanding of potential impacts from chemical releases to surrounding communities, including those that might be more susceptible to climate change impacts (*i.e.,* sea level rise). TRI will initiate this work for at least two EPA Regions and will provide outreach and training in how to use and interpret the information within those locations.

Additionally, TRI reporting includes information on institutional/firm environmental stewardship, P2, and other sustainability practices and activities (*e.g.,* voluntary climate mitigation-, adaptation- or resilience-oriented work) undertaken by facilities during the reporting year. TRI's P2 reporting data[94] include thousands of instances of source reduction implementation and other sustainability activities by facilities, which often reflect economic benefits coupled with improved environmental performance. TRI's P2 data tools have a wide range of capabilities to help identify and amplify improvement to environmental practices, and the Program will continue to conduct analyses of these practices and to develop profiles of these environmental improvements, which can be useful for P2 practitioners including those seeking to advance sustainability and strengthen the resilience of facilities near disadvantaged communities with EJ concerns. The Program also will continue to support the Agency's P2 Program, and other Agency source reduction and sustainability programs, specifically efforts to advance P2 best practices among national emphasis areas, including tools to advance priorities such as the P2-EJ Facility Mapping Tool.[95]

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$457.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity

[94] For additional information, please visit: https//www.epa.gov/tri/p2.
[95] To access the P2 EJ Facility Mapping Tool, please visit https://www.epa.gov/p2/p2-ej-facility-mapping-tool.

requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (-$1,491.0) This program change is a decrease in contract resources to support IT analytical tools.

Statutory Authority:

Emergency Planning and Community Right-to-Know Act (EPCRA) § 313; Pollution Prevention Act of 1990 (PPA) § 6607.

Tribal - Capacity Building

Program Area: Cross-Agency Coordination, Outreach and Education
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$13,735***	***$14,715***	***$34,674***	***$19,959***
Total Budget Authority	$13,735	$14,715	$34,674	$19,959
Total Workyears	71.5	78.6	166.9	88.3

Program Project Description:

EPA is responsible for protecting human health and the environment under federal environmental statutes. Under the Agency's 1984 Indian Policy,[96] EPA works with federally recognized tribes on a government-to-government basis, in recognition of the federal government's trust responsibility to tribes, to implement federal environmental programs in Indian Country.

To do this, EPA will:

- use key environmental justice principles, such as, equity for underserved communities, strong meaningful tribal engagement, and fair treatment as it prioritizes implementation of EPA directly implemented programs, and for other activities;
- fully consider ways in which program funding can best be used to address climate change concerns to build climate resiliency for federally recognized tribes, and;
- work to enhance the consideration and integration of tribal treaty rights and reserved rights into EPA decision-making and regulatory development.

This program also supports the Categorical Grant: Tribal General Assistance Grants Program.

EPA's American Indian Environmental Office leads the agencywide effort to ensure environmental protection in Indian country. Please see http://www.epa.gov/tribal for more information.

FY 2024 Activities and Performance Plan:

[96] EPA Policy for the Administration of Environmental Programs on Indian Reservations, available at https://www.epa.gov/tribal/epa-policy-administration-environmental-programs-indian-reservations-1984-indian-policy.

Work in this program directly supports Goal 2/Objective 2.1, Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels in the *FY 2022-2026 EPA Strategic Plan.* To support this work, EPA is requesting $20 million in additional resources and an increase of 88.3 FTEs to focus on advancing environmental justice in Indian Country by ensuring full and robust implementation of the laws that EPA administers in all areas in need of such protections while simultaneously honoring the federal trust responsibility to the hundreds of federally recognized tribes EPA works with throughout FY 2024.

Overall, the Agency continues to make steady progress towards strengthening human health and environmental protection in Indian Country. In FY 2024, EPA will further the following priorities:

- Strengthen tribal partnerships and engagements, including through tribal consultation and engagement;

- Build tribal capacity to administer and meaningfully participate in environmental programs;

- Directly implement programs in Indian Country for equitable environmental protection especially for underserved tribal communities; and,

- Enhance the protection of tribal treaty rights in EPA activities.

The strategic investment will directly result in the following enhancements and deliverables:

- Improve public health by reducing disparities in compliance rates between Indian Country and the national average through greater Office of International and Tribal Affairs support and leadership to EPA programs and regions for planning and measuring EPA direct implementation actions in Indian Country.

- Initiate a General Assistance Program (GAP) oversight process to ensure GAP funds are being efficiently distributed and used.

- Initiate national coordination with Intertribal Consortia for technical assistance and GAP planning.

- Implement the revised EPA Tribal Consultation Policy and Implementation Guidance to improve consultation practices in conformance with Executive Order on Tribal Consultation and train EPA staff. Review and improve access to and quality of tribal data and information held in EPA information management systems to enable informed management and budget decisions on tribal matters.

- Provide technical assistance for tribes to support delegation of federal authority to the tribal government that allow tribes to implement EPA overseen programs.

- Make EPA regulatory tribal information available to tribal members and the public on EPA's *EJScreen* and other data systems through technical changes to existing EPA data

systems and develop a registry of EPA regulated facilities and entities in Indian Country that is publicly available.

- Develop best practices for engagement of communities by tribal governments with delegated federal authority.

- Reduce the ratio of grants per Project Officer for tribal grants.

- Support tribes and EPA regions in negotiating EPA-Tribal Environmental Program Agreements (ETEPs) and all aspects of the National Environmental Performance Partnership System (NEPPS) including Performance Partnership Grants (PPGs).

- Provide greater regional liaison work to strengthening partnerships with tribes with "more time per tribe" for GAP technical assistance.

- Provide greater and earlier meaningful engagements with tribes on actions that require consultation.

- Implement grant performance management system to measure tribal capacity and establish EPA GAP grant reporting to benefit tribes and EPA.

- Work as national program coordinator and connector for regional Environmental Justice Thriving Communities Navigators.

- Work as the liaison to the Office of Policy's Climate Adaptation Program to strengthen regional liaison work to implement tribal-related climate and treaty right priorities in the EPA Strategic Plan and Climate Adaptation Implementation Plans including consideration of a whole government approach to implement Tribal Climate Adaptation Implementation Plans.

Tribal Consultation: In working with the tribes, EPA follows its *Policy on Consultation and Coordination with Indian Tribes.*[97] The Consultation Policy builds on EPA's 1984 Indian Policy and establishes clear Agency standards for a consultation process promoting consistency and coordination. From FY 2011 through FY 2023, EPA expects to complete over 985 tribal consultations, nearing an important agency milestone under the EPA Tribal Consultation Policy. EPA anticipates completing another 125 tribal consultations in FY 2024. EPA will continue to support the Agency's web-based Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments. EPA's work increases access to public benefit programs and advancing environmental justice through simplified access to TCOTS information The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

Capacity Building: EPA will continue to support mechanisms for tribes to pursue developing and implementing federal environmental programs, including the "treatment in a manner similar to a

[97] Please refer to: https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes.

state" (TAS) process and the use of the Direct Implementation Tribal Cooperative Agreement (DITCA) authority. The Agency will continue to provide technical and financial assistance to tribal governments to build their capacity to meaningfully participate and engage in environmental protection activities. As of July 2022, EPA had approved 103 TAS regulatory program delegations to tribes, including 21 approvals for compliance and enforcement authority. EPA had 20 DITCAs with tribes in place in FY 2022.

Indian Environmental General Assistance Program Capacity Building Support: GAP grants to tribal governments help build the basic components of a tribal environmental program. The Agency manages GAP grants according to its Indian Environmental GAP Guidance on Financial Assistance Agreements.[98] In FY 2024, EPA will continue to administer GAP financial assistance to build tribal capacity and address environmental issues in Indian Country under new GAP guidance and training. EPA's work in FY 2024 also will continue to enhance EPA-tribal partnerships through development and implementation of EPA-Tribal Environmental Plans (ETEPs) with a continued focus on tracking and reporting measurable results of GAP-funded activities. GAP funding also continues to support EPA PPG goals. EPA will strive to incorporate environmental justice and climate change considerations in these activities.

GAP Performance Measurement: EPA will adjust the performance management application to align with the revised GAP Guidance and begin compiling and analyzing data. The information technology-based performance application will provide a data-driven basis for supporting funding decisions, funding priorities, and contribute to program accountability. Increased GAP performance will complement tribal capacity in media programs including efforts for CWA and SDWA SRF tribal set-asides.

Direct Implementation: In the absence of an authorized tribal program, EPA will continue to provide federal environmental program protections in Indian Country by directly implementing programs. In FY 2024, EPA will continue to evaluate its direct implementation responsibilities and activities on a program-by-program basis in Indian Country and make the data and information it relies upon available through EPA's EJScreen and other EPA applications.

Performance Measure Targets:

(PM E21) Number of significant actions taken by EPA programs with direct implementation authority that will result in measurable improvements in Indian country.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	25	20	Significant Actions
Actual						25			

(PM EC41) Percentage of EPA tribal consultations that may affect tribal treaty rights that consider those rights as part of the consultation.

[98] Please refer to https://www.epa.gov/tribal/gap-guidance-financial-assistance-agreements for further information.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						20	25	50	Percent
Actual						100			
Numerator						19			Tribal Consultations
Denominator						19			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,882.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$17,896.0 / +87.3 FTE) This program change increases resources and FTE to advance equitable implementation of EPA authorities and directives in Indian Country. This increase also will allow the Agency to work effectively with tribal governments and communities, administer tribal grants and critical technical assistance, and fulfill the federal trust responsibilities that align with the environmental statutes. Support will be provided to priority commitments made in EPA and Tribal Climate Adaptation Implementation Plans and allow additional incorporation of Indigenous Knowledge into climate change efforts. This includes $15.971 million in payroll costs.

- (+$181.0 / +1.0 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Enforcement

Civil Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$179,062***	***$205,942***	***$242,585***	***$36,643***
Leaking Underground Storage Tanks	$631	$661	$682	$21
Inland Oil Spill Programs	$2,660	$2,565	$2,665	$100
Total Budget Authority	$182,354	$209,168	$245,932	$36,764
Total Workyears	883.8	998.1	1,041.7	43.6

Program Project Description:

The overall goal of EPA's Civil Enforcement Program is to protect human health and the environment by ensuring compliance with the Nation's environmental laws and regulations. The Civil Enforcement Program works in partnership with its federal, state, local, tribal, and territorial regulatory partners to encourage compliance, compel regulated entities to correct and/or mitigate violations, and assess appropriate penalties for violations, including removing any economic benefit that a violator gained from noncompliance.

The Civil Enforcement Program works closely with the U.S. Department of Justice, state and local governments, tribal governments, territories, and other federal agencies to ensure consistent and fair enforcement of all major environmental statutes and numerous regulations implementing each of those statutes. Millions of public, federal, and private regulated entities are subject to one or more of these statutory requirements. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws. In FY 2022, because of EPA civil enforcement actions, approximately 95 million pounds of air, water, and toxic pollutants and approximately 100 million pounds of hazardous and non-hazardous waste were treated, minimized, or properly disposed.[99]

EPA is responsible for direct implementation of programs that are not delegable or where a state or tribe has not sought or obtained the authority to implement a program (or program components). Examples of programs that are not delegable include the Clean Air Act (CAA) mobile source and Ozone Depleting Substances programs; pesticide labeling and registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); the new and existing chemicals program under the Toxic Substances Control Act (TSCA); and enforcement in Indian Country (except where the Program has been delegated to the tribe). Many statutes have programs or regulations that states have not obtained authority to implement, including the American Innovation and

[99] For additional information on EPA's FY 2022 enforcement and compliance assurance program results, please visit: https://www.epa.gov/enforcement/enforcement-and-compliance-annual-results-fiscal-year-2022.

Manufacturing (AIM) Act, as well as portions of the Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), TSCA (lead-based paint program), and the CAA (chemical accident prevention).

Even where a state is authorized or has delegated program implementation responsibility, EPA retains concurrent enforcement authority. The Agency and authorized states have a joint responsibility to achieve and maintain high levels of compliance with the nation's environmental laws. EPA works with authorized states and tribes to ensure a level playing field and assists states and tribes in their implementation of delegated/authorized programs when needed, such as in cases where the Agency maintains a unique expertise or capability, or where direct federal action is necessary to take timely or appropriate steps to address threats to public health and the environment. The Agency also carries out its statutory oversight responsibilities to ensure states and tribes are meeting national compliance monitoring standards and taking timely and appropriate actions to return facilities to compliance. EPA's work to protect communities with environmental justice (EJ) concerns is a shared goal and responsibility of EPA and partner agencies. To carry out statutory oversight responsibilities, a robust inspection and enforcement program is essential to advancing the promise of clean air, land, and water to many communities across the country, especially overburdened communities and communities impacted by climate change.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable, in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency requests an increase of $8.5 million and 5.4 FTE in civil enforcement resources to rebuild the inspector cadre at Headquarters. This is in addition to the Agency's request for $14.1 million and 33.0 FTE to rebuild the Headquarters and Regional inspector cadre through Compliance Monitoring and Forensics Support resources. Rebuilding EPA's inspector corps is an EPA priority for FY 2024. A robust inspection and enforcement program is essential to advancing the promise of clean air, land, and water to the many communities across the country that have not received the full benefits from EPA's decades of progress. Staff on the ground that can identify public health concerns and potential environmental regulatory violations is critical to protect communities that are vulnerable or overburdened. EPA's inspection programs have been under-resourced for over a decade leading to a loss of agency expertise and a decline in the numbers of inspections. To meet EPA's EJ goals and the mission to protect human health and the environment and ensuring that Americans have clean air, land and water, EPA must rebuild and strengthen its inspection program with increased hiring and training of new and existing inspectors, including in-person basic inspector trainings and travel funding for the trainings for the following programs: CAA; SDWA; CWA; RCRA; FIFRA; and TSCA. Additionally, funding is needed to purchase health and safety equipment and inspection monitoring equipment such as Forward Looking InfraRed (FLIR) cameras, Data Acquisition Real-Time (DART), flame ionization detectors/photo ionization detectors, fenceline monitors, Smart Tools software and hardware for inspectors. Travel funding for inspections also is essential to get inspectors into the field.

In FY 2024, the Agency also requests an increase of $8.2 million and 19.9 FTE to enforce the AIM Act by preventing the illegal importation and use of hydrofluorocarbons (HFCs) in the United

States, facilitating a transition to next-generation technologies, and managing HFCs in existing equipment. EPA's job will be exponentially harder in FY 2024 as additional phasedown requirements and new requirements restricting the import, manufacture, and use of certain products come into effect. Enforcing the AIM Act in FY 2024 will more than double the level of effort as compared to enforcing the existing 2021 HFC Phasedown regulations. EPA requests a significant additional infusion of FTE and extramural resources for equipment, training, and other important tools. to lead the HFC Task Force and catch and deter potentially widespread illegal imports in FY 2024. The HFC Task Force will identify, intercept, and interdict illegal HFC imports, share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA also will implement new HFC allowance modules and expand its ozone depleting substances (ODS) tracking system to assess ongoing compliance. In addition, in FY 2024, training on the new enforcement techniques and support for implementation of both rules will be needed. As a result, civil enforcement needs an infusion of attorneys and inspectors to catch and prosecute violators. The additional FTE for case development, will assist in developing enforceable AIM Act rulemakings planned for FY 2024 and beyond. Without additional staff to find the violators, EPA will fail to achieve the benefits Congress intended in promulgating the AIM Act: phasing down HFCs and accelerating the transfer to new innovative technologies.

In FY 2024, EPA will continue to protect fenceline communities at risk from cumulative impacts of large chemical manufacturing facilities, petrochemical operations, and refineries. Through coordinated assessment of noncompliance in multiple statutory areas, EPA's Civil Enforcement Program will plan inspections, case development, and enforcement actions to integrate RCRA, CWA, SDWA, CAA (including Section 112(r)), TSCA, and the Emergency Planning and Community Right-to-Know Act (EPCRA) to ensure comprehensive compliance with environmental regulations, thereby reducing risk to human health and the environment by decreasing the likelihood of excess emissions, releases, and discharges.

In FY 2024, EPA will continue to integrate EJ and climate change considerations (including HFCs) throughout all aspects of EPA's Civil Enforcement Program (*e.g.*, private parties, public and federal facilities) in headquarters and across EPA's 10 regional offices. This work will answer the President's call to "strengthen enforcement of environmental violations with disproportionate impact on underserved communities through the Office of Enforcement and Compliance Assurance" [*EO 14008, sec. 222(b)(i)*], and to "combat the climate crisis with bold, progressive action" (*EO 14008, sec. 201*).[100] EPA will focus on strengthening enforcement and resolving environmental noncompliance through remedies with tangible benefits for disadvantaged communities by preventing further pollution due to noncompliance; mitigating past impacts from pollution; securing penalties to recapture economic benefit of noncompliance and deter future violations; seeking early and innovative relief (*e.g.*, fenceline monitoring and transparency tools); and incorporating Supplemental Environmental Projects (SEPs) in settlements, where appropriate and to the extent permitted by law and policy.

[100] For additional information on the Executive Order on *Tackling the Climate Crisis at Home and Abroad*, please visit: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

In FY 2024, EPA will incorporate climate and EJ factors into case development while pursuing enforcement and compliance assurance work (*e.g.*, to emphasize areas where greenhouse gas emission can be reduced while providing benefits in underserved communities, such as reducing air emissions from oil & gas and landfills), increase climate and EJ focused inspections, incorporate community outreach, and expand inclusion of mitigation and adaptation/resilience remedies in case resolutions. In addition, EPA will ensure that the increasing number of rules addressing climate change and affecting communities with EJ concerns, as well as permit-related provisions, are enforceable and implementable. A particular area of EPA's climate change effort will be the work of the Interagency HFC Task Force, which was established to ensure compliance with the AIM Act. Additionally, EPA will continue its strong emphasis on identifying and resolving CAA noncompliance in the oil and gas sector and requiring compliance with the Renewable Fuel Standard regulations.

In FY 2024, EPA will utilize resources to investigate and identify releases of per- and polyfluoroalkyl substances (PFAS) to the air, land, and water by actively investigating under RCRA, TSCA, CWA, SDWA, and CAA at the yet-unknown number of processing facilities, waste disposal facilities, and federal facilities where PFAS are suspected of contaminating various environmental media. PFAS released into the environment can present an urgent public health and environmental threat. EPA will continue to investigate releases, address imminent and substantial endangerment situations, and prevent exposure to PFAS, under multiple environmental statutes. OECA is stretching its base resources to (1) issue corporate-wide information requests and analyze responses, (2) create site profiles and information databases on specific facilities, (3) obtain site-specific data, and (4) use administrative and judicial authorities to require sampling and other response actions.

In FY 2024, new statutory and regulatory requirements will mean an increased need to evaluate and address noncompliance with these rules. As a result, the Agency will increase efforts to enforce the Coal Combustion Residuals (CCR) Rule. EPA's review of publicly posted CCR Rule compliance information suggests widespread noncompliance with CCR regulations. In enforcing the CCR Rule, coal ash units would be made more resilient to extreme weather events and contamination in communities near CCR units would be reduced. CCR evaluations are technically complex and require review and analysis of facility assessments that cover necessary corrective action measures and facility plans to permanently close units (the units can sometimes be hundreds of acres in size). EPA needs to conduct CCR compliance reviews to ensure that facilities properly address the significant health risks posed by these units and bring enforcement actions when violations are found. This work is identified as a priority in the *FY 2022 - 2026 EPA Strategic Plan.*

EPA will continue to focus its enforcement resources, over a four-year cycle, on the most serious environmental violations by developing and implementing National Enforcement and Compliance Initiatives (NECIs) that seek to improve air quality, provide for clean and safe water, and ensure chemical safety. [101] EPA issued a notice of public comment period in January 2023 on six proposed NECIs for FY 2024-2027 (described below). EPA's proposed NECIs will update the current FY 2020-2023 NECIs. As part of that process, EPA proposed to continue or modify four of the current national initiatives and return two remaining current initiatives to the standard ("core")

[101] For additional information, please visit: https://www.epa.gov/enforcement/national-enforcement-and-compliance-initiatives

enforcement program. EPA proposed two new NECIs: one that would focus specifically on mitigating climate change by reducing non-compliance with applicable requirements (*e.g.*, under the CAA and AIM Act), and second to address PFAS contamination with a focus on manufacturers and federal facilities. EPA also will fully incorporate EJ considerations into every existing and proposed NECI as the EPA seeks to reduce environmental harm in vulnerable and overburdened communities and incorporate climate resiliency considerations in the current and proposed initiatives. Lastly, EPA also is taking comment on whether to include in the NECIs its ongoing efforts to address lead exposures (*e.g.*, lead-based paint, lead in drinking water, *etc.*), and CCR contamination.

EPA's Proposed FY 2024-2027 NECIs:

- The following current initiatives are proposed to continue or be modified:
    - Creating Cleaner Air for Communities – focuses on processes with widespread non-compliance such as flares, storage tanks, wastewater treatment, and incineration/combustion to reduce excess emissions of harmful air pollutants that adversely impact vulnerable and pollution-burdened communities.
    - Reducing Risks of Accidental Releases at Industrial and Chemical Facilities – focuses on decreasing the likelihood of chemical accidents, thereby reducing risk to communities.
    - Reducing Significant Non-Compliance with National Pollutant Discharge Elimination System (NPDES) Permits – focuses on improving compliance rates with NPDES permits and ensuring the worst violations are timely and appropriately addressed.
    - Reducing Non-Compliance with Drinking Water Standards at Community Water Systems – focuses on ensuring safe and clean drinking water from regulated community drinking water systems.

- The two potential new NECIs in FY 2024-2027 are described as follows:
    - Mitigating Climate Change – focuses on reducing non-compliance with the AIM Act and the CAA to seek to combat climate change, which poses a risk to human health and the environment.
    - Addressing PFAS Contamination – focuses on implementing the commitments to action made in EPA's *2021-2024 Per- and Poly-fluoroalkyl substances (PFAS) Strategic Roadmap* to address PFAS contamination that pose a threat to human health and the environment. [102]

- The following current initiatives are proposed to return to the standard "core" enforcement program:
    - Stopping Aftermarket Defeat Devices for Vehicles and Engines – focuses on stopping the manufacture, sale, and installation of devices on vehicles and engines that defeat emissions controls, which contribute excess pollution, harming public health and air quality.

[102] For additional information, please visit: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024.

- Reducing Hazardous Air Emissions from Hazardous Waste Facilities – focuses on improving compliance with RCRA regulations that require the control of organic air emissions from certain hazardous waste management units and activities.

Performance Measure Targets:

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		325	325	325	325	325	325	325	Millions of Pounds
Actual	461	810	347	2,058	7,864	195			

(PM 436) Number of open civil judicial cases more than 2.5 years old without a complaint filed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target			129	120	99	99	96	95	Cases
Actual			94	74	66	65			

(PM 446) Quarterly percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target			17.8	15.2	12.7	10.1	10.1	10.1	Percent
Actual		20.3	17.1	16.4	12.6	9.0			
Numerator		8,310	7,015	6,941	5,330	3,942			Permittees
Denominator		40,944	41,085	42,334	42,429	44,015			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$9,630.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$8,533.0 / +5.4 FTE) This program increase will help rebuild EPA's civil enforcement inspector cadre for inspections, case development and to supplement this program's training and travel budget. This funding will enhance EPA's civil enforcement programmatic capabilities to enhance efforts to address pollution in overburdened and vulnerable communities. This investment includes $1.0 million for payroll.

- (+$8,212.0 / +19.9 FTE) This program increase will allow EPA to expand the work of the Interagency HFC Task Force, which is focused on ensuring compliance with the AIM Act. Additional FTE will allow EPA to build this major Congressional priority program from the ground up, address existing requirements, and prepare for both additional new

regulatory requirements and expansion of the Program into EPA's regional offices. This investment includes $3.7 million for payroll.

- (+$4,000.0) This change will support increased focus on environmental justice and climate change considerations by developing and implementing a comprehensive action plan for integrating climate and EJ considerations throughout all aspects of the Civil Enforcement Program (*e.g.*, private parties and federal facilities) in Headquarters and across EPA's 10 regional offices.

- (+$3,406.0 / +7.0 FTE) This request for Coal Combustion Residuals (CCR) Rule/coal ash resources will increase capacity to enforce the CCR/coal ash rule. The requested resources are needed to provide technical and legal support when engaging with noncompliant facilities and, ultimately, to negotiate or issue compliance orders. This investment includes $1.3 million for payroll.

- (+$946.0 / +4.0 FTE) This program change will increase protection of fenceline communities from industrial accidents because of increased frequency and intensity of extreme weather events due to climate change. Increased resources will support CAA sec. 112(r) inspections and enforcement actions to prevent industrial accidents. This investment includes $746.0 thousand for payroll.

- (+$648.0 / +0.5 FTE) This request for climate change adaptation funding will support implementation of the Office of Enforcement Compliance Assurance Climate Adaptation Implementation Plan.[103] Resources will support completion of priority actions including continued staff training to build climate change knowledge and consideration of climate change in all aspects of enforcement. This investment includes $93.0 thousand for payroll.

- (+$578.0 / +3.1 FTE) This program increase supports additional FTE for the Agency's Regional laboratories and its support of the Civil Enforcement Program. This investment includes $578.0 thousand for payroll.

- (+$410.0 / +2.2 FTE) This investment will increase EPA's effort to use its enforcement tools to hold major PFAS manufacturers at processing facilities, waste disposal facilities, and federal facilities accountable to characterize, control, and address ongoing and past PFAS contamination. This investment includes $410.0 thousand for payroll.

- (+$187.0 / +1.0 FTE) This program increase will continue to provide compliance oversight and perform follow up from recent inspections of the Red Hill Fuel Facility to prevent future fuel leaks into the military's drinking water. The Agency will review submittals from the Navy to ensure the facility is prepared for any oil releases to surface waters. In addition, EPA is planning to lead the technical review of the piping system between Red Hill and Pearl Harbor. This investment includes $187.0 thousand for payroll.

[103] For additional information, please visit: https://www.epa.gov/system/files/documents/2022-10/bh508-OECA_Climate_Adaptation_Implementation_Plan_-Final_to_OP_9.15.2022.pdf.

- (+$93.0 / +0.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $93.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Act to Prevent Pollution from Ships (MARPOL Annex VI); American Innovation and Manufacturing Act; Clean Air Act; Clean Water Act; Emergency Planning and Community Right-to-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Marine Protection, Research, and Sanctuaries Act; Oil Pollution Act; Resource Conservation and Recovery Act; Safe Drinking Water Act; and Toxic Substances Control Act.

Criminal Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$55,343***	***$62,704***	***$66,487***	***$3,783***
Hazardous Substance Superfund	$8,149	$7,999	$8,644	$645
Total Budget Authority	$63,492	$70,703	$75,131	$4,428
Total Workyears	252.9	269.3	296.0	26.7

Program Project Description:

EPA's Criminal Enforcement Program enforces the Nation's environmental laws through investigation of criminal conduct, committed by individual and corporate defendants, threatening public health and the environment. EPA's criminal investigators (special agents) investigate violations of environmental statutes and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice.

The Criminal Enforcement Program collaborates with other EPA Program offices, the Environmental Justice (EJ) Program, and the U.S. Department of Justice (DOJ) to ensure enforcement work addresses the impacts of illegal environmental pollution activities nationwide especially on overburdened communities.

Criminal Enforcement special agents are supported by forensic scientists, attorneys, technicians, engineers, and other experts. EPA's criminal enforcement attorneys provide legal and policy support for all program responsibilities, including forensics and expert witness preparation, to ensure program activities are carried out in accordance with legal requirements and EPA policies. These efforts support environmental crime prosecutions by U.S. Attorneys' Offices and the DOJ's Environmental Crimes Section. In FY 2022, the criminal enforcement program opened 117 new cases. The conviction rate for criminal defendants charged because of EPA criminal enforcement investigations in FY 2022 is 94 percent, with a total of 21 years of incarceration given for defendants sentenced in criminal enforcement investigations.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to focus on the most egregious cases (*e.g.*, significant human health, environmental, and deterrent impacts.), while balancing its overall case load across all environmental statutes. The Agency will continue expanding its capacity to support the criminal

enforcement program, with an emphasis in several priority areas, including communities with EJ concerns, the HFC (Hydrofluorocarbons) Enforcement Task Force, the After Market Defeat Device criminal enforcement initiative, and preventing the illegal importation, sale, and distribution of unregistered pesticides. Program goals and priorities include the following:

- In FY 2024, EPA will continue to prioritize criminal enforcement resources for investigations which involve vulnerable communities or those that have historically been overburdened by pollution. This effort has been focused as a Criminal Enforcement Program Initiative with an emphasis on addressing environmental crimes and crime victims in these areas.[104] The Criminal Investigation Division (CID) works with partners at the DOJ to jointly prosecute wrongdoing and reduce the impact pollution has on these areas through investigation, judicial actions, and settlements while maintaining case initiation standards.

- In FY 2024, EPA's Environmental Crime Victim Witness Assistance Program will closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's EJ work. Activities will include data mining and mapping to identify where communities with EJ concerns, crime victims, and public health impacts overlap. This strategy will aid the program in identifying sources of pollution impacting these communities and to focus criminal enforcement resources on the Nation's most overburdened or vulnerable populations and, where appropriate, use the crime victim program resources and emergency funds to assist individuals in such communities. EPA conducts outreach to crime victims and overburdened communities using the social media platform Nextdoor, sharing information relating to EJ, sources of pollution, and links to EPA's Report a Violation webpage directly to households in overburdened communities.

- In FY 2024, the Agency requests an additional $714 thousand and 2.1 FTE to support efforts to interdict the illegal import, manufacture and use of certain HFC products, pursuant to the American Innovation and Manufacturing (AIM) Act. The Task Force will continue to identify, intercept, and interdict illegal HFC imports, share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA will continue standing up its new enforcement and compliance program, which will include training, outreach, and coordination with federal, state, and local partners. EPA would leverage our experience working with Customs and Border Protection (CBP), DOJ and other federal partners to successfully enforce federal laws related to HFCs. Critically important to success in this media are dedicated analysts in the Criminal Enforcement Program to research, assess, and coordinate with federal partners, private industry, and task force members.

- In addition, in FY 2024, the Criminal Enforcement Program will continue to work with Interpol and other federal partners to combat climate change through domestic and international law enforcement collaboration. This work will include formalized information sharing related to preventing illegal importation of prohibited products that contribute to global climate instability and capacity building with other countries.

[104] For additional information, please see: https://www.govinfo.gov/content/pkg/FR-2023-01-12/pdf/2023-00500.pdf.

Specifically, collaboration will occur with an emphasis placed on cases that have a transnational organized crime nexus.

- In FY 2024, the Criminal Enforcement Program also will increase its collaboration and coordination with the Civil Enforcement Program to ensure that EPA's Enforcement Program identifies the most egregious cases and responds to them effectively and efficiently to ensure compliance and deter future conduct. The Agency will continue to investigate violations of environmental statutes and associated violations of Title 18 of the United States Code to protect public health and the environment.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$731.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It includes critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$2,338.0 / +23.9 FTE) This net program change supports expanding EPA's capacity for criminal enforcement, the expansion of the enforcement in communities with environmental justice concerns, enforcement of climate-related regulations, and increased polluter accountability. This investment includes $5.3 million for payroll.

- (+$714.0 / +2.1 FTE) This program investment will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport HFCs. The increase in FTE will allow analysts to research, assess, and coordinate with federal partners, private industry, and task force members. This investment includes $469.0 thousand for payroll.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Resource Conservation and Recovery Act; Clean Water Act; Safe Drinking Water Act; Clean Air Act; Toxic Substances Control Act; Emergency Planning and Community Right-To-Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Ocean Dumping Act; Rivers and Harbors Act; Pollution Prosecution Act of 1990; American Innovation and Manufacturing Act.

NEPA Implementation
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$17,177***	***$20,611***	***$25,760***	***$5,149***
Total Budget Authority	$17,177	$20,611	$25,760	$5,149
Total Workyears	87.5	104.9	115.9	11.0

Program Project Description:

EPA's National Environmental Policy Act (NEPA) Implementation Program implements the environmental requirements of NEPA and Section 309 of the Clean Air Act (CAA) to review other federal agency environmental impact statements (EIS) and NEPA regulations. This work includes engaging with officials throughout the federal government and across EPA while supporting EPA's lead NEPA Official. EPA has special authority and responsibilities under CAA section 309 to review and publicly comment on NEPA environmental analyses for major projects across the federal government. This work is substantially increasing in scope and importance given the recent legislation related to energy development and infrastructure and the need to incorporate consideration of climate change and environmental justice (EJ) into these assessments.

Consistent with Executive Orders (EO) 13990 and 14008,[105] the Council on Environmental Quality (CEQ) issued Interim *NEPA guidance on Consideration of Greenhouse Gas Emissions and Climate Change*[106] in January 2023. CEQ is in the process of updating NEPA regulations and key guidance for addressing impacts to communities with EJ concerns. Through a Memorandum of Understanding (MOU) with CEQ,[107] EPA regularly supports and assists CEQ in the development of guidance and technical tools. EPA also provides technical assistance to other federal agencies on implementing NEPA, including identifying potential programmatic options to streamline NEPA analyses while maintaining quality environmental analyses and meaningful engagement with the public.

EPA focuses on early engagement with other federal agencies consistent with NEPA principles and uses interagency cooperation for early identification of issues and potential solutions to reduce impacts and improve environmental outcomes. EPA's expertise helps other agencies analyze complex NEPA issues. Through our review of other federal agencies' EISs and the tools and

[105] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.
[106] For additional information, please refer to: Federal Register : National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change.
[107] 1977 Memorandum of Understanding (MOU) between CEQ and EPA addressed the allocation of responsibilities between the two agencies for assuring government-wide implementation of NEPA. This includes the operational duties associated with the administrative aspects of EISs. Through this MOU, EPA became the official recipient for all copies of EISs.

training we provide, EPA facilitates the robust consideration of impacts related to climate change and EJ; further, EPA plays a critical role in identifying ways to mitigate environmental impacts, including on overburdened and underserved communities.

In addition, EPA's NEPA Implementation Program manages e-NEPA, a web-based application that serves as the official EIS filing system and clearinghouse for all federal EISs on behalf of CEQ in accordance with the MOU with CEQ and 40 CFR 1506. The Program also oversees EPA's actions subject to NEPA (40 CFR Part 6) and reviews of EISs for non-governmental activities in Antarctica (40 CFR Part 8).

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an investment of $5.1 million and 11.0 FTE for the NEPA Implementation Program. EPA acknowledges a partial increase in its FY 2023 Enacted budget but still has a resource gap which is hereby requested in the FY 2024 budget. These essential resources are needed for us to meet the increased need for technical expertise in emerging subject matter areas, including addressing climate change and EJ, and to develop tools and training for NEPA/CAA 309 reviewers at EPA. This investment will improve EPA's responsiveness, technical assistance, and support to other agencies in conducting EPA's environmental review function, which relies upon both adequate staff capacity and expertise. These resources also will assist EPA in ensuring staff levels are adequate to address anticipated environmental reviews and support environmental review processes to improve environmental and community outcomes.

In FY 2023, EPA received a total of $40 million as part of the Inflation Reduction Act (IRA). These resources will allow EPA to meet the short-term increase in demand to support environmental reviews from the Infrastructure Investment and Jobs Act but are not a permanent solution as the funds remain available until September 30, 2026. While the IRA funds will support environmental reviews in the short term, the FY 2024 investment will allow the Program to continue to meet some of its recent challenges, including rebuilding core capacity, hiring of subject matter experts knowledgeable in various sector-based activities, and positioning EPA to respond to national priorities and provide adequate succession planning and professional development across EPA's NEPA/309 community going forward. This strategic investment of subject matter expertise provides new FTE in EPA's regional offices, which is critical as the majority of the NEPA reviews and programmatic assistance to other federal agency field offices is conducted by the regions. EPA's FY 2024 long term resource needs will be like those used to support past economic recovery initiatives. For context, the American Recovery and Reinvestment Act triggered a very similar substantial increase in volume of NEPA reviews across the Federal government. Therefore, EPA requests an adjustment to the NEPA Implementation Program to address current and anticipated future environmental review workloads, which will require a corresponding permanent increased staffing and resource support to meet the Nation's goals, particularly with respect to climate change and environmental justice.

EPA's NEPA Implementation Program will continue to support the application of CEQ's updates to NEPA regulations, guidance, and process improvements for priority federal projects. It is anticipated that in FY 2024, agencies will update NEPA implementation procedures to be consistent with updated CEQ regulations and guidance. EPA will be required under CAA section 309 to review these procedures for all federal agencies and must provide technical assistance to CEQ and other agencies. This support will promote quality environmental review processes across federal agencies to improve environmental and community outcomes.

EPA will continue to work with the Office of Management and Budget (OMB), CEQ, and other federal agencies to evaluate ways to coordinate, streamline, and improve the NEPA process, as well as to incorporate robust science-based analyses of project-related impacts and potential measures to minimize and mitigate those impacts. Federal agencies received a substantial increase in funded actions that will likely require EISs and thus necessitate EPA environmental reviews due to: the American Rescue Plan Act of 2021 (P.L. 117-2),[108] the Infrastructure Investment and Jobs Act (IIJA), the Creating Helpful Incentives to Produce Semiconductors for America Act (CHIPs Act), and other economic recovery and federal investment actions, as well as policies and initiatives, such as EO 14017 *America's Supply Chains*[109] and the Energy Act MOU between the Bureau of Land Management and EPA. EPA anticipates its existing workload will likely double based on interagency discussions hosted by CEQ and OMB. This continued substantial increase in priority actions will require early engagement and may require expedited reviews. With the additional resources requested in FY 2024, EPA will work with other agencies to prioritize and support the increase in environmental review of Federal EISs. These initiatives support other federal agencies establishment of clear timeline goals and will improve EPA's responsiveness, technical assistance, and support to other agencies to enhance the overall environmental and community outcomes in other agency environmental reviews.

In alignment with the Administration's Permitting Action Plan, EPA engages early with federal agencies to improve the quality of EISs and minimize delays. Early engagement helps accelerate robust environmental reviews through early cross-agency coordination; supports the establishment of clear timelines and tracking; facilitates early and meaningful outreach and communication with states, tribes, territories, and local communities; provides technical assistance in areas of subject matter expertise; and promotes interagency cooperation to improve environmental and community outcomes. As part of the Permitting Action Plan, EPA has committed to update EPA's Policies and Procedures Manual for conducting NEPA/309 reviews in FY 2023. In FY 2024, EPA will update and develop a priority set of technical reviewer guidance documents for mining, renewable energy, oil and gas activities, transportation and estimating Greenhouse Gas (GHG) emissions and social cost of GHG for fossil fuel pipeline projects. These technical reviewer guidance documents are expected to be completed by third quarter FY2024. EPA also plans to conduct training for NEPA/309 reviewers and other federal agencies to incorporate recent changes in CEQ regulations and guidance for NEPA related topics. In FY 2024, EPA will work to provide early engagement and to streamline environmental reviews by having dedicated EPA NEPA/309 review staff from the start of the NEPA review and through completion. Updating actions associated with the Permitting Action Plan will help improve EPA's responsiveness, technical assistance, and support

[108] For additional information, please refer to: https://www.congress.gov/117/bills/hr1319/BILLS-117hr1319enr.pdf.
[109] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/02/24/executive-order-on-americas-supply-chains/.

to other agencies with the objective of improving environmental and community outcomes based on environmental reviews.

EPA will support and collaborate with other federal agencies on priority actions and/or emerging sectors, such as critical minerals mining, carbon sequestration, renewable energy, and energy storage. In FY 2024, EPA will work toward providing staff with specialized expertise at both headquarters and the regional offices to facilitate timely interagency coordination on environmental reviews and permitting actions. As part of this specialized expertise, EPA will support development of analytic tools to help NEPA/309 reviewers and other agencies implement CEQ Interim NEPA Guidance on Consideration of GHG and Climate Change. This support will improve EPA's technical assistance capacity to help support improved environmental and community outcomes in review of other federal agency NEPA documents.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,991.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,158.0 / +11.0 FTE) This program change is an increase to build core capacity, support the increase in environmental reviews of Federal EISs, hire and train new staff and subject matter experts, and facilitate timely interagency coordination on environmental reviews and permitting actions. This investment includes $2.0 million for payroll.

Statutory Authority:

National Environmental Policy Act (NEPA); Clean Air Act (CAA) § 309; Antarctic Science, Tourism, and Conservation Act; Clean Water Act § 511(c); Endangered Species Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; and Title 41 of the Fixing America's Surface Transportation Act.

Environmental Justice

Environmental Justice

Program Area: Environmental Justice
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$20,455***	***$102,159***	***$369,106***	***$266,947***
Hazardous Substance Superfund	$1,065	$5,876	$5,888	$12
Total Budget Authority	$21,520	$108,035	$374,994	$266,959
Total Workyears	51.8	223.6	264.6	41.0

Program Project Description:

EPA's Environmental Justice (EJ) Program coordinates the Agency's efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and building collaborative partnerships with all stakeholders to build healthy, sustainable communities based on residents' needs and desires. In 2022, EPA reorganized its Office of Environmental Justice into a new national program along with the External Civil Rights Compliance Office and the Conflict Prevention and Resolution Center. This new national program is the Office of Environmental Justice and External Civil Right (OEJECR). OEJECR focuses on collaboration as a central principle and method of advancing justice. The Program's core philosophy is that EJ challenges need strong collaborative partnerships that include federal, state, local, and tribal governments along with the private sector, academia, and philanthropy–to support communities in addressing multifaceted problems and positively changing conditions on the ground. The Program provides grants, technical assistance, and expert consultative support to communities, partners at all levels of government, and other stakeholders such as business and industry, to achieve protection from environmental and public health hazards for people of color, low-income communities, and indigenous communities.

Work in this program directly supports Administrator Michael Regan's message in the memo titled "Our Commitment to Environmental Justice" issued on April 7, 2021.[110] In addition, this work supports implementation of Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*,[111] and EO 14008: *Tackling the Climate Crisis at Home and Abroad*.[112] In accordance with the America's Water Infrastructure Act

[110] For additional information, please refer to: https://www.epa.gov/sites/default/files/2021-04/documents/regan-messageoncommitmenttoenvironmentaljustice-april072021.pdf.
[111] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.
[112] For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.

(AWIA) of 2018 (P.L. 115-270), every EPA regional office employs a dedicated EJ coordinator, and the Agency maintains a list of these persons on EPA's website.[113]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an additional $266.9 million and 41.0 FTE for the Environmental Justice Program in the EPM appropriation. This investment will provide unprecedented levels of capacity-building grants and technical assistance to more communities, governmental partners, and academic institutions. To ensure greater opportunity for investment and the resulting outcomes for communities, EPA will offer more grant trainings and methods of technical assistance to help underserved and under-resourced communities and their partners apply for competitive grant opportunities and provide robust new levels of support to help communities and their partners navigate the array of federal assistance programs to maximize the ability of programs to leverage positive change on the ground. For example, this enhanced assistance will support broader investment in climate initiatives in communities with EJ concerns as well as provide critical support to community-based organizations, indigenous organizations, states, tribes, local governments, territorial governments, and state and local EJ advisory councils, in pursuit of identifying and addressing EJ issues through multi-partner collaborations. EPA also will continue to support and engage grantees from previous years' competitions to ensure successful project completion.

In FY 2024, the existing grant programs include:

1) $65 million Environmental Justice Community Grants Program (formerly named Environmental Justice Small Grants) that would continue to competitively award a comprehensive suite of grants to non-profit, community-based organizations to reduce the disproportionate health impacts of environmental pollution in communities with EJ concerns;
2) $40 million Environmental Justice Government to Government Grant Program (formerly named State, Tribes, and Territories Environmental Justice Grants) that would continue funding for states, tribes, local governments, and territories to create or support community-driven partnerships and associated environmental justice partnerships;
3) $15 million competitive, community-based Participatory Research Grant Program to award competitive grants to higher education institutions that develop partnerships with community entities to improve the health outcomes of residents and workers in communities with EJ concerns; and
4) $10 million competitive, Environmental Justice training program to award competitive grants to community-based nonprofit organizations and partnerships between community-based nonprofit organizations and institutions of higher education.

[113] For additional information, please refer to: https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice.

Environmental Justice and External Civil Rights (EJECR) National Program

In FY 2024, EPA's EJECR National Program will continue leading the integration of EJ in Agency decision-making and implement a comprehensive framework for considering cumulative impacts in relevant EPA decisions. Implementation of the cumulative impacts framework, developed as part of EPA's FY 2022-2023 Agency Priority Goal, will position EPA to consider and address cumulative impacts that affect community health and well-being in its decisions, thus fundamentally integrating EJ issues within the core regulatory decisions of the Agency. The EJECR National Program will provide essential support across all EPA programs to consider EJ in environmental permitting, rulemaking, enforcement and compliance, emergency/disaster response and recovery, and climate change priorities. The EJECR National Program will enhance its engagement with communities by continuing to support Thriving Community Technical Assistance Centers (TCTACs) established in FY 2023 and increasing their number beyond the initial goal of one per EPA region. The TCTACs will be instrumental in fundamental technical assistance and capacity building resources for underserved communities and their partners. The EJECR National Program will ensure that all community support activities provide a stream of tools, data, and methods back to the Agency to help other EPA programs analyze the EJ implications of policy decisions and program implementation, such as through National Environmental Policy Act processes or the consideration of costs and benefits in economic analyses.

The FY 2024 resources also will provide capacity to integrate EJ and civil rights compliance principles across all programs and regularly engage with and support community and state, tribal, and local partners. This will ensure the elimination of barriers to participation in EPA programs and other activities by the public. Specific focuses will be on strengthening EPA's language assistance and other services to improve access for people with Limited English Proficiency and implementation of EPA external disability program as required under Section 504 of the Rehabilitation Action of 1973. Additionally, the EJECR National Program will monitor indicators established in FY 2023 to track EPA's performance in eliminating disparities in environmental and public health conditions, as directed by the Agency Priority Goal for the first two years in the *FY 2022 - 2026 EPA Strategic Plan*.

Engagement with Partners, Stakeholders, and Communities

EPA pursues a broad array of activities to support efforts by partners, stakeholders, and communities to advance EJ. The EJ Program will continue to build and support trainings for an increasingly broad array of program development and learning resource areas for other governmental agencies, communities, and other partners. These trainings focus on the integration of equity and justice from communities through all levels of government, as well as the private sector, with special focus on state agencies, tribal governments, indigenous populations, territorial governments, and insular areas such as Pacific Island Nations. During FY 2023, this included partnership with the Environmental Council of States to provide additional and more finely tailored resources to support state efforts to advance equity and justice in their agencies and the establishment of an unprecedented foundation of learning tools and knowledge management resources available publicly through EPA's EJ Program.

The FY 2024 Budget proposes to invest $91 million and 50 FTE on building out community-centered technical assistance hubs to support basic capacity building of communities and their partners to advance equity and justice in their communities. This effort will be significantly enhanced through the dedicated addition of funds and staff in EPA's ten regional offices to fully build out community-centered technical assistance hubs to support base capacity building of communities and their partners. These hubs, the EJ TCTACs established in FY 2023, will be enhanced through this dedicated EPA staff support by better leveraging hands-on facilitation of connecting communities and their partners directly with EPA program resources in addition to the resources available through other federal programs.

EPA will continue to host regular National EJ Community Engagement calls.[114] These calls will continue to focus on a wide spectrum of topics related to EJ, the Justice40 Initiative[115], and EJ mapping and screening, and will reach thousands of participants. Each call will feature opportunities, such as expansive listening sessions, during which speakers interact with comments and questions from participants. EPA also will continue to host "office hours" for users of EJScreen to engage with the EPA EJScreen team with questions and feedback for further enhancements to the tool. The EJ Program also will have greater communications presence with more focused content, targeted communications, and other ways to reach communities and those not yet engaged through both headquarters and regional EJ program activities and direct outreach and support.

EPA also continues to directly engage community organizations and leaders while supporting internal EPA efforts to integrate EJ considerations into all EPA policies, programs, and activities. Work with the National Environmental Justice Advisory Committee (NEJAC) will continue with new leadership to help EPA advance and further integrate EJ into Agency decision-making. In addition to the NEJAC, EPA will report on progress to the Science Advisory Board, National Tribal Caucus, Children's Health Protection Advisory Committee, Local Government Advisory Committee, and other regular public engagement forums.

In FY 2024, EPA will continue to develop education, training, and outreach resources associated with EJ to answer the ever-increasing demand for such resources, particularly from other federal agencies and state and local governmental partners. These resources include 1) an EJ Training Program to increase the capacity of residents in communities with EJ concerns to identify and address negative impacts; 2) an EJ educational curriculum to broaden understanding of EJ to more of the American public; and 3) an EJ Clearinghouse to serve as an online resource for EJ information.

EJ Grants Program

EPA's EJ Grants Program funding has grown significantly due to the additional $3 billion Inflation Reduction Act[116] resources received in FY 2022 and expanded with new grant and technical assistance offerings in FY 2023. The new offerings include the establishment of the EJ Thriving Community Grantmakers Network and the establishment of an innovative new EJ implementation

[114] For additional information, please refer to: https://www.epa.gov/environmentaljustice/community-outreach-and-engagement.
[115] For additional information, please refer to: https://www.whitehouse.gov/environmentaljustice/justice40/
[116] Inflation Reduction Act: https://www.congress.gov/117/plaws/publ169/PLAW-117publ169.pdf

grant to directly fund community-driven collaborative efforts to lead change-making projects on the ground in communities. In FY 2024, EPA will continue to support the EJ Thriving Community Grantmakers network to efficiently provide grants to communities and their partners, the EJ TCTACs to provide technical support to community-based organizations and their partners such as tribes and local governments, and to award and support the execution of collaborative community-driven implementation grants across the United States. This holistic approach to grant funding and technical assistance will build the capacity of community-based organizations and their partners to build strong collaborative efforts to effectively identify and address community concerns in addition to providing funding to governmental partners to support their integration of EJ considerations into their policies, programs, and activities. EPA also will continue to provide grants to states, local governments, tribes, and territories through the EJ Government to Government grant program. These grants will support our governmental partners' effort to engage local communities and further equity and justice priorities of their partnerships.

The EJ Grants Program priorities funded in FY 2023 included a new, larger implementation grant program that funds projects that implement solutions to long-standing EJ challenges, development of cumulative impacts assessments, public education, engagement of communities with state and federal processes, training, emergency planning and preparedness, and addressing climate and disaster resiliency. EPA's EJ Program will continue to focus support primarily for small community-based nonprofit organizations and their local partners in an attempt to ensure EJ funding reaches lower-capacity and new organizations with capacity building needs. The EJ Grants Program also will work to minimize barriers for applicants by working with EPA's Office of Grants and Debarment to develop submission flexibilities to help applicants from underserved communities and other low-capacity institutions such as tribes and rural local governments apply for competitive grant opportunities.

Interagency Coordination

In FY 2024, EPA will continue to support the efforts of the NEJAC as referenced above in addition to supporting the efforts of the White House Environmental Justice Advisory Council (WHEJAC) established by EO 14008.[117] EPA also will support the Council on Environmental Quality (CEQ) as it leads the Interagency Council on Environmental Justice as well as a suite of EPA bi- and multi-lateral initiatives to support and partner directly with other federal agencies.

EJScreen

With an investment of $8.9 million provided in FY 2024, EPA will continue to support and improve our national EJ screening and mapping tool (EJScreen). Efforts will focus on identifying and adding valuable new data sources to the tool to include potential cumulative impacts index score(s) for areas facing disproportionate environmental burdens in addition to inclusion of new climate-relevant data and enhancing user interface elements. EPA will enhance EJScreen based upon user requests and feedback – from both within EPA and from external users – to further inform equitable decision making across the federal government in addition to providing more robust and diverse data to effectively prioritize communities in need and will ensure that EPA

[117] For more information, please visit: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad

programs develop guidance on using EJ tools such as EJScreen to support their decision making. These enhancements will enable EPA to further focus program design to benefit communities with EJ concerns and those most at risk to the effects of climate change.

In FY 2024, EPA requests an additional 0.7 FTE to serve as an EJ coordinator specific to indigenous and disadvantaged communities in Hawaii. This investment will allow the Agency to coordinate more effectively with communities under the Red Hill Administrative Order on Consent and on other matters unique and specific to the Hawaiian Islands. A dedicated resource on-island can build and maintain the relationships necessary to support communities in addressing environmental and public health challenges with a whole-of-government approach.

Performance Measure Targets:

(PM EJCR01) Percentage of EPA programs that seek feedback and comment from the public that provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							25	50	Percent
Actual									
Numerator									Programs
Denominator									

(PM EJCR02) Percentage of EPA programs utilizing extramural vehicles to fund organizations and individuals providing environmental justice expertise and support to advance EPA priorities and activities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							50	75	Percent
Actual									
Numerator									Programs
Denominator									

(PM EJCR03) Percentage of environmental justice grantees whose funded projects result in a governmental response.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							No Target Established	No Target Established	Percent
Actual									
Numerator									Grantees
Denominator									

(PM EJCR04) Percentage of written agreements between EPA and tribes or states implementing delegated authorities that include commitments to address disproportionate impacts.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							5	25	Percent
Actual									
Numerator									Agreements
Denominator									

(PM EJCR05) Percentage of state-issued permits reviewed by EPA that include terms and conditions that are responsive to environmental justice concerns and comply with civil rights obligations.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							10	25	Percent
Actual									
Numerator									Permits
Denominator									

(PM EJCR07) Percentage of EPA national program and regional offices that extend paid internships, fellowships, or clerkships to college students from diverse backgrounds.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							50	75	Percent
Actual									
Numerator									Programs and Regions
Denominator									

(PM EJCR08) Percentage of significant EPA actions with environmental justice implications that respond to environmental justice concerns and reduce or address disproportionate impacts.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							40	80	Percent
Actual									
Numerator									Actions
Denominator									

(PM EJCR09) Percentage of programs that have developed clear guidance on the use of justice and equity screening tools.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							50	75	Percent
Actual									
Numerator									Programs
Denominator									

(PM EJCR10) Percentage of EPA programs and regions that work in and with communities that do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							25	50	Percent
Actual									
Numerator									Programs
Denominator									

(PM EJCR11) Number of established EJ collaborative partnerships utilizing key principles for community work (e.g., community-driven, coordinated, and collaborative).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							30	60	Partnerships
Actual									

(PM EJCR13) Percentage of EPA regions and national programs that have established clear implementation plans for Goal 2 commitments relative to their policies, programs, and activities and made such available to external partners.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									Regions and Programs
Denominator									

(PM EJCR18) Number of information sharing sessions and outreach and technical assistance events held with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						8	90	100	Sessions and Events
Actual					40	30			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$9,414.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$90,180.0) This program change increases support for EJ work across the Agency. This investment supports the significantly expanded base activity and agencywide coordination required across the EJ Program.

- (+$68,453.0 / +41.0 FTE) This program increase will fully build out the Thriving Community Technical Assistance Centers to support basic capacity building of communities and their partners to advance equity and justice in their communities; support ongoing response efforts for Red Hill, HI to protect communities and ensure safe drinking water; and support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $7.0 million for payroll.

- (+$45,000.0) This program change increases the Environmental Justice Community Grant Program to non-profit, community-based organizations to reduce the disproportionate health impacts of environmental pollution in communities with EJ concerns. Appropriations language has been provided in the proposed EPM Bill Language.

- (+$17,000.0) This program change increases the EJ Government to Government Grant Program that would continue funding for states, tribes, local governments, and territories to create or support community-driven partnerships and associated environmental justice partnerships. Appropriations language has been provided in the proposed EPM Bill Language.

- (+$13,500.0) This program change increases support for the community-based Participatory Research Grant Program. Eligible recipients would be higher education institutions that aim to develop partnerships with community entities to improve the health outcomes of residents and workers in communities with EJ concerns. Appropriations language has been provided in the proposed EPM Bill Language.

- (+$8,900.0) This program change increases support for EJScreen to improve how the Agency utilizes nationally consistent data that combines environmental and demographic indicators to map and identify communities with EJ concerns. In addition, resources are included to update EPA's IT systems to support the Climate and Economic Justice Screening tool and the EJ Clearinghouse, which would serve as an online resource for information on EJ

- (+$8,500.0) This program change increases support for an Environmental Justice Training Program to increase the capacity of residents of underserved communities to identify and address disproportionately adverse human health or environmental effects. Appropriations language has been provided in the proposed EPM Bill Language.

- (+$6,000.0) This program change increases support for the National Environmental Justice Advisory Council; other federal advisory council activities; and the White House Environmental Justice Advisory Council.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); American Rescue Plan Act of 2021 (Pub. L. 117-2).

Geographic Programs

Geographic Program: Chesapeake Bay
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$90,309***	***$92,000***	***$92,094***	***$94***
Total Budget Authority	$90,309	$92,000	$92,094	$94
Total Workyears	35.4	41.2	41.2	0.0

Program Project Description:

The Chesapeake Bay is the largest estuary in the United States, with a drainage area that covers six states in the mid-Atlantic. The Bay is not only treasured for recreational purposes but also serves as a vital resource for ecological and economic activities in the region and beyond. The Chesapeake Bay Program operates under the authority of Section 117 of the Clean Water Act and includes the Chesapeake Bay watershed states (Delaware, Maryland, New York, Virginia, Pennsylvania, and West Virginia), the District of Columbia, the Chesapeake Bay Commission, and the federal government. EPA coordinates and supports the activities of the partnership and represents the federal government on the partnership's Chesapeake Executive Council. On June 16, 2014, the Chesapeake Bay Program partners signed the most recent Chesapeake Bay Watershed Agreement.[118] The Agreement establishes 10 goals and 31 outcomes including restoration of wetlands and riparian forest buffers, sustainable fisheries, water quality, vital habitats, climate change, and toxic contaminants, with Management Strategies and two-year Logic & Action Plans guiding the work of each outcome. Progress toward the Agreement commitments is updated regularly and publicly available for evaluation.

EPA, the watershed jurisdictions, and other key federal agencies set two-year water quality milestones that measure progress made in achieving the Bay Total Maximum Daily Load (TMDL) and the jurisdictions' Watershed Implementation Plans.[119] The TMDL satisfies a requirement of the Clean Water Act and EPA commitments under Court-approved consent decrees for Virginia and the District of Columbia dating to the late 1990s.[120] The TMDL is designed to ensure all nitrogen, phosphorus, and sediment pollution control efforts needed to restore the Bay and its tidal rivers are in place by 2025.

FY 2024 Activities and Performance Plan:

[118] The Chesapeake Bay Watershed Agreement (2014) as amended in 2022, available at: https://d18lev1ok5leia.cloudfront.net/chesapeakebay/Chesapeake-Bay-Watershed-Agreement-Amended.pdf.
[119] The federal and jurisdictional milestones related to water quality in the Chesapeake Bay watershed are available at https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-milestones#2022.
[120] The Chesapeake Bay TMDL, available at: http://www.epa.gov/chesapeake-bay-tmdl/.

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will focus on supporting implementation of the two-year logic model and action plans for the 25 management strategies developed under the Agreement, with particular focus on improving performance toward achieving outcomes where progress is lagging. The Program is increasing focus on environmental justice, ensuring the benefits of the Chesapeake Bay Program are distributed equitably. In addition, the Program is increasing efforts in the climate change space by focusing initiatives on the resiliency of the watershed. Specific emphases include:

- Implementing the water quality outcomes that describe the commitment of the Agreement signatories for having all practices in place by 2025 to achieve the necessary pollutant reductions.
- Accelerating implementation of outcomes that help keep the watershed resilient in the face of climate change (including forest buffers, urban tree canopy, wetland protection and restoration, and land conservation).
- Increasing community engagement in achieving program outcomes and initiating efforts to garner partnership commitment to outyear priorities to achieve a restored Chesapeake Bay, considering current scientific understanding and emerging issues, and ensuring consideration of diversity, equity, inclusion, and justice.
- Maintaining and expanding the historically strong submerged aquatic vegetation, and tidal and non-tidal water quality monitoring programs implemented through state grants and federal interagency agreements.
- Ensuring the most up-to-date science is used throughout the Chesapeake Bay Program to support decision-making, implementation, and future condition assessment (for example, improving computer models to help predict the impact of climate change on the Chesapeake Bay Program's ability to meet water quality standards in the tidal waters of the Chesapeake Bay); and
- Increasing investment, and tracking of investments, in diversity, equity, inclusion, and justice in Chesapeake Bay Program restoration efforts, implementing the partnership's 2021 DEIJ action strategy and supporting local level actions, targeting disadvantaged communities. This includes funding work with the EPA's National Center of Environmental Economics to develop a methodology for understanding and tracking benefits to disadvantaged communities from Bay restoration work.

Environmental results, measured through data collected by the states and shared with the federal government, show the importance of the investment that federal, state, and local governments have made in providing clean and safe water. Every year, the Chesapeake Bay Program uses available monitoring information from the 92 segments of the Chesapeake Bay to estimate whether each segment is attaining criteria for one or more of its designated uses. EPA, along with other federal, state, and academic partners, are using this information to demonstrate progress toward meeting water quality standards and the Bay TMDL.

States have reported that, as of 2021, best management practices to reduce pollution are in place to achieve 49 percent of the nitrogen reductions, 64 percent of the phosphorus reductions, and 100 percent of the sediment reductions needed to attain applicable water quality standards when

compared to the 2009 baseline established in the Bay TMDL.[121] In FY 2024, EPA will evaluate progress toward meeting the 2022-2023 milestone commitments of the seven Chesapeake Bay jurisdictions. The two-year milestones are intended to demonstrate how the jurisdictions will meet their pollution reduction goals by 2025 through the major source sectors (agricultural sector, urban stormwater, and wastewater).

EPA will continue to provide the Chesapeake Bay Program partnership with funding and technical assistance, expand our ability to track and report progress across our suite of outcomes, and coordinate and facilitate partnership efforts to reach our mutual goals of a healthy Bay and watershed. While continuing progress toward restoring the Bay watershed, EPA and other Executive Council members signed and released the historic *Statement in Support of Diversity, Equity, Inclusion and Justice.*[122] This statement reaffirmed the Executive Council's commitment to recruit and retain staff and volunteers that reflect the diversity of the watershed, foster a culture of inclusion and respect across all partner organizations, and ensure the benefits of our science, restoration, and partnership programs are distributed equitably without disproportionate impacts on disadvantaged communities.

Additionally, EPA is working to accelerate integration of climate change in Bay restoration efforts. EPA and other Executive Council members signed and released the *Collective Action for Climate Change*[6] directive. One key activity is the launch of a Climate Directive Pilot Project which prioritizes implementation projects that advance progress towards multiple Agreement outcomes in disadvantaged and/or climate vulnerable communities. EPA also is addressing climate change in other ways: 1) in 2025, predicting the impact of 2035 climate changes on water quality and adjusting pollution targets; 2) understanding adaptations needed in the watershed and coastal regions; and 3) maintaining or improving the watershed's resiliency to climate change. Work is underway to develop state-of-the-science models of the Chesapeake airshed, watershed, and tidal waters to refine the 2035 climate risk in the 2025 Chesapeake Bay Assessment. Also, EPA and the Bay Program partnership are actively investigating best management practices to better protect the watershed and tidal Bay against the observed increased precipitation volumes and intensity brought about by climate change in urban and agricultural regions.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $47.6 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

[121] For more information, please see https://www.chesapeakeprogress.com/clean-water/watershed-implementation-plans.
[122] For more information, please see https://www.chesapeakebay.net/channel_files/40996/deij_statement_final_all_signatures.pdf.
[6]For more information, please see https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/climatedirective_final_3.pdf.

- (+$416.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$322.0) This program change is a decrease due to offsets in fixed and other costs.

Statutory Authority:

Clean Water Act, Section 117; Estuary Restoration Act of 2000; Chesapeake Bay Accountability and Recovery Act of 2014; Clean Air Act; Consolidated Appropriations Act, 2023, Pub. L. 117-328.

Geographic Program: Gulf of Mexico
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$21,194***	***$25,524***	***$25,558***	***$34***
Total Budget Authority	$21,194	$25,524	$25,558	$34
Total Workyears	16.1	21.7	21.7	0.0

Program Project Description:

The Gulf of Mexico is an iconic and important body of water, providing ecological, economic, cultural, and recreational opportunities for millions of residents and visitors to the region. The Gulf of Mexico is heavily impacted by the Mississippi River, the main river system which drains into it. The Mississippi River watershed captures drainage from 41 percent of the land area of the contiguous United States (includes nearly 1.5 million square miles over parts of 31 states). Through the Gulf of Mexico Division (GMD), EPA collaborates with federal, state, and local partners to restore the Gulf, and ultimately improve the health of the coastal area, benefiting approximately 16 million Americans.[123]

The mission of the EPA's GMD is to facilitate collaborative actions that protect, maintain, and restore the health and productivity of the Gulf of Mexico in ways consistent with the economic and ecological well-being of the region. The GMD competitively funds projects and uses interagency agreements and strategic partnerships to accomplish its mission. All GMD projects and partnership work are linked to one or more of the following performance measures: 1) improve and/or restore water quality; 2) protect, enhance, or restore coastal and upland habitats; 3) promote and support environmental education and outreach to inhabitants of the Gulf watershed; and 4) support the demonstration of programs, projects, and tools which strengthen community resilience.[124] The GMD provides significant leadership and coordination among state and local governments, the private sector, tribes, scientists, and citizens to align efforts that address the challenges facing the communities and ecosystems of the Gulf Coast. The GMD is committed to voluntary, non-regulatory actions and solutions based on scientific data and technical information underpinning our work with the aforementioned stakeholders.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

[123] For more information please see: https://www.census.gov/content/dam/Census/library/visualizations/2019/demo/coastline-america-print.pdf.
[124] For more information please see: https://www.epa.gov/gulfofmexico/2021-gulf-mexico-division-annual-report.

In FY 2024, the Agency will continue supporting specific actions and solutions designed to improve the environmental and economic health of the Gulf of Mexico region through cooperative efforts and partnerships. Specifically, the Agency will address nutrient reduction on working lands with targeted habitats. Additionally, GMD will center its focus on sustainable agriculture and resilience in the farming community. EPA will continue to expand Science, Technology, Engineering, Arts, and Mathematics (STEAM) experiential education and workforce development to underserved communities. Through green infrastructure practices such as artificial reefs, riparian buffers, prairies, and living shorelines, GMD will continue to build the adaptive capacity of ecosystems and communities. The GMD projects are competitively funded and coordinated with and complement ongoing Resource and Ecosystems Sustainability, Tourist Opportunities, Revived Economies (RESTORE) and Natural Resource Damages Assessment (NRDA) activities related to the Deepwater Horizon oil spill. The GMD continues to seek broad participation and input from the diverse stakeholders who live, work, and recreate in the Gulf Coast region.

The GMD directly funds assistance agreements, interagency agreements and partnerships, which support the following activities:

Environmental Education and Outreach

In FY 2024, the GMD will continue to promote the use of best available science and sustainable environmental practices by developing programs, establishing partnerships, and competitively funding projects that increase environmental literacy. The GMD will enhance experiential learning opportunities for Gulf residents and visitors alike.

To ensure that environmental education and outreach efforts extend to overburdened and underserved populations, GMD will work with various sectors of government, community leaders, and academia on projects that promote capacity building and lead to behavioral changes in communities with environmental justice concerns. Education and outreach are vital to accomplishing the Agency's mission to protect human health and the environment, to inform and provide actionable information to communities with environmental justice challenges, and to meet the GMD-specific goals of promoting healthy and resilient coastal communities.

GMD will evaluate success of this performance measure by tracking the number of participants involved in environmental literacy and stewardship activities. Recipients of competitively funded projects are required to report on this data quarterly and personnel must input direct engagement efforts into the GMD's quarterly metrics tracking database.

Strengthen Community Resilience

Coastal and inland communities continuously face a range of natural and man-made challenges, including storm risk, land and habitat loss, depletion of natural resources, compromised water quality, and resulting economic instability. In FY 2024, the GMD will continue to emphasize robust partnerships and extensive community engagement to strengthen coastal and near-shore community preparedness. Through actions, activities, partnerships, and projects, communities throughout the Gulf will be more resilient, and thus better prepared for natural disasters or other

emergencies. The GMD will leverage its Community Resilience Index Tool to provide municipalities with a method to assess vulnerabilities and take steps to mitigate risks.

GMD will evaluate success of this performance measure by tracking the number of communities informed on vulnerabilities and risks and those with programs, projects, and tools developed and/or demonstrated to identify vulnerabilities and to manage risks as a way of improving the social well-being, the economy, and/or the environment. Recipients of competitively funded projects are required to report on this data quarterly and personnel must input direct engagement efforts into the GMD's quarterly metrics tracking database.

Improve Water Quality

The Clean Water Act provides authority and resources to protect and improve the water quality in the Gulf of Mexico and all waters of the United States. The GMD supports projects and works with partners, such as the Hypoxia Task Force, to improve water and habitat quality throughout the Gulf of Mexico watershed. In FY 2024, the GMD will fund projects which improve water quality on a watershed basis through monitoring nutrient reduction, analyzing data, and assessing changes.

Enhance, Protect, or Restore Coastal Habitats

Managing critical ecosystems is widely recognized as a fundamental environmental priority throughout the Gulf Coast region. Critical issues include, but are not limited to, sediment management, marsh/habitat loss due to subsidence, the continued reduction of freshwater in-flow, and climate change. For decades, the Gulf Coast has endured extensive natural and man-made damage to key habitats such as coastal wetlands, estuaries, barrier islands, upland habitats, seagrass vegetation, oyster reefs, coral reefs, and offshore habitats. In FY 2024, the GMD will continue to fund projects and work with partners to enhance coastal ecosystems, improve sediment movement/management, restore acreage where feasible and cost-effective, and reverse the effects of long-term habitat degradation.

GMD will evaluate success of this performance measure by tracking the number of habitats restored, improved, or enhanced through competitively funded projects and partnerships with stakeholders. Recipients of competitively funded projects are required to report on this data quarterly and personnel must input direct engagement efforts into the GMD's quarterly metrics tracking database.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $10.6 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds and that will allow utilization of funds to support infrastructure projects or activities.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$593.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$559.0) This program change is a decrease due to offsets in fixed and other costs.

Statutory Authority:

Clean Water Act, Consolidated Appropriations Act, 2023, Pub. L. 117-328.

Geographic Program: Lake Champlain

Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$19,096***	***$25,000***	***$25,000***	***$0***
Total Budget Authority	$19,096	$25,000	$25,000	$0
Total Workyears	0.0	1.0	1.0	0.0

Program Project Description:

The trans-boundary region of Lake Champlain is a resource of national significance and home to more than 600,000 people, about 35 percent of whom depend on the lake for drinking water. The 8,234-square mile basin includes areas in Vermont, New York, and the Province of Quebec. Lake Champlain draws millions of visitors annually. The Patrick Leahy Lake Champlain Basin Program (LCBP) supports implementation in Vermont and New York of a comprehensive pollution prevention, control, and restoration plan for protecting the future of the Lake Champlain Basin. Through the LCBP, EPA is addressing various threats to Lake Champlain's water quality, including phosphorus loadings, invasive species, and toxic substances.[125]

The Program's goal is to achieve clean waters that will sustain diverse ecosystems, vibrant communities, and working landscapes. These ecosystems should provide clean water for drinking and recreation and support a habitat that is resilient to extreme events and free of aquatic invasive species.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA's budget request will allow the Program to address high levels of phosphorus by implementing priority actions identified in the Opportunities for Action Management Plan to reduce phosphorus loads. The 2016 Vermont Total Maximum Daily Load (TMDL) for Phosphorus for Lake Champlain is central to the planning and implementation work within the Lake Champlain Basin to reduce phosphorus loads and meet the wasteload and load allocations specified in the TMDL. Phosphorus reductions from the New York portion of the Basin continue to be subject to the TMDL approved in 2002. The Program also seeks to prevent the impacts of aquatic invasive species and to restore habitat across its basin.

[125] For additional information see: https://www.epa.gov/tmdl/lake-champlain-phosphorus-tmdl-commitment-clean-water and http://www.lcbp.org,

The LCBP will also increase efforts to better understand how to address harmful algal blooms (HABs) and prevent the introduction and spread of invasive species.

In FY 2024 EPA will focus on the following activities:

- Ninety-three percent of the total phosphorus load to the lake is from stormwater or nonpoint source runoff, and seven percent is from wastewater treatment plant sources in Vermont, New York, and Quebec. EPA and its partners will continue to reduce phosphorous pollution from stormwater runoff, nonpoint sources, and wastewater treatment facilities to meet reductions specified in the Vermont and New York Total Maximum Daily Loads (TMDLs). Specifically, EPA will focus on:
    - Implementing stormwater planning, design, and construction of green stormwater infrastructure at Vermont public schools and state universities and implementing best management practices on rural roads in both Vermont and New York, thereby increasing their resiliency to climate impacts.
    - Addressing agricultural nonpoint sources including continued research to determine the efficiency of agricultural best management practices; evaluating farm practices to identify where improvements to practices are needed; and decommissioning former agricultural lands better suited for habitat and floodplain restoration efforts.
    - Ensuring that wastewater facilities' permits remain consistent with the Clean Water Act, necessary upgrades to treatment facilities are completed, and the treatment optimization efforts continue throughout the Basin.

- The Program also aims to restore healthy ecosystems to provide clean water for recreation and drinking water and intact habitat that is resilient to extreme events and invasive species. In FY 2024 the Program will support:
    - Biodiversity, prevent habitat fragmentation and improve resilience to changing weather conditions.
    - Prevention of aquatic invasive species that harm the environment, economy, or human health, including aquatic plants, animals, and pathogens. EPA will continue to work with partners to understand the impact of any potential spread. The Agency also will continue to monitor invasive water chestnuts and fund efforts to reduce their density and distribution. Additionally, EPA and its partners will continue to implement the activities identified in the Great Lakes and Lake Champlain Invasive Species Program Report submitted to Congress under requirements of the Vessel Incidental Discharge Act.[126]

- The LCBP will continue to support the development of new ways to understand the high seasonal concentrations of Harmful Algal Blooms, report on their potential health impacts, and provide necessary information to the health departments of New York and Vermont to close beaches, protect drinking water intakes, or take other actions. In addition, the Program will investigate developing new approaches for urban and agricultural stormwater control.

[126] For more information please visit: https://www.epa.gov/greatlakes/great-lakes-and-lake-champlain-invasive-species-program-report.

- LCBP will continue efforts to increase the participation of new and diverse partners in LCBP programs and decision-making by assessing LCBP's committee membership and structure, programs, and outreach strategy to engage with disadvantaged communities more effectively, including a focus on diversity, equity, and inclusion in the 2022 Opportunities for Action update to better describe how the Program will engage with all residents and communities of the basin.

- The Program's 2022 management plan includes new metric to expand tracking and reporting of implementation efforts. In FY 2024 the Program will continue development of a new project tracking database.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $8 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Boundary Waters Treaty of 1909; Clean Water Act §120; Consolidated Appropriations Act, 2023 (P.L. 117-328).

Geographic Program: Long Island Sound
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$29,758***	***$40,002***	***$40,005***	***$3***
Total Budget Authority	$29,758	$40,002	$40,005	$3
Total Workyears	1.7	8.0	8.0	0.0

Program Project Description:

The Long Island Sound Program protects wildlife habitat and water quality in one of the most densely populated areas of the United States, with nearly nine million people living in the watershed. In total, the Long Island Sound watershed comprises more than 16 thousand square miles, including virtually the entire state of Connecticut, and portions of New York, Rhode Island, Massachusetts, Vermont, and New Hampshire. The Long Island Sound provides recreation for millions of people each year and provides a critical transportation corridor for goods and people. The Long Island Sound continues to provide feeding, breeding, nesting, and nursery areas for diverse animal and plant life. The ability of the Long Island Sound to support these uses is dependent on the quality of its waters, habitats, and living resources. The Long Island Sound watershed's natural capital provides between $17 and $37 billion in ecosystem goods and services every year.[127]

Improving water quality and reducing nitrogen pollution are priorities of the Long Island Sound Program. The Program is making measurable differences in the region. Through State Revolving Fund and local investments of more than $2.5 billion to improve wastewater treatment, the total nitrogen load to the Long Island Sound in 2021 decreased by more than 49 million pounds from 1990 levels, a 60 percent reduction. This and other investments have enabled the EPA-State partnership to attain the pollution reduction targets set in the nitrogen TMDL 2000.

The Program is also focused on habitat protection and restoration. Program partners have restored 593 acres of coastal habitat between 2015-2022, well ahead of the pace needed to achieve the goal of restoring 1,000 coastal acres by 2035. In 2022, program partners completed 25 projects in coastal habitats, restoring 134.3 acres. An average of 50 acres a year is needed to meet the 2035 target. The Program is currently averaging 89.6 acres a year.

[127] For more information please see: Kocian, M., Fletcher, A., Schundler, G., Batker, D., Schwartz, A., Briceno, T. 2015. The Trillion Dollar Asset: The Economic Value of the Long Island Sound Basin. Earth Economics, Tacoma, WA.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Program will continue to oversee implementation of the Long Island Sound Study (LISS) Comprehensive Conservation and Management Plan (CCMP) by coordinating the cleanup and restoration actions of the LISS Management Conference. The LISS CCMP is organized around four major themes:[128] 1) Clean Waters and Healthy Watersheds; 2) Thriving Habitats and Abundant Wildlife; 3) Sustainable and Resilient Communities; and 4) Sound Science and Inclusive Management. Throughout the four themes, the CCMP incorporates key challenges and environmental priorities including resiliency to climate change, long-term sustainability, and environmental justice. The plan also set 20 quantitative ecosystem recovery targets to drive progress. In 2020, the LISS updated the CCMP with 136 implementation actions covering the period 2020-2024. In FY 2024, the EPA will focus on the following:

- Continue to reduce nitrogen pollution through implementing the Nitrogen Reduction Strategy. EPA will work cooperatively with Connecticut and New York to expand modeling and monitoring to develop numeric nitrogen targets that are protective of designated uses and set local nitrogen reduction targets where necessary.
- Coordinate priority watershed protection programs such as increasing streamside buffer zones as natural filters of pollution.
- Support community sustainability and resiliency through the Sustainable and Resilient Communities Work Group to help communities plan for climate change impacts while strengthening ecological health and protecting local economies.
- Coordinate the protection and restoration of critical coastal habitats to improve the productivity of tidal wetlands, inter-tidal zones, and other key habitats that have been adversely affected by unplanned development, overuse, land use-related pollution effects, and climate change (*e.g.*, sea level rise, warming temperatures, changes in salinity, and other ecological effects).
- Integrate environmental justice considerations across program decision-making and implementation through the new LISS Environmental Justice Work Group.
- Conduct targeted outreach and engagement efforts to understand community needs in areas with environmental justice concerns.
- Increase the participation of new and diverse partners in LISS programs and decision-making.
- Expand tracking and reporting of implementation efforts.
- Continue coordinated water quality monitoring.
- Support community partnerships to reduce pollution, protect and restore habitats, and increase sustainability and resiliency through the Long Island Sound Futures Fund.
- Conduct focused scientific research into the causes and effects of pollution on the Sound's living marine resources, ecosystems, water quality, and human uses to assist managers and

[128] For more information please visit: https://longislandsoundstudy.net/2015/09/2015-comprehensive-conservation-and-management-plan/.

public decision-makers in developing policies and strategies to address environmental, social, and human health impacts.
- Submit the next biennial Report to Congress covering progress in implementing the CCMP during the period 2022-2023.
- Update the CCMP's actions for the period 2025 to 2029.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $21.2 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$73.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$76.0) This program change is an increase to provide increased resources to add to the restoration of the Long Island Sound.

Statutory Authority:

Clean Water Act § 119.

Geographic Program: Other
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$12,797***	***$14,200***	***$14,212***	***$12***
Total Budget Authority	$12,797	$14,200	$14,212	$12
Total Workyears	5.3	6.7	6.7	0.0

Program Project Description:

EPA targets efforts to protect and restore many of the unique communities and ecosystems across the United States through the geographic programs. To protect and restore these treasured resources, the Agency develops and implements approaches to mitigate sources of pollution and cumulative risks posed by a variety of geographically distinct environmental stressors. These approaches improve water resource quality in ecosystems and the health and economic vitality of residents that rely on them. While substantial progress has been made in all these programs, more work is required to further reduce toxins, lower nutrient loads into watersheds and water bodies, increase ecologically and economically important species, restore habitats, and protect human health. The programs are also focused on targeting investments and benefits to disadvantaged communities within their territories, consistent with the goals of the Justice40 initiative, and prioritizing investments with climate adaptation and mitigation outcomes.

The Northwest Forest Program

The Northwest Forest Program addresses water quality impairments in forested watersheds and works to improve the quality and quantity of surface water to meet beneficial use and drinking water/source water protection goals. Climate change is increasing the demands on the program due to the increase of catastrophic wildfires and resulting impacts to water quality and municipal drinking water.

The Northwest Forest Program supports monitoring of watershed conditions across 72 million acres of forest and rangelands in the Northwest. In Oregon and Washington, 40 to 90 percent of the land area within national forests supply drinking water to communities west of the Cascade Range crest. This program provides the data communities need to help manage these drinking water resources. Funding allows EPA to provide critical support to the Aquatic Riparian Effectiveness Monitoring Program and the Pacfish/Infish Biological Opinion Effectiveness Monitoring Program. These regional scale watershed monitoring programs are essential to determining the effectiveness of riparian management in meeting aquatic/riparian habitat, ecosystem function, and water quality standards.

The Northwest Forest Program also helps EPA respond to tribal trust and treaty responsibilities. EPA staff are key to protection and restoration of watersheds and water quality important to tribes. EPA has tribal trust responsibilities in the Northwest for tribes reliant on salmon and shellfish.

The Lake Pontchartrain Basin Restoration Program

The purpose of this Program is to restore the ecological health of the Lake Pontchartrain Basin by developing and funding restoration projects and related scientific and public education projects.

The Basin comprises 16 Louisiana parishes and 4 Mississippi counties. The land use of the Basin ranges from rural to urban and is the most densely populated region in Louisiana, including metropolitan New Orleans and Louisiana's capitol, Baton Rouge. The Basin provides a home and natural habitat to 2.1 million people and many plants, animals, and fish. It is one of the largest estuarian systems in the United States, containing over 22 essential habitats. The Basin's topography ranges from rolling woodlands in the north to coastal marshes in the south, with the 630 square mile Lake Pontchartrain, the second largest saltwater lake in the United States, as its centerpiece.

Projects funded under this program maintain, protect, and restore the water quality and ecosystems of the Basin. These projects reduce the risk of pollution, increase protection of fisheries and drinking water sources and enhance recreational opportunities for the citizens of Louisiana.

Southeast New England Program (SNEP)

Southeast New England (from Westerly, Rhode Island, to Pleasant Bay, Massachusetts) faces environmental challenges that are both unique and highly representative of critical national problems, especially in coastal areas. Typical problems include rivers hydrologically disconnected by dams and restrictions, lost wetland functions, urbanization, and centuries-old infrastructure – all compounded by the increasing impacts of excess nutrients from wastewater, stormwater runoff, and atmospheric deposition. Excess nutrients have contributed to severe water quality problems including algal blooms, low dissolved oxygen conditions, fish kills, impaired benthic communities, and habitat loss (sea grass and salt marsh) in estuaries and near-coastal waters of this region and worldwide. The impacts of climate change, especially the likelihood of extreme weather events and increased precipitation, will further stress these systems in coming years, not only environmentally but also socially and economically. The Program seeks to link environmental quality to economic opportunity and jobs by delivering local solutions in a regional and watershed context. Taking up and successfully addressing these issues will enable the program to serve as a model for other areas.

SNEP serves as a hub to enable protection and restoration of the coastal watersheds of Southeast New England. Protecting these watersheds and the ecosystem services they provide will help sustain the region's communities and environmental assets into the future. SNEP draws upon networks of stakeholders and experts to seek out and support innovations in practices, technology, and policies that will enable better and more effective watershed protection and restoration. The goal is to create a sustainable path for change and to lead the next generation of environmental management by:

- Developing and investing in innovative, cost-effective restoration and protection practices, as well as new regulatory, economic, and technology approaches.
- Providing technical assistance to municipalities, tribes, and local organizations.
- Supporting local restoration efforts.
- Integrating delivery of programs to the public by our fellow agencies and partners.
- Focusing on ecosystem services.
- Improving technology transfer and delivery of restoration programs across the region.
- Developing regional approaches to collate water quality and habitat data in order to provide a report on regional trends.
- Developing and implementing metrics to track the impact of SNEP projects throughout the region.

Columbia River Program (CRBRP)

The Columbia River Basin (Basin) is one of North America's largest watersheds, covering approximately 260 thousand square miles, originating in British Columbia, Canada, with seven states including significant portions of Idaho, Montana, Oregon, and Washington. The Basin provides environmental, economic, cultural, and social benefits and is vital to many entities and industries in the Pacific Northwest, including tribal, recreational, and commercial fisheries; agriculture; forestry; recreation; and electric power generation.

Human activities have contributed to impaired water quality that impacts human health, and fish and wildlife species survival. Tribal fish consumers, other high fish consumers and subsistence fishers, are exposed to known toxic contaminants and increased human health risks. Beginning in 2004, EPA has made a priority commitment to reducing toxics in the Basin reflecting a responsibility to environmental justice for tribal people to protect human health and help restore and protect fish and wildlife populations. There are several endangered fish and wildlife species throughout the Basin. A major salmon restoration effort is underway that has expended millions of dollars to restore salmon throughout the Basin.

In 2016, Congress adopted the Columbia River Basin Restoration Act as Section 123 of the Clean Water Act (CWA), which directs EPA to lead a Basin-wide collaboration and competitive grant program to assess and reduce toxics in the Basin. Section 123 also directs EPA to: establish a Columbia River Basin Restoration Program (CRBRP) to assess trends in water quality; collect and assess data to identify possible causes of environmental problems; provide grants for projects for specific purposes; and establish a voluntary Columbia River Basin Restoration Working Group.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Funding will be split amongst the Northwest Forest Program, Lake Pontchartrain Program, Southern New England Program, and Columbia River Basin Program for restoration of the four geographic programs with an emphasis on initiatives that advance environmental justice and address the threats exacerbated by climate change.

Northwest Forest Program

In FY 2024, the Program will support the following activities:

- Wildfires impact monitoring and assessment of water quality in watersheds impacted by the catastrophic 2020 Labor Day fires in Oregon and anticipated future fire seasons in the Pacific Northwest.
- Aquatic and Riparian Effectiveness Monitoring Program (AREMP) of the Northwest Forest Plan and Bureau of Land Management (BLM) Western Oregon Resource Management Plan to help maintain and restore watersheds across 24 million acres of federal lands in western Washington and Oregon, and northern California.
- The PacFish/InFish Biological Opinion Effectiveness Monitoring Program to monitor stream and riparian habitats for both inland fish species and anadromous fish like salmon that rely on both the Pacific Ocean and freshwater rivers to ensure conservation strategies are working effectively to sustain fish populations.
- The Drinking Water Providers Partnership – an annual public-private funding opportunity for water providers and watershed restoration practitioners in Oregon and Washington to implement riparian or in-stream restoration actions to restore and protect the health of watersheds and drinking water.
- States' implementation of forestry non-point source programs and development of Total Maximum Daily Loads (TMDLs) and Best Management Practices for forestry.
- Development of Spatial Statistical Network models to evaluate impacts of forest practices and climate change on stream temperatures across entire watersheds. Further support for watershed management and development and implementation of TMDLs.
- Collaboration with partners and local water providers to address sediment and temperature impairments in forested watersheds.

Lake Pontchartrain

In FY 2024, the Program will help restore the ecological health of the Lake Pontchartrain Basin by:

- Implementing the current Lake Pontchartrain Basin Program Comprehensive Management Plan (CCMP) and Comprehensive Habitat Management Plan (CCHP), including implementation of restoration projects to address saltwater intrusion-wetland loss, agricultural, and stormwater runoff.
- Revising the CCMP/CCHP to meet the current needs of the Basin and updating recommendations to meet current Best Management Practices and technology. This will be the first update to the Management Plan since 1995.
- Working with the executive committee to expand the reach of the program to communities who have not participated in the past and to reinvigorate participation in the management conference.
- Incorporating Justice40 into the Potentially Responsible Party (PRP) through:
    - identification of key areas for investments
    - development of robust protocols for proposal review and project
    - outreach to subaward grantees to include investments and benefits to disadvantaged communities in their projects and

- tracking and reporting the investments and benefits of PRP projects to disadvantaged communities in the Basin

- Protecting and restoring critical habitats and encouraging sustainable growth by providing information and guidance on habitat protection and green development techniques.

Southeast New England Program (SNEP)

In FY 2024, the Program will support technical assistance, grants, interagency agreements, and contracts to spur investment in regionally significant and/or landscape-scale restoration opportunities, more fully integrate restoration actions, build local capacity, promote policy and technology innovation, encourage ecosystem (water quality and habitat) approaches, and enact the Southeast New England Program's Five-Year Strategic Plan.[129] SNEP is tracking community engagement and is committed to provide funding or technical assistance to 25 percent of regional municipalities (34 out of 133) and over 50 percent of federally-recognized tribes (at least 2 of 3) by the end of FY 2025. Specific activities include:

- Investing in on-the-ground environmental restoration/protection projects through the SNEP Watershed Implementation Grants (SWIG) Program.
- Building capacity of municipalities and other organizations to actively participate in implementing restoration projects and effectively manage their environmental programs through the SNEP Network.
- Promoting the development of next-generation watershed management tools.
- Collaborating among the Narragansett Bay and Buzzards Bay National Estuary Programs, the states of Rhode Island and Massachusetts, the Cape Cod and Martha's Vineyard Commissions and other Cape and Island organizations, municipalities, and key stakeholders to identify, test, promote, and implement approaches that can be replicated across Southeastern New England, with a focus on the nexus between habitat, nutrients, and stormwater and ecosystem and community resilience.
- Funding pilot projects and research to introduce innovations and practices that accelerate and guide ecosystem restoration and avoid or reduce nutrient impacts.
- Continuing the SNEP Pilot Watershed Initiative which seeks to concentrate and quantitatively evaluate the effectiveness of coordinated environmental restoration projects at a sub-watershed scale. Leveraging for efficiency and effectiveness by coordinating operations, resources, and funding principles among restoration partners, including federal and state agencies.
- Continuing development of a regional water and habitat monitoring strategy that incorporates current monitoring efforts to tracks environmental restoration progress and inform the public about the health of the SNEP region.

Columbia River Basin Program (CRBRP) - Section 123 of the Clean Water Act

The EPA CRBRP's vision is to be a catalyst for broad toxics reduction work efforts and basin-wide collaboration to achieve a healthy ecosystem with significantly reduced toxic levels in fish,

[129] For more information visit: https://www.epa.gov/snep/snep-strategic-plan.
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wildlife, and water to enable communities to access unimpaired watersheds with healthy fish and wildlife habitat. Key FY 2024 plans for EPA's CRBRP include:

- Continuing to manage the implementation of the CRBRP grant program awards to monitor and reduce toxics in the Basin.
- Competing a fourth round of CRBRP funding assistance utilizing FY 2023 and FY 2024 appropriations.
- Providing technical assistance and communication products for the Columbia River Basin Restoration Working Group and the general public.
- Continuing to update the EPA Columbia River Basin website which serves as a source of technical references and other information on understanding and reducing toxics in the Basin.
- Integrating Environmental and Tribal Justice and Treaty Rights into the program.
- Supporting climate adaptation strategies and resilience as it relates to toxics reduction.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $30.2 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Clean Water Act.

Geographic Program: South Florida
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$6,917***	***$8,500***	***$8,503***	***$3***
Total Budget Authority	$6,917	$8,500	$8,503	$3
Total Workyears	1.6	3.0	3.0	0.0

Program Project Description:

The South Florida Program ecosystem extends from Chain of Lakes near Orlando, Florida, to Florida Bay which is 250 miles south. Nine million people, two Federally Recognized Native American Tribes: Seminole and Miccosukee, three National Parks, 15 National Wildlife Refuges, Big Cypress National Preserve, the Florida Keys National Marine Sanctuary, the Everglades, and unique coastal resources: St. Lucie and Caloosahatchee Estuaries, Indian River Lagoon, Biscayne Bay, Florida Bay, Florida Keys, and coral reefs make up this unique and sensitive ecosystem. These ecosystems support a multi-billion-dollar economy through outdoor tourism, boating, recreational and commercial fishing, coral reef diving, and world-class beaches.

Challenges faced include: the long-term sustainability of sensitive natural areas, agriculture, and the expanding human population; balancing the region's often conflicting flood control, water supply and water quality needs; and mitigating and adapting to extreme weather events and sea-level rise.

EPA's South Florida Program coordinates restoration activities in South Florida where water quality and habitat are directly affected by pollution and climate change. The Program is developing an Equity Strategy that will include an emphasis on addressing the dual burdens of pollution and climate in disadvantaged communities. EPA implements, coordinates, and facilitates activities through a variety of programs in the region including: the Clean Water Act (CWA) Section 404 Wetlands Program; the Everglades Water Quality Restoration Strategies Program; the Florida Keys National Marine Sanctuary Water Quality Protection Program; the Florida Keys National Marine Sanctuary Water Quality Monitoring Program; the Coral Reef Environmental Monitoring Program; the Benthic Habitat Monitoring Program; the Southeast Florida Coral Reef Initiative, as directed by the U.S. Coral Reef Task Force; and other programs.[130,2]

[130] For more information please see: http://www.epa.gov/aboutepa/about-epa-region-4-southeast.
[2] For more information please see: https://www.epa.gov/everglades.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

The South Florida Program supports efforts to protect and restore ecosystems impacted by environmental challenges. In FY 2024, EPA will focus on the Florida Keys Water Quality Protection Program, Florida Coral Reef Tract, Everglades Restoration, nutrient reduction to reduce harmful algal blooms, and CWA Section 404 implementation.

- Through the Florida Keys National Marine Sanctuary Water Quality Protection Program, the South Florida Program will engage stakeholders across the breadth of the Florida Keys to review long-term monitoring projects of water quality and ecosystems related to water quality in the Keys. Data generated by EPA partners informs these programs which have documented periodic oceanographic events such as algal blooms, seagrass die-offs, and coral diseases, and have provided the foundational data for the development of nutrient numeric criteria. The long-term status and trend collected by the Coral Reef Environmental Monitoring Program is tracking the ongoing Stony Coral Tissue Loss Disease that continues to decimate over 20 reef building corals species of the Florida Reef Tract. To date, the South Florida Program has provided more than $3 million to support coral research to hinder or halt the disease destroying corals reefs that are vital to Florida's eco-tourism industry and that serve as a natural mitigation barrier from storms and hurricanes. The Program will continue to support these efforts.

- The Program will complete study reports associated with the Everglades Regional Environmental Monitoring and Assessment Program in 2024 and 2025 based upon monitoring completed in 2023. This is an EPA-conducted extensive assessment of the Everglades' health since 1993. Federal and state agencies, tribes, agriculture, the public, non-governmental organizations, and the National Academies of Sciences use the data to understand water quality and ecological conditions and to assess restoration progress. The data also help to explain the effectiveness of control programs for phosphorus and mercury.

- EPA will continue CWA and National Environmental Policy Act coordination with the US Army Corps of Engineers, Florida Department of Environmental Protection, South Florida Water Management District, and tribes for the Comprehensive Everglades Restoration Plan (CERP) and Western Everglades Restoration Plan planning and Implementation. CERP is a $20 billion federal-state restoration effort with over 60 projects that affect aquatic resources throughout south Florida. EPA will continue CWA and National Environmental Policy Act coordination with the US Army Corps of Engineers, Florida Department of Environmental Protection, South Florida Water Management District and Tribes for CERP planning and implementation.

- This program will continue implementation of the Florida Keys Wastewater Master Plan to provide Advanced Wastewater Treatment or Best Available Technology services to all homes and businesses in the Florida Keys through the EPA and state co-chaired Florida Keys National Marine Sanctuary (FKNMS) Water Quality Protection Program. The goal is to remove from service all non-functioning septic tanks, cesspits, and non-compliant wastewater facilities.

More than 90 percent of Florida Keys homes and business are on advanced wastewater treatment systems and more than 30 thousand septic tanks have been eliminated.

- The Program will continue support for restoration, monitoring, and modeling of seagrass communities within St. Lucie Estuary, the Caloosahatchee Estuary, Indian River Lagoon, Biscayne Bay, and Florida Keys to address of loss of seagrass meadows from phosphorus enrichment and chlorophyll increases resulting in dying seagrass beds, increasing harmful algal blooms, fish kills, and manatee deaths.

- EPA will continue work with State and local governments, universities, and non-governmental organizations to implement on-the-ground and satellite water quality monitoring programs for the Florida Keys, Biscayne Bay, St. Lucie Estuary, Florida Bay, and Caloosahatchee Estuary. EPA has provided more than $4 million to support water quality that includes water quality monitoring; harmful algal blooms detection, nutrient source identification and tracking; bacteria (enterococcus) tracking for healthy beaches; and submarine groundwater discharge to evaluate groundwater as a potential nutrient source.

- The FY 2024 budget request continues support for oysters, seagrass, mangroves, and sponge restoration efforts that reestablish and rehabilitate these natural systems; identify and map habitat areas for protection, restoration, and management; and develop conservation/ restoration plans for these resilient ecosystems that provide habitat, food, nutrient removal, water filtration, storm attenuation, carbon storage and shoreline stabilization in South Florida.

- EPA will develop an annual Request for Applications for FY 2024 funds and continue management of more than $20 million in South Florida prior-year projects enhancing water quality, coral, and seagrass monitoring; restoring coral, seagrass, and sponge ecosystems; developing models to identify pollutant sources; investigating emerging contaminants and researching water quality environments conducive to algal blooms.

- EPA will continue to work with the Florida Department of Environmental Protection (FDEP), local municipalities, and grantees to quantifying the impact of shallow wastewater effluent injection on groundwater nutrient fluxes to surface waters in the FKNMS.

- The Program will support CWA Section 404 implementation, including wetlands conservation, permitting, dredge and fill, and mitigation banking strategies through collaboration with U.S. Army Corps of Engineers and FDEP.

- EPA will continue to work with the State of Florida on Everglades Water Quality Restoration Strategies to address pollution. Part of this work will be tracking progress on the National Pollutant Discharge Elimination System permits and consent orders within the Everglades, including discharge limits for phosphorus and corrective actions that are consistent with state and federal law and federal court consent decree requirements.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $3.2 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$123.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$120.0) This program change is a decrease due to offsets in fixed and other costs.

Statutory Authority:

Florida Keys National Marine Sanctuary and Protection Act of 1990; National Marine Sanctuaries Program Amendments Act of 1992; Clean Water Act; Water Resources Development Act of 1996; Water Resources Development Act of 2000; National Environmental Policy Act.

Geographic Program: San Francisco Bay

Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$2,631***	***$54,500***	***$54,505***	***$5***
Total Budget Authority	$2,631	$54,500	$54,505	$5
Total Workyears	1.7	7.8	7.8	0.0

Program Project Description:

The San Francisco Bay-Delta Estuary has long been recognized as an estuary of national importance by EPA, other federal agencies, state partners, and local stakeholders. The Bay Area, home to more than seven million people, is one of the densest urban areas in the nation. While historically, San Francisco Bay had about 200 thousand acres of mudflats and tidal marshes, over 90 percent of that was lost to diking and filling for agriculture and urbanization. San Francisco Bay supports 500 species of wildlife, more than a quarter of which are either threatened or endangered. Investing in wetland restoration is pivotal to the bay's resiliency to rising sea levels and other hydrologic changes.

Since 2008, EPA has received an annual appropriation for a competitive grant program, the San Francisco Bay Water Quality Improvement Fund (SFBWQIF), to support projects that protect and restore San Francisco Bay and advance Blueprint/Comprehensive Conservation and Management Plan (CCMP) restoration goals.[131] Funding for the SFBWQIF is specifically targeted for the watersheds and shoreline areas of the nine San Francisco Bay Area counties that drain into the Bay. Since 2008, the SFBWQIF has invested over $72.4 million in 59 grant awards to restore over four thousand acres of wetlands around the Bay and minimize polluted runoff from entering the San Francisco Bay. SFBWQIF grants have leveraged $183 million in funding from partners and represents a collaborative investment with local partners guided by the consensus-based Blueprint/CCMP. The San Francisco Estuary restoration community is working rapidly to meet its goal of restoring 100,000 acres of wetlands that can provide flood protection, recreation, water quality improvement, and habitat for surrounding communities. Since 2008, approximately $32 million of the SFBWQIF funds have been provided through grants to restore wetland habitat.

The FY 2024 request will support increased investments in projects around San Francisco Bay that are designed for resiliency considering a wide range of climate change impacts. The Program will increase focus on historically underserved and overburdened communities through continued outreach and capacity building with partner organizations.

FY 2024 Activities and Performance Plan:

[131] For more information, please see: https://www.sfestuary.org/estuary-blueprint/.

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will focus on the following activities:

- Issue a Request for Applications soliciting proposals to restore wetlands, restore water quality, and implement green development practices that use natural hydrologic processes to treat polluted runoff around San Francisco Bay.
- Issue a Request for Applications soliciting proposals to support underserved populations in the Bay Area to improve the habitat and water quality in their local communities and improve the ease in which underserved community voices are included in the planning for regional environmental projects.
- Continue to administer the SF Bay Water Quality Improvement Fund and gather evidence of progress, consistent with the San Francisco Estuary Partnership's (SFEP) Comprehensive Conservation and Management Plan (CCMP).[132]
- Continue to build the resilience of San Francisco Bay ecosystems, shorelines and communities to climate change and sea level rise.
- Continue to use EPA grants to fund climate resilient projects and improve access to funds for underserved communities.
- Provide funding and technical support to implement a new regional monitoring program for San Francisco Bay wetlands. The Wetlands Regional Monitoring Program will provide baseline data and include the following: a) Monitoring site network; b) Open data sharing platform; c) Comprehensive science framework.
- Continue technical support for the San Francisco Bay Regional Monitoring Program (RMP), a 28-year-old partnership between regulatory agencies and the regulated community to provide a long-term data set and scientific foundation to make water quality management decisions. The RMP monitors water quality, sediment quality and bioaccumulation of priority pollutants in fish, bivalves, and birds. To improve monitoring measurements or the interpretation of data, the RMP also regularly funds special studies.
- Seek to leverage other sources of funding such as the Clean Water State Revolving Fund and Federal Emergency Management Agency's pre-hazard mitigation funds in support of priority CCMP projects such as the San Francisco Estuary Partnership working with municipal partners on the Hayward Shoreline horizontal levee pilot project and the related "First Mile" project.
- Continue EPA's participation in the Bay Restoration Regulatory Integration Team (BRRIT), a five-year, multi-agency pilot effort to facilitate the complex permitting of restoration projects. The goal of BRRIT is for agencies with permitting jurisdiction over multi-benefit habitat restoration projects to improve the permitting process. BRRIT agencies use dedicated staff time to conduct early design review, provide written guidance and comments, identify Agency requirements that need to be met, and resolve regulatory issues early in the project planning and design phase. This permitting effort enables the accelerated implementation of BRRIT funded restoration projects.
- Continue to increase the reuse of dredged material for wetlands restoration, which is critical in preparing and responding to sea level rise in San Francisco Bay.

[132]Please see the SFEP Comprehensive Conservation and Management Plan (2016) at https://www.sfestuary.org/wp-content/uploads/2017/08/CCMP-v26a-all-pages-web.pdf.

- Continue to partner with the academic and science organizations supporting the San Francisco Bay buoy array, partially funded by EPA, to monitor low-pH and low-oxygen events due to intrusion of upwelled water from the ocean and assessing its impacts, as well as watershed nutrient inputs.
- Key actions include continued partnerships with state and federal agencies to implement and track fourteen TMDLs,[133] provide technical assistance when asked by Delta stakeholders to sustain the Delta Regional Monitoring Program (RMP), and work towards continued integration of long-term data sets in the Bay and Delta, such as the Bay Regional Monitoring Program for water quality (RMP) and the Interagency Ecological Program.
- Begin work on the creation of the San Francisco Bay Program Office as authorized by the Water Resources Development Act of 2022.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $4.8 million for this program in FY 2024.

In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$679.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$674.0) This program change is a decrease due to offsets in fixed and other costs.

Statutory Authority:

Clean Water Act, Consolidated Appropriations Act, 2023 (P.L. 117-328).

[133] For more information, please see the SF Bay Delta TMDL Progress Assessment at http://www.epa.gov/sfbay-delta/sf-bay-delta-tmdl-progress-assessment.

Geographic Program: Puget Sound
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$34,746***	***$54,000***	***$54,022***	***$22***
Total Budget Authority	$34,746	$54,000	$54,022	$22
Total Workyears	7.2	9.0	9.0	0.0

Program Project Description:

Puget Sound is the southern portion of the international Salish Sea and is the largest estuary by water volume in the United States (U.S.). The Sound is an economic and cultural engine for the region's more than 4.7 million people, including nineteen federally recognized tribes. Nearly 71 percent of all jobs and 77 percent of total income in Washington State are found in the Puget Sound Basin. By 2040, the population is projected to grow to seven million, the equivalent of adding approximately four cities the size of Seattle to the watershed.

Puget Sound's beneficial uses are significant. In 2017, the value of Puget Sound commercial fishing (finfish and shellfish) was $114 million, and the Gross Domestic Product from Puget Sound-related tourism and recreation activities was $4.7 billion. Puget Sound's shellfish industry is considered the Nation's most valuable and is an important source of family wage jobs in economically challenged rural communities.

Development and land use conversion have adversely impacted the beneficial uses of Puget Sound's waters. For example, pollution and agricultural runoff reduce the safe harvest and consumption of shellfish across 143 thousand acres of shellfish beds and cause the closure of popular swimming beaches and recreational sites annually. Southern resident killer whales and 59 populations of Chinook salmon, steelhead, and bull trout are listed under the Endangered Species Act. Tribal nations also are unable to sustain their culture and way of life.

A healthy and functioning Puget Sound benefits all who live, visit, or recreate there, or have a connection to the region. A properly functioning ecosystem provides residents with food, water, and raw materials; regulates and moderates harmful elements; and provides cultural, spiritual, and recreational experiences.

Federal support of Puget Sound recovery comes from many programs, most of which are administered by EPA, the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, U.S. Department of Interior, and the U.S. Army Corps of Engineers.

Since 2010, Congress has appropriated over $400 million using Clean Water Act Section 320 authority for Puget Sound. Under Section 320, EPA has provided the National Estuary Program and Geographic Program funding and support to help communities make on-the-ground improvements for clean and safe water, protect, and restore habitat, allow for thriving species and a vibrant quality of life for all, while supporting local jobs.

EPA's work with the Puget Sound Partnership, state agencies, tribes, and other partners has supported important gains in recovery. Examples include:

- Comprehensive regional plans to restore the Sound;
- More than $1 billion of non-federal dollars leveraged for recovery;
- Partnerships with 19 federally recognized tribes;
- Transboundary collaboration with Canada;
- Scientific gains on toxic effects of urban stormwater;
- Development and use of decision-making tools to integrate Environmental Justice and Climate Adaptation plans and projects;
- Since 2007, a net increase of harvestable shellfish beds;
- Over 41 thousand acres of habitat protected and/or restored (cumulative from 2006); and
- More than six thousand acres of shellfish harvest bed upgraded (cumulative from 2007).

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Key FY 2024 activities for EPA's Puget Sound Program include:

- EPA will fund assistance agreements with the 19 federally recognized tribes in Puget Sound, three Tribal consortia, and the Northwest Indian Fisheries Commission. EPA proposes to provide funding to tribes for both capacity building and implementing priority tribal projects in the Puget Sound basin.
- EPA will fund over $7 million in tribal projects to support key local watershed science and monitoring; local partnerships in restoration projects to support habitat and water quality; and enhancement of ongoing programs and policies for recovery.
- EPA is a co-chair of the overall federal effort to address Tribal Treaty Rights at Risk consistent with the roles assigned by the Council on Environmental Quality. This is an essential role for EPA and other federal leaders in the region to meaningfully engage and develop actions with Puget Sound tribes to address their important treaty rights.
- The program will be developing and implementing actions to establish the Puget Sound National Program Office and the Puget Sound Federal Leadership Task Force as outlined in the new Clean Water Act amendment for Puget Sound (Section 126 of the CWA). This includes a report to Congress in December 2023.
- The Program will enhance Federal Task Force leadership, including leadership and implementation of the FY 2022-2026 Action Plan.[134] This leverages hundreds of millions

[134] For more information please visit: https://www.epa.gov/system/files/documents/2022-06/puget-sound-federal-task-force-action-plan-2022-2026.pdf.

of dollars in federal investments in Puget Sound and provides alignment of program and policies for recovery.

- The Program will build on over 20 years of international cooperation with Canada implementing the Canada-U.S. Cooperation in the *Salish Sea: 2021-2024 Action Plan*.[135] The Program will participate in a series of workshops on topics of shared interest in transboundary work including joint efforts for Southern Resident Killer Whales, science collaboration and enhancing transboundary governance opportunities.
- The FY 2024 budget request will help fulfill National Estuary Program responsibilities, including support for the implementation of the Comprehensive Conservation and Management Plan (CCMP) for recovering Puget Sound (the Action Agenda). The Program received, reviewed, and approved the updated CCMP in FY 2022 that sets up the next four years of collaborative implementation of recovery efforts in Puget Sound.
- The Program will continue to integrate climate adaptation and environmental justice while supporting local jobs. The Program is building climate resiliency into the actions and projects funded with Puget Sound assistance agreements for habitat, shellfish and water quality, which presents the opportunity to grow and integrate climate justice in all of our program areas with federal, state, tribal and local partners.
- The Program will be managing and awarding up to $100 million in projects from Puget Sound funding over the next five years consistent with the EPA's *2021 Strategic Initiative Lead Funding Model*.[136] The Program will fund over $17 million in shellfish, habitat and stormwater projects and programs.
- The Program will continue to fund and coordinate cutting-edge science in the Salish Sea with funding over $6 million in science projects from Puget Sound funding and programs with federal, state, tribal and academic partners.

In addition, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $17.8 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$678.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$656.0) This program change is a decrease due to offsets in fixed and other costs.

[135] For more information please see: https://www.epa.gov/puget-sound/actions-plans-us-canada-cooperation-salish-sea.
[136] For more information please visit: http://snohomishcountywa.gov/DocumentCenter/View/87563/FY21-EPA-Funding-Guidance-to-SILs_FINAL.

Statutory Authority:

Clean Water Act. Consolidated Appropriations Act, 2023 (P.L. 117-328).

Great Lakes Restoration
Program Area: Geographic Programs
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$349,157***	***$368,000***	***$368,154***	***$154***
Total Budget Authority	$349,157	$368,000	$368,154	$154
Total Workyears	68.2	77.0	77.0	0.0

Program Project Description:

The Great Lakes are the largest system of surface freshwater on Earth, containing 20 percent of the world's surface freshwater and 95 percent of the United States' surface freshwater. The watershed includes two nations, eight United States (U.S.), two Canadian provinces, and 35 tribes.

Through a coordinated interagency process led by EPA, the implementation of the Great Lakes Restoration Initiative (GLRI) is helping to restore the ecosystem. This restoration effort provides environmental and public health benefits to the region's thirty million Americans who rely on the Great Lakes for drinking water, recreation, and fishing. The restoration and protection of the Great Lakes also fuels local and regional economies and community revitalization efforts across the basin.

This interagency collaboration accelerates progress, promotes leveraging, avoids potential duplication of effort, and saves money. In accordance with the Clean Water Act (CWA), EPA and its partners are accomplishing this restoration through the implementation of a five-year GLRI Action Plan. The implementation of the GLRI Action Plan III, covering FY 2020 through FY 2024, began in October 2019.

EPA and its partners have achieved significant results since the GLRI started in 2010[137], including:

- Five Areas of Concerns (AOCs) delisted, including the Ashtabula River AOC in FY 2021. (Prior to GLRI, only one Great Lakes AOC was delisted.) Eleven others have had the cleanup and restoration actions necessary for delisting completed.
- 104 Beneficial Use Impairments (BUIs) at 28 AOCs in the eight Great Lakes states have been removed, ten times the total number of BUIs removed in the preceding 22 years.
- Over 4.3 million cubic yards of contaminated sediment have been remediated.
- Over 215,000 acres on which invasive species control activities have been implemented.
- Self-sustaining populations of Silver and Bighead carp have been kept out of the Great Lakes.

[137] For more information, please see https://www.epa.gov/greatlakes. AOC and BUI information in the first two bullets is as of 6/1/22 and the contaminated sediment remediation is as of 12/31/21. Information in the remaining bullets is as of 9/30/21.

- Over 16 million pounds of invasive carp have been removed from the Illinois River, reducing the potential for these species to invade the Great Lakes.
- Loadings of over 2 million pounds of phosphorus were reduced through implementation of conservation practices (phosphorus is a major driver of harmful algal blooms in Great Lakes priority watersheds).
- More than 475,000 acres of habitat have been protected, restored, or enhanced; and
- Over 625,000 youths have benefited from Great Lakes based education and stewardship projects.

Under the GLRI, funds are first appropriated to EPA. After annual evaluation and prioritization consistent with the GLRI Action Plan, EPA and its partner agencies collaboratively identify projects and programs that will best advance progress under GLRI. EPA then provides a substantial portion of those funds to its partner federal agencies to implement GLRI projects and programs in partnership with EPA, states, and tribes. EPA and its partner federal agencies will directly implement projects and fund projects performed by other entities such as states, tribes, municipalities, counties, universities, and nongovernmental organizations. GLRI funding can supplement each partner agency's base funding.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the GLRI will continue to support programs and projects which target the most significant environmental problems in the Great Lakes. Emphasis will continue to be placed on 1) cleaning up and delisting AOCs, which will help to revitalize and generate community benefits in environmental justice communities; 2) reducing phosphorus contributions that contribute to harmful algal blooms and other water quality impairments; and 3) invasive species prevention GLRI Action Plan III targets GLRI restoration within the focus areas, objectives, and performance goals described below.

<u>Toxic Substances and Areas of Concern Objectives:</u>

- *Remediate, restore, and delist AOCs*: EPA, U.S. Fish & Wildlife Service (FWS), U.S. Army Corps of Engineers (USACE), United States Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), and other GLRI partners will continue accelerating the pace of U.S. BUI removals. EPA and its federal partners will work with and fund stakeholders to implement management actions necessary to remove the BUIs (indicators of poor environmental health) that will ultimately lead to the delisting of the remaining AOCs on the U.S. side of the border. Agencies target collective efforts under the GLRI to maximize removal of BUIs and delisting of AOCs. Agencies will support BUI removal through sediment remediation under the Great Lakes Legacy Act (part of the GLRI) and other restoration activities. FY 2024 targets are:

- Ten BUIs (128 BUIs cumulative since 1987) removed in AOCs; and
- Three AOCs (31 AOCs cumulative since 1987 – 100 percent of the AOCs) with complete and approved lists of management actions necessary for delisting.

- *Share information on the risks and benefits of consuming Great Lakes fish, wildlife, and harvested plant resources with the people who consume them*: Federal agencies and their state and tribal partners will continue to help the public make informed decisions about healthy options for safe fish consumption. Expansion of successful pilot programs will increase the availability and accessibility of safe fish consumption guidelines to vulnerable populations that consume Great Lakes fish. Additional emphasis will be placed on the safe consumption of wildlife and harvested plant resources.

- *Increase knowledge about 1) "Chemicals of Mutual Concern" identified pursuant to the Great Lakes Water Quality Agreement Annex 3; and 2) other priority chemicals that have negatively impacted, or have the potential to negatively impact, the ecological or public health of the Great Lakes*: Federal agencies will coordinate with appropriate state and tribal partners to begin to fill critical monitoring and data gaps for priority chemicals in the Great Lakes. Monitoring data from this process will provide information on the magnitude and extent of these chemicals in the Great Lakes and help in the evaluation of associated ecological, economic, and recreational consequences.

Invasive Species Objectives:

- *Prevent introductions of new invasive species*: Federal agencies and their partners will continue to prevent new invasive species (including invasive carp) from establishing self-sustaining populations in the Great Lakes ecosystem. Federal agencies and their partners will work to increase the effectiveness of existing surveillance programs by increasing detection abilities. Federal agencies will continue to support state and tribal efforts to develop and implement Aquatic Nuisance Species Management Plans which will be used for annual "readiness exercises" and actual responses to new detections of invasive species. GLRI partners will be able to use risk assessments in combination with updated "least wanted" lists to focus prevention activities. Increasing the ability and frequency of Great Lakes states to quickly address new invasions or range expansion of existing invasive species will be a key GLRI strategy. In FY 2024, the goal is to conduct eight rapid responses exercises.

- *Control established invasive species*: Federal agencies and their partners will bring an enhanced focus to the quality of acreage to be restored as they restore sites degraded by aquatic, wetland, and terrestrial invasive species. Federal agencies will implement control projects in national forests, parks, and wildlife refuges, and will partner with states and neighboring communities to promote larger scale protection and restoration through applicable control programs. GLRI funding will help the Great Lakes Sea Lamprey Control Program to locate and address strategic barriers while also advancing new control technologies. In FY 2024, the target is to control invasive species on 6,000 acres.

- *Develop invasive species control technologies and refine management techniques*: Federal agencies and their partners will continue to develop and enhance technologies to control non-

native phragmites, sea lamprey, and red swamp crayfish so that on-the-ground land managers can field test these new approaches. Federal agencies also will develop and enhance invasive species "collaboratives" to support rapid responses and to communicate the latest control and management techniques for non-native species such as Hydrilla, Dreissenidae mussels, hemlock wooly adelgid, and emerald ash borer. Federal agencies and their partners will support a Great Lakes telemetry network to track aquatic invasive species movements (*e.g.*, grass carp) and refine rapid response actions.

Nonpoint Source Pollution Impacts on Nearshore Health Objectives:

- *Reduce nutrient loads from agricultural watersheds*: EPA, federal agencies, and their partners will continue working on farms and in streams to reduce nutrient loads from agricultural watersheds, emphasizing utilization of conservation systems and work in priority watersheds, particularly the Lower Fox River (WI), Saginaw River (MI), Maumee River (OH), and Genesee River (NY). This work will reduce the most significant loadings from nutrient runoff. Federal agencies and their partners will improve the effectiveness of existing programs, encourage the adoption of technologies and performance-based approaches to reduce runoff and soil losses, expand demonstration farm networks to increase adoption of nutrient management practices, promote practices for slowing down and filtering stormwater runoff, and emphasize long-term and sustainable nutrient reductions. EPA and its federal partners will target resources and activities at locations that are the most significant cause of harmful algal blooms. FY 2024 targets are:
    - Reduce 300,000 pounds (2.8 million pounds cumulative since 2010) of phosphorus from conservation practice implementation throughout Great Lakes watersheds; and
    - Provide technical or financial assistance on 132,500 acres (2.8175 million acres cumulative since 2010) in priority watersheds.

- *Reduce untreated stormwater runoff*: EPA and its federal partners will continue to accelerate implementation of green infrastructure projects to reduce the impacts of polluted urban runoff on nearshore water quality at beaches and in other coastal areas. These projects will capture or slow the flow of untreated runoff and filter out sediment, nutrients, toxic contaminants, pathogens, and other pollutants prior to entering Great Lakes tributaries and nearshore waters. Federal agencies and their partners also will continue to support watershed management projects that slow and intercept runoff, including installation of tributary buffers, restoration of coastal wetlands, and re-vegetation and re-forestation of areas near Great Lakes coasts and tributaries. FY 2024 targets are:
    - Capture or treat 50 million gallons (550 million gallons cumulative since 2015) of untreated stormwater runoff captured or treated; and
    - Restore or protect seven miles (61 miles cumulative since 2015) of Great Lakes shoreline and riparian corridors restored or protected.

- *Improve effectiveness of nonpoint source control and refine management efforts*: EPA and its federal partners will continue to adaptively manage to maximize nonpoint source control efforts. Strategies will include conducting edge-of-field monitoring studies in agricultural priority watersheds to test the effectiveness of innovative practices such as bioreactors; application of previously supported tools and lessons learned to optimize project results; and

development of new strategies such as nutrient recovery and manure transformation technologies. FY 2024 targets are:

- Conduct 30 nutrient monitoring and assessment activities; and
- Develop or evaluate ten nutrient or stormwater runoff reduction practices or tools.

Habitats and Species Objectives:

- *Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes*: EPA and its federal partners will implement protection, restoration, and enhancement projects focused on open water, nearshore, connecting channels, coastal wetland, and other habitats to protect and restore native species. They will build upon and shore-up past investments while advancing protection and restoration in new areas important to targeted species. Projects will be largely based on priorities in regional scale conservation strategies and will include:
    - Protecting, restoring, and enhancing coastal wetlands;
    - Removing dams and replacing culverts to create fish habitat and reconnect migratory species to Great Lakes tributaries.
    - Restoring habitat necessary to sustain populations of migratory native species; and
    - Protecting, restoring, and managing existing wetlands and high-quality upland areas to sustain diverse, complex, and interconnected habitats for species reproduction, growth, and seasonal refuge.

  FY 2024 targets are:
    - Restore, protect, or enhance 12,000 acres of coastal wetland, nearshore, and other habitats (442,000 acres cumulative since 2010); and
    - 200 miles (6,500 miles cumulative since 2010) of connectivity between rivers, streams, and lakes providing passage for aquatic species.

Increase resiliency of species through comprehensive approaches that complement on-the-ground habitat restoration and protection: EPA and its federal partners will maintain, restore, and enhance the habitats of native fish and wildlife species to increase the resiliency and overall health of these species. Agencies will maximize habitat improvements (coastal wetlands in particular) for aquatic and terrestrial species through collaborative conservation and monitoring at local and regional scales. Project benefits are expected to include avoiding species extinction, identification of key habitats and of limiting factors to species recovery and increasing or protecting population levels. GLRI agencies and their partners will continue to support protection of native species that have cultural, subsistence, and economic value. In FY 2024 the target is to complete actions to significantly protect or promote recovery of populations of two species (eight species cumulative since 2018).

Foundations for Future Restoration Actions Objectives:

- *Educate the next generation about the Great Lakes ecosystem*: EPA and its federal partners will promote Great Lakes-based environmental education and stewardship for students and other interested community members (*e.g.*, courses at parks, nature centers, on board vessels, museums, and zoos). With an emphasis on educating K-12 youth, GLRI partners will support

experience-based learning opportunities. GLRI agencies and their partners also will continue to develop Great Lakes-literate educators to maximize the number of youths impacted using principles and concepts in the Great Lakes Literacy curriculum. These activities will support the overall goal of impacting youth to foster Great Lakes stewardship, promote conservation, and expose and prepare under-represented youth for higher education opportunities in natural resource management.

- *Conduct comprehensive science programs and projects*: EPA and its federal partners will continue to investigate the most significant ecological problems in the Great Lakes. Great Lakes monitoring will include: coastal wetlands, water quality, and the lower food web in the offshore waters; nutrient cycling and harmful algal blooms in priority areas; and contaminants in Great Lakes fish, sediments, and air. Federal agencies and their partners will identify and address science priorities to support implementation of the GLRI and the Great Lakes Water Quality Agreement. They will continue to: develop new tools for monitoring and forecasting; measure project effectiveness; prioritize management activities; and consider environmental and health outcomes.

In addition, the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58) includes $200 million for this program in FY 2024. In FY 2024, EPA is requesting appropriations language that will provide funding under this program as no-year funds.

GLRI Funding Allocations:

EPA leads the cooperative process to determine funding allocations for programs and projects of the GLRI agencies. Under the CWA Section 118, EPA provides the appropriate authorizing and appropriating committees of the Senate and the House of Representatives a yearly detailed description of the progress of the GLRI and amounts transferred to participating federal departments and agencies.

Summary of FY 2017 – FY 2024 Allocations* by Focus Area
(Dollars in Thousands)

Focus Area	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Toxic Substances and AOC	$107,500	$105,600	$107,400	$115,800	$118,500	$62,600	$102,165	TBD
Invasive Species	$62,200	$56,700	$57,000	$62,900	$66,000	$81,000	$70,213	TBD
Nonpoint Source Pollution Impacts on Nearshore Health	$47,900	$50,600	$51,200	$51,000	$55,400	$83,800	$79,479	TBD
Habitat and Species	$49,500	$52,400	$51,400	$54,500	$56,200	$79,500	$75,112	TBD
Foundations for Future Restoration Actions	$32,900	$34,700	$33,000	$35,800	$33,900	$41,100	$41,031	TBD
TOTAL	$300,000	$300,000	$300,000	$320,000	$330,000	$348,000	$368,000	TBD
Allocations are based on budgets approved by Regional Working Group agencies. The FY 2022 and FY 2023 allocations reflect adjustments as a result of allocating BIL funding, principally to cleanup of AOCs. RWG agencies develop allocations for future funding, such as FY 2023 and FY 2024, based on the authorized GLRI funding level and will make adjustments upon appropriation.								

Summary of FY 2017 – FY 2024 Allocations* by Agency
(Dollars in Thousands)

Agency	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
DHS-USCG	$1,580	$500	$1,661	$1,250	$1,300	$1,200	TBD	TBD
DOC-NOAA	$12,027	$24,629	$29,405	$28,163	$16,621	$29,420	TBD	TBD
DOD-USACE	$55,940	$43,559	$37,387	$30,599	$42,612	$17,687	TBD	TBD
DOI-BIA	$10,904	$11,617	$9,842	$15,840	$15,765	$19,368	TBD	TBD
DOI-NPS	$4,379	$3,940	$3,822	$3,794	$4,968	$7,996	TBD	TBD
DOI-USFWS	$41,794	$52,902	$47,272	$53,523	$59,288	$78,910	TBD	TBD
DOI-USGS	$26,817	$25,724	$21,603	$19,780	$19,790	$20,702	TBD	TBD
DOT-MARAD	$800	$675	$803	$5,500	$8,000	$6,500	TBD	TBD
HHS-ATSDR/CDC	$593	$590	$0	$0	$0	$0	TBD	TBD
USDA-APHIS	$1,262	$1,176	$1,312	$1,378	$1,459	$1,830	TBD	TBD
USDA-NRCS	$22,072	$25,096	$20,697	$22,239	$24,374	$31,824	TBD	TBD
USDA-USFS	$11,355	$10,153	$11,646	$9,921	$12,464	$12,958	TBD	TBD
IA Totals:	$189,522	$200,560	$185,448	$191,988	$206,641	$228,395	TBD	TBD
EPA and Misc. IAs	$110,478	$99,440	$114,552	$128,012	$123,359	$119,605	TBD	TBD
Totals:	$300,000	$300,000	$300,000	$320,000	$330,000	$348,000	$368,000	TBD
Allocations are based on budgets approved by Regional Working Group agencies. The FY 2022 allocations reflect adjustments as a result of allocating BIL funding, principally to cleanup of AOCs. RWG agencies develop allocations for future funding, such as FY 2023 and FY 2024, based on the authorized GLRI funding level and will make adjustments upon appropriation.								

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,500.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$1,346.0) This program change is a decrease due to offsets in fixed and other costs.

Statutory Authority:

Clean Water Act Section 118.

Homeland Security

Homeland Security: Communication and Information

Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$4,054***	***$4,692***	***$6,051***	***$1,359***
Total Budget Authority	$4,054	$4,692	$6,051	$1,359
Total Workyears	10.9	13.3	15.3	2.0

Program Project Description:

There has been an evolution of the term and mission of national and homeland security since 9/11. National security is now widely understood to include non-military dimensions, such as climate and environmental security, economic security, energy security, and cybersecurity, as well as traditional homeland security topics. Due to this, the homeland security roles and responsibilities of the EPA have expanded, and several areas (*e.g.,* climate, natural disasters) now involve engagement from the broader national security community. Systematic preparation is essential for the threats that pose the greatest risk to the security of the Nation, including acts of terrorism, climate change, pandemics, catastrophic natural disasters, cyber-attacks, and other national security emergencies. The White House, Congress, and the Department of Homeland Security (DHS) have defined responsibilities for EPA in several areas, including water critical infrastructure protection and response to chemical, biological, radiological, and nuclear events, through a series of statutes, presidential directives, and national plans.

In addition, EPA supports disaster recovery and mitigation, yet this essential work has been steadily expanding to include climate change and climate security work identified in recent Executive Orders. EPA's Mitigation and Recovery Order 2074 reaffirms our role using EPA programs and resources and directs Regions to assign coordinators to support the agency-wide efforts with mitigation and recovery. EPA's critical mitigation work prepares communities to prevent or reduce impacts when natural (e.g., climate change) or human-made disaster (e.g., dirty bomb, anthrax) occurs. Regions work with federal, state, territorial, tribal, and local communities to provide technical assistance to reduce loss of life and environmental impact per the National Mitigation Framework and the National Investment Mitigation Strategy. Climate change will continue to increase the frequency, extent, and severity of natural disasters.

As our response roles are executed and the event continuum transfers to recovery, EPA then focuses on how best to restore, redevelop, and revitalize the health, social fabric, economy, and environment of the community using the six Recovery Support Functions of the National Disaster Recovery Framework.

EPA's Homeland Security: Communication and Information Program has two components. The Office of Homeland Security (OHS) supports the Agency's coordination and communication activities related to national security and homeland security. The Office of Mission Support, which manages the Agency's Enterprise Security Operations Center (SOC), is responsible for the centralized, integrated, and coordinated cybersecurity prevention, detection, response, and supporting recovery capability for EPA networks.

OHS provides technical, policy, and intelligence advice to senior agency leadership related to national and homeland security. OHS coordinates the Agency's intelligence activities including EPA's engagement with the White House, National Security Council (NSC), and other federal departments and agencies on the development of new national and homeland security policies and requirements. OHS also ensures that the NSC and other lead federal entities understand the impacts of new national security initiatives and policies on existing EPA programs. OHS maintains intelligence operations and analyses capabilities focusing on EPA's equities, including the protection of critical infrastructure, specifically the water sector, climate change and security issues, and biodefense and global health security issues. OHS serves as the Federal Intelligence Coordinating Office (FICO) for EPA and coordinates with the Intelligence Community (IC) in support of policy development and consequence management efforts. OHS also focuses on coordination and integration of chemical, biological, and radiological preparedness and response programs. More specifically, OHS focuses on the protection of air and water quality and the prevention of land contamination, through external engagement with federal departments and agencies and internal coordination with EPA program offices with homeland security responsibilities. OHS also has developed a Classified Information Management Program to ensure effective classified communications with all ten EPA Regions in the event of a national security emergency or incident. OHS coordinates with regional, state, and local Fusion Centers and Joint Terrorism Task Forces to focus on integrating EPA regional offices with the information sharing environment and DHS' intelligence sharing network. OHS also advances implementation of the National Counterintelligence and Security Center's Enterprise Threat Mitigation Framework via the following programs: EPA Insider Threat, Suspicious Activity Reporting, National Operations Security (OPSEC), and Counterintelligence. OHS also manages the program that supports the Department of Treasury with the Committee on Foreign Investment in the United States.

In addition, OHS works closely with EPA's Water Program to coordinate and integrate water security efforts internally and externally with stakeholders regarding physical threats and contamination and cyber threats to operations. EPA serves as the Sector Risk Management Agency (SRMA) for the water sector. The October 2020 *DHS Homeland Threat Assessment* and the *2021 Annual Threat Assessment of the U.S. Intelligence Community (IC)* (April 2021)[138] indicated that cyber threats from nation states and non-nation states remain an acute growing problem threatening U.S. critical infrastructure. Cyberattacks across critical infrastructure sectors are rapidly increasing in volume and sophistication, impacting both information technology (IT) and operational technology (OT) systems in the water sector.

[138] Please see the following for more information: https://www.dhs.gov/sites/default/files/publications/2020_10_06_homeland-threat-assessment.pdf.
https://www.dni.gov/files/ODNI/documents/assessments/ATA-2021-Unclassified-Report.pdf.

EPA's Enterprise SOC provides a centralized, integrated, and coordinated cybersecurity incident response capability that defends against unauthorized activity within computer networks, by preventing, detecting, monitoring, analyzing, and responding to suspicious or malicious activity through its Computer Security Incident Response Capability (CSIRC). The SOC and CSIRC also provide situational and threat awareness; cyber network defense infrastructure; cybersecurity tool engineering and support; vulnerability and risk assessments; and threat intelligence processing and threat hunting capabilities. The SOC leverages an enterprise security information and event manager, enterprise logging, endpoint detection and response, and other capabilities to perform its mission. The SOC maintains communications with DHS' Liaison Officers to respond to alerts that have potential national security impact.

National and homeland security information technology efforts are closely coordinated with the agencywide information security and infrastructure activities, which are managed by EPA's Information Security and IT/Data Management programs. These IT support programs also enable contact among localities, EPA program and regional offices, and laboratories in emergency situations.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*. With the resources requested in FY 2024, this program will:

- Continue to promote a coordinated approach to EPA's homeland security activities and support the alignment of resources with government-wide national and homeland security priorities and requirements as defined by the NSC and the IC, including climate security, cybersecurity, and biodefense.

- Continue to build on and develop the Agency's cybersecurity intelligence capabilities to provide a level of support that would enable EPA to better prepare for and respond timely to specific threats, mitigate attacks, assess evolving water sector cyber intelligence requirements, and assist in developing proposals to prevent/mitigate cyber incidents. By further building these capabilities, the Agency will be able to increase research, analyses, and engagement with the water and wastewater sector and partner agencies who deal with cybersecurity (*i.e.,* DHS Cybersecurity and Infrastructure Security Agency (CISA)) and help EPA fulfill the requirements in Section 9002 of the FY 2021 National Defense Authorization Act. All indicators suggest cybersecurity threats and requirements, particularly those associated with the critical infrastructure sector, will only increase in number, complexity, and potential consequences for the foreseeable future.

- OHS and EPA's Water Program will develop an integrated strategy to work together more effectively to coordinate water and wastewater sector-wide cybersecurity threat information and intelligence sharing efforts. Specific examples of OHS' roles/responsibilities in this area include:

- Engaging with the Water Sector Coordinating Council and the Water Information Sharing and Analysis Center (ISAC) to more closely work with CISA and the intelligence and law enforcement communities to facilitate the identification of intelligence requirements and priorities of critical infrastructure owners and operators in the water and wastewater sector in coordination with the Director of National Intelligence and the heads of other Federal departments and agencies, as appropriate;

- Supporting risk assessment and risk management efforts by EPA in conjunction with CISA; and

- Working with CISA to provide and facilitate awareness, within the water and wastewater sector, of ongoing, and where possible, real-time awareness of identified threats, vulnerabilities, mitigations, and other actions related to the security of the water and wastewater sector.

- Continue to develop new collaborative practices and methods with Intelligence Community agencies to meet the cybersecurity needs of the water and wastewater sector, along with other critical sectors, to address increasingly sophisticated and complex threat actor tactics and techniques. EPA has coordinated with NSC, CISA, Federal Bureau of Investigation (FBI), and water sector entities, on several occasions, regarding cyber-attacks on the water sector's IT and OT systems, which has resulted in a renewed emphasis on notification and communication efforts with the water utilities.

- Continue to develop new collaborative practices and methods with Intelligence Community agencies and the National Security Council to: meet the requirement in Executive Order (EO) 14008, *Tackling the Climate Crisis at Home and Abroad*,[139] "to place the climate crisis at the forefront of this Nation's foreign policy and national security planning," and to address emerging domestic and global biological risks, including pandemics and national bio-preparedness policies.

- Provide more comprehensive support to the expanding collaborations with Department of Energy (DOE), CISA, WaterISAC, and other programs on cyber threat response.

- Promote a coordinated approach to communicating classified and sensitive information to EPA programs, laboratories, and regional offices via secure communications systems to support timely intelligence and information sharing to enable safe and effective operational preparedness and response.

- Continue to develop a program, working with the Office of Policy, to support the regional Disaster Recovery Coordinators, increasing national disaster mitigation and recovery capacity. OHS also will support regional Mitigation Coordinators to increase mitigation planning and advance policy to increase resilience in support of Executive Order 14008 *Tackling the Climate Crisis at Home and Abroad.*

[139] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

- Support federal, state, tribal, and local efforts to prevent, protect, mitigate, respond to, and recover from the impacts of natural disasters, acts of terrorism, and other emergencies by providing leadership and coordination across EPA's program offices and regions.

- Ensure appropriate agency representation in various White House and other federal national security and homeland security policy activities. These efforts include serving as EPA's representative for homeland security, national disaster response, and mitigation and recovery policy in monthly meetings of the Homeland Preparedness and Response Interagency Policy Committee (IPC), the Homeland Critical Infrastructure Resilience Interagency Policy Committee, chaired by the NSC, and in weekly NSC Cyber Response Group meetings and other national security policy committees. In addition, OHS serves as EPA's representative in monthly meetings of the Recovery Support Function Leaders Group, chaired by the Federal Emergency Management Agency (FEMA), and the Mitigation Framework Leadership Group, also chaired by FEMA, and on other interagency workgroups.

- In support of agency representation in various White House and other federal national security and homeland security policy activities, EPA will expand its secure video telecommunications (SVTC) capabilities.

- Focus on filling critical policy, knowledge, and technology gaps that may be essential for an effective EPA response, including working with our interagency partners to define collective capabilities and resources that may contribute to closing common homeland security gaps, including emerging chemical threats and cybersecurity concerns for critical water infrastructure.

- Provide EPA end-users with relevant, accurate, reliable, objective, and timely intelligence bearing on matters of environmental policy and regulation and domestic threats and counterintelligence, where EPA functions to preserve or assist in the restoration of human health and the environment.

- Continue phased implementation of EO 13587, *Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information*[140] to meet the main pillars of classified information protection with a focus on the implementation of an Insider Threat Program to address and mitigate threats to national security.

- Track emerging national and homeland security issues, through close coordination with the U.S. Intelligence Community, to anticipate and avoid crisis situations and target the agency's efforts proactively against threats to the United States.

- Phase in National Security Presidential Memorandum 28 (NSPM-28) to support OPSEC for the Agency.

[140] For more information, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/10/07/executive-order-13587-structural-reforms-improve-security-classified-net.

- Support the coordination and communication requirements of NSPM-32 to share information on critical incidents in a timely and effective manner.

In FY 2024, EPA also will support implementation of EO 14028, *Improving the Nation's Cybersecurity,*[141] through monitoring across the Agency's IT infrastructure to detect, remediate, and eradicate malicious activity/software from EPA's computer and data networks. Specific activities include:

- Continue to mature and enhance internal Computer Security Incident Response Capability to ensure rapid identification and reporting of suspicious activity through increased training and awareness of cybersecurity threats. Training opportunities are provided to individual users to identify the most recent cybersecurity threats along with tabletop exercises to develop agency staff proficiency in responding to cyber security incidents.

- Improve threat intelligence sharing. EPA personnel are active participants in the United States Computer Emergency Readiness Team, a DHS-led group of experts from incident response and security response teams. Indicators and warnings are shared between EPA incident responders and their cleared counterparts in other agencies and with the Intelligence Community. This provides the ability to integrate actionable intelligence with deployed systems to improve cybersecurity defensive capabilities.

- Continue maturation and refinement of the Agency's Incident Response procedures in compliance with EO 14028 and CISA's Playbook for Responding to Cybersecurity Vulnerabilities and Incidents.

- In compliance with OMB Memorandum M-22-01, *Improving Detection of Cybersecurity Vulnerabilities and Incidents on Federal Government Systems through Endpoint Detection and Response,*[142] continue work to integrate End Point Detection and Response (EDR) capabilities with the Continuous Diagnostics and Mitigation Program to support proactive detection of cybersecurity incidents within the EPA information environment, supporting active cyber hunting, containment and remediation, and incident response. This work includes extensive coordination with CISA and deployment of capabilities across the Agency.

- Mature the security logging capabilities as outlined in OMB Memorandum M-21-31, *Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents*.[143] This activity will build on implementation of Event Logging Level 3 for Advanced Logging requirements at all criticality levels. It will focus on fully implementing Security Orchestration, Automation, and Response tools to streamline threat and vulnerability management, incident response, and security operations automation, as

[141] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/.
[142] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/10/M-22-01.pdf.
[143] For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-31-Improving-the-Federal-Governments-Investigative-and-Remediation-Capabilities-Related-to-Cybersecurity-Incidents.pdf.

well as User Behavior Monitoring analytics to enable early detection of malicious behavior.

- In compliance with OMB Memorandum M-22-09,[144] M*oving the U.S. Government Toward Zero Trust Cybersecurity Principles,* the SOC will support implementation of a Zero Trust Architecture across the Agency.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$282.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,320.0 / +1.0 FTE) This program change increases resources and FTE for implementing the EPA Climate Adaptation Action Plan, supporting the increased resilience of EPA programs, and strengthening the capacity of states, communities, and businesses to adapt to climate change, with a particular focus on enhancing environmental justice. This investment includes $210.0 thousand for payroll costs.

- (+$372.0 / +1.0 FTE) This program change increases resources and FTE for enhancing homeland security coordination and communication efforts across the Agency. This investment includes $210.0 thousand for payroll costs.

- (-$51.0) This program change reflects efficiencies realized from streamlining homeland security IT efforts across the agency.

Statutory Authority:

Resource Conservation and Recovery Act, §§ 1001, 2001, 3001, 3005; Safe Drinking Water Act; Clean Water Act, §§ 101, 102, 103, 104, 105, 107; Clean Air Act, §§ 102, 103, 104, 108; Toxic Substances Control Act, §§ 201, 301, 401; Federal Insecticide, Fungicide, and Rodenticide Act, §§ 136a-136y; Bio Terrorism Act of 2002, §§ 303, 305, 306, 307; Homeland Security Act of 2002; Post-Katrina Emergency Management Reform Act; Defense Against Weapons of Mass Destruction Act; and Food Safety Modernization Act, § 208.

[144] For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2022/01/M-22-09.pdf.

Homeland Security: Critical Infrastructure Protection
Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$873***	***$923***	***$1,023***	***$100***
Science & Technology	$9,941	$10,852	$34,205	$23,353
Total Budget Authority	$10,814	$11,775	$35,228	$23,453
Total Workyears	26.1	26.6	57.6	31.0

Program Project Description:

The Critical Infrastructure Protection Program supports EPA's efforts to coordinate and provide technical expertise to enhance the protection of the Nation's critical water infrastructure from terrorist threats and all-hazard events through effective information sharing and dissemination. This program provides water systems with current information on methods and strategies to build preparedness for natural and man-made threats.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan*. This program also supports the Agency's Infrastructure Investment and Jobs Act implementation priorities including preparing for and responding to cybersecurity challenges so that water systems are more resilient.

In FY 2024, EPA will build the capacity at water systems to identify and respond to threats to critical national water infrastructure by:

- Providing timely information on contaminant properties, water treatment effectiveness, detection technologies, analytical protocols, and laboratory capabilities;

- Supporting effective communication conduits to disseminate threat and incident information and to serve as a clearinghouse for sensitive information;

- Encouraging information sharing between the water sector and environmental professionals, scientists, emergency services personnel, law enforcement, public health agencies, the intelligence community, and technical assistance providers. Through this exchange, water systems can obtain up-to-date information on current technologies in water security, accurately assess their vulnerabilities to terror acts, and work cooperatively with public health officials, first responders, and law enforcement officials to respond effectively in the event of an emergency;

- Providing water utilities, of all sizes, with access to a comprehensive range of important materials, including the most current information, tools, training, and protocols designed to enhance the security (including cybersecurity), preparedness, and resiliency of the water sector (including addressing natural hazards and climate change); and

- Ensuring that water utilities receive timely and informative alerts about changes in the homeland security advisory level and regional and national trends in certain types of water-related incidents. For example, should there be types of specific, water-related threats or incidents that are recurring, EPA, in coordination with the Department of Homeland Security and other appropriate agencies, will alert utilities of the increasing occurrence of or trends in these incidents.

Providing this information, coupled with effective information sharing processes, allows the water sector to improve its understanding of the latest water security and resiliency protocols and threats. These protocols reduce risk by enhancing the water sector's ability to prepare for an emergency.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act (SDWA) implementation and compliance and performance results in the Drinking Water Programs, under the EPM appropriation, to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$37.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$63.0) This program change provides increased resources to promote the protection of critical water infrastructure.

Statutory Authority:

SDWA, §§ 1431-1435; Clean Water Act; Public Health Security and Bioterrorism Emergency and Response Act of 2002; Emergency Planning and Community Right-to-Know Act, §§ 301-305.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$4,903***	***$5,188***	***$5,158***	***-$30***
Science & Technology	$501	$625	$501	-$124
Building and Facilities	$7,049	$6,676	$6,676	$0
Hazardous Substance Superfund	$1,201	$1,029	$1,530	$501
Total Budget Authority	$13,653	$13,518	$13,865	$347
Total Workyears	12.0	13.3	9.2	-4.1

Total workyears in FY 2024 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

Environmental Programs and Management resources for the Homeland Security: Protection of EPA Personnel and Infrastructure Program ensure that EPA maintains a robust physical security and preparedness infrastructure, ensuring that its numerous facilities are secured and protected in line with the federally mandated Interagency Security Committee standards.

In order to secure and protect EPA's personnel and physical infrastructure, the Agency operates a USAccess Personal Identity Verification (PIV) program, which adheres to the requirements as set forth in Homeland Security Presidential Directive-12 (HSPD-12).[145] This program ensures the Agency complies with government-wide standards for the issuance of secure and reliable forms of identification to federal employees and contractors who require access to federally controlled facilities and networks. Additionally, EPA's National Security Information (NSI) program manages and safeguards EPA's classified information for its federal workforce and contractors, including conducting mandatory training and NSI inspections at EPA's accredited facilities. In addition to the NSI program, EPA operates a Personnel Security Program that initiates and adjudicates personnel background investigations, processes fingerprint checks, determines individual eligibility to access classified NSI, and maintains personnel security records for all federal and non-federal employees.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan.*

As part of the nationwide protection of buildings and critical infrastructure, EPA performs vulnerability assessments on facilities each year. Through this program, the Agency also

[145] For additional information, please see: https://www.dhs.gov/homeland-security-presidential-directive-12.

recommends security risk mitigations, oversees access control measures, determines physical security measures for new construction and leases, and manages the lifecycle of security equipment.

In FY 2024, EPA will continue to partner with the General Services Administration (GSA) on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency's modernization of its security infrastructure in compliance with HSPD-12 and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks. In addition, the Agency will continue to utilize GSA's Managed Service Office program, USAccess, for PIV card enrollment and issuance. USAccess is a GSA managed, shared services solution that provides EPA the ability to produce and maintain secure and reliable forms of identification, as required per HSPD-12, for all EPA employees and contractors.

The Agency will continue to prioritize implementation of Trusted Workforce 2.0[146] (TW 2.0). TW 2.0 is a whole-of-government background investigation reform effort overhauling the personnel vetting process by creating one government-wide system that allows reciprocity across organizations. This effort includes moving from periodic reinvestigations every five to ten years towards a Continuous Vetting program, which protects the trusted workforce in real time.

In FY 2024, pursuant to the April 2022 Trusted Workforce Implementation Strategy issued by the Security, Suitability, and Credentialing Performance Accountability Council, EPA will complete projects that support the transition to TW 2.0, including: enrollment of EPA personnel into the continuous evaluation program managed by the Defense Counterintelligence and Security Agency, and integration of EPA processes with National Background Investigation Services (NBIS),[147] a new personnel vetting IT system for the background investigation process to deliver stronger security, faster processing, and better information sharing.

EPA complies with *5 CFR 1400*, which requires that federal and non-federal positions are designated for both risk and sensitivity and that personnel have appropriate background investigations commensurate with their position's risk and sensitivity designation. EPA will continue to manage the personnel security, suitability, fitness, and NSI programs and conduct background investigations following appropriate federal guidance, ensuring that personnel are properly investigated for the positions they encumber and that classified material and activity is properly handled. As federal guidelines and policies change or are introduced, the systems supporting background investigations and the NSI program will be updated and enhanced as needed.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

[146] For additional information, please see: https://www.performance.gov/trusted-workforce/.
[147] For more information, please refer to: https://www.dcsa.mil/is/nbis/.

- (-$30.0) This program change reflects cost efficiencies associated with the continued adoption of the Enterprise Physical Access Control System (ePACS) shared service across EPA facilities.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Privacy Act of 1974; REAL ID Act of 2005; Homeland Security Act of 2002; Americans with Disabilities Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Indoor Air: Radon Program
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$2,966***	***$3,364***	***$5,113***	***$1,749***
Science & Technology	$116	$199	$173	-$26
Total Budget Authority	$3,082	$3,563	$5,286	$1,723
Total Workyears	8.4	9.0	12.4	3.4

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risk posed by exposure to indoor radon. Under the statute, EPA studies the health effects of radon, assesses exposure levels, sets an action level, provides technical assistance to states, industry, and the public, advises the public of steps they can take to reduce exposure, and promotes the availability of reliable radon services and service providers to the public.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year.[148] EPA's non-regulatory Indoor Air: Radon Program promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that all homes be tested for radon and if radon levels above EPA's guidelines are confirmed, elevated levels should be reduced by home mitigation using proven, straightforward techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in many homes over the years, but millions of homes are still in need of mitigation. Additionally, low-income families and tribal communities lack access to resources to address radon. This voluntary program promotes partnerships among national organizations, the private sector, and more than 50 state, local, tribal, and territory governmental programs to reduce radon risk.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will continue to lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program. Work in this program supports the President's

[148] https://www.epa.gov/radon.

priority of advancing environmental justice. EPA will drive action at the national level to reduce radon risk in homes and schools through the National Radon Action Plan, partnerships with the private sector and public health groups, technical assistance to states and industry, public outreach, and education activities. The Agency will encourage radon risk reduction as a normal part of doing business in the real estate marketplace, will promote local and state adoption of radon prevention standards in building codes, and will participate in the development of national voluntary standards (e.g., mitigation and construction protocols) for adoption by states and the radon industry. EPA will continue working to update the framework that ensures a quality, credentialed radon workforce.

Performance Measure Targets:

(PM LCD) Number of lung cancer deaths prevented through lower radon exposure.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						1,881	1,981	2,083	Deaths Prevented
Actual	1,383	1,482	1,578	1,684	1,795	1,894			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$50.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,699.0 / +3.4 FTE) This increase in resources and FTE supports efforts to restore EPA's staff expertise, analysis, and capacity in the indoor air radon program in order to better lead the federal government's response to radon and to implement the Agency's own multi-pronged radon program. This investment includes $675.0 thousand in payroll costs.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA); Title IV of the Superfund Amendments and Reauthorization Act (SARA); Clean Air Act.

Radiation: Protection
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$8,244***	***$9,088***	***$11,638***	***$2,550***
Science & Technology	$2,224	$1,683	$2,349	$666
Hazardous Substance Superfund	$2,011	$2,472	$3,010	$538
Total Budget Authority	$12,479	$13,243	$16,997	$3,754
Total Workyears	53.9	54.8	67.2	12.4

Program Project Description:

EPA has general and specific duties to protect human health and the environment from harmful and avoidable exposure to radiation under multiple statutes. EPA's Radiation Protection Program carries out these responsibilities through its federal guidance and standard-setting activities, including: regulatory oversight and implementation of radioactive waste disposal standards for the Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP); the regulation of airborne radioactive emissions; general disposal standards for nuclear waste repositories; and the development and determination of appropriate methods to measure and to model radioactive releases and exposures under Section 112 of the Clean Air Act. The Radiation Protection Program also supports EPA, state, local and tribal authorities by providing radiation protection scientific analyses and recommendations needed to inform risk management policies, and the necessary radiation risk communications expertise to support local community engagement on issues related to legacy contamination and environmental justice needs.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will meet its statutory obligation to implement its regulatory oversight responsibilities for DOE activities at the WIPP facility, as mandated by Congress in the WIPP Land Withdrawal Act of 1992. In FY 2024, EPA anticipates conducting a detailed review of the DOE request for expanding the WIPP repository to address needs for more waste disposal area, permitting disposal of previously identified transuranic waste as well as more recently identified needs for disposal of surplus plutonium. EPA will review and implement regulations or guidance, as necessary.

The Agency also will provide technical and policy analysis supporting scientific goals for space exploration. EPA serves on the Interagency Nuclear Safety Review Board with NASA and DOD to provide launch safety analysis.

EPA scientists will participate, as appropriate, in interagency working groups to examine issues of low-dose radiation health impacts and identify any needed changes to existing technical and policy guidance. EPA radiation risk communicators will provide radiation-related website and communications product content that is clear and accessible to the general public, including those with limited English proficiency.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$106.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$2,352.0 / +7.3 FTE) This program change is an increase that supports efforts to restore EPA's staff expertise, analysis, and capacity in the radiation protection program to provide radiation protection scientific analyses and recommendations needed to inform risk management policies. It also supports the necessary radiation risk communications expertise for local community engagement on issues related to legacy contamination and environmental justice needs. This investment includes $1.454 million in payroll.

- (+$92.0 / +0.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

Atomic Energy Act of 1954; Clean Air Act; Energy Policy Act of 1992; Nuclear Waste Policy Act of 1982; Public Health Service Act; Safe Drinking Water Act; Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978; Waste Isolation Pilot Plant Land Withdrawal Act of 1992; Marine Protection, Research, and Sanctuaries Act; Clean Water Act.

Radiation: Response Preparedness
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$2,658***	***$2,650***	***$3,143***	***$493***
Science & Technology	$2,928	$3,596	$4,686	$1,090
Total Budget Authority	$5,586	$6,246	$7,829	$1,583
Total Workyears	31.0	33.3	41.4	8.1

Program Project Description:

EPA responds to radiological emergencies; conducts essential national and regional radiological response planning and training; and develops response plans for radiological incidents or accidents. EPA will continue to conduct assessment and preparedness for response to incidents involving foreign and domestic nuclear technology used in space nuclear systems and advanced reactor technologies. EPA generates policy guidance and procedures for the Agency's radiological emergency response under the National Response Framework (NRF) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Agency maintains its own Radiological Emergency Response Team (RERT) and is a member of the Department of Homeland Security/Federal Emergency Management Agency Federal Radiological Preparedness Coordinating Committee (FRPCC), the Interagency Nuclear Safety Review Board and leads the Federal Advisory Team for Environment, Food and Health (the "A-Team"). The A-Team includes radiation protection experts from EPA, the Centers for Disease Control and Prevention, the Food and Drug Administration, and the Department of Agriculture, and their function is to advise federal, state, local and tribal authorities during radiological/nuclear emergencies on public safety issues including evacuation, sheltering, and contamination concerns for food, drinking water and other resources.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to streamline activities and fill gaps in the expertise that is critical for essential preparedness work, restoring critical capacity to meet EPA's core mission. The RERT will maintain essential readiness to support federal radiological emergency response and recovery operations under the NRF and NCP. EPA will participate in interagency training and exercises to maintain readiness levels needed to fulfill EPA's responsibilities.

Evaluation of Response Plans

In FY 2024, EPA will continue to work with interagency partners, including those under the FRPCC as well as those at the state, local, and tribal levels to examine and, as needed, revise radiation emergency response plans, protocols, and standards. Under the NRF, EPA is the coordinating agency for responding to foreign nuclear incidents, such as the Fukushima accident. In FY 2024, EPA will maintain staff readiness and training needed to meet the Agency's mission during such incidents. EPA will review and revise preparedness guidance to ensure that the Agency's response efforts address the needs of the public, with special emphasis on the most vulnerable.

EPA will support the U.S. Government assessment of foreign and domestic nuclear technology used in space nuclear systems and advanced reactor technologies. Building on efforts in FY 2023, EPA will continue work on the safety evaluations of the Defense Threat Reduction Agency's Demonstration Rocket for Agile Cislunar Operations (DRACO) mission and the National Aeronautics and Space Administration's Dragonfly mission for potential impacts to human health and the environment from these space nuclear systems. EPA will continue radiological contingency planning and preparedness for DRACO and Dragonfly mission launches in 2025 and 2027, respectively.

Coordinating Preparedness Efforts

EPA will continue essential planning and will participate in interagency tabletop and field exercises, including radiological accident and incident response and anti-terrorism activities with the Advisory Team for Environment, Food, and Health, the Nuclear Regulatory Commission, the Department of Energy, the Department of Defense, and the Department of Homeland Security. The Agency also will provide technical support on priority issues to federal, state, local, and tribal radiation, emergency management, solid waste and health programs responsible for implementing radiological emergency response and preparedness programs. The Agency will continue to train and advise on the Protective Action Guidance[149] and use lessons learned from incidents and exercises to ensure the effective delivery of EPA support in coordination with other federal, state, local, and tribal authorities.

Performance Measure Targets:

(PM RAD2) Percentage of radiation emergency response program personnel and assets that meet functional readiness requirements necessary to support federal radiological emergency response and recovery operation.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						90	92	92	Percent
Actual					92	88			
Numerator					128.24	122.78			Personnel and Assets
Denominator					140	140			

[149] For additional information, please see: https://www.epa.gov/sites/production/files/2017-01/documents/epa_pag_manual_final_revisions_01-11-2017_cover_disclaimer_8.pdf.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$118.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$611.0 / +3.1 FTE) This program change is an increase that supports efforts to restore EPA's staff expertise, analysis, and capacity in the radiation response program in order to examine and, as needed, revise radiation emergency response plans, protocols, and standards and continue essential planning for preparedness efforts. This investment includes $589.0 thousand in payroll.

Statutory Authority:

Homeland Security Act of 2002; Atomic Energy Act of 1954; Clean Air Act; Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA); Public Health Service Act (PHSA); Robert T. Stafford Disaster Relief and Emergency Assistance Act; Safe Drinking Water Act (SDWA).

Reduce Risks from Indoor Air
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$12,611***	***$13,593***	***$47,389***	***$33,796***
Science & Technology	$136	$278	$183	-$95
Total Budget Authority	$12,748	$13,871	$47,572	$33,701
Total Workyears	40.1	39.2	71.4	32.2

Program Project Description:

Title IV of the Superfund Amendments and Reauthorization Act of 1986 (SARA) authorizes EPA to conduct and coordinate research on indoor air quality, develop and disseminate information, and coordinate risk reduction efforts at the federal, state, and local levels. Poor indoor air quality represents one of the most significant public health risks within EPA's responsibility.[150] EPA uses a range of strategies to reduce health risks from poor indoor air quality in homes, schools, and other buildings through partnerships with non-governmental, professional, federal, state, and local organizations. Through these partnerships EPA provides information, guidance, and technical assistance that equips industry, the health care community, the residential, school, and commercial building sectors, and the general public to take action. As technical experts working at the intersection of the built environment and health, EPA is focused on policy and guidance to improve building conditions, including for disproportionately impacted communities, to reduce indoor air risk and achieve improvements in environmental and health outcomes.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting an increase of approximately $34 million and 32.2 FTE with associated payroll to continue working with countries to adopt and implement Cookstove ISO Standards to reduce black carbon and CO_2 emissions from household energy as part of their international climate commitments, scale up deployment of EPA's Indoor Air Quality Tools for Schools program in coordination with the White House and other Federal partners to facilitate smart investments and sustained effective and healthy operation of school facilities; provide technical support for the White House Clean Air in Buildings Challenge; provide expanded technical assistance to community-based asthma programs, particularly those in disadvantaged

[150] For additional information, please visit: https://www.epa.gov/iaq.

communities to reduce asthma disparities; and provide technical support to high-risk and low-income communities to reduce radon lung cancer risk.

In FY 2024, the Indoor Air Program will include efforts targeted to children, underserved communities, and other vulnerable populations, with a particular focus on new demands and opportunities for improvements in ventilation, filtration, and other protective indoor air practices, including those created by the COVID-19 pandemic and wildfire events. EPA will continue to lead on these issues by providing technical assistance and guidance on upgrading public buildings, including schools, to protect against airborne disease transmission and wildfire smoke exposure and provide guidance to the general public to reduce harmful exposures indoors, emphasizing that these upgrades will be beneficial to not only pandemic preparedness and disaster resilience, but also improved public health in the long-term.

Additionally, EPA will collaborate with public and private sector organizations to provide clear and verifiable protocols and specifications for promoting good indoor air quality and support adoption of these protocols and specifications into existing healthy, energy efficiency, and green building programs and initiatives to promote healthy buildings for a changing climate. EPA also will equip the housing sector with guidance to promote the adoption of these best practices with the aim of creating healthier, more energy efficient homes, including for low-income families. EPA also will equip school leaders and the school sector, through the Indoor Air Quality Tools for Schools program, to put in place comprehensive indoor air quality management programs that implement sustainable ventilation, filtration and other indoor air quality improvements to promote healthy school environments for students and staff. EPA will provide and promote technical assistance, training, outreach and other support to improve indoor air in schools nationwide, including those in low-income and disadvantaged communities. EPA will build the capacity of community-based organizations to provide comprehensive asthma care that integrates management of indoor environmental asthma triggers and health care services, with a particular focus on low-income, minority, and tribal communities. As of FY 2021, EPA had equipped 2,446 programs to support the infrastructure, delivery, and sustainability of comprehensive asthma care. In FY 2024, EPA's goal is to have equipped 3,005 programs.

Internationally, EPA will renew support of the household energy sector, providing technical assistance and promoting the adoption of voluntary international stove standards to accelerate adoption of clean cookstoves and fuels, in order to reduce the climate, health, and equity impacts of rudimentary stove use in developing nations. EPA will work with partners to increase the sustained use of clean and efficient cookstoves by helping ensure the distribution of 60 million clean cookstoves worldwide in FY 2024.

Performance Measure Targets:

(PM CS) Millions of demonstrably improved (field or lab tested) cookstoves sold.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						50	60	60	Millions of Cookstoves
Actual						50			

(PM IA) Number of programs, annually, equipped to support the infrastructure, delivery and sustainability of comprehensive asthma care.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	600					1,800	2,855	3,005	Programs
Actual	884	1,232	1,645	2,132	2,446	2,705			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$172.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$33,968.0 / +32.2 FTE) This program change is an increase that supports efforts to restore EPA's staff expertise, analysis, and capacity in the indoor air program. Funds also support efforts to address indoor air quality during wildfires, reduce asthma disparities, promote healthy school facilities in low-income communities in the U.S., and address the international climate crisis by improving public health through the adoption of clean cookstoves. This investment includes $6.071 million in payroll.

Statutory Authority:

Title IV of the Superfund Amendments and Reauthorization Act (SARA); Title III Toxic Substances Control Act; Clean Air Act.

International Programs

International Sources of Pollution
Program Area: International Programs
Goal: Tackle the Climate Crisis
Objective(s): Advance International and Subnational Climate Efforts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$7,220***	***$7,323***	***$26,044***	***$18,721***
Total Budget Authority	$7,220	$7,323	$26,044	$18,721
Total Workyears	30.9	33.4	50.9	17.5

Program Project Description:

The United States works with international partners to address global sources of pollution, including greenhouse gases (GHGs), as well as the impacts of pollution from the United States on other countries, regions, and the global environment. International sources of pollution impact air, water, land, the oceans, food crops, and food chains. Healthy environments, ecosystems, and communities provide the foundation for protecting human health and the environment and creating sustainable economic development, job opportunities, and sustainable growth.

Tackling the Climate Crisis, Accelerating Environmental and Economic Justice

EPA works with international partners, such as foreign governments and international organizations, to deploy assistance for measures that can strengthen on the ground action to tackle the climate crisis, reduce transboundary pollution that impacts local communities and travels through the environment to impact other communities across the globe; this assistance can also strengthen the fundamental environmental rule of law. These actions typically rely upon U.S. best practices, technical knowledge, and expertise that promote U.S. priorities such as protecting underserved and vulnerable communities. EPA's international mission is essential to addressing transboundary pollution and adverse environmental impacts in the United States and helps facilitate a cleaner and healthier environment around the world. Strengthening environmental protection abroad so that it is on par with practices in the U.S. helps level the playing field for industry and create incentives for innovation and deploying cleaner technologies. EPA's international programs also play an important role in fulfilling national security and foreign policy objectives and create a platform for promoting U.S. innovation and showcasing state and local breakthrough programs and policies.

An important example of this work is EPA's engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings, which negotiate outcomes on key EPA issues such as climate change, food waste, marine litter, resource efficiency, lead pollution, and air quality. EPA's engagement with international financial institutions, United Nations (UN) entities, and the Organization for Economic Cooperation and Development (OECD) has helped advance recognition of the critically important role of environmental factors, including

air pollution and toxic chemicals that contribute to the global burden of non-communicable diseases (NCDs), and of the role that sound environmental laws can play in reducing these risks. Additionally, EPA's participation in the North American Commission for Environmental Cooperation (CEC) provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Advance International and Subnational Climate Efforts in the *FY 2022 – 2026 EPA Strategic Plan.*

In FY 2024, EPA will continue to engage both bilaterally, regionally, and through multilateral institutions to improve international cooperation to reduce greenhouse gases, increase resilience and adaptive capacity, as well as prevent and address the transboundary movement of conventional pollution and waste. All related records will be maintained to ensure robust electronic recording consistent with the OMB issued M-23-07, Update to Transition to Electronic Records.

Climate and Equity

Specifically, in line with the *FY 2022 – 2026 EPA Strategic Plan*, EPA will provide technical assistance through the transfer of tools and knowledge to address climate change with partner countries, with the goal of leveling the playing field, addressing disproportionate adverse human health and environmental impacts in vulnerable and underserved communities, and helping to ensure that all countries make meaningful progress in implementing their nationally determined contributions under the Paris Agreement. This helps fulfill EPA's commitment to implementing, by 2026, at least 40 international climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG emissions, adapt to climate change, or improve resilience in a manner that promotes equity. In FY 2022, EPA made significant progress towards this goal with applicable engagements implemented. These actions are consistent with EPA's draft International Climate Strategy Plan. Specifically, EPA's international work will further the environmental governance of priority partner countries so that they can implement and enforce effective climate mitigation activities and incorporate environmental justice climate principles. Without basic governance infrastructure, it is difficult for many countries to make progress on their Nationally Determined Contributions (NDCs) under the Paris Agreement. This strategic direction responds to ongoing and anticipated requests from the White House and the Special Envoy on Climate Change (SPEC) for whole of government action on climate change as described in Section 103 of *E.O 14008: Tackling the Climate Crisis at Home and Abroad*.

In FY 2024, EPA is requesting $18.7 million and 17.5 FTE to enhance capacity building governance programs for priority countries with increasing GHG footprints and increase their capacity to implement partnerships as well as legislative, regulatory, and legal enforcement efforts. These programs will also work to improve adaptive capacity and mitigation strategies of pollution-burdened, vulnerable, and indigenous communities.

Actions will include re-engaging the Secretariat of Partnership for Clean Fuels and Vehicles (PCFV) to identify project partners to assist in transitioning to electric mobility solutions in key

countries, particularly in underserved and vulnerable communities, to finalize a high ambition workplan with the Secretariat. Additionally, EPA will initiate stakeholder consultations with key priority countries on critical mineral supply-chain transparency guidelines, focused on minerals needed for low carbon technology. For the pilot programs, EPA will provide meaningful technical assistance internationally on climate mitigation, adaptation, and resilience by sharing expertise and building the environmental management capacity of key EPA partners and priority countries identified by the Biden-Harris Administration. This will enable countries to set and meet ambitious greenhouse gas reductions. In implementing these pilot programs, EPA will seek opportunities to engage with partner governments and organizations to develop and use best practices and tools to address the unique needs and challenges of vulnerable and underserved communities.

In FY 2024, the Agency will work in the Arctic Council to provide in-kind expertise and help to identify external resources to screen sources of black carbon that may impact local health conditions, with the potential of expanding across a wider range of Alaskan Native Villages (ANVs). EPA also will co-chair the Arctic Council expert group on short-lived climate pollutants (SLCPs) to facilitate the development and implementation of projects to reduce SLCP emissions in and near the arctic. EPA also will continue to share Agency tools that can help partners increase their adaptative capacity to climate change and understand the impacts of climate change on vulnerable and underserved communities through the UN Environment Program, the Global Adaptation Network, and existing and new bilateral work programs.

Marine Litter

EPA will continue to engage internationally to prevent and reduce marine litter, including plastics, through sharing best practices and U.S. innovation as well as through existing or new global instruments. Marine plastic litter is an increasingly prominent global issue that can negatively impact water quality, tourism, industry, and public health in the United States. Working with other federal departments, EPA will continue to provide leadership and expertise on how to best address land-based sources of marine litter, including plastics. Specifically, EPA will provide critical technical and policy expertise through a multilateral intergovernmental negotiating committee (INC) process to develop a new binding international arrangement to end plastic pollution[151]. Since 80 percent of plastic marine litter comes from land-based sources of waste,[152] countries with inadequate waste management contribute to the pollution in our shared oceans. Improving integrated waste management in these countries will continue to be a priority.

In FY 2024, EPA will share tools and provide technical assistance, including through efforts related to Trash Free Waters, to key contributing countries in Asia and countries in Africa as well as building on past projects in Latin America and the Caribbean. Technical support may include developing national, regional, and local action plans to reduce leakage of trash to the environment; identifying steps to implement relevant and applicable waste collection/management systems; and modest implementation projects where possible. EPA will continue to collaborate with leaders in innovation on the domestic stakeholder community to identify ways to leverage efforts to tackle this pressing global problem. EPA will continue to strengthen actions with a regional focus on

[151] https://www.unep.org/about-un-environment/inc-plastic-pollution.

[152] J. R. Jambeck, R. Geyer, C. Wilcox, T. R. Siegler, M. Perryman, A. Andrady, R. Narayan, and K. L. Law, "Plastic waste inputs from land into the ocean," Science, 2015, Volume 347, Number 622.

major source countries in Southeast Asia and key partners in Latin America, the Caribbean, and Africa through bilateral relationships and/or partnerships with UNEP leaders on implementing and disseminating governance measures, policies, and technology to prevent marine litter.

Air Quality

EPA will engage with key priority countries and UN institutions to address air pollution that contributes significant pollution to the domestic and international environment. For example, several Asian countries (*e.g.*, Thailand) are implementing national air quality monitoring, planning, and control strategies with advice and lessons learned from the United States. Environmental policies adopted and implemented overseas will improve competitiveness for U.S. businesses, drive demand for U.S. emissions control technologies, and expand exports of U.S. environmental goods and services, which will create green jobs at home and improve air quality conditions in the United States.

In FY 2024, building upon FY 2023 North America Leaders' Summit (NALS) deliverable for a North American Strategy on Methane and Black Carbon, EPA will continue working with Canada and Mexico to reduce methane emissions from the solid waste and wastewater sector by at least 15 percent by 2030 from 2020 levels and deepen collaboration on waste and agriculture methane measurement and mitigation, including achieving the Global Methane Pledge through trilateral cooperation on methane and black carbon emissions.

Food Waste

In FY 2024, EPA will continue to cooperate with the United Nations and the Office of Management and Budget to ensure that methodologies used to track international progress on reducing food waste accurately reflect U.S. progress and to better understand the climate benefits of reducing food waste. Approximately eight to ten percent of global greenhouse gas emissions are from food loss in the agricultural supply chain and consumer food waste. [153] The Agency will continue to advance food waste efforts, which is an increasing portion of landfill waste in rapidly urbanizing cities in developing countries. The problems of food insecurity, in particular for the most vulnerable, have been exacerbated by COVID-19, thus underscoring the need for greater attention to reducing food waste. For example, EPA will bring together experts from the U.S. and partner country governments, non-governmental organizations (NGOs), academia, the private sector, and the UN to promote best practices and technologies related to food loss and waste. In FY 2024, EPA will implement another commitment made at the FY 2023 North America Leader's Summit NALS by working with interagency partners at USDA and FDA to develop a Food Loss and Waste Reduction Action Plan by the end of 2025 outlining efforts to cut food loss and waste in half by 2030.[154]

[153] For more information, please see: Intergovernmental Panel on Climate Change (IPPC) Special Report on Climate Change and Land, Chapter 5 Food Security, pg 440, https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/08_Chapter-5_3.pdf.
[154] See https://www.whitehouse.gov/briefing-room/statements-releases/2023/01/10/fact-sheet-key-deliverables-for-the-2023-north-american-leaders-summit/.

Chemicals

EPA also will maintain efforts to reduce environmental threats to U.S. citizens from global contaminants impacting air, water, and land. EPA will continue technical and policy assistance for global, regional, and bilateral efforts to address international sources of harmful pollutants, such as mercury. Since 70 percent of the mercury deposited in the U.S. comes from global sources,[155] both domestic efforts and international cooperation are important to address mercury pollution. EPA will continue to work with international partners and key countries to fully implement obligations under the Minamata Convention on Mercury to protect the U.S. population from mercury emissions originating in other countries, including from artisanal and small-scale gold mining. EPA also continues its leadership role within the United Nations Environment Program's Global Mercury Partnership. The Partnership coordinates effective and essential implementation activities by governments, academia, and public and private organizations and businesses in targeted sectors that are important for reducing the presence of mercury in the environment.

With respect to mercury, EPA continues to work with partner countries to develop National Action Plans (NAPs) that demonstrate how they will reduce or eliminate the use of mercury in the Artisanal and Small-Scale Gold Mining (ASGM) sector. ASGM is the largest source of global mercury releases[156] and the development of NAPs called for by the Minamata Convention on Mercury is a critical first step to help major emitters reduce the use and release of mercury into the environment.

EPA will continue to play a leadership role in the Lead Paint Alliance to increase the number of countries that establish effective laws to limit lead in paint, which remains a priority health concern following successful efforts to eliminate lead in gasoline worldwide. EPA consistently meets objectives for reviewing the development of laws in other countries to control their levels of lead in paint in a manner consistent with U.S. regulations. In doing so, these countries will not only reduce the exposure of their children to lead and prevent the subsequent health effects of this potent developmental neurotoxin, but also will reduce the amount of lead-based paint on products in international commerce that often reach U.S. markets. In the G7, Germany, through its G7 Presidency in 2022, co-hosted with EPA a lead pollution workshop for G7 countries that took stock of activities undertaken by G7 and others to address lead pollution and developed possible options for future work and cooperation on sources of lead to reduce lead exposure in developing countries. EPA will continue to advance options towards commitments by G7 countries and others to reduce lead exposure in developing countries which will also help to reduce lead in products destined for U.S. markets.

In addition, EPA will continue to work with International Arctic partners to further develop a joint project proposal on per- and polyfluoroalkyl substances (PFAS). This effort will focus on aqueous film-forming fire-fighting foams (AFFFs) in arctic airports through in-kind technical expertise.

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[155] For more information, please see: https://www.epa.gov/international-cooperation/minamata-convention-mercury and www.mercuryconvention.org.

[156] For more information, please see: Global mercury assessment | UNEP - UN Environment Programme.

Performance Measure Targets:

(PM E13a) Number of climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG) emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						8	10	10	Engagements
Actual						8			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$456.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$17,965.0 / +16.0 FTE) This program change increases resources and FTE to support efforts for climate change work, including greenhouse gas guidance, pilot programs, and indigenous engagements on climate change. This increase also will enhance capacity building governance programs for priority countries with increasing GHG footprints to increase their capacity to implement partnerships as well as support legislative, regulatory, and legal enforcement efforts. This includes $3.501 million in payroll.

- (+$300.0 / +1.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 13547; E.O. 13689; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

Trade and Governance
Program Area: International Programs
Goal: Tackle the Climate Crisis
Objective(s): Advance International and Subnational Climate Efforts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$6,252***	***$5,510***	***$7,153***	***$1,643***
Total Budget Authority	$6,252	$5,510	$7,153	$1,643
Total Workyears	12.6	15.3	18.0	2.7

Program Project Description:

EPA has played a key role in trade policy development since the 1972 Trade Act mandated that the U.S. Trade Representative (USTR) engage in interagency consultations. Specifically, EPA is a member of the Trade Policy Staff Committee, the Trade Policy Review Group, and relevant subcommittees–interagency mechanisms that provide advice, guidance, and clearance to the Office of the U.S. Trade Representative in the development of U.S. international trade and investment policy. Trade influences the nature and scope of economic activity and therefore the levels of pollutant emissions and natural resource use. EPA's role in trade negotiations is to ensure that agreements have provisions that are consistent with the Administration's environmental protection goals while not putting the United States at an economic disadvantage. EPA offers technical assistance and environmental governance capacity building for trade partners to support implementation of environmental commitments made in Free Trade Agreements. EPA also provides technical expertise on environmental governance and policy for international financial institutions, including environmental policy reviews and project-level environmental guidance.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Advance International and Subnational Climate Efforts in the *FY 2022 – 2026 EPA Strategic Plan.*

Free Trade Agreements and United States-Mexico-Canada Agreement (USMCA)

In FY 2024, EPA will continue its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance environmental protection, human health, and sustainable economic growth in North America. EPA will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. The CEC work on border watersheds supports America the Beautiful (AtB); specifically, the Administration is pursuing a national conservation goal to protect or conserve at least 30 percent of U.S. lands and waters by 2030. EPA activities will include monitoring and verifying provisions pertaining to global and national environmental requirements in the agreement and providing subject matter

expertise including activities that enhance capacity building governance programs in North America that increase the capacity to implement partnerships as well as legislative, regulatory, and legal enforcement to reduce the overall GHG footprint. These additional international activities would fall into the following categories: reducing short-lived climate pollutants (SLCPs); improving household and commercial energy efficiency; improving integrated air quality management, including global GHG modeling, monitoring, and reporting; boosting national and local climate adaptation and resilience strategies; and supporting resource efficiency actions to reduce GHG emissions from overlooked sources.

EPA will continue active participation in the United States Trade Representative (USTR) led Interagency Environment Committee for Monitoring and Environment (IECME) established to access implementation and maintenance by Mexico and Canada compliance of their environmental obligations.

In addition, EPA will continue to play an active role in the negotiation of agreements with other countries to facilitate trade and to promote good regulatory practices and anti-corruption measures, and then provide technical assistance to support implementation of environmental commitments within those agreements. At present, EPA collaborates through the USTR-led interagency process to support the negotiation of the Indo-Pacific Economic Framework for Prosperity, the U.S.-Kenya Strategic Trade and Investment Partnership, and the U.S.-Taiwan Initiative on 21st Century Trade. Further, given the Biden Administration 2022 Trade Agenda emphasis on achieving climate change objectives and supporting underserved and vulnerable communities, including possibly through trade measures, EPA will provide technical advice and input for the negotiation of a sectoral agreement with the EU on steel and aluminum that will lead to decarbonizing production and provide governance capacity building for incentivizing the abatement of methane emissions and the transition to cleaner energy.

In FY 2024, EPA will continue to work with partners (including the Treasury Department, State Department, U.S. Agency for International Development, and the U.S. International Development Finance Corporation) to improve environmental governance of U.S. funded international development projects that enhance capacity building governance programs for priority countries with increasing GHG footprints and increase their capacity to implement partnerships as well as legislative, regulatory, and legal enforcement. EPA will support the environmental performance of international financial institutions such as the development of environmental safeguards, including climate performance.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$22.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,665.0 / +2.7 FTE) This program change supports an increase in resources and FTE to provide support and capacity building for regional and international Trade and Governance programs and projects addressing climate change and environmental justice. This includes $523.0 thousand in payroll.

Statutory Authority:

In conjunction with the National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) § 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide Fungicide and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA) §10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); E.O. 12915; E.O. 13141; E.O. 13277; U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

US Mexico Border

Program Area: International Programs
Goal: Tackle the Climate Crisis
Objective(s): Advance International and Subnational Climate Efforts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$2,886***	***$2,993***	***$5,088***	***$2,095***
Total Budget Authority	$2,886	$2,993	$5,088	$2,095
Total Workyears	11.6	12.4	17.4	5.0

Program Project Description:

The two-thousand-mile border between the United States and Mexico is one of the most complex and dynamic regions in the world, where the benefits of international programs are very apparent. This region accounts for three of the ten poorest counties in the U.S. and is characterized by higher-than-average poverty, unemployment, uninsurance, and lower than average median incomes.[157] In addition, over 500 thousand of the 15 million people in the region live in colonias,[158] which are unincorporated communities characterized by substandard housing and unsafe drinking water or wastewater systems. Population growth indexes show a trend of increasing growth, related among other factors to the influx of migrants from different regions. This trend has increased the pressure on basic infrastructure and services in border cities, which struggle to keep up with population growth. The adoption of the Border Programs has gone a long way to protect and improve the health and environmental conditions along a border that extends from the Gulf of Mexico to the Pacific Ocean.

The Border 2025 Program will continue to emphasize local priority-setting, focus on measurable environmental results, and encourage broad public participation. Specifically, Border 2025 builds on earlier program work, which includes project-promoted solutions or monitoring related to air quality, used tire management, environmental health promotion, response to environmental emergencies, and treatment of wastewater.[159] In addition, the Border 2025 Program has helped highlight regional areas where environmental improvements are most needed and establish thematic goals supporting the implementation of projects, while considering the guiding principles and encouraging the achievements of more ambitious environmental and public health goals.

The Border 2025 Program identifies four long-term goals to address the serious environmental and environmentally related public health challenges, including the impact of transboundary transport of pollutants in the border region. These strategic goals are: Goal 1: Reduce Air Pollution, Goal 2:

[157] For additional information, please visit: https://www.ruralhealth.us/NRHA/media/Emerge_NRHA/Advocacy/Policy%20documents/05-11-18-NRHA-Policy-Border-Health.pdf.
[158] https://www.dallasfed.org/~/media/documents/cd/pubs/lascolonias.pdf.
[159] https://www.epa.gov/sites/default/files/2021-05/documents/final_b2020_acc_report_may_24_2021.pdf.

Improve Water Quality, Goal 3: Promote Sustainable Materials and Waste Management and Clean Sites, and Goal 4: Improve Joint Preparedness for and Response to Hazardous Environmental Emergencies. Within the goals are specific objectives that identify actions that will be taken in support of the program's mission. The Border 2025 Program supports the President's Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workplace as well as cross-Agency efforts of tackling the climate crisis and advancing environmental justice.

Guiding principles support the mission statement, ensure consistency among all aspects of the Border 2025 Program, and continue successful elements of previous binational environmental programs. Prioritizing environmental equity and addressing disproportionate environmental impacts in border communities by protecting, improving, and promoting environmental awareness and environmental and human health is one of the program's core principles. This principle aligns with one of EPA's priorities to promote equity for underserved communities and civil rights in the U.S. border region.

The Border 2025 program is under the Justice40 Initiative that has as its goal to ensure that 40 percent of overall benefits of federal investments are directed to disadvantaged communities. To help support Justice40 implementation, activities may include developing benefits methodologies and identifying, tracking, analyzing, and reporting Justice40 data. EPA and the Secretariat of Environment and Natural Resources (SEMARNAT) will continue to closely collaborate with the ten border states (four U.S./six Mexican), twenty-seven U.S. federally recognized tribes, indigenous communities including the afro-Mexican community in Mexico, and local communities in prioritizing and implementing projects that address their particular needs.

Note: The border water and wastewater infrastructure programs are described in the State and Tribal Assistance Grants (STAG) appropriation, Infrastructure Assistance: Mexico Border Program.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.3, Advance International and Subnational Climate Efforts in the *FY 2022-2026 EPA Strategic Plan.*

All records will be consistent with the Update to Transition to Electronic Records as per OMB issued M-23-07, Update to Transition to Electronic Records, including Border Office Records.

Air Pollution

In FY 2024, EPA will continue to focus on air pollution reductions in binational airsheds, work on reducing emissions through implementing policy-based or technology-based programs and maintain effective air quality monitoring networks and timely access to air quality data along the border region to help support the Administration's goal of reducing air pollution and the effects of climate change. This effort to meet health-based air quality standards, especially for particulate matter and/or ozone, is expected to mitigate negative effects on public health by deploying innovative strategies or technologies and building public awareness of associated health risks to protect public health and advance environmental justice.

EPA and SEMARNAT will continue to build on the successful air quality efforts conducted in the Border 2020 program, which resulted in complete greenhouse gas emissions inventories for each Mexico border state, and improved public health, especially in underserved communities. In addition, building upon over 20 years of binational air quality success within the New Mexico, Texas, and Chihuahua shared air basin, local coordinated efforts will advance work to address mobile sources at two designated border cities.

EPA will assist in expanding technical training to promote standardized approaches and improvements to emissions inventory development, improved compliance with vehicle emission standards, establishment of and compliance with vehicle inspection and maintenance programs, increased data-sharing on used vehicle emissions testing, and strengthened Green Freight Programs such as Transporte Limpio (Mexico) and *SmartWay* (United States). The benefit in cooperation with Mexican border cities has a high positive impact to Texas' largest populated border city of El Paso in protecting U.S. citizens and vulnerable populations, as Juarez and El Paso make up a metropolitan area that shares and breathes the same air. Along the U.S. border, California, Arizona, and New Mexico have completed Climate Change Action Plans.

Water Management

In FY 2024, the Agency will continue to address border water management in the Tijuana River Watershed. The United States-Mexico-Canada Trade Agreement (USMCA) authorizes and directs EPA to coordinate with specific federal, state, and local entities to plan and implement high priority infrastructure projects that address transboundary pollution affecting San Diego County. EPA will advance implementation of projects to prevent and reduce the levels of trash and sediment from entering high priority binational watersheds. Other projects that prevent/reduce marine litter should primarily focus on preventing waste at the source through improvements to solid waste management systems, education campaigns, and monitoring as well as reducing trash entering the aquatic environment through the capture of litter using river booms in known watershed litter hot spots.

Sustainable Materials Management

In FY 2024, EPA will continue to collaborate and partner on sustainable materials management demonstration projects to prevent waste and improve the recovery of materials, such as plastic, e-waste, and scrap tires, through public-private partnership programs and infrastructure investments in the border region to mitigate public health and environmental impacts and avoid costly cleanup efforts. Additionally, EPA will work to increase institutional capacity for resource efficiency and sustainable management of materials and develop/implement strategies to reduce illegal dumping, maximize material recovery, and promote environmentally sound disposal practices. Each region of the northern border has different economic, social, and cultural situations, with different capacities to mitigate the generation and management of waste and secondary materials.

EPA will continue to work to increase institutional capabilities in planning and technical assistance, enabling the development of programs, projects, or actions, which consider the life cycle analysis on natural resource economics, manufacturing, transport, and other market factors to more effectively collect and use materials and avoid them from being lost to landfills.

Emergency Preparedness and Response

Additionally, the United States and Mexico will work together to enhance joint preparedness for environmental response and facilitate easier transboundary movement of emergency response equipment and personnel by activities such as: updating Sister City Plans with preparedness and prevention and providing training to emergency responders on preparedness and prevention related activities. As part of the efforts for binational emergency preparedness and response, the Program will continue updating the Mexico-U.S. Joint Contingency Plan in both Spanish and English as well as conducting knowledge exchange and tabletop exercise activities to build partnership capacity and provide locals with the opportunity to test and improve emergency plans in their areas. In addition, both countries will coordinate binational efforts border wide.

Performance Measure Targets:

(PM E13b) Number of Border 2025 actions implemented in the U.S.-Mexico Border area to improve water quality, solid waste management and air quality including those that address climate change, and advance emergency response efforts.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						3	10	10	Actions
Actual						6			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$392.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$1,703.0 / +5.0 FTE) This program change increase supports efforts addressing pollution and climate change related activities along the United States and Mexico Border. To address the priority needs in the region and in support of the Border 2025 Program priorities, this effort continues to focus on smaller scale sustainability and core capacity building projects designed to improve the environment and protect the health of people living along the U.S.-Mexico border. This includes $916.0 thousand in payroll.

Statutory Authority:

In conjunction with the 1983 Agreement between the United States of America and the Mexican United States on Cooperation for the Protection and Improvement of the Environment in the Border Area (La Paz Agreement) and National Environmental Policy Act (NEPA) § 102(2)(F): Clean Air Act § 103(a); Clean Water Act § 104(a)(1)-(2); Safe Drinking Water Act (SDWA) §§ 1442(a)(1); Resource Conservation and Recovery Act (RCRA) § 8001(a)(1); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §§ 17(d), 20(a); Toxic Substances Control Act (TSCA)

§ 10(a); Marine Protection, Research, and Sanctuaries Act (MPRSA) § 203(a)(1); U.S.-Mexico-Canada Agreement (USMCA) Implementation Act, 19 U.S.C. §§ 4501-4372.

IT/ Data Management/ Security

Information Security
Program Area: IT / Data Management / Security
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$10,450***	***$9,142***	***$23,889***	***$14,747***
Hazardous Substance Superfund	$1,209	$1,062	$7,859	$6,797
Total Budget Authority	$11,659	$10,204	$31,748	$21,544
Total Workyears	10.9	14.1	17.1	3.0

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program's mission is to protect the confidentiality, integrity, and availability of EPA's information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests $14.7 million to support enhancements to protect the Agency's information technology portfolio. This investment will increase EPA's information technology resiliency and limit vulnerabilities in the event of a malicious attack. EPA will work toward full compliance with the five high priority directives (Adoption of Multifactor Authentication, Encryption of Data At Rest, Encryption of Data In Transit, Zero Trust Architecture, and Event Logging) in Executive Order (EO) 14028: *Improving the Nation's Cybersecurity*.[160]

[160] Work in this program takes direction for IT implementation practices and priorities from the following:

- EO 14028: *Improving the Nation's Cybersecurity* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/)
- OMB Memo M-23-03: *Fiscal Year 2023 Guidance on Federal Information Security and Privacy Management Requirements* (https://www.whitehouse.gov/wp-content/uploads/2022/12/M-23-03-FY23-FISMA-Guidance-2.pdf)
- OMB Memo M-19-26: *Update to the Trusted Internet Connection (TIC) Initiative* (https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf)
- OMB Memo M-21-30: *Protecting Critical Software Through Enhanced Security Measures* (https://whitehouse.gov/wp-content/uploads/2021/08/M-21-30.pdf)
- OMB Memo M-21-31: *Improving the Federal Government's Investigative and* OMB Memorandum *Remediation Capabilities Related to Cybersecurity Incidents* (https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-31-Improving-the-Federal-Governments-Investigative-and-Remediation-Capabilities-Related-to-Cybersecurity-Incidents.pdf)
- OMB Memo M-22-01: *Improving Detection of Cybersecurity Vulnerabilities and Incidents on Federal Government Systems through Endpoint Detection and Response* (https://www.whitehouse.gov/wp-content/uploads/2021/10/M-22-01.pdf)
- OMB Memo M-22-09: *Moving the U.S. Government Toward Zero Trust Cybersecurity Principles* (https://www.whitehouse.gov/wp-content/uploads/2022/01/M-22-09.pdf)

Improving the Defense and Resilience of Government Networks

Zero Trust Architecture (ZTA)

A key priority for EPA's information security needs is the development of networks which can resist malevolent actions regardless of their origin. ZTA will grant authorized users full access to the tools and resources needed to perform their jobs but limit access to unnecessary areas. Proper permissions for a given user's needs are a critical component of Zero Trust Architecture and coding for more granular control over the network environment is an information security priority.

EPA will continue to improve defense and resilience of government networks in accordance with ZTA security principles, which focus on virtual identity management capabilities. These improvements ensure agency staff can access necessary software applications while providing resistance to malicious phishing campaigns and sophisticated online attacks. For those system environments not integrated into the larger enterprise system, which may not be compatible with the enterprise-wide identity management capabilities, EPA will continue efforts to harden those systems with continuous monitoring capabilities to reduce risk.

EPA will continue to implement cybersecurity enhancements necessary to support a larger remote workforce, which includes strengthening cloud security monitoring and access to sensitive data, cyber incident response, and cloud platform management services. These enhancements allow agency staff to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC). The Agency also will pilot enterprise web application control tools to protect web applications by preventing malicious traffic from accessing the web application or agency data. The Agency will continue to build its Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments,[161] and to monitor and report on EPA networks and systems.

IT Modernization for Federal Cybersecurity by Design

EPA will continue to strengthen information technology (IT) assets and develop resiliency against potential cybersecurity threats. This work includes enhancing Multifactor Authentication to strengthen access controls to data and evaluating areas which still may require implementation of encryption for Data at Rest and Data in Transit to protect data. EPA has prioritized investments to protect the most sensitive systems and information. Additionally, EPA will work with the Department of Homeland Security and the Continuous Diagnostics and Mitigation (CDM) Program to ensure up-to-date technologies are implemented.

- OMB Memo M-22-16: *Administration Cybersecurity Priorities for the FY 2024 Budget (https://www.whitehouse.gov/wp-content/uploads/2022/07/M-22-16.pdf)*
- *OMB Memo M-23-03: Fiscal Year 2023 Guidance on Federal Information Security and Privacy Management Requirements* (https://www.whitehouse.gov/wp-content/uploads/2022/12/M-23-03-FY23-FISMA-Guidance-2.pdf)
- NIST 800-53

[161] These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: https://www.epa.gov/sites/production/files/2017-10/documents/_epaoig_20171030-18-p-0031.pdf.

Cyberattacks are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the Chief Information Officer's (CIO) Information Security and Privacy Programs through continuous monitoring functions. These capabilities serve to identify and address security vulnerabilities and incidents quickly, ensuring that EPA's information environment remains safe.

EPA will continue to support the ongoing implementation of capabilities for data labeling and data loss prevention, which will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Enterprise Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. EPA will mature the system logging capabilities in Event Logging (EL) Level 3 for Advanced Logging requirements at all criticality levels, leveraging Security Orchestration, Automation, and Response tools to streamline threat and vulnerability management, incident response, and security operations automation. Additionally, EL 3 will employ User Behavior Monitoring analytics to enable early detection of malicious behavior. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission.

The Agency's Security Operations Center will continue work to integrate End Point Detection and Response capabilities with the CDM Program to support proactive detection of cybersecurity incidents, active cyber hunting, containment and remediation, and incident response. EPA will continue modernizing its network and system logging capabilities (on-premises systems and connections hosted by third parties, such as Cloud Service Providers) for both investigation and remediation purposes.

EPA leverages CDM capabilities to address the Agency's cybersecurity security gaps and efficiently identify and respond to government-wide cybersecurity threats and incidents. In FY 2024, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will continue closing gaps in privileged access to EPA's network and will continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection and response capabilities. In line with OMB and DHS direction, the CDM Program will implement priority capabilities as they are identified. In FY 2024, EPA estimates a $13 million budget for the CDM Program.

Strengthening the Foundations of our Digitally-Enabled Future

Securing Infrastructure Investments

The Agency collects Federal Information Security Modernization Act (FISMA) metrics and evaluates related processes, tools, and personnel to identify gaps and opportunities for

improvement.[162] EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer, will continue to monitor and report on these metrics. EPA will:

- Modernize and automate the methodology and workflow for collecting Federal Information Registry data supporting the System of Record Notice Management process.
- Continue implementing Ground Truth Testing to validate security and find weaknesses through manual and automated penetration testing and red team exercises.

The Agency continues to work on refinements to improve the ability to track and report on critical software used by the Agency in compliance with Federal Information System Reporting and OMB direction.

EPA includes cybersecurity and privacy components in senior leadership program reviews. These reviews enhance CIO oversight by enabling better risk area determination and targeted improvement to system and mission program managers. While EPA program and regional offices maintain responsibility for improving their performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvement.

Human Capital

EPA will further enhance agency-specific role-based training to ensure personnel in key cybersecurity roles have a comprehensive understanding of modern, secure IT and cybersecurity requirements, with the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

Technology Ecosystems

EPA will build on efforts to fully carry out the Agency's program to implement Cybersecurity Supply Chain Risk Management Controls to comply with the Government Accountability Office findings and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.[163,164] This work includes coordinating across the Agency with professionals from Information Technology, Information Security, and Procurement to update the policy and obtain the necessary tools to address these critical security requirements. EPA will continue to implement standards, procedures, and criteria to harden and secure software development environments, and investigate the addition of automated tools to secure the development environment.

[162] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.
[163] Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.
[164] For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

Performance Measure Targets:

(PM ALR) Implementation of advanced event logging requirements (EL3) across EPA networks.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						EL1	EL3	EL3	Tier
Actual						EL0			

(PM DAR) Percentage of EPA data at rest in compliance with encryption requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							90	95	Percent
Actual									
Numerator									Systems
Denominator									

(PM DIT) Percentage of EPA data in transit in compliance with encryption requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							90	95	Percent
Actual									
Numerator									Systems
Denominator									

(PM MFA) Percentage of EPA applications in compliance with multifactor authentication requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						75	85	90	Percent
Actual						48			
Numerator						223			Applications
Denominator						463			

(PM ZTA) Percentage of "Zero Trust Architecture" projects completed on time.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									TBD
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$214.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$14,533.0 / +3.0 FTE) This program change supports enhancements to protect the Agency's information technology infrastructure portfolio and advance the implementation of EO 14028: Improving the Nation's Cybersecurity. This investment will increase EPA's information technology resiliency and limit vulnerabilities in the event of a malicious attack. This investment includes $617.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$90,029***	***$91,821***	***$105,868***	***$14,047***
Science & Technology	$2,799	$3,197	$3,313	$116
Hazardous Substance Superfund	$16,075	$19,764	$17,727	-$2,037
Total Budget Authority	$108,903	$114,782	$126,908	$12,126
Total Workyears	463.6	490.9	503.9	13.0

Total work years in FY 2024 include 172.0 FTE to support IT/Data Management working capital fund (WCF) services.

Program Project Description:

This program supports the maintenance of EPA's Information Technology (IT) and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency requests an additional $4.0 million to continue to support Future of Work efforts of the Agency through maintaining and enhancing the IT infrastructure required to support a permanent increase in telework, remote work, and operational readiness, consistent with Office of Management and Budget Memorandum M-21-25.[165] This includes modernizing the Agency's obsolete voice communications system and investing in the enterprise network to support enhanced collaboration flowing smoothly and efficiently within a widely distributed community.

Additionally, EPA requests $6.1 million in FY 2024 for the maintenance and modernization of the Agency's enterprise network switch infrastructure. This funding ensures critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in network degradation, which leaves EPA vulnerable to cybersecurity threats, and can disrupt operations.

[165] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.

In FY 2024, EPA will continue implementation of the agencywide Digitization Strategy, which includes the operation of two EPA digitization centers and the development and operation of a modernized electronic Agency Records Management System (ARMS), which is necessary to meet the requirements of Memoranda M-19-21 *Transition to Electronic Records* issued by the Office of Management and Budget and the National Archives and Records Administration.[166] In FY 2024, two EPA digitization centers will digitize, validate, and upload electronic files into the ARMS. Additionally, EPA will leverage artificial intelligence and machine learning to assist staff with appropriately scheduling electronic records that are saved to ARMS. The Agency will operate the Paper Asset Tracking Tool (PATT) to track paper records as they are submitted and processed through the digitization centers.

The Agency also will continue implementing the 21st Century Integrated Digital Experience Act (P.L. 115-336), which includes modernization of internal and public-facing websites and digital services, as well as digitization of paper forms and non-digital services. EPA will continue digitizing the Agency's public-facing paper forms in compliance with the 21st Century Integrated Digital Experience Act and based on the completed inventory of the Agency's forms.

In FY 2024, EPA will continue to maintain and manage its core IT/DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program, which directly supports the requirements under Executive Order 14035.[167] Key initiatives include,

- Further strengthening the Agency's IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2022,[168] EPA scored an overall B. EPA will continue to use the results of the FITARA scorecard to drive agency priorities and investments.
- Continuing work on converting prioritized internal administrative paper or analog workflows into modern digital workflows to speed up common administrative tasks, reduce burdensome paperwork for EPA employees and managers, improve internal data collection and reporting, and improve cross-agency data interoperability and delivery to the public. This work includes identifying a set of processes which will yield the greatest benefit for the Agency upon automation and complete a high priority pilot automation project.
- Continuing work on EPA's Controlled Unclassified Information Program to standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency, and with the public, meeting federal standards as required by Executive Order 13556: *Controlled Unclassified Information*.[169]
- Increasing the use of registries, continue migration to a cloud infrastructure, and improve registry quality by modernizing from custom built solutions to commercial off-the-shelf

[166] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/08/M-19-21-new-2.pdf.
[167] For more information, please refer to Executive Order: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/.
[168] For additional information, please refer to: https://oversight.house.gov/sites/democrats.oversight.house.gov/files/COR%20Scorecard%2014.pdf.
[169] For more information, please refer to Executive Order: https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information.

tools with expanded capabilities. Registries are shared data services in which common data are managed centrally but shared broadly; they improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information publicly and internally.

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public, in line with the guidance in Executive Order 14058.[170] The Program focuses on collaborations such as the Hiring and Onboarding process, which collects feedback from IT professionals, hiring managers, regions, programs, and other stakeholders to improve the experience for hiring authorities and new employees at EPA. The CX Program collects customer feedback, conducts data analytics, assesses priorities within a governing community of practice, and presents recommendations to senior leaders to allocate resources to improve CX initiatives.

In FY 2024, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications, and services such as the Facility Registry System, the Agency can integrate, interpret, and visualize multiple data sets and information sources to support environmental decisions. The Agency will continue developing and increasing capabilities of EPA's Data Management and Analytics Platform, which has both internal and public facing elements, such as Envirofacts. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Platform. Throughout FY 2023 and FY 2024, based on the Agency's assessment of options for improving regulated facility data, EPA will establish a governance framework for implementing an enterprise data life cycle approach for managing regulated facility data.

In FY 2024, Web Infrastructure Management will continue to modernize EPA's web presence to support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue to upgrade its web infrastructure to ensure that it meets current statutory and evolving security requirements.

The EPA Chief Data Officer (CDO), with support from the Agency's Data Governance Council (DGC) will continue to develop enterprise scale data governance, including data policies, procedures, and standards to ensure all priority data assets are fully available. Additionally, they will promote data management that emphasizes equitability and FAIR (Findable, Accessible, Interoperable, and Reusable) data principles. EPA's enterprise data governance implementation plans depend on coordination across the Agency's program offices and regions. Currently, EPA relies on a network of data managers and stewards across the Agency to implement governance. To facilitate effective communication between the DGC and responsible parties, as well as to ensure development and implementation of the most effective data policies, procedures, and standards, EPA proposes to establish a data officer position in each of the 23 EPA program offices

[170] For additional information, please refer to: https://www.federalregister.gov/documents/2021/12/16/2021-27380/transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government. For additional information, please refer to: https://www.federalregister.gov/documents/2021/12/16/2021-27380/transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government.

and regions. These data officers will fulfill essential communication and coordination functions and serve as anchors for building a stronger culture of utilizing data to build evidence and support decision making across EPA.

Performance Measure Targets:

(PM GOPA) Percentage of priority internal administrative processes automated.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							10	10	Percent
Actual									
Numerator									Internal Processes
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$568.0) This (net) change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$6,160.0) This change to fixed and other costs is an increase to provide funding for the enterprise network switch infrastructure necessary for the operations of the EPA network including data centers. This funding ensures critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in network degradation, leave EPA vulnerable to cybersecurity threats, and disrupt EPA operations.

- (+$4,000.0) This program change is an increase to provide the necessary support for a hybrid modern workforce and will require the integration of facilities and infrastructure, human resources, and information technology programs in order to successfully re-envision the federal work environment.

- (+$3,124.0 / +15.0 FTE) This program change supports agencywide implementation Evidence Act data stewardship and governance requirements. This investment includes $2,776.0 for payroll.

- (+$195.0 / +1.0 FTE) This program change provides increased support for ongoing response efforts for Red Hill in Region 9 to protect communities and ensure safe drinking water. This investment includes $185.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger- Cohen Act (CCA); Rehabilitation Act of 1973 § 508; Foundations for Evidence-Based Policy Making Act of 2018; Geospatial Data Act of 2018.

Legal/ Science/ Regulatory/ Economic Review

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$5,022***	***$5,395***	***$6,116***	***$721***
Total Budget Authority	$5,022	$5,395	$6,116	$721
Total Workyears	20.1	25.8	25.8	0.0

Program Project Description:

This program supports EPA's Administrative Law Judges (ALJs) and the Environmental Appeals Board (EAB).

Administrative Law Judges

The ALJs preside in hearings and issue initial decisions in cases initiated by EPA's enforcement program concerning environmental, civil rights, and government program fraud related violations. Additionally, pursuant to an interagency agreement providing for reimbursement of services, the ALJs also adjudicate enforcement actions brought by National Oceanic and Atmospheric Administration (NOAA), primarily under statutes protecting marine mammals and endangered species over which EPA and NOAA share jurisdiction, such as the Marine Protection, Research, and Sanctuaries Act and Endangered Species Act. The Fifth Amendment of the Constitution of the United States of America guarantees the regulated community the right to due process of the law. The ALJs issue orders and decisions under the authority of the Administrative Procedure Act (APA) and the various environmental, civil rights, and anti-fraud statutes that establish administrative enforcement authority and implement the Constitution's guarantee of due process.

The ALJs preside in hearings in cases initiated at EPA Headquarters and in each of EPA's 10 regional offices. Parties participating before the ALJs include local and national community groups, private parties, and federal, state, and local governments. The ALJs promote public participation in the administrative hearing process through remote hearings and prehearing conferences. They maintain an extensive website, accessible to the public, containing all initial decisions and case filings. Additionally, to promote access to justice, participants in cases pending before the ALJs may file documents electronically and are not required to pay a filing fee or be represented by counsel. The ALJs also offer an opportunity for alternative dispute resolution to completely resolve disputed issues or narrow the issues to be decided after a hearing, which may further reduce costs.

The right of affected persons to appeal ALJ initial decisions is conferred by various statutes, regulations, and constitutional due process rights. A small subset of the initial decisions issued by the ALJs are appealed to the Environmental Appeals Board (EAB).

Environmental Appeals Board

The Environmental Appeals Board is a four-member appellate tribunal established by regulation in 1992 to hear appeals and issue decisions in environmental adjudications (primarily enforcement and permit related) under all major environmental statutes that EPA administers. The EAB promotes the rule of law and furthers the Agency's mission to protect human health and the environment. The EAB furthers the Agency's mission to advance environmental justice (EJ) and address climate-related issues by ensuring the integrity of federal decision-making and fairness in its adjudication of administrative appeals.

Since the 1994 Executive Order on Environmental Justice[171] was issued, the EAB has played a pioneering role in ensuring that the Agency meets its obligation with respect to EJ and, for example, in the context of permitting, has remanded several permit cases where the record did not support a finding that the permit authority reasonably considered the contested EJ issues in their permit decision making process.

To promote access to justice, parties appearing before the EAB are not required to be represented by counsel or pay a filing fee. Additionally, the EAB promotes public participation in the appeals process through remote oral arguments and maintaining an extensive website, accessible to the public, containing all final EAB decisions and case filings. Among others, parties participating before the EAB include local and national community groups, tribal nations, private parties, and state and local governments.

The EAB also decides petitions for reimbursement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 106(b); hears appeals of pesticide licensing and cancellation proceedings under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); and serves as the final approving body for proposed settlements of enforcement actions initiated at EPA. The EAB issues decisions in a fair and timely manner consistent with the APA and the applicable environmental statutes, and under the authority delegated by the Administrator and pursuant to regulation, ensuring consistency in the application of legal requirements. In 90 percent of matters decided by the EAB, no further appeal is taken to federal court, providing a final resolution to the dispute. The EAB also offers an opportunity for alternative dispute resolution.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the ALJs will continue to convene formal hearings either remotely or in the location of the alleged violator or violation, as required by statute. As the Agency continues its focus on reviewing FIFRA registrations and making determinations on certain claims against the Superfund under CERCLA into FY 2024, the ALJs will support adjudication of these time-sensitive matters. In FY 2024, the EAB will continue to efficiently and fairly adjudicate permit and enforcement

[171] Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

appeals under all statutes as well as petitions for reimbursement under CERCLA, expediting appeals such as Clean Air Act New Source Review cases and FIFRA licensing proceedings that are particularly time sensitive. The EAB and ALJs also anticipate addressing a potential increase in EJ-related issues and in new work assuring access to justice, including for tribal nations and parties impacted by EJ-related concerns.[172] In FY 2024, the EAB will support the implementation of the American Innovation and Manufacturing Act (AIM Act) of 2020, specifically administrative enforcement of its provisions concerning hydrofluorocarbons (HFCs), which are designed to phase down the production and consumption of listed HFCs, manage these HFCs, and facilitate transition to next generation technologies.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$401.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$320.0) This program change is an increase to support programmatic investments relating to advancing environmental justice through the Administrative Law Program.

Statutory Authority:

Administrative Procedure Act (APA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Water Act (CWA); Clean Air Act (CAA); Toxic Substance Control Act (TSCA); Solid Waste Disposal Act (SWDA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Emergency Planning and Community Right-to-Know Act (EPCRA); Marine Protection, Research, and Sanctuaries Act (MPRSA); Mercury-Containing and Rechargeable Battery Management Act (MCRBMA); the Act to Prevent Pollution From Ships (APPS).

[172] For additional information, please refer to Executive Order 14008: "Tackling the Climate Crisis at Home and Abroad," https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.

Alternative Dispute Resolution
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$1,196***	***$972***	***$2,194***	***$1,222***
Hazardous Substance Superfund	$698	$791	$880	$89
Total Budget Authority	$1,894	$1,763	$3,074	$1,311
Total Workyears	5.5	5.9	10.0	4.1

Program Project Description:

EPA's Alternative Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on environmental matters and some workplace conflicts as an alternative to litigation. The Program provides facilitation, mediation, public involvement, training, and consensus building advice and support for the entire Agency. The Program's ADR services especially support the meaningful engagement of EPA programs with communities and other stakeholders, including states and tribes, by helping to develop collaborative and effective partnerships.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA requests an additional $1.2 million and 4.1 FTE for the ADR Program. EPA will continue to provide conflict prevention and ADR services to all EPA programs and external stakeholders on environmental matters. This program will continue to support implementation of Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[173] This investment also will be used to build capacity to improve oversight and enforcement of civil rights compliance and to prioritize and advance EJ concerns.

Specifically, the ADR Program will:

- Administer its five-year, $53 million Conflict Prevention and Resolution Services contract, through which it provides most of its conflict prevention and resolution services to the Agency. The contract supports facilitation and mediation services for more than 100 active projects involving stakeholders across the Agency and is expected to take on an additional

[173] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

20 to 30 projects in FY 2024. The ADR Program expects continued growth in the areas of environmental justice, climate change, and Title VI civil rights cases. Contract support contributes to more productive engagement between EPA programs and communities, especially underserved and overburdened communities.

- Provide facilitation, mediation, and training services through the four conflict resolution specialists on staff and the Regional Environmental Collaboration and Conflict Resolution (ECCR) specialists, who perform environmental ADR work as collateral duty with support from the ADR Program. The ADR Program expects to provide support through conflict resolution specialists and ECCR specialists for agency programs and stakeholders by providing facilitation, mediation, or other consensus building support on 20 to 30 projects in FY 2024, including up to 10 Title VI civil rights cases. The ADR Program initiated a pilot program in FY 2022 to provide facilitation services to resolve Title VI civil rights complaints as part of the Informal Resolution Agreement process; the Program is now fully formed, and demand for facilitation services to resolve complaints continues to grow. As with contract support, direct staff support promotes greater collaboration among EPA and its stakeholders, as well as greater inclusion of overburdened and underserved communities.
- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program offers this training through eight interactively designed courses to all national program offices and regions. The ADR Program created virtual versions of its trainings during COVID, which has expanded its reach throughout the Agency. As of February 2023, the ADR Program has delivered eight trainings and has scheduled several more. The ADR Program expects a continued increase in training requests in FY 2024. Trainings include the building of skills such as working across cultural divides and supporting productive dialogue, which help EPA programs better engage with communities.
- Help to achieve the goals of President Biden's Justice40 initiative by tracking the number of ADR Program projects in which services are provided to underserved and overburdened communities. In FY 2024, the ADR Program expects to increase services to underserved and overburdened communities.

The following are examples of FY 2022 accomplishments:

- Successfully managed a $53 million Conflict Prevention and Resolution Services contract and administered 330 contract actions valued at slightly over $44 million in the first three years. Through contract support, the ADR Program provided conflict resolution services for multiple projects and in dozens of communities to promote greater collaboration and inclusion of underserved and overburdened communities.
- Supported 99 environmental collaboration and conflict resolution cases nationwide, including multiple Administrator priority projects, such as the WOTUS National Roundtable Facilitation, Red Hill Facility Closure Facilitation, the USMCA-Tijuana River Watershed, the Clean School Bus Program, and Underground Injection Control. To support these projects, the ADR Program provided design and facilitation support to gather public input on controversial issues, supported community outreach efforts by facilitating listening sessions, and helped key stakeholders to reach agreement.

- Provided facilitation services for four Title VI civil rights cases to support the inclusion of all parties in the development of Informal Resolution Agreements between EPA and recipients of Title VI complaints.
- Trained more than 400 EPA personnel in conflict resolution skills through 10 courses and supported additional conflict resolution trainings, led by Regional Environmental Collaboration and Conflict Resolution Specialists, for 147 EPA staff and managers.

Performance Measures Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$17.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$1,239.0 / +4.1 FTE) This program change is an increase for the use of alternative dispute resolution processes, such as mediation and facilitation, to promote equity by including underserved communities in negotiations. This investment includes $798.0 thousand for payroll.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Civil Rights Program

Program Area: Legal / Science / Regulatory / Economic Review
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$10,061***	***$12,866***	***$31,462***	***$18,596***
Total Budget Authority	$10,061	$12,866	$31,462	$18,596
Total Workyears	47.3	66.4	143.6	77.2

Program Project Description:

EPA has long held and elevated three fundamental principles to follow the science, follow the law, and be transparent. In 2022 EPA also added a fourth foundational principle: advance justice and equity. By so doing, EPA solidified its recognition that it was time to include this principle to infuse the consistent and systematic fair, just, and impartial treatment of all individuals into all EPA policies, practices, and programs. These principles form the basis of the Agency's culture and guide its operations and decision making – whether with respect to the public and communities, or EPA's workforce.

EPA's Civil Rights Program mitigates the Agency's liability by enhancing efforts to meet regulatory responsibilities under Title VI and VII of the Civil Rights Act of 1964, as amended among other applicable civil rights statutes and regulations, including 40 C.F.R. Parts 5 and 7, 29 C.F.R. § 1614.102(c)[174] and U.S. Equal Employment Opportunity Commission (EEOC) Management Directive 110,[175] which require federal agencies to fully fund its civil rights program. The Civil Rights Program enforces federal civil rights laws that prohibit discrimination against EPA employees and applicants for employment and by applicants for and recipients of EPA federal financial assistance. EPA also has committed to strengthening external civil rights enforcement to address health and environmental disparities, eliminate discriminatory barriers to clean air, water, and land, and ensure the protection of human health and the environment for all persons in the United States. There are two offices within the Agency's civil rights program, the Office of Civil Rights (OCR) and Office of External Civil Rights Compliance (OECRC). OCR and OECRC (the Civil Rights Program) are included in the same historic budget line, though the resource profiles of these two offices are very different. OCR has responsibility for the internal enforcement of several civil rights laws related to equal employment opportunity (EEO), and OECRC carries out the external enforcement of several civil rights laws that prohibit discrimination in programs or activities that receive federal financial assistance from EPA. Together, both offices comprise

[174] For more information, please see: https://www.ecfr.gov/current/title-29/subtitle-B/chapter-XIV/part-1614/subpart-A/section-1614.102.
[175] For more information, please see: https://www.eeoc.gov/federal-sector/management-directive/management-directive-110.

EPA's civil rights program and its foundational commitment to the advancement of justice, equality, and equity.

EPA's Civil Rights Program provides leadership, direction, and guidance in carrying out the Agency's civil rights mission to senior leadership, EPA managers, employees, applicants, and recipients of federal financial assistance in carrying out civil rights responsibilities. The Program provides counseling and investigates discrimination complaints filed against EPA and EPA federal financial assistance recipients. The Program identifies triggers and eliminates barriers to EEO and environmental justice. The Program promotes alternative dispute resolution mechanisms to resolve discrimination complaints. The Program develops policy to clarify recipients' legal obligations. It conducts pre-award reviews and affirmative post-award compliance reviews and audits. EPA also provides technical assistance to recipients and enhances communication and engagement with environmentally overburdened and disadvantaged communities.

The Program processes accommodation requests due to disability that are made by employees and applicants. The Program issues final agency decisions in employment discrimination complaints.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 2, including/Objective 2.3, Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns.[176]

Internal Civil Rights

In FY 2024, EPA must meet statutory and regulatory requirements to address potential barriers to employment and advancement and deliver training and services to EPA employees. EPA endeavors to assess organizational EEO efforts through listening sessions and during Technical Assistant Visits (TAVs) with program and regional offices. EPA typically has more requests for these interactive TAVs than time and resources to support them all in a year. EPA will continue to prioritize its interagency agreements to ensure impartial investigations of EEO complaints. Additionally, EPA will actively support, and as required, lead specific efforts and workgroups to implement its DEIA Strategic Plan as required by Executive Order 14035.[177]

Employee Complaints and Resolution (ECR)

In FY 2024, EPA will dedicate a majority of its resources to the processing of discrimination complaints. It also will market the benefits of the Alternative Dispute Resolution (ADR) Program to address informal complaints. It also will continue to take proactive steps, including educating through trainings, listening sessions, and community outreach. EPA is expected to engage in the following activities:

[176] It also provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.
[177] For more information, please see: https://www.federalregister.gov/documents/2021/06/30/2021-14127/diversity-equity-inclusion-and-accessibility-in-the-federal-workforce.

- Track and manage investigations, draft final agency decisions, and track compliance of EEOC decisions within standard timelines set by the EEOC.
- Evaluate the effectiveness of the revised procedures for processing final agency decisions.
- Implement strategies for transparently communicating and addressing trends in formal complaints at program and region offices.
- Implement ADR training (for management and staff) to strengthen participants' knowledge and to increase offers and participation in the ADR process.
- Implement a revised TAV agenda based on feedback from previous TAVs completed to ensure an enhanced customer experience and usefulness.
- Conduct assistance visits for a total of four EPA regional and program offices.
- Recruit and train new collateral duty EEO Counselors, Special Emphasis Program Managers, and Local Reasonable Accommodation Coordinators.
- Implement new EEO Case Management database to effectively track EEO complaints, ensure timeliness, and the ability to produce annual required reports to the EEOC, Congress, OPM, and the Department of Justice.

Affirmative Employment, Analysis, and Accountability (AEAA)

In FY 2024, EPA will continue to focus on identifying and eliminating barriers to employment and advancement at the Agency. EPA dedicates a significant amount of labor to assembling and analyzing data for the Management Directive 715 Report (MD-715), EPA's annual report to the Equal Employment Opportunity Commission.

The MD-715 highlights EPA's efforts to establish and maintain a model civil rights program and drives the State of the EEO briefing to the Administrator each year. This effort will include guiding every region and program office through the collection of enhanced data and investigating workforce data triggers. In FY 2024, EPA expects to engage in the following activities:

- Continue to monitor the effectiveness of measures implemented from the "Barrier Analysis Report: Increasing the Use of the Schedule A (Disability) Hiring Authority."
- Analyze, complete, and/or monitor, as appropriate, two other Barrier Analysis efforts: "Upward Mobility of Hispanic Employees into the Senior Executive Service (SES)" and "Upward Mobility of Employees into the Senior Executive Service (SES) based on the EEO Categories of Race and Sex."
- Continue to implement recommendations resulting from the EPA MD-715 priority regarding the collection of applicant flow data for Career Development Opportunities.[178]
- Evaluate the underrepresentation of EEO groups from MD-715 reports.
- Monitor and assist the Administrator's Office and regional and program offices with implementation of their workforce EEO Actions Plans.
- Manage EPA's ten Special Emphasis Programs.[179]
- Collaborate in the planning of EPA's National Commemorative Programs.
- Conduct TAVs for a total of four region and program offices.

[178] For more information, please see: https://www.epa.gov/sites/default/files/2021-05/documents/md-715_report_fy20_final_28_apr_21_signed.pdf.
[179] For more information, please see: https://www.epa.gov/ocr/affirmative-employment-analysis-and-accountability#special.

- Provide effective training and tools for managers to report and carry out their responsibilities under the MD-715.

National Reasonable Accommodations Program (NRAP)

In FY 2024, EPA will work to enhance the effectiveness of services through training, policy development, and improving the support functions of the Local Reasonable Accommodation Coordinators (LORACs). The Agency has a legal obligation to provide an effective accommodation for employees and applicants with disabilities absent an undue hardship. In FY 2024, EPA expects to engage in the following activities:

- Receive, track, advise on response, and monitor the delivery of requested reasonable accommodations for all national programs and oversee similar actions in every region.
- Evaluate the effectiveness of revised procedures for providing Personal Assistant Services.
- Support the Agency's efforts to improve accessibility for persons with disabilities.
- Evaluate the Reasonable Accommodations Management System (RAMS) and upgrade/enhance features as necessary.
- Conduct recertification training for LORACs.
- Conduct TAVs for a total of four EPA regional and program offices.

To be an effective internal civil rights program, it must be trusted by all EPA employees for its impartiality and transparency.

External Civil Rights

In FY 2024, EPA requests an additional $17.0 million and 76.5 FTE to enforce the Nation's external civil rights laws through EPA's Headquarters program as well as the regional offices. This investment will provide essential program support to investigate and resolve critical civil rights complaints, initiate affirmative compliance reviews, and work toward achieving measurable environmental, public health, and quality of life improvements in the most overburdened, vulnerable, and underserved communities.

EPA will continue to elevate environmental justice and external civil rights within the Agency and integrate environmental justice considerations and full compliance with civil rights obligations across all of EPA's policies, programs, and activities. EPA also will continue to advance its commitment to bring justice to frontline communities that experience the worst impacts of environmental pollution.

Through the continued implementation of Goal 2 of EPA's *FY 2022 - 2026 Strategic Plan:* "Take Decisive Action to Advance Environmental Justice and External Civil Rights." EPA will promote further the integration of environmental justice and external civil rights throughout EPA and carry out the objectives, sub-objectives, and annual and long-term goals articulated in Strategic Plan Goal 2. In particular, EPA's request includes critical FTE for external civil rights compliance activities in the regional offices, including participation in pre-award reviews and post-award complaint and compliance review investigations and resolutions.

Specifically, with respect to external civil rights, in FY 2024, EPA will:

- Continue its shift to proactive activities, by initiating proactive pre-award and post-award civil rights compliance reviews to address the impacts of potentially discriminatory activities on overburdened communities.
- Fully implement its authority to address actions, policies, and practices by recipients of EPA funding that have a discriminatory impact on overburdened and disadvantaged communities.
- Continue to develop and implement clear and strong civil rights guidance and corresponding training and technical assistance to increase recipients' compliance with civil rights laws.
- Conduct timely and effective civil rights complaint investigations and resolutions – including investigations and informal resolution agreements that effectively address discriminatory practices.
- Continue to implement and refine the Case Resolution Manual that was updated in FY 2023.
- Fully implement the EPA Limited English Proficiency policy and procedures and Order, revised in FY 2023, and develop and finalize an EPA Order to ensure meaningful access for persons with disabilities to EPA programs services and activities.
- Enhance communication and engagement with environmentally overburdened communities to meaningfully inform EPA's civil rights complaint resolution work and to empower and increase their participation in critical decision making.
- Increase transparency by continuing to affirmatively provide information and case-related documents to the public through the interactive "Complaint Docket" online.[180]
- Strengthen federal interagency collaboration and coordination on complaints, compliance reviews, and policy guidance to enforce federal civil rights laws.

Performance Measure Targets:

(PM EJCR05) Percentage of state-issued permits reviewed by EPA that include terms and conditions that are responsive to environmental justice concerns and comply with civil rights obligations.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							10	25	Percent
Actual									
Numerator									Permits
Denominator									

(PM EJCR06) Percentage of required civil rights procedural safeguard elements implemented by state permitting agencies that are recipients of EPA financial assistance.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						20	40	45	Percent
Actual						33			
Numerator						138			Elements
Denominator						408			

[180] For more information, please see: https://www.epa.gov/external-civil-rights/external-civil-rights-docket-2014-present.

(PM EJCR13) Percentage of EPA regions and national programs that have established clear implementation plans for Goal 2 commitments relative to their policies, programs, and activities and made such available to external partners.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									Regions and Programs
Denominator									

(PM EJCR14) Percentage of EPA programs and regions that have implemented program and region-specific language assistance plans.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						30	35	60	Percent
Actual						0			
Numerator						0			Programs and Regions
Denominator						23			

(PM EJCR15) Percentage of EPA programs and regions that have implemented program and region-specific disability access plans.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							No Target Established	25	Percent
Actual									
Numerator									Programs and Regions
Denominator									

(PM EJCR16) Number of proactive post-award civil rights compliance reviews initiated to address discrimination issues in environmentally overburdened and underserved communities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						3	6	12	Compliance Reviews
Actual			1	1	0	1			

(PM EJCR17) Number of audits completed to ensure EPA financial assistance recipients are complying with federal civil rights laws.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						25	30	50	Audits
Actual					0	0			

(PM EJCR18) Number of information sharing sessions and outreach and technical assistance events held with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						8	90	100	Sessions and Events
Actual					40	30			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,439.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical Agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$17,025.0 / +76.5 FTE) This program change increases staffing and capacity to enforce the Nation's external civil rights laws and to work toward the goal of achieving measurable environmental, public health, and quality of life improvements in the most overburdened, vulnerable, and underserved communities; supports activities including investigations into claims of discrimination by underserved communities and pre-award and post-award compliance activities. This investment includes $14.4 million for payroll.

- (+$132.0 / +0.7 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $132.0 thousand for payroll.

Statutory Authority:

Equal Pay Act of 1963; Title VI of the Civil Rights Act of 1964; Title VII of the Civil Rights Act of 1964; Age Discrimination in Employment Act (ADEA) of 1967; Title IX of the Educational Amendments of 1972; Federal Water Pollution Control Act Amendments of 1972 § 13; Rehabilitation Act of 1973 §§ 501, 504, 505, 508; Rehabilitation Act of 1973 § 504; Age Discrimination Act of 1975; Americans with Disabilities Act of 1990; ADA Amendments Act of 2008; and Genetic Information Nondiscrimination Act (GINA) of 2008.

Integrated Environmental Strategies
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Tackle the Climate Crisis
Objective(s): Accelerate Resilience and Adaptation to Climate Change Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$10,534***	***$11,297***	***$71,722***	***$60,425***
Total Budget Authority	$10,534	$11,297	$71,722	$60,425
Total Workyears	45.7	55.5	91.0	35.5

Program Project Description:

The Integrated Environmental Strategies (IES) Program advances the Agency's mission of protecting human health and the environment by focusing on cross-media environmental concerns. The IES Program provides tools, training, advice, and resources to help EPA work as a more effective organization. Nationally, IES is focused on: 1) providing for the development of efficient, accurate, and timely reviews for permitting and approval processes which support automation, oversight, and integration of environmental justice (EJ) and climate change in environmental permitting; 2) working with industrial sectors to identify and develop innovative approaches to better protect the environment and public health; 3) collaborating with partners, including federal, state, municipalities, communities, businesses, and other stakeholders, to implement locally-led, community-driven approaches to environmental protection through technical assistance, policy analysis, and training; and 4) partnering with states, territories, tribes, local governments, businesses, other federal agencies, and others to increase the resilience of the Nation to the impacts of climate change, with a particular focus on advancing climate justice.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 1/Objective 1.2, Accelerate Resilience and Adaptation to Climate Change Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an investment of $60.4 million and 35.5 FTE for the IES Program. Within this amount, $14.5 million and 9.0 FTE are needed support the coordination, streamlining, oversight, automation, and integration of EJ and climate change into environmental permitting. These resources also will be used to support core program capacity and to build the program by addressing the Administration's priorities and adhering to the goals in the *FY 2022 – 2026 EPA Strategic Plan*. The Program will continue to focus on four major areas, each presenting unique opportunities to improve delivery of environmental protection across multiple media and stakeholders. These four areas include permitting strategies, sector strategies, community-driven environmental protection, and climate adaptation and resilience.

Permitting Strategies

EPA implements its statutory authority through various permitting programs. The Agency continues to focus efforts across EPA program and regional offices and with state and tribal co-regulators to support coordination, efficiencies, oversight, automation, and integration of EJ and climate change for environmental permitting. The Office of Federal Activities (OFA) coordinates across 13 other federal agencies, the Federal Permitting Improvement Steering Council, the Council on Environmental Quality, and the Office of Management and Budget to coordinate on permitting and meet EPA's Permitting Action Implementation Plan goals. EPA uses its EPA Permitting Action Implementation Plan to help address the expansion of permitting for major infrastructure projects, expanded FAST-41 covered sectors, and to address seven critical elements of the Plan:

- Accelerating smart permitting through early cross-agency coordination.
- Establishing clear timeline goals and tracking key project information.
- Engaging in early and meaningful outreach and communication with States, Tribes, Territories, and local communities.
- Improving agency responsiveness, technical assistance, and support.
- Using agency resources and the environmental review process to improve environmental and community outcomes.
- Ensuring staffing levels are adequate to address anticipated environmental review and permitting-related workloads.
- Addressing, elevating, and resolving schedule delays, disputes and other issues impacting the environmental and permitting process in a timely manner.

Additionally, OFA addresses cross-cutting permitting and major infrastructure topics that are identified as critical for infrastructure development. These topics, often new or cutting-edge national priorities (e.g., critical minerals production, quantum processing/manufacture, etc.), require integration of permitting policy, implementation, and evaluation.

EPA is working to transition the Agency's major permitting programs from paper submissions to electronic processes through the automation of permit application review and issuance. The benefits of permit automation will reduce the processing time on issuing permits, decrease the time between receiving monitoring data and engaging in enforcement actions, and increase transparency by allowing communities to search, track, and access permit actions easily. Permit automation improves the integration of climate change and EJ considerations into permit processes and ensures that climate change and EJ are evaluated and addressed appropriately within the terms and conditions of the permit. For the regulated community, permit automation provides a simplified, streamlined, and transparent permitting process, resulting in both time and cost savings.

EPA's renewed focus on effective integration of EJ and climate change considerations within the Agency's various decentralized permitting programs, continues to play a leading role in coordinated efforts aligned with the Administration's priorities including:

1. Coordinating permit support for major infrastructure projects, including carbon capture/use/sequestration and renewable energy projects requiring a permit.
2. Supporting integration of EJ and climate change analysis into permit development.

3. Supporting EPA and FAST-41 oversight, permit quality, permit timelines, and permit program integrity.
4. Documentation of best practices and addressing cross-cutting permitting and policy issues (*e.g.,* Endangered Species Act and National Historic Preservation Act coordination); and, in partnership with other federal agencies, state and tribal permitting offices, continuing to streamline and gain efficiencies in the review of all permits.
5. Expansion of a successfully piloted e-permitting application tool to other permitting program areas.

Smart Sectors

EPA's Smart Sectors Program (SSP) provides a platform for the Agency to collaborate with industry to develop innovative approaches to protect the environment and public health from a multi-media perspective. SSP serves as a hub for understanding and addressing sector specific environmental challenges and opportunities, facilitating dialogue with industry representatives and other stakeholders, and managing a network of SSPs in all 10 EPA regional offices. The Program will continue as a liaison to connect, convene, and facilitate discussions among agency experts and business leaders to address discrete issues unique to each sector and help sectors drive improvements that serve the Agency's greater mission of protecting human health and the environment.

In FY 2024, SSP will focus activities in three areas: broad multi-stakeholder engagement, cross-agency coordination, and policy and program initiatives as they relate to industry sectors. Multi-stakeholder engagements will provide a platform for working with industry trade associations and leading companies, as well as other stakeholders on key issues such as climate change, EJ, and fostering environmentally sustainable infrastructure development. In addition to industry, the Program will work with non-governmental organizations, organized labor, the academic community, state/local governments, and overburdened and vulnerable communities with EJ concerns, as appropriate. The Program will coordinate and/or lead cross-agency, sector-based projects, and activities to address the Administration's priorities, including tackling climate change, delivering EJ, and securing environmentally responsible and resilient supply chains.

Community-Driven Environmental Protection

The IES Program delivers technical assistance, training, and tools to economically distressed communities and coordinates the Agency's work with communities to increase efficiency, effectiveness, and accountability leading to improved environmental and public health protection. In FY 2024, the Program will continue to deliver direct technical assistance to communities. In FY 2022, the Program developed new technical assistance approaches specifically focused on helping communities disproportionately impacted by the COVID-related economic downturn, attracting private investment, growing in more resilient ways, and rebuilding to improve environmental and human health outcomes. For example, in FY 2023 the Program collaborated with the US Forest Service, Northern Border Regional Commission and Appalachian Regional Commission to develop and deploy a Recreation Economy for Rural Communities toolkit in 25 communities. This collaboration supports community driven development approaches that protect and conserve natural lands, support reinvestment in existing neighborhoods, and protect air and water quality.

The Recreation Economy for Rural Communities tool is one of many developed by the Program. In FY 2024, EPA will continue to deploy tools and expertise, through technical assistance delivery. These resources will continue to strengthen EPA's efforts to leverage public and private sector investments in support of improved economic development and environmental outcomes.

In FY 2024, the Program will continue to support community-driven solutions to local environmental challenges, focusing on the Administration's priorities, such as leveraging private investment and aligning federal investments to maximize benefits to vulnerable and underserved communities, and increasing climate resilience. Technical assistance and training are the cornerstones of EPA's cooperative approach to addressing environmental challenges in communities, particularly communities that are economically distressed. In FY 2024, the Program will continue to prioritize technical assistance, capacity building and training, with the objective of helping communities as well as tribal, state, and local governments increase their capacity to protect the environment while growing their economies, creating jobs, spending public and private sector investments and other resources more efficiently, and promoting more equitable approaches to development. Where appropriate, EPA will partner with other agencies to help achieve locally led, community-driven approaches to protecting air, land, and water, while at the same time supporting equitable economic revitalization. In FY 2024, the Program will partner with EPA program and regional offices to support their delivery of resources and assistance to communities in ways that align with the principles of community driven solutions.

In FY 2024, the Program will continue analyses on emerging trends, innovative practices, and tools that support equity, climate resilience, Greenhouse Gas (GHG) reduction, and clean air, land, and water outcomes. EPA will continue to develop tools to help interested communities incorporate innovative, equitable approaches to infrastructure and land development policies. This assistance helps deliver multiple economic, community, and human health goals embedded in EPA's core mission, including managing stormwater, improving local air and water quality, cleaning up and reusing previously developed sites, and supporting revitalization and redevelopment in economically distressed communities to create economic opportunities while reducing GHG emissions and protecting the environment.

Climate Adaptation Program

The impacts of climate change affect people in every region of the country, threatening lives and livelihoods and damaging infrastructure, ecosystems, and social systems in communities across the Nation. Climate change also challenges EPA's ability to accomplish its mission to protect human health and the environment. The Climate Adaptation Program is taking the actions necessary to ensure that EPA continues to fulfill its mission even as the climate changes and is working with other federal agencies to increase the resilience of the Nation.

The Program recognizes that certain parts of the population, such as communities of color, low-income communities, children, the elderly, tribes and indigenous people, and small rural communities, are often especially vulnerable to the impacts of climate change. To that end, the Program will particularly focus on engaging the most overburdened and vulnerable groups of people and communities to improve their capacity to anticipate, prepare for, and adapt to or recover from climate change impacts.

The Climate Adaptation Program's overarching goals and expected accomplishments are 1) ensuring EPA continues to fulfill its mission of protecting human health and the environment even as the climate changes and disruptive impacts increase, 2) meeting (or exceeding) the Long-Term Performance Goals in Objective 1.2 of the *FY 2022-2026 EPA Strategic Plan*, and 3) ultimately empowering all 40,000 communities across the Nation and all 574 tribes to adapt to the risks of climate change, with a particular focus on advancing climate justice.

In FY 2024, EPA requests approximately $45.3 million and 26.5 FTE for its work in the Climate Adaptation program. With this investment EPA will provide targeted assistance to states, tribes and indigenous peoples, territories, local governments, communities, and businesses to bolster these groups' climate resilience efforts. The Agency will focus resources on communities with environmental justice concerns to develop new strategies that strengthen their adaptive capacity and increase climate resilience across the Nation. EPA also will produce and deliver training, tools, technical assistance, financial incentives, and information the agency's partners indicate they need to adapt and to increase resilience to climate change.

In FY 2024, EPA will continue to implement its 2021 Climate Adaptation Action Plan and the 20 Climate Adaptation Implementation Plans developed by the Program and Regional Offices.[181] EPA will leverage the additional resources and FTE provided in FY 2024 to implement selected additional priority actions identified in the Implementation Plans. These additional actions will enhance the adaptive capacity and resilience of states, tribes, territories, local governments, and communities by providing technical assistance through the Program and Regional offices. These strategies are informed by the best available science and deliver co-benefits for mitigation of GHG and other pollution, public health, economic growth and job creation, national security, and environmental justice—all of which will be central to building a more resilient future. These actions will integrate climate adaptation planning into Agency programs, policies, rulemaking processes, enforcement and compliance assurance activities, financial mechanisms, and operations to ensure they are effective even as the climate changes.

EPA also will continue to monitor progress toward established targets for each of the Long -Term Performance Measures in Objective 1.2 ("Accelerate Resilience and Adaptation to Climate Change Impacts") of the *FY 2022-2026 EPA Strategic Plan.* The baseline and additional priority actions identified in the 20 Climate Adaptation Implementation Plans support EPA's efforts to continue to fulfill its mission of protecting human health and the environment even as the climate changes and disruptive impacts increase. The additional resources also will be used to advance climate justice through the provision of grants and technical assistance and protect communities that are disproportionately affected by climate change.

In FY 2024, the Program will continue to modernize EPA financial assistance programs to encourage climate-resilient investments across the Nation. Particular attention will be given to ensuring that the outcomes of investments made with funds from the Infrastructure Investment and Job Act (IIJA) and the Inflation Reduction Act (IRA) will be resilient to the impacts of climate change, as well as support climate mitigation goals. The Program also will establish a National Adaptation Grants and Technical Assistance Program to provide financial incentives beyond the

[181] For additional information, please see: https://www.epa.gov/climate-adaptation/climate-adaptation-plans.

IIJA to support climate-resilient investments and encourage adaptation planning and implementation by states, tribes, territories, and local communities.

Performance Measure Targets:

(PM AD07) Number of priority actions completed in EPA's Climate Adaptation Action Plan and Program and Regional Implementation Plans.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						100	100	100	Priority Actions
Actual						155			

(PM AD08) Number of EPA national program offices that have developed adaptation training for programs and staff.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						4	10	12	Program Offices
Actual						4			

(PM AD09) Cumulative number of federally recognized tribes assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						100	150	200	Tribes
Actual						Data Avail 3/2023			

(PM AD10) Cumulative number of states, territories, local governments, and communities (i.e., EPA partners) assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						250	300	350	Partners
Actual						Data Avail 3/2023			

(PM AD11) Number of tribal, state, regional, and/or territorial versions of the Climate Change Adaptation Resource Center (ARC-X) or similar, systems developed by universities with EPA support.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						3	6	6	Versions
Actual						1			

(PM AD12) Hours of appropriate subject matter expert time provided by EPA to help communities adapt to climate impacts, build long-term resilience, and support the most underserved and vulnerable communities after federally declared disasters.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						No Target Established	No Target Established	No Target Established	Hours
Actual						9,763			

(PM CO1) Percentage of technical assistance projects in support of environmentally sustainable and community-driven revitalization that support or expand upon previous or ongoing federal investments.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							No Target Established	TBD	Percent
Actual									

(PM PAT) Percentage of EPA permitting processes automated.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							10	30	Percent
Actual									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$665.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$45,267.0 / +26.5 FTE) This change is an increase provided for EPA's Climate Adaptation Program to support increased resilience of EPA's programs and strengthen the adaptive capacity of states, tribes, territories, local governments, communities, and businesses. This investment includes $4.98 million for payroll.

- (+$11,493.0 / +3.0 FTE) This program change is an increase to support core program capacity and build the program by addressing the Administration's priorities and adhering to the goals in the *FY 2022 – 2026 EPA Strategic Plan*. This investment includes $1.7 million for payroll.

- (+$3,000.0 / +6.0 FTE) This program change is an increase to support the coordination, streamlining, oversight, automation, and integration of EJ and climate change into environmental permitting. This investment includes $1.1 million for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); National Environmental Policy Act; CAA § 309; Endangered Species Act; National Historic Preservation Act; Archaeological and Historic Preservation Act; Fishery Conservation and Management Act; Fish and Wildlife Coordination Act; and Title 41 of the Fixing America's Surface Transportation Act.

Legal Advice: Environmental Program
Program Area: Legal / Science / Regulatory / Economic Review
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$63,795***	***$60,061***	***$85,252***	***$25,191***
Hazardous Substance Superfund	$475	$599	$477	-$122
Total Budget Authority	$64,270	$60,660	$85,729	$25,069
Total Workyears	262.6	273.3	343.5	70.2

Total Workyears in FY 2024 include 8.3 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

The Legal Advice Environmental Program provides legal representational services, legal counseling, and legal support for all the Agency's environmental activities. The legal support provided by this program is essential to the Agency's core mission. The personnel assigned to this program possess essential expertise in critical fields that EPA relies on for all decisions and activities in furtherance of its mission: to protect human health and the environment.

The Program provides legal counsel on nearly every major action the Agency takes. It plays a central role in all statutory and regulatory interpretation of new and existing rules, as well as rule and guidance development under EPA's environmental authorities. The Program also provides essential legal advice for every petition response and emergency response. When the Agency acts to protect the public from pollutants or health-threatening chemicals in the air we breathe, in the water we drink, or in the food we eat, the Program provides counsel on the Agency's authority to take that action. The Program then provides the advice and support necessary to finalize and implement that action. When that action is challenged in court, the Program defends it, in coordination with the Department of Justice (DOJ). The Program also provides support and legal counsel in adhering to court orders and mandates. The Program also supports EPA's National Freedom of Information Act (FOIA) Office and the Ethics Office as part of the legal services activity within the Agency's Working Capital Fund.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency requests an investment of $25.2 million and 70.2 FTE to defend and assist EPA's environmental programs in their increased efforts to tackle the climate crisis; advance environmental justice; support the Office of Air and Radiation's priority rulemakings for climate and clean air; and to support the Office of Chemical Safety and Pollution Prevention's pesticide program among its many other initiatives and responsibilities. This builds upon investments from

FY 2023. The Program has seen a significant increase in work to respond to coal combustion residuals (CCR) actions, and rulemakings and emerging issues like per- and polyfluoroalkyl substances (PFAS); support Toxic Substances and Control Act (TSCA) implementation; and support the Administration's Memorandum of Understanding (MOU) on tribal engagement and tribal treaty rights. Additional resources will provide continued support to the Office of Chemical Safety and Pollution Prevention's (OCSPP) expansion to the expedited settlement agreements (ESA) investment that was made in the FY 2023 budget. During the past several years EPA's Office of General Counsel's (OGC) workload has significantly outpaced staffing resources, even as the Program has added work on vital new Administration priorities including regulatory changes, climate change, and environmental justice. OGC will also provide legal support to the newly established Office of Environmental Justice and External Civil Rights (OEJECR) necessary in order to fully implement the essential environmental justice deliverables so that EPA can maintain its promise to protect human health and the environment for all persons in the U.S. Lastly, the Program will continue to provide legal representation in judicial and administrative litigation and provide counseling outside of the litigation context in the highest priority issues arising under all the environmental statutes administered by EPA.

In FY 2024, the Agency will continue to focus on its core mission to apply the most effective approaches by implementing EPA's environmental programs under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Clean Air Act (CAA), Clean Water Act (CWA), TSCA, Federal Insecticide Fungicide and Rodenticide Act, Food Quality Protection Act, Safe Drinking Water Act, and other authorities. This strategy will help ensure that human health and the environment are protected, including clean air, water, and land, and safe chemicals and pesticides. OGC will use additional resources to strengthen staffing and attorney training for those who provide legal advice and counsel in support of CERCLA, RCRA, CAA, CWA, and other regulations to assist EPA in its ability to broaden and accelerate cleanup and management of PFAS contamination to protect human health and ecological systems.

EPA also will continue to strengthen its FOIA implementation to enhance transparency, build public trust in agency actions, and support public participation by working to achieve the *FY 2022 - 2026 EPA Strategic Plan* long-term performance goal to eliminate the backlog of overdue FOIA responses. Timely disclosure helps achieve the core purpose of the FOIA to ensure an informed citizenry. Additional resources will also support EPA's continuing effort to reduce the FOIA backlog, and to support increased work associated with the procurement of a new FOIA case management and recordkeeping software solution to replace FOIAonline, which will be terminated in FY 2023.[182] This additional work will include the configuration and deployment of the new tool, as well as training of EPA staff and the public on how to use it.

The Program includes oversight and implementation of the Agency's Ethics responsibilities to bolster all of the principles articulated in the *FY 2022 - 2026 EPA Strategic Plan*. Public trust in the integrity of EPA's scientific and legal efforts necessarily depends upon all EPA employees faithfully carrying out their official duties ethically and impartially.

[182] EPA's Chief Information Officer determined EPA must replace the current FOIA Online system due to unresolvable technical issues that would cost more to troubleshoot, than to replace the entire system.

Legal counseling resources continue to be in high demand, which requires OGC to maintain full staffing and proficiently trained attorneys to support the Agency's response to states seeking assistance developing or implementing environmental programs, industrial facilities seeking permits to allow them to undertake new economic activity or continue existing activity, and citizens seeking actions to protect local environmental quality, among other things. The Program will prioritize resources after supporting judicial and administrative litigation to counsel agency clients on these matters.

The following are examples of recent 2022 accomplishments and work being completed to illustrate this program's role in implementing the Agency's core mission:

- EPA's Water Law Office (WLO) provided critical legal support for development of the Agency's latest rulemaking defining "waters of the United States," a key CWA term that defines the limits of federal jurisdiction over discharges into, or filling of, surface waters throughout the United States. WLO expects to continue its work on legal issues associated with this agency priority in FY 2024, including supporting the Solicitor General's Office in addressing the *Sackett v. EPA* petition in the Supreme Court (argued in October 2022) and responding to a decision in this case (expected in early 2023), as well as defending the new rule, finalized on December 30, 2022. Additionally, WLO also has provided critical legal support for the decision to reconsider and revise the Agency's 2020 rule implementing CWA section 401 to facilitate states' and tribes' ability to protect the quality of their waters. These actions will protect the quality of rivers, lakes, and other waters throughout the nation so they can be safely used by the public for drinking water, fishing, swimming, and other recreation as well as support healthy and abundant fish and other wildlife.

- EPA's Pesticides and Toxic Substances Law Office (PTSLO) continues to provide critical legal advice in support of EPA's continuing implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which modernized and substantially overhauled the TSCA. PTSLO also provides substantial support to EPA's Office of Pesticide Programs in its activities related to the operation of a national licensing program for pesticides sold and used in the United States, which involves the issuance of over 2,000 reviewable final agency actions each year, including the grant of new pesticide registrations; amendments to existing pesticide registrations; new or amended tolerance regulations authorizing the presence of specific levels of pesticide residues on food sold in the United States; determinations related to the statutorily-mandated review of all existing pesticide registrations; state special local needs registrations; and emergency exemptions from the requirements of the pesticide statute.

- EPA's Air and Radiation Law Office (ARLO) played a key role in implementing the American Innovation and Manufacturing (AIM) Act. ARLO attorneys are playing a critical role in helping EPA propose and finalize regulations and decisions implementing the AIM Act, which Congress passed in December of 2020. Among other things, this law requires the phase down of hydrofluorocarbons (HFCs), a potent class of greenhouse gases. ARLO also has played a key role in developing a rulemaking to regulate methane emissions from the oil and natural gas industry under CAA section 111, as well as defending EPA's

authority to effectively regulate greenhouse gas emissions from the power sector under that section. Additionally, ARLO played a key role in a number of recent actions to reduce greenhouse gas emissions from vehicles and will work closely with the DOJ to defend the recent light duty vehicle and aircraft greenhouse gas actions. These actions, particularly the rulemakings, will significantly advance the Administration's goal of addressing the devastating effects of climate change.

- EPA's Solid Waste and Emergency Response Law Office (SWERLO) provided critical legal advice on multiple EPA actions to protect communities and hold facilities accountable for controlling and cleaning up the contamination created by decades of coal ash disposal, which can pollute waterways, groundwater, drinking water, and the air. The actions advance the Agency's commitment to protecting groundwater from coal ash contamination and include: 1) proposing decisions on requests for extensions to the current deadline for initiating closure of unlined Coal Combustion Residuals (CCR) surface impoundments; 2) putting several facilities on notice regarding their obligations to comply with CCR regulations; and 3) laying out plans for future regulatory actions to ensure coal ash impoundments meet strong environmental and safety standards. SWERLO also served as agency lead in successfully defending D.C. Circuit litigation challenging EPA's approval of the Oklahoma CCR Program (*Waterkeeper Alliance, Inc., et al. vs. Regan* (No. 20-5174, D.C. Cir., July 26, 2022)). SWERLO continues to take a significant role in addressing CCR issues, including proposing the first batch of Part A decisions and responding to comments on those actions, which address extensions of the date unlined CCR units must cease receipt of waste. Additionally, SWERLO counseled on multiple issues related to the top Administration priority of addressing PFAS contamination, including the use of RCRA authority to compel investigation of PFAS and a novel petition from a state governor to list PFAS as RCRA hazardous wastes.

- EPA's Cross-Cutting Issues Law Office (CCILO), in collaboration with OGC's ARLO, WLO, PTSLO, and SWERLO law offices, continues to provide critical legal advice in support of EPA rulemaking efforts to protect human health and the environment pursuant to its statutory authorities such as the CAA, CWA, TSCA, CERCLA, and RCRA. Specifically, CCILO provided specialized legal and tactical expertise in legal counseling on a range of administrative law matters including counseling on the update and legal defense of the social cost of greenhouse gas emissions, as well as the implementation of several new Executive Orders and strengthening transparency in agency science. CCILO also provides critical legal advice on EPA's obligations to ensure meaningful public engagement in its regulatory actions, as well as with other obligations that benefit the public by fostering open and transparent operations under the Federal Advisory Committee Act, the Paperwork Reduction Act, and the Information Quality Act. CCILO also provided critical legal support to advance the Administration's environmental justice goals by updating *EPA Legal Tools to Advance Environmental Justice (EJ Legal Tools)* to incorporate new and revised environmental and civil rights statutes to advance environmental justice, provided training to Headquarters, Regional Offices, and stakeholders on *EJ Legal Tools*. This work supports EPA and the Administration's priority to address environmental harms and protect public health in communities with environmental justice concerns and other vulnerable and underserved populations. Finally,

CCILO continued to support the Administration's Memorandum on Tribal engagement in a variety of contexts, including in the context of addressing the inequity to Oklahoma tribes created by the Safe, Accountable, Flexible, Efficient, Transportation, Equity Act (SAFETEA) decision, and playing a pivotal counseling role in the crafting of EPA's draft Tribal Reserved Rights Rule under the CWA.

- EPA's National Freedom of Information Office (NFO) provided legal advice and support to the agencywide FOIA Program. NFO completed the initial review and assignment of 6,698 FOIA requests; processed 234 applications for expedited response; processed 797 applications for fee waivers; and processed and closed more than 1,760 FOIA requests. The NFO also began a major procurement initiative to replace FOIAonline, provided project management support to several EPA program offices to reduce their FOIA response backlogs, and led the Agency in reducing its backlog of overdue FOIA responses by over 10 percent in FY 2022

- EPA's Ethics Office managed the overall agency ethics program to ensure that employees carry out their duties ethically. In FY 2022, over 7,800 confidential financial disclosure reports were submitted to the more than 100 deputy ethics officials throughout the Agency. Of those, 97 percent were certified timely. The Ethics Office is solely responsible for assigning, reviewing, and certifying public financial disclosure reports and periodic transaction reports. The Ethics Office received more than 640 reports in FY 2022, and nearly 90 percent of those were reviewed and certified timely.

- The executive branch ethics program is more than a disclosure-based program. Public trust in EPA and its actions is supported when EPA employees make impartial decisions based on the interests of the public and when they consistently serve as good stewards over public resources and adhere loyally to the Constitution and federal laws and regulations. The Ethics Office actively provides robust ethics training to EPA employees. In FY 2022, the Office introduced the "Ethics Minute" to begin the Administrator's weekly senior staff meeting and provided one-on-one initial ethics training to every incoming political and Administratively Determined appointee. It also provided tailored training on recusals and vetting invitations to incoming Regional Administrators. In FY 2022, it delivered high-quality annual training on gifts that also met the regulatory training requirements; more than 9,000 employees attended this training.

- The Resource Management Office (RMO), located in OGC, manages OGC's budget, human resources, information technology, and administrative key functions (*i.e.*, acquisition resources, strategic planning, Diversity Equity Inclusion and Accessibility (DEIA), and LEAN process improvement efforts for the office). In FY 2022, RMO oversaw the implementation of OGC's DEIA efforts in support of the President's FY 2021 DEIA Executive Order (EO): 13985[183] and EO 14035[184]. RMO coordinated and led the swift response to write and implement the OGC Anti-Racism and Workplace Equity Plan,

[183] For more information, please see: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.
[184] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/.

including implementing the first Equity Assessment for OGC, and within EPA. This work entailed facilitating the completion of OGC's Equity Assessment contract, which allowed OGC to conduct a survey, create focus groups, and interview OGC employees to collect and analyze their experiences, opinions, and feedback on the state of workplace fairness and equality and capture ideas on how to improve identified areas. RMO also managed the Anti-Racism and Workplace Equity Plan by coordinating the efforts of six sub-groups working on action plans to address issues from recruitment and outreach to training and career development.

Performance Measure Targets:

(PM FO2) Number of FOIA responses in backlog.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						845	712	474	Responses
Actual		2,761	2,128	1,395	1,056	950			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$6,091.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$11,500.0 / +41.7 FTE) This program change addresses a need for increased defensive litigation work in multiple environmental statutes, including legal work in pesticides and rulemakings for climate and clean air toxics. These additional resources also will assist EPA in tackling the climate crisis and securing environmental justice. This investment provides additional funding for essential core workforce support costs and includes $10.0 million for payroll.

- (+$7,600.0 / +28.5 FTE) This program change strengthens staffing and attorney training for those who provide legal advice and counsel in support of CERCLA, RCRA, CAA, CWA, and other regulations to assist EPA in its ability to broaden and accelerate cleanup and management of PFAS contamination to protect human health and ecological systems. This program change includes $6.7 million for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Legal Advice: Support Program
Program Area: Legal / Science / Regulatory / Economic Review
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$18,246***	***$18,957***	***$20,322***	***$1,365***
Total Budget Authority	$18,246	$18,957	$20,322	$1,365
Total Workyears	74.5	83.7	93.7	10.0

Total Workyears in FY 2024 include 6.1 FTE funded by TSCA fees.

Program Project Description:

The Legal Advice: Support Program provides legal representational services, legal counseling, and legal support for all activities necessary for EPA's operations. The Program provides legal counsel and support on a wide variety of issues and plays an important role in meeting and addressing legal support for work under the Civil Rights Statutes, contracts, grants, employment law, and Freedom of Information Act (FOIA) requirements. It provides critical counseling on a range of Information Law, Employment and Labor Law, Intellectual Property Law, Appropriations Law, and National Security Law matters. With enhanced FOIA implementation, community consultations and other public participation opportunities, the beneficiaries of environmental protection – the American people including communities with civil rights concerns – will be able to engage more meaningfully through their communities, local governments, and state and tribal governments.

For example, if an EPA program office needs guidance on the legal parameters of grant disbursement, how to respond to a FOIA request, whether it may spend money on a certain activity, or what to do if a tort claim is filed with the Agency, this program provides answers, options, and legal advice. Additionally, the Program provides comprehensive counseling on civil rights issues including equal protection. The Program provides counsel and advice for settlement of Equal Employment Opportunity (EEO) mediations and counsels on a range of sensitive and complex national security law matters. The Program also supports EPA in maintaining high professional standards and in complying with all laws and policies that govern the Agency's operations.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency requests an investment of $1.4 million and 10 FTE to strengthen EPA's Legal Advice: Support Program. In FY 2024, EPA will continue to address and manage the growing information requests, legal support for work under the Civil Rights Statutes, and employment law. There also is an ongoing need for a high level of involvement in questions related to contracts, ethics, grants, finance, appropriations, and employment.

The additional resources in this program are critical to ensure that the Agency continues to make legally sound decisions that advance EPA's mission and serve the American public. During the past several years, the Legal Advice: Support Program workload has outpaced staffing resources. Additional resources are required to maintain adequate staffing to provide counseling and defend lawsuits on matters including FOIA, torts and contracts, employment law, intellectual property law, and national security law matters. This is vital to ensure compliance with EPA's legal obligations while protecting EPA resources for the Agency to continue its essential work. In addition, the Program will counsel the Agency in carrying out plans to implement congressionally directed spending by certain offices. EPA's FOIA counseling and litigation work are essential parts of ensuring transparency and accountability at the Agency. EPA's employment law portfolio is critical to ensuring fair and impartial hiring and retention of a qualified workforce. EPA's Federal Tort Claims Act portfolio also has increased with incredibly complex, billion-dollar cases such as (1) the Flint, Michigan drinking water lawsuits, including *In re FTCA Flint Water Cases*, seeking redress for drinking water contamination injuries and (2) *In re: Gold King Mine Release*, stemming from a release of mine waste into the Animas River, both of which have required very significant resources for discovery and/or settlement preparation.

Further, EPA's civil rights lawyers have a critical role to play in "Affirmatively advancing equity, civil rights, racial justice, and equal opportunity", pursuant to Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*[185]. To this end, EPA made environmental justice (EJ) and civil rights compliance the focus of one of its strategic goals in its *FY 2022 - 2026 EPA Strategic Plan*[186] to "Take Decisive Action to Advance Environmental Justice and Civil Rights." The Strategic Plan provides the framework for the Agency to center its mission on the integration of justice, equity, and civil rights across the Nation's environmental protection enterprise. Achieving this goal in FY 2024 will require additional legal resources and FTE to provide the expanded legal counseling necessary to support increased efforts by the new Office of Environmental Justice and External Civil Rights (OEJECR) National Program Manager (NPM) to improve oversight and enforcement of civil rights and prioritize and advance EJ concerns.

The following are examples of FY 2022 accomplishments:

- Prior to the official creation of OEJECR (September 2022), which now includes the External Civil Rights Compliance Office (ECRCO), the Program provided critical legal advice to ECRCO as it pivoted from being a primarily reactive civil rights program to a proactive program. This included providing advice on the ongoing affirmative compliance review of a state environmental agency and on the general compliance review process and the criteria ECRCO will apply to prioritize and select affirmative compliance reviews on an annual basis memorialized in the January 6, 2022 memorandum "External Civil Rights Compliance Office (ECRCO) Process and Criteria for Prioritizing and Selecting Affirmative Compliance Reviews." Affirmative compliance reviews are conducted subsequent to the award of Federal financial assistance to determine whether a recipient complies with federal civil rights laws and EPA's implementing regulation. In addition,

[185] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[186] For additional information, please see: https://www.epa.gov/planandbudget/strategicplan.

the Program provided legal advice to ECRCO on its development of guidance for recipients on the procedural safeguards required by EPA's regulation, to be issued in the near future, as well as providing legal advice on a wide range of complaint investigations of important civil rights issues in environmentally burdened communities.

- Provided ongoing agencywide legal support to address questions that were key to allowing the Agency to return to the workplace. This included the use of appropriated funds for travel issues, as well as for various items addressing workplace safety. The Program also provided critical employment and privacy law advice and assistance in navigating a series of COVID-19 related issues. The Program continued to provide support to the agency leadership and program offices on COVID-19 related matters that required procurement analysis. Legal counsel ranged from related to the applicability of return-to-work policies to contractor employees.

- Developed legal guidance regarding how to advance executive orders related to equity and EJ in a legally sustainable way. This diverse and varied work will continue into FY 2024. This work allows the Agency to take action to advance equity, diversity, inclusion and EJ consistent with equal protection principles, which ensures that all individuals have an equal opportunity to benefit from the Agency's employment programs, as well as its programs to protect human health and the environment.

- Provided and continue to provide significant legal support in the Flint, Michigan defensive litigation arising under the Federal Tort Claims Act, in connection with drinking water contaminants. Discovery in the cases has demanded substantial time and effort from a large team of attorneys in order to ensure that EPA is accurate and timely in responding to court deadlines and is regularly coordinating with the Department of Justice as the trials progress.

- Provided essential counseling on: employment and labor law matters, including EEO mediations; a range of sensitive and complex national security law matters; and key confidential business information issues.

- Initiated a comprehensive overhaul of agency eDiscovery practice, including updated legal guidance for agency personnel and development of robust cross-agency eDiscovery legal practitioner and paralegal support to enhance consistency of practice. Provided critical legal counsel on EPA's information preservation obligations relating to the use of enterprise-wide software integral to EPA's hybrid workplace and to the transition of approximately 2,700 agency mobile devices to new management software, ensuring that this information is maintained for the American public.

- Significantly furthered EPA's duties under the Toxic Substances Control Act (TSCA) by completing over 4,000 Confidential Business Information (CBI) determinations on confidentiality claims. The timely adjudication of CBI determinations is critical to transparency and public access to information.

- Defended the Agency in more than 45 FOIA cases and more than 100 employment law matters. Completed 130 FOIA administrative appeals, eliminating the Agency's appeals backlog by responding to every appeal within the statutory timeframe.

- Trained more than 500 employees and senior officials on CBI, FOIA, and eDiscovery; trained 250 management officials throughout the Agency on employment laws; and helped train 128 EPA scientists and laboratory staff on intellectual property (IP). EPA's highly successful information law training program significantly improves awareness of the Agency's legal responsibilities and ultimately promotes improved transparency and responsiveness to public information requests. EPA's employment law training helps ensure a healthy workplace based on merit promotion and fairness. Finally, EPA's IP training is key to helping EPA scientists and laboratory staff understand the IP process to promote innovation and technology transfer.

Performance Measure Targets:

Work under this program supports performance results in the Legal Advice: Environmental Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$213.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,578.0 / +10.0 FTE) This program change is an increase to support Legal Advice: Support Program projects, with a priority for work related to defending the increase in litigation, building capacity, improving oversight, and enforcement of civil rights issues including External Civil Rights and equal protection compliance and for prioritizing and advancing EJ concerns. This investment includes $1.5 million for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Regulatory/Economic-Management and Analysis
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$16,725***	***$17,475***	***$16,930***	***-$545***
Total Budget Authority	$16,725	$17,475	$16,930	-$545
Total Workyears	68.9	73.7	76.0	2.3

Program Project Description:

The Regulatory/Economic, Management, and Analysis Program is responsible for reviewing the Agency's regulations to ensure that they are developed in accordance with the governing statutes, executive orders, and agency commitments and are based on sound technical, economic, scientific, and policy assumptions. Further, the Program ensures consistent and appropriate economic analysis of regulatory actions, conducts analyses of regulatory and non-regulatory approaches, and considers interactions between regulations across different environmental media. The Program provides all technical support to the Interagency Working Group on the Social Cost of Greenhouse Gases (GHGs) to develop final SC-CO_2, SC-N_2O and SC-CH_4 values required under Executive Order (EO) 13990, *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*.[187] The Program helps to implement the President's Memorandum on *Modernizing Regulatory Review*[188] and EO 13985 *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*[189] by developing appropriate modeling, data, and analysis to inform the consideration of environmental justice (EJ) concerns in regulatory and non-regulatory actions. The Program ensures the Agency's regulations comply with statutory and EO requirements, including the Congressional Review Act,[190] the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act),[191] and EOs 12866, *Regulatory Planning and Review*[192] and 13563, *Improving Regulation and Regulatory*

[187] For more information on EO 13990, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/.
[188] For more information on the Memorandum Modernizing Regulatory Review, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/.
[189] For more information on EO 13985, please to see: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.
[190] For more information on the Congressional Review Act, please see Subtitle E: https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf.
[191] For more information on the Regulatory Flexibility act, please see: https://www.govinfo.gov/content/pkg/STATUTE-94/pdf/STATUTE-94-Pg1164.pdf, and as amended by the Small Business Regulatory Enforcement and Fairness Act, please see: https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf.
[192] For more information on EO 12866 Regulatory Planning and Review, please see https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf.

Review[193] regarding the Office of Management and Budget (OMB) regulatory review. The Program manages the development and deployment of EPA's economy-wide model for analyzing the economic impacts of environmental regulations. The Program also includes the Agency's Chief Statistical Official charged with implementing major elements of the *Foundations for Evidence Based Policy Act*.[194]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Strategic Goal 2/Objective 2.2, Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities in the *FY 2022 - 2026 EPA Strategic Plan*.

The Program assists the Administrator and other senior agency leaders in implementing regulatory policy priorities.

In FY 2024, EPA will continue its efforts to assess and review the benefits and costs to communities, businesses, government entities, and the broader economy associated with each economically significant regulatory action to maximize the net benefits of policies protecting human health and the environment. EPA will conduct and integrate analysis of EJ concerns in the rulemaking process to address the Administration's priorities. EPA will collect data and build models to assess regulatory proposals and their impacts on benefits, economic performance, and EJ. Planned key program activities in FY 2024 include:

- Represent EPA on, and prepare information and analyses for, the Interagency Working Group on the Social Cost of GHGs, engage the public, stakeholders, and experts to provide recommendations for reviewing, and, as appropriate, updating the social cost of carbon (SC-CO_2), social cost of nitrous oxide (SC-N_2O), and social cost of methane (SC-CH_4) to ensure that these costs are based on the best available economics and science.

- Represent EPA in recommending improvements to modernize the regulatory review process to promote policies that reflect new developments in scientific and economic understanding, fully accounts for regulatory benefits that are difficult or impossible to quantify and does not have harmful anti-regulatory or deregulatory effects. Develop procedures that consider the distributional consequences of regulations as part of any quantitative or qualitative analysis of the benefits and costs of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden underserved, vulnerable, or marginalized communities across all life stages.

- Support EPA's Chief Statistical Official, who will provide technical support for projects under EPA's Learning Agenda, evaluation plan, and capacity assessment; design statistically sound policy analyses and evaluations; assist in the continued development of EPA's Learning Agenda; and promote a culture of evidence-based decision making.

[193] For more information on EO 13563 Improving Regulation and Regulatory Review, please see: https://obamawhitehouse.archives.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review.
[194] For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.

- Conduct training for EPA regulatory staff on a broad range of topics, including EPA's internal Action Development Process, developing EJ analysis for rulemakings, updated *Guidelines for Preparing Economic Analyses,* and Congressional Review Act requirements to help ensure that rules meet policy goals and address legal and administrative requirements and are informed by high quality EJ and economic analyses.

- Expand analytic capabilities for conducting EJ analyses for rulemaking through development of flexible analytic tools and novel datasets.

- Implement EPA's updated *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*, including training on new additions that address how the EJ analysis can be used to inform policy options and newer techniques for conducting EJ analyses.

- Provide updates to *EPA's Guidelines for Preparing Economic Analyses*, revised to incorporate updated analytic requirements and practices developed under the President's Memorandum on *Modernizing Regulatory Review*[195] and the recommendations from the Science Advisory Board's peer review. The guidelines help ensure that EPA's economic analyses provide a complete accounting of the economic benefits, costs, and impacts of regulatory actions, including distributional consequences, and are consistent across EPA programs.

- Continue to deploy a model of the U.S. economy so that EPA routinely assesses how regulations affect the economy, including distributional impacts, costs, and broader macro-economic performance.[196] EPA will continue to update the model consistent with recommendations from EPA's Science Advisory Board, deploy the model in regulatory analyses where appropriate, and advance the development of open-source data resources to support transparent analyses. This modeling capacity provides critical evidence-based analyses to inform decision making.

- Continue to manage EPA's response to recently issued EOs, particularly with an eye toward identifying regulatory actions that advance human health and environmental protection for all people.

- Review economic analyses prepared by EPA to ensure compliance with statutory and other related requirements. Provide the Administrator and the public with high-quality analyses of the costs, benefits, and impacts on jobs, businesses, and communities of major regulatory proposals to better inform decision-making and ensure transparency about the consequences of regulation.[197]

- Apply the best modeling tools to assess the economic effects of approaches that reduce climate pollution in every sector of the economy, deliver EJ, and spur well-paying union jobs and economic growth, including methods designed to examine how alternative

[195] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/modernizing-regulatory-review/.
[196] For more information, please see: https://www.epa.gov/environmental-economics/cge-modeling-regulatory-analysis.
[197] For more information, please see: https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses.

regulatory options affect employment. Continue development of open-source data and economic models, including sector-specific cost models, to support these efforts in a manner that maximizes the transparency of these EPA analyses.

- Continue development of a modeling platform capable of assessing the benefits of national regulations that affect water quality. This effort will provide important evidence-based data and analyses, consistent with economic science best practices, to inform decision making.

- Strengthen available data and methods to estimate the monetized benefits of health outcomes of chemical exposures, water pollution, and air pollution for use in EPA's benefit cost analyses.

- Continue to develop EPA's semiannual unified Regulatory Agenda and manage EPA's compliance with the Congressional Review Act.[198]

- Manage EPA's internal Action Development Process and expand and upgrade regulatory planning and tracking tools to facilitate timely decisions and coordination across programs, on multimedia regulatory and policy issues such as Per- and Polyfluoroalkyl Substances (PFAS), climate, and EJ.

- Review all regulatory actions prior to signature by the EPA Administrator to ensure agency actions are of consistently high quality and supported with strong analysis.

- Serve as EPA's liaison with the Office of Information and Regulatory Affairs within OMB.

- Serve as EPA's liaison with the Office of the Federal Register by reviewing, editing, and submitting documents for publication, so that the public, states, other agencies, and Congress are informed about EPA's regulatory activities in a timely manner.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$2,657.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,442.0 / +1.0 FTE) This program change is an increase to support the Administration's goal to tackle the climate crisis and ensures consistent and appropriate economic analysis of regulatory actions including advancements in the ability to model the economic impacts

[198] For more information on the Congressional Review Act, please see: https://www.govinfo.gov/content/pkg/PLAW-104publ121/pdf/PLAW-104publ121.pdf.

of climate change for assessing the mitigation benefits and macroeconomic effects. This investment includes $190.0 thousand for payroll.

- (+$670.0 / +1.3 FTE) This program change is an increase to support cross-agency coordination, analysis, and review of regulatory activity across statutory programs. particular emphasis is to be placed on pending climate regulations. This investment includes $246.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Science Advisory Board
Program Area: Legal / Science / Regulatory / Economic Review
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$3,854***	***$4,155***	***$4,124***	***-$31***
Total Budget Authority	$3,854	$4,155	$4,124	-$31
Total Workyears	17.6	18.7	18.7	0.0

Program Project Description:

EPA's Science Advisory Board Staff Office (SABSO) manages two Federal Advisory Committees. Congress established the Agency's Science Advisory Board (SAB) in 1978, under the Environmental Research, Development, and Demonstration Act, to advise the Administrator on a wide range of highly visible and important scientific matters. The Clean Air Scientific Advisory Committee (CASAC) was established under the Clean Air Act Amendments of 1977 to provide independent advice to the EPA Administrator on the technical bases for EPA's National Ambient Air Quality Standards (NAAQS). The SAB and the CASAC, both statutorily mandated chartered Federal Advisory Committees, draw from a balanced range of non-EPA scientists and technical specialists from academia, states, tribes, independent research institutions, non-governmental organizations, and industry. The Program provides management and technical support to these advisory committees. The Committees provide EPA's Administrator independent advice and objective scientific peer review on the technical aspects of environmental issues as well as the science used to establish criteria, standards, regulations, and research planning, as requested.[199]

In FY 2022 and thus far in FY 2023, the SAB has finalized four scientific peer review, two consultations, and submitted seven reports on the science supporting decisions framework, while CASAC has produced three scientific peer reviews and one consultation. SABSO expects these totals to increase in FY 2023 as both Committees have several current activities on-going that we anticipate completing this fiscal year. In January 2023, both the SAB and CASAC published Federal Register Notices soliciting new nominations for membership and to serve as expert advisors to EPA. SABSO will follow a thorough and transparent public process and recommend experts with the disciplines to align with the Agency's strategic priorities to the Administrator for his consideration and selection.

Since SABSO provides an in-house resource for EPA peer reviews, the Program costs are low in comparison to external peer review conducted by groups such as the National Academy of Sciences (NAS).

[199] For more information, please see: http://www.epa.gov/sab/ and http://www.epa.gov/casac/.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

Using the best available science and a credible, defensible, and transparent scientific approach, SABSO supports the EPA's mission by conducting independent, scientific, public, peer reviews of some of the most challenging regulatory and science-based topics facing EPA and America. In FY 2024, SABSO anticipates SAB and CASAC will complete 16-18 peer reviews, consultations, and regulatory reviews in accordance with the Biden Administration's science and policy agenda. In FY 2024, the CASAC is expecting completing reviews of NAAQS for several critical pollutants, including Nitrogen Oxides (NOx), Sulfur Oxides (SOx), and lead. The SAB will conduct peer reviews on Integrated Risk Information System (IRIS) Chemical reviews, risk assessment models, climate science reports, economic analyses, Environmental Justice (EJ) reports, and other similar projects. In addition, SABSO also expects to conduct four to seven regulatory reviews.

The SAB will directly support EPA Administrator Michael Regan's message "Our Commitment to Environmental Justice" issued on April 7, 2021,[200] in addition to supporting implementation of Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.* [201] EO 14008: *Tackling the Climate Crisis at Home and Abroad*;[202] and Strategic Goal 4, *Ensure Clean and Healthy Air for all Communities*. In FY 2024, the EJ Science Committee and Climate Science Committee (both standing committees of the SAB) expect to complete three climate and EJ risk analyses.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$31.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. The reduction is offset by a program increase for conducting peer reviews to support priority rulemakings and analyses, including PFAS and several critical pollutants.

Statutory Authority:

Environmental Research, Development, and Demonstration Authorization Act (ERDDAA); Federal Advisory Committee Act (FACA); and Clean Air Act (CAA).

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[200] For more information, please see: https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiatives-support-environmental-justice-and.
[201] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[202] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

Operations and Administration

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$36,051***	***$37,251***	***$41,609***	***$4,358***
Leaking Underground Storage Tanks	$158	$181	$136	-$45
Hazardous Substance Superfund	$23,550	$27,247	$33,758	$6,511
Total Budget Authority	$59,759	$64,679	$75,503	$10,824
Total Workyears	281.7	307.7	355.7	48.0

Program Project Description:

Environmental Programs and Management (EPM) resources in the Acquisition Management Program support EPA's contract activities, which cover planning, awarding, and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology (IT) improvements for acquisition.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue to strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged businesses; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. Efforts to process and award contract actions in a timely manner will be in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP).

In FY 2024, EPA will continue to support the implementation of supply chain risk requirements in Section 889 of the 2019 National Defense Authorization Act and the "Made in America Laws" referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers,*[203] while furthering Category Management implementation requirements. The Agency will develop a Made in America Acquisition training curriculum to help educate the acquisition workforce on navigating the process. EPA also will focus on establishing a

[203] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/.

comprehensive architecture for the Agency's supply chain as well as mechanisms to identify and mitigate risk.

In FY 2024, EPA will continue to identify activities and resources to enhance and modernize its acquisition process, allowing the Agency to connect with a more diverse business base to address inequities in the acquisition process and build domestic markets and capabilities. EPA will leverage its three-year Acquisition Forecast database and existing spend data to engage in early market research to ensure enough time is available to thoroughly analyze the market for domestic vendors or seek a waiver if none exist. The Agency will overhaul the Advance Procurement Planning component of the Agency's requisition dashboard to easily gather data regarding the planning phase of the procurement process. Furthermore, EPA will expand the Acquisition Portal to include an up-to-date Made In America toolkit, a Contingency Planning toolkit, Acquisition Lab Toolkits for Agency Acquisition personnel, and a repository for Vendor marketing information.

In FY 2024, EPA will continue working to eliminate barriers to full and equal participation in agency procurement and contracting opportunities for all communities. The Agency will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services. This work aims to increase the percentage of EPA contract spend awarded to small businesses located in Historically Underutilized Business Zones (HUBZones). These businesses often lack dedicated resources and in-house capacity to master complex federal requirements needed to capitalize on agency acquisition and financial assistance opportunities.

EPA remains committed to leveraging Category Management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2024, EPA will continue to utilize data provided by the General Services Administration and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of federal strategic sourcing vehicles and BIC acquisition solutions.

OMB's SUM initiative focuses on managed total acquisition spend and agency activities which transition spend to contract vehicles unaligned with Category Management principles. In accordance with OMB Memorandum M-22-03, *Advancing Equity in Federal Procurement*,[204] EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions*, to add clarification of the SUM Tier 2-SB designation which is afforded to contracts of any size awarded to small and disadvantaged businesses. The revision emphasizes EPA's focus on small business utilization and ensures continued alignment with federal category management and equity goals.

EPA will continue to implement a full Category Management strategy for IT and to increase transparency and visibility for IT purchases, including improving the Financial Information Technology Acquisition Reform Act (FITARA) process. [205] In FY 2023 through FY 2025, EPA

[204] For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-03.pdf.
[205] For additional information, please refer to: https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148%5D.

will focus on establishing the full category-level strategy for the IT software, hardware, and services acquisition processes, as well as on addressing opportunities for efficiency.

In addition to establishing the IT Category-level strategy, EPA will begin planning and implementation efforts to establish category-level strategies in the Agency's other top contract spending areas in FY 2023: Professional Services, Industrial Products & Services, Human Capital, and Office Management. For Professional Services in particular, the Agency will build understanding of mission-critical services and explore opportunities to develop enterprise-wide solutions in mission support areas nuanced to EPA's specific needs.

In FY 2024, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts. Through SUM Tier 2 and BIC solutions, acquisition experts will optimize spending within the government-wide category management framework and increase the transactional data available for agency-level analysis of buying behaviors. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool, which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

EPA also will elevate its focus on the Category Management approach to improvement management and results of its portfolio of contracts. EPA will continue to maximize considerations for implementing Strategic Sourcing Initiatives (SSIs), thereby enhancing purchase coordination, improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. EPA will continue to implement strategic sourcing initiatives first launched in FY 2023 in the areas of Lab Equipment Maintenance; Diversity, Equity, Inclusion, and Accessibility (DEIA); Memberships; Freight Services; Business and Financial Services; and Intellitrak software.

The Category Management Program (CMP) allows the Agency to research, assess, and award contract vehicles that will maximize time and resource savings. Long-term implementation of the CMP will transform the Agency's acquisition process into a strategically driven function, ensuring maximum value for every acquisition dollar spent. In FY 2022, EPA realized approximately $24 million in cost avoidance in specific, measurable costs for: four agencywide software solutions; print services; cellular services; shipping; voice services; office supplies; lab supplies; computers; furniture and furniture management services; Covid testing; and laboratory equipment maintenance.

In FY 2024, EPA will continue to utilize a government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration and OMB requirements. EPA will continue implementing FITARA through competing contracts with multiple vendors and avoid vendor lock-in by confining the scope of a contract to a limited task. Additionally, the Agency will develop acquisition vehicles to further support FITARA compliance and implementation.

Performance Measure Targets:

Work under this program supports performance results in the Small Minority Business Assistance Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,443.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,915.0 / +20.0 FTE) This net program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged business; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. The change is partially offset by a reduction in system operations and development resources for the EPA Acquisition System. This investment includes $3.6 million for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$82,781***	***$87,099***	***$99,812***	***$12,713***
Leaking Underground Storage Tanks	$360	$457	$469	$12
Hazardous Waste Electronic Manifest System Fund	$149	$0	$0	$0
Hazardous Substance Superfund	$29,102	$31,338	$30,207	-$1,131
Total Budget Authority	$112,392	$118,894	$130,488	$11,594
Total Workyears	435.5	469.0	480.0	11.0

Total workyears in FY 2024 include 2.0 FTE funded by TSCA fees.
Total workyears in FY 2024 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

Program Project Description:

Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, risk assessments and reporting, and financial systems to ensure effective stewardship of resources. This includes managing and supporting the Agency's financial management systems. Functions include financial payment and support services for EPA; general and specialized fiscal and accounting services for many of EPA's programs; strategic planning and accountability for environmental, fiscal, and managerial results; developing and executing an Enterprise Risk Management Program to support effective and efficient mission delivery and decision-making; providing policy, systems, training, reports, and oversight essentials for EPA's financial operations; managing the agencywide Working Capital Fund (WCF); and managing the Agency's annual budget process. This program supports agency activities to meet requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010,[206] as amended by the Foundations for Evidence-Based Policymaking Act of 2018 ("Evidence Act"), with an emphasis on Title I of the Act;[207] the Digital Accountability and Transparency (DATA) Act of 2014;[208] the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;[209] the Federal Management Financial Integrity Act (FMFIA);[210] the Inspector General Act of 1978.[211]

FY 2024 Activities and Performance Plan:

[206] For more information, please see: https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf.
[207] For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.
[208] For more information, please see: https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf.
[209] FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf.
[210] For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf.
[211] For more information, please see: https://www.govinfo.gov/content/pkg/USCODE-2012-title5/pdf/USCODE-2012-title5-app-inspector.pdf.

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Agency requests an additional $12.7 million and 13.1 FTE. This increase invests in a solution that would move the Agency forward in assessing enterprise and programmatic risk, internal control, audit management and provides for necessary fixed costs increases. The additional FTE will support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. The Program will continue maintaining key planning, budgeting, performance measurement, and financial management activities. The Program also will implement enhancements to technical training, outreach, and reporting to assistance recipients and programs with a goal of reducing the barriers to managing complex federal requirements intended to ensure sound financial management. The Program will ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, which includes a Performance Module, and related financial reporting systems.

The Agency continues to modernize its financial systems to gain greater efficiencies through leveraging the accounting system and eliminating legacy systems, as well as provide accessible tools to manage resources and track performance. In FY 2024, Robotics Process Automation (BOTS) will be incorporated as a part of the overall strategy to reduce manual work and improve efficiency throughout the Agency. The Program also will begin planning activities for a major upgrade to the Agency's financial management system Compass. EPA will continue to expand and enhance easy to use dashboards for financial management. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress. The Program will continue to modify systems and data flows to meet Justice40 location reporting needs. This will involve extensive evaluation of systems architecture to streamline and modernize interconnections and to improve system performance as well as customer experience.

In FY 2024, EPA will continue to standardize and streamline internal business processes, reduce the number of administrative systems, and adopt federal shared services when supported by business case analysis. Modernizing or integrating legacy payment systems will continue to be a focus. For example, EPA has implemented Treasury's Invoice Processing Platform (IPP) for reviewing invoices and paying commercial vendors. As of January 2023, roughly 98 percent of contract invoices are being handled through this system. In FY 2023, EPA will add additional payment types to this system, including Superfund Contract Laboratory Program and Simplified Acquisition payments through a system interface. This implementation will greatly reduce manual effort, improve data quality, and allow for the elimination of two legacy administrative systems. In FY 2024, EPA intends to initiate the acquisition process and transition planning for the Agency's Time and Attendance system based on the results of the FY 2023 alternatives analysis. By the end of FY 2023, the Agency will have fully implemented G-invoicing for new and existing

agreements. In FY 2024, the Program will continue to focus on post implementation activities and review, to address system user process concerns.

Equally important is the ability to adapt systems to meet increased transparency needs, such as those prescribed in the DATA Act. The DATA Act reporting will continue to evolve with more stringent timelines, certification requirements, data standards and validation checks, as well as additional areas of federal financial spending. The Agency plans to be flexible to adapt to the new transparency requirements and to provide timely and accurate spending information to the public while ensuring appropriate security controls and data governance.

In FY 2024, EPA will continue to support formal evaluations as well as efforts to improve critical data collections and data sharing in priority areas as directed by the Evidence Act. In alignment with the Act, EPA has been steadily building the capacity for this important work, and in FY 2022 the Agency published its first Learning Agenda at the same time as the *FY 2022-2026 EPA Strategic Plan*. The first Learning Agenda helped established the policy framework for the Agency's evaluation program. In FY 2024, the Agency will continue implementing the larger goals of the Act. In alignment with the Act, EPA will use findings from its FY 2022 and FY 2023 capacity assessment activities to prioritize strategic investments at an enterprise level that will expand capacity for robust evidence and evaluation, data use, research and development, analysis, and Lean Management. The Act requires EPA to develop an evidence-building portfolio to support policy and program implementation decisions by generating evaluation studies to help the Agency improve, advance, or modify existing programs, policies, projects, or operations. In FY 2024, EPA will continue to execute the Agency's Learning Agenda, build evaluation and evidence-building into the planning for new and enhanced programs, enhance strategic and annual planning, collaborate with external evaluation experts, and implement EPA's evaluation policy framework. EPA will invest in evaluation and other evidence-building activities addressing environmental justice (EJ), climate change, community engagement, and diversity, equity, inclusion, and accessibility (DEIA). As part of the Agency's FY 2024 evidence-building portfolio, EPA activities will reflect the FY 2023 cross-government effort to develop evidence-building guidelines and initiate evaluation studies related to the execution of the Infrastructure Investment and Jobs Act of 2021 (IIJA) investments.

In FY 2024, the Program will continue to focus on core responsibilities in the areas of strategic planning; performance measurement, assessment, and reporting; enterprise risk management. As the Agency lead in designing and implementing performance measurement and risk management strategies that inform agency decision-making and advance mission results, the Program will focus on driving progress toward the Administrator's priorities by regularly assessing performance results against ambitious targets, monitoring and mitigating risks, and adjusting strategies as needed. This includes convening Quarterly Performance Reviews (QPRs) to assess progress; promoting an increased use of data analytics and evidence-based decision-making practices; working collaboratively with agency programs to assess and analyze performance and risk data; and providing technical assistance on agencywide measures of governance to enhance data quality. EPA also will continue to use the performance data and other evidence to answer fundamental business questions and identify opportunities for service improvements.

During FY 2024, EPA will continue to leverage a management system that uses Lean Management techniques and tools to promote continuous improvement. Lean Management techniques will continue to complement EPA's performance framework to help the Agency meet the requirements and spirit of the GPRMA. As of January 2023, EPA has improved nearly 1,300 processes and implemented over 6,800 employee ideas. Improvements and innovations have been made in a variety of administrative areas, such as hiring, improving diversity, equity, inclusion, and accessibility (DEIA), and in many other programmatic areas.

Moving forward, EPA will continue measuring process improvements as a long-term performance goal in support of the *FY 2022 – 2026 EPA Strategic Plan*. EPA successfully built flexibility into its Continuous Improvement Program to better integrate with the Agency's range of programs and approaches. Additionally, the Agency continues to leverage senior staff engagement in continuous improvement through nearly 100 executive-sponsored improvement projects annually. EPA also has applied continuous improvement tools and projects to support IIJA implementation with an emphasis on improving processes related to hiring and grants. EPA also expects to continue partnering with states and tribes in continuous improvement efforts to improve processes related to authorized or delegated federal programs in key priority areas.

EPA has made significant strides in recent years to strengthen programs considered susceptible to improper payment. However, the Agency continues to be vigilant in reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. In addition, as required by the Payment Integrity Information Act of 2019 (PIIA) (P.L. 116-117),[212] and OMB Memorandum *M-21-19 Appendix C*,[213] EPA conducts risk assessments of all its payment streams. Other improvements include the recent implementation of upgraded systems used for payments and invoice processing through which the Agency anticipates even fewer payment errors moving forward. To strengthen our processes, the Program is developing risk assessment plans for significant increases or new funding the Agency receives. These risk assessments outline potential areas that will need additional guidance as well as tracking and reporting, performance measures and internal controls that will help prevent and detect possible improper payment activities.

The Program will continue to conduct internal control program reviews and use the results and recommendations from the Office of Inspector General to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. Annually, the Agency conducts internal control reviews of multiple programs. The Program also will collect key operational statistics for its financial management program to further evaluate its operations and for management decision-making. For example, in FY 2022, the Office of the Chief Financial Officer (OCFO) recognized additional opportunities for engagement with the Office of Inspector General (OIG) by providing an Audit Preparedness Guide. The Audit Preparedness Guide is intended as a tool to encourage a proactive approach to addressing common OIG and Government Accountability Office findings before audits are initiated. Additionally, OCFO is utilizing data analytics in validating and documenting measures to ensure that the process is standardized across the Agency while providing more customer-level support.

[212] For more information, please see: https://www.congress.gov/116/plaws/publ117/PLAW-116publ117.pdf.
[213] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/03/M-21-19.pdf.

With increased focused on internal controls, audit management, and enterprise risk assessment, in FY 2024, the Agency will be expanding its efforts in this area including implementing a new integrity tool for managing risk. The new Integrity Tool allows the Agency to easily crosswalk the anticipated increase in the number of audits related to IIJA and Inflation Reduction Act (IRA) activities for program integrity to the 600+ risks and internal controls. The Integrity Tool will help the Agency to better monitor the effectiveness and impact of the internal controls set in place.

The Program will continue to support FITARA requirements in accordance with EPA's Implementation Plan.[214] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology needs are properly planned and resourced in accordance with FITARA.

Performance Measure Targets:

(PM OP1) Number of operational processes improved.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		25	50	72	500	200	200	200	Operational Processes
Actual		N/A	66	502	507	208			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$4,271.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$6,415.0 / +7.2 FTE) This increase supports the duties of the Evaluation Officer in implementing the Evidence Act and early integration of evidence into the IRA programs. The increase in funding will continue supporting the data, reporting, and evidence-building capacity of EPA grant recipients. The funding also will increase contract resources needed to support EPA's central evaluation function, including evaluation policy implementation activities and increasing EPA's program evaluation capacity. The increase will support the funding of 3 to 4 comprehensive program evaluations and allow for a higher degree of planning to better prioritize and integrate evidence-building and evidence-based decision-making into agency programs. This investment includes $1.3 million for payroll.

- (+$1,570.0 / +3.4 FTE) This investment supports a new management integrity tool to turn manual data collection and analysis activities into a streamlined, customer-focused and agencywide tool that meets the analytical needs for IIJA and IRA activities and agencywide needs of enterprise risk, internal control, and audit environments. The FTE will support system configuration, training, on-going administrative functions and expanded agency analysis and compilation activities. This investment includes $621.0 thousand for payroll.

[214] For more information, please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

- (+$457.0 / +2.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $457.0 thousand for payroll.

- (-2.6 FTE) This is an adjustment based on expected Central Planning, Budgeting, and Finance working capital fund services.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$291,501***	***$283,330***	***$305,753***	***$22,423***
Science & Technology	$68,347	$67,500	$72,043	$4,543
Building and Facilities	$24,681	$42,076	$105,009	$62,933
Leaking Underground Storage Tanks	$922	$754	$727	-$27
Inland Oil Spill Programs	$854	$682	$641	-$41
Hazardous Substance Superfund	$76,108	$65,634	$71,540	$5,906
Total Budget Authority	$462,412	$459,976	$555,713	$95,737
Total Workyears	310.6	321.8	330.4	8.6

Total work years in FY 2024 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Environmental Programs and Management (EPM) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

This program also includes the Agency's Protection Services Detail (PSD) that provides physical protection for the Administrator through security for daily activities and events. The PSD coordinates all personnel and logistical requirements including scheduling, local support, travel arrangements, and the management of special equipment.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency proposes an investment of $22.4 million and 8.8 FTE for the Facilities Infrastructure and Operations Program. These additional resources will support agencywide climate sustainability and resiliency initiatives, EPA facilities projects, and EPA's Climate Adaptation Action Plan. The Agency will continue to pursue agencywide climate sustainability and resiliency initiatives and EPA facilities projects. Investing in the reconfiguration of EPA's workspaces enables the Agency to release office space and avoid long-term rent costs, consistent

with HR 4465, the *Federal Assets Sale and Transfer Act of 2016*.[215] EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. The Agency's space consolidation efforts are expected to result in cost avoidances due to projected rent increases over ten years. EPA also will continue working to enhance its federal infrastructure and operations in a manner that increases efficiency. These enhancements also support the Future of Work as the Agency continues to implement hybrid, remote, and physical workspaces, consistent with OMB Memorandum M-21-25.[216] For FY 2024, the Agency requests $153.55 million for rent, $7.65 million for utilities, and $27.88 million for security in the EPM appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

EPA also will work to secure physical and operational resiliency for Agency facilities. As part of this work, EPA will continue conducting climate resiliency assessments at all EPA-owned facilities to identify critical upgrades that are necessary to improve facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. In FY 2024, EPA will conduct climate assessments at the following facilities: Office of Air and Radiation Laboratory – Montgomery; Edison Environmental Center; Region 4 Field Annex – Athens; Athens Environmental Center; Corvallis Environmental Laboratory; and Newport Environmental Laboratory. EPA will initiate all high-priority projects within 24 months of the completion of a climate assessment.

Further, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce.[217] Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050.

In FY 2024, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs *(e.g.*, Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment in infrastructure (*e.g.*, architectural and design) and mechanical systems (*e.g.*, Optimized Building Managements Systems for heating and cooling with load demand driven controls) is necessary to meet the Administration's climate sustainability goals. Additionally, in 2024, EPA will direct $3.5 million to continue the Agency's transition to electric vehicles through

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[215] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.
[216] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf..
[217] Work in this program takes direction for climate change and sustainability related initiatives from the following:
EO 14008: *Tackling the Climate Crisis at Home and Abroad* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/)
EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/)

direct purchase (mobile lab vehicles) or lease through the General Services Administration (GSA) for all future fleet procurements where economically feasible. EPA also will identify opportunities to build out necessary charging infrastructure at EPA facility locations. In line with federal sustainability goals, EPA will work to utilize 100 percent carbon pollution-free electricity on a net annual basis by 2030.

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (*e.g.,* inspections, monitoring, on-scene coordinators) and track capital equipment of $25 thousand or more. The Agency will continue its partnership with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

(PM CAA) Number of EPA-owned facility climate adaptation assessments completed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2	5	6	Assessments
Actual						1			

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned facilities initiated within 24 months of a completed facility climate assessment and project prioritization.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									Projects
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$13,453.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change includes adjustments to rent, utilities, security, and transit subsidy needs.

- (+$6,870.0 / +8.8 FTE) This program change supports implementation of EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* requirements that will require EPA to increase facility resiliency against the impact of climate change and to advance sustainability of EPA operations. EPA will invest in facility climate assessments and Optimized Building Management Systems; EPA facilities projects to ensure EPA has optimal footprint to support the proposed FTE increase in the FY 2024 Budget request; and EPA's Climate Adaptation Action Plan. This investment includes $1.6 million for payroll.

- (+$2,100.0) This investment supports the Agency's transition to electric vehicles and to build out necessary charging infrastructure at EPA facility locations.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$29,070***	***$30,188***	***$34,350***	***$4,162***
Hazardous Substance Superfund	$4,188	$4,002	$4,601	$599
Total Budget Authority	$33,258	$34,190	$38,951	$4,761
Total Workyears	141.1	156.8	184.5	27.7

Program Project Description:

Environmental Program and Management (EPM) resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs as well as suspension and debarment activities for assistance and procurement programs. Grants and IAs historically comprise approximately 60 percent of EPA's annual appropriations. Resources in this program ensure EPA manages grants and IAs to meet the highest fiduciary standards and achieve measurable results for environmental programs and agency priorities, and that the government's financial resources and business interests are protected from fraud and mismanagement.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Agency will continue implementing the FY 2021-2025 Grants Management Plan, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, promoting environmental justice (EJ), and ensuring effective grant oversight and accountability.

EPA will continue to provide technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and process financial assistance agreements in a timely manner. EPA will continue to implement grants management activities to achieve efficiency, enhance quality, and ensure fiscal accountability. In addition, EPA will conduct a robust training program for EPA staff and grant applicants and recipients. In FY 2024, the training program will focus on (1) helping applicants find and apply for competitive and non-competitive grant opportunities, compliance-assistance under the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA); and (2) understanding the federal requirements that are passed down to subrecipients, and the oversight that pass-through entities are responsible for on EPA's behalf. EPA also will explore methods to use or update the grant competition and grant-making processes to promote equity and support for

underserved communities. For example, EPA will provide technical assistance to potential grantees from underserved communities on sound financial management practices to reduce barriers to competition for EPA grant resources. EPA also will track grant place of performance to help determine whether underserved and communities with EJ concerns are realizing the benefits of EPA grant programs.

EPA also will continue to ensure compliance with "Made in America" laws and policies in its financial assistance programs, consistent with Executive Order 14005 and Office of Management and Budget (OMB) Memorandum M-22-11.[218][219] These efforts include establishing appropriate terms and conditions, developing information to share with recipients, outreach, and market research, and providing waivers when consistent with statutory requirements and OMB directives.

EPA will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS) to ensure it aligns with the requirements of the Grant Reporting Efficiency and Agreements Transparency (GREAT) Act, applicable OMB Quality Service Management Offices (QSMO) standards, and the Federal Integrated Business Framework for grants (*i.e.,* required standard data elements for grants reporting). In FY 2024, EPA will operate and maintain an electronic grants record management system that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards. The Agency also will utilize the government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

EPA will complete all activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions. EPA met the October 1, 2022, deadline for new IAs, and will complete the transition for existing IAs by Treasury's October 1, 2023, deadline. EPA provides quarterly progress updates to Treasury that highlight activities under the Agency's approved G-Invoicing Implementation Plan.

In FY 2024, the Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal assistance and procurement programs. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and federal assistance awards (*e.g.,* grants, cooperative agreements, loans, and loan guarantees).

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[218] For more information, please refer to: https://www.federalregister.gov/documents/2021/01/28/2021-02038/ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers For more information, please refer to: https://www.federalregister.gov/documents/2021/01/28/2021-02038/ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers.

[219] For more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdfhttps://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,214.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,832.0 / +23.0 FTE) This program change will support technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and the timely processing of financial assistance agreements. This investment includes $4.1 million for payroll.

- (-$884.0) This program change is due to completing development on an interagency agreement pre-work processing system.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$56,709***	***$51,261***	***$71,093***	***$19,832***
Hazardous Substance Superfund	$7,253	$7,419	$8,751	$1,332
Total Budget Authority	$63,963	$58,680	$79,844	$21,164
Total Workyears	221.8	254.4	327.4	73.0

Total work years in FY 2024 include 0.2 FTE to support Human Resources Management working capital fund (WCF) services.

Program Project Description:

Environmental Programs and Management (EPM) resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. HCM activities including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement are critical for building, developing, and retaining a diverse and talented workforce at EPA. Additional HCM activities supported by EPM resources include personnel and payroll processing through the Human Resources Line of Business. EPM resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency's HR Management Program will continue to implement EPA's Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan, establishment of a centralized EPA intern program, evidence-gathering under EPA's Learning Agenda, and strengthening agencywide capacity to hire and onboard staff in a timely and equitable manner. The activities supported by EPA's HR Management Program contribute to effective workforce management and are critical for strengthening the workforce, retaining expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure that employees have the right skills to successfully achieve the Agency's core mission today and in the future.

EPA is committed to advancing equity, in line with President Biden's Executive Orders (EOs) 13985,[220] 13988,[221] 14020,[222] 14035,[223] and 14075.[224] In FY 2024, in line with EO 14035, EPA will implement the actions identified in the DEIA Strategic Plan to assess whether agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices are equitable. EPA will undertake an evidence-based and data-driven approach to determine whether, and to what extent, Agency practices result in inequitable employment outcomes, and whether Agency actions may help to overcome systemic societal and organizational barriers. Further, the Agency will assess the status and effects of existing DEIA initiatives or programs and review the institutional resources available to support human resources activities. For areas where evidence is lacking, the Agency will propose opportunities to advance DEIA. EPA will continue to involve employees at all levels of the organization in the assessment of DEIA initiatives and programs.

In FY 2024, EPA will continue its Senior Executive Service Candidate Development Program launched in FY 2023. The Program will focus on incorporating DEIA strategies so that future executives reflect the diversity of the American population and possess the skills necessary to lead a diverse and talented workforce operating in a hybrid work environment. The Agency will implement a centralized paid internship program, which expands on existing internship opportunities across the Agency to strengthen talent and workforce acquisition. This paid internship program focuses on expanding federal work experience opportunities for underrepresented and underserved populations, which may experience barriers to applying or fully participating in existing opportunities. EPA's program will provide a total of approximately 180 four-month internship opportunities across EPA Programs and Regional Offices. Additionally, EPA will implement a plan to convert eligible interns to permanent federal service based on performance and completing program requirements.

EPA has increased efforts to improve DEIA with virtual outreach events, targeting diverse networks such as veterans, persons with disabilities, Returned Peace Corps Volunteers, and Historically Black Colleges and Universities and other Minority Serving Institutions. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities, including Schedule A and recruitment incentives. In FY 2024, EPA will continue to work with Science, Technology, Engineering, and Mathematics-focused institutions and organizations such as the Society of Hispanic Professional Engineers and National Society of Black Engineers. EPA also will participate in the President's Management Council Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees. EPA will continue to review applicant flow diversity data every quarter to assess progress and identify areas for improvement.

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[220] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.
[221] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01761/preventing-and-combating-discrimination-on-the-basis-of-gender-identity-or-sexual-orientation.
[222] For additional information, please refer to: https://www.federalregister.gov/documents/2021/03/11/2021-05183/establishment-of-the-white-house-gender-policy-council.
[223] For additional information, please refer to: https://www.federalregister.gov/documents/2021/06/30/2021-14127/diversity-equity-inclusion-and-accessibility-in-the-federal-workforce.
[224] For additional information, please refer to: https://www.federalregister.gov/documents/2022/06/21/2022-13391/advancing-equality-for-lesbian-gay-bisexual-transgender-queer-and-intersex-individuals.

In FY 2024, EPA will continue to implement flexible work policies in line with OMB Memoranda M-21-25 - *Integrating Planning for A Safe Increased Return of Federal Employees and Contractors to Physical Workplaces with Post-Reentry Personnel Policies and Work Environment*,[225] including designation of remote work status to certain positions, providing work schedule flexibilities, and increasing the use of telework. EPA strives to be a model federal employer and these efforts will strengthen the Agency's ability to attract, recruit, retain and empower top talent while advancing DEIA. EPA also will continue to support front-line supervisor training for managing individuals and teams working in hybrid environments, with a focus on employee communication, mentorship, and equity.

The Agency will continue to build Talent Teams to effectively expand recruitment and hiring to meet critical agency skill needs, as well as continue to leverage childcare subsidies to support retention. EPA also will continue to support evidence-building activities to carry out a workforce strategy guided by data-driven decisions as part of its implementation of the Evidence Act through the Workforce Planning learning priority area in EPA's Learning Agenda. This work includes determining Mission Critical Competencies, enhancement of EPA's competency assessment tool, skills gap analysis across the Agency, and knowledge transfer strategies to support Succession Management.

In FY 2024, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets should reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with Succession Management by identifying workforce gaps due to anticipated retirements and attrition trends. This is critical considering approximately 23 percent of EPA's workforce is retirement eligible and another 15 percent of the current workforce will become retirement eligible over the next five years.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*,[226] issued on January 22, 2021. EPA reviewed its unions' agreements to identify and eliminate provisions influenced by four revoked executive orders and will increase the focus on pre-decisional involvement and interest-based bargaining. In FY 2024, EPA will continue working to reset and repair relationships and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

Finally, EPA's advisory committees have proven effective in building consensus among the Agency's diverse external partners and stakeholders. In line with President Biden's *Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based*

[225] For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.
[226] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/.

Policymaking,[227] EPA remains committed to ensuring that highly qualified external experts serve on agency committees and that those members and future nominees of EPA advisory committees reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

Performance Measure Targets:

(PM DEIA) Diversity, Equity, Inclusivity, and Accessibility (DEIA) actions completed toward Maturity Level "Leading and Sustaining" achieved.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							2	4	Actions
Actual									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$3,790.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$8,515.0 / +45.0 FTE) This program change is an increase to continue to develop and diversify its new paid internship program to strengthen talent and workforce acquisition and focus on expanding federal work experience opportunities for underrepresented and underserved populations. This investment includes $8.1 million for payroll.

- (+$3,935.0 / +5.0 FTE) This program change is an increase to support the implementation Executive Order 14035 – Diversity, Equity, Inclusion, and Accessibility (DEIA) in the Federal Workforce and taking the actions identified in EPA's DEIA Strategic Plan. This investment includes $896.0 thousand for payroll.

- (+$1,608.0 / +8.5 FTE) This program change strengthens agencywide capacity to quickly increase staff levels in key offices and programs (i.e., environmental justice, climate, infrastructure programs, etc.). This investment includes $1.5 million for payroll.

- (+$1,000.0) This program change is an increase to support the continuation of the Senior Executive Service Candidate Development Program with a goal that EPA senior leaders reflect the diversity of the American people and will include a special focus on developing diversity, equity, accessibility, and inclusivity competencies.

- (+$984.0 / +5.2 FTE) This program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes $932.0 thousand for payroll.

[227] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.

- (-1.3 FTE) This is an adjustment based on expected Human Resources Management working capital fund services.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$1,345***	***$1,554***	***$4,972***	***$3,418***
Total Budget Authority	$1,345	$1,554	$4,972	$3,418
Total Workyears	0.5	1.7	6.7	5.0

Program Project Description:

EPA's Regional Science and Technology (RS&T) Program provides direct regional support to multiple Agency programs including implementing the Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Clean Air Act (CAA); and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The RS&T Program supports the Agency's strategic goals by performing laboratory analysis, and mobile laboratory services to provide credible scientific data on environmental pollutants and conditions to Agency decision makers. The RS&T Program also assists state environmental agencies by providing specialized technical assistance including assistance to vulnerable and highly exposed communities. Additionally, the Program assists tribal communities to help build tribal capacity for environmental monitoring and assessment.

The RS&T Program provides essential expertise and scientific data for a wide array of environmental media, including ambient air; surface, drinking, and ground water; soil and sediment; solid and hazardous waste; and biological tissue. This work focuses on the immediate scientific information needed to make short-term local decisions. A strategic strength of the regional laboratories is their ability to respond to events requiring surge capacity. In the event of an emergency or project impacting a large area, regional laboratories work together to leverage the strengths and capacities of individual lab facilities and deploy mobile laboratory services where needed.

Extreme weather events often disproportionally affect vulnerable and highly exposed populations including fence line communities most closely adjacent to chemical facilities. As extreme weather events and related wildfires, flooding, and service interruptions increase in frequency due to climate change, the public expectation for a rapid and effective response will continue to grow over time. These events often require assistance from EPA's regional labs for quick turnaround sample analyses as well as technical support. When extreme weather events occur, local area laboratories can become overwhelmed. Each year, in response to natural and/or man-made disasters across the county, the regions mobilize to provide critical support of urgent analytical results to assist communities whose drinking water is threatened, air quality impacted, or properties inundated. Regional laboratories have a strong record of backing up each other during incidents when there is a high demand for services, such as 2021's Winter Storm Uri, where Regions 4 and

7 assisted Region 6. Regional laboratories continue to stand ready to assist each other during increasing wildfire events and other natural disasters.

The RS&T Program provides support for areas such as environmental biology, microbiology, chemistry, field sampling, enforcement and criminal investigations, and quality assurance, as well as support for special or non-routine analytical requests that EPA cannot readily obtain from other sources within required timeframes. Funding for up-to-date scientific equipment under this program is essential for maintaining high level capabilities in EPA regional laboratories. New and improved technology strengthens science-based decision-making for regulatory efforts, environmental assessment of contaminants, and development of critical and timely environmental data in response to accidents and natural or man-made disasters. As technology improves, the sensitivity of equipment advances to detect lower levels of contaminants. Newer, more advanced instrumentation improves environmental data collection and laboratory analytical capability.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, resources will continue to support regional implementation of the Agency's statutory mandates through fixed and mobile laboratory operations for environmental sampling, monitoring and enforcement compliance support. Resources improve timely decision-making in regional program management and implementation of regulatory work across all media and enable the Agency to address environmental issues specific to geographic areas (e.g., energy extraction, mining, wood treating operations, specialty manufacturing), natural disasters and extreme climate events such as flooding, drought and wildfires, and homeland security threats.

In FY 2024, regional laboratories will continue to coordinate within the Regional Laboratory Network (RLN) to provide needed expert analytical services. The regional laboratories have the capability to analyze a full suite of contaminants using an array of established methods, including regulatory or guidance methods such as the RCRA, CWA and SDWA methods. Laboratories also utilize new methods and adapt methods based on immediate needs or circumstances. These efforts help support the underserved communities that benefit from response times for both routine and enforcement sample analyses related to contaminated sites in urban areas where legacy contamination persists. For example, brownfield sites tend to be in densely developed, centralized locations, redevelopment in these areas lead to multiple positive outcomes in urban communities including reducing exposure to toxic chemicals, increased access to green space and reducing vehicle miles driven due to more efficient home/work travel patterns.[228] As the Agency implements an ambitious agenda on climate change, environmental justice, aging infrastructure, and emerging contaminants, the need for sound analytical capabilities and capacity increase. Additional state-of-the science instrumentation is necessary to address these complex and inter-connected challenges.

[228] For more information please see: https://www.epa.gov/brownfields/brownfields-program-environmental-and-economic-benefits.

In FY 2024, the regional laboratories will continue to work toward replacement and upgrading of aging analytical equipment and modernization of associated critical IT infrastructure. This will support the risk identification and assessment associated with pesticides, organic chemicals, and other high-risk chemicals, as well as support the Agency's science priorities related to informing communities at risk from increasing challenges from climate change, chemical exposures, and aging infrastructure. The Agency's mission to protect human health and the environment often requires the availability of scientific data at lower detection levels, which requires specialized equipment. Almost all scientific instrumentation is computer-controlled or interfaced. As computer technology improves, instrument efficiencies and sensitivity also improve – these advances in technology leading to lower detection levels of contaminants are essential for some compounds where health-based risk levels are decreasing (e.g., hexavalent chromium and PFAS chemicals). When measuring for these compounds, the instrument detection levels need to be as low as technically feasible, requiring laboratories to modify an existing method, modify existing equipment, or purchase newer instrumentation.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$81.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,499.0 / +5.0 FTE) This program change will support replace and upgrade aging analytical equipment and modernize associated critical IT infrastructure necessary to meet increasing demands for immediate scientific information needed to make short-term local decisions. This investment includes $828.0 thousand for payroll.

Statutory Authorities:

Resource Conservation and Recovery Act (RCRA); Toxic Substances Control Act (TSCA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Clean Air Act (CAA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Pesticides Licensing

Pesticides: Protect Human Health from Pesticide Risk

Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$65,333***	***$62,125***	***$65,529***	***$3,404***
Science & Technology	$2,854	$2,894	$4,031	$1,137
Total Budget Authority	$68,187	$65,019	$69,560	$4,541
Total Workyears	420.3	385.6	385.6	0.0

Total program work years in FY 2024 include 82.1 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)[229] and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Act of 2022 (PRIA 5),[230] EPA is charged with protecting people from the health risks that pesticide use can pose. FIFRA requires EPA to register pesticide products before they are marketed for use in the U.S. Registration is based on the review of scientific data sufficient to demonstrate that the product can perform its intended function without unreasonable adverse effects on people or the environment. This program emphasizes the use of reduced risk methods of pest control, including the use of reduced risk pesticides and helping growers and other pesticide users learn about new, safer products and methods of using pesticides.

Under FFDCA, if a pesticide is to be used in a manner that may result in pesticide residues in food or animal feed, EPA must establish a tolerance, or maximum legal residue level, or an exemption from the requirement of a tolerance, before it can be registered. To establish a tolerance, EPA must find that the residues are "safe," which, under FFDCA, means that there is a reasonable certainty of no harm to human health from aggregate exposure to the pesticide residue in food and from all other exposure except occupational exposure.[231] EPA must periodically review the registration and tolerances that the Agency issues to ensure that public health is adequately protected.

[229] For additional information on FIFRA, please visit: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.

[230] On December 29, 2022, Pesticide Registration Improvement Extension Act of 2022 (PRIA 5) was signed into law, which reauthorizes PRIA for 5 years through fiscal year 2027 and updates the fee collection provisions of the Federal Insecticide, Fungicide, and Rodenticide Act.

[231] Additional information related to pesticide registration, the setting of tolerance levels, and the pesticide risk assessment process can be found at the following location: https://www.epa.gov/pesticide-tolerances/setting-tolerances-pesticide-residues-foods.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

Pesticide Review and Registration

In FY 2024, EPA will continue to review and register new pesticides, new uses for existing pesticides, and other registration requests in accordance with statutory requirements, making sure exposure to infants and children is reflected in the human health risk assessments supporting these regulatory determinations. Many assessments also address potential exposure to pregnant women. In addition, the Agency will evaluate pesticides that are already in the market against current scientific standards for human health. To advance EPA's work supporting environmental justice (EJ) and children's health, EPA also will evaluate these registration requests with special consideration for impacts on members of overburdened communities and sensitive life stages, especially infants and children. Under the FQPA, EPA is statutorily required to ensure that its regulatory decisions are protective of children's health and other vulnerable subpopulations. EPA also will continue to emphasize the registration of reduced risk pesticides, including biopesticides, to provide farmers and other pesticide users with new, safer alternatives. The Agency, in collaboration with the U.S. Department of Agriculture (USDA), also will work to ensure that minor use registrations receive appropriate support and that needs are met for reduced risk pesticides for minor use crops. EPA also will assist farmers and other pesticide users in learning about new, safer products and methods of using existing products through workshops, demonstrations, small grants, and materials on the website and in print.

In FY 2024, EPA will continue to review the registrations of existing pesticides with a focus on assessing and ensuring that pesticides are used safely, without unreasonable adverse effects to human health and the environment. The goal of the registration review process, as mandated by statute, is to review pesticide registrations every 15 years to determine whether they continue to meet the FIFRA standard for registration.[232] With the reauthorization of PRIA5 on December 29, 2022, the deadline to complete the initial registration review of each pesticide or pesticide case was extended four years to October 1, 2026, and EPA will continue working on registration review cases in FY 2024. For pesticides registered before October 1, 2007, EPA is required to make registration review decisions by October 1, 2026. EPA will focus its FY 2024 resources on completing decisions for cases with the FY 2026 statutory deadline and on cases with 15-year due dates in FY 2024 and beyond. Regarding those registration review cases due by October 1, 2026, through FY 2023 Q1 EPA has completed opening dockets for all 726 cases in registration review. EPA has completed a total of 685 draft risk assessments and 582 final or interim decisions, with 41 draft risk assessments and 144 final or interim decisions remaining to be completed to meet the FY 2026 statutory deadline.

As EPA approaches the October 1, 2026 deadline, many of the remaining cases involve highly complex scientific and regulatory issues, which have resulted in requests from stakeholders to extend the comment periods for proposed decisions, lengthening the amount of time needed to complete the necessary reviews. In addition, EPA continues to await data and/or registrant input critical to finalizing several registration review decisions. Further ongoing challenges in

[232] For additional information please visit the EPA Pesticide Registration Internet site: https://www.epa.gov/pesticide-registration.

completing actions that are due in October 2026 and beyond include: delayed registrant submittal of additional data, the need for inter- and intra-agency coordination, resource constraints, and recent court decisions which may prevent EPA from taking action on issuing Interim Decisions.

In FY 2024, EPA will continue enhancements to the Pesticide Registration Information System (PRISM). Expanding the capabilities of PRISM by integrating more of EPA's regulatory workflow into a single system will reduce paperwork burden and maximize efficiency, in accordance with the President's Management Agenda (PMA), by converting paper-based processes into electronic processes and corresponding workflows for the Pesticide Program's regulated entities. In addition, PRISM will create an iterative/inclusive, streamlined electronic workflow to support pesticide product registration, chemical reviews, and assessments, and will be used as a centralized data repository to electronically store associated data as they relate to regulatory decisions and scientific information. Overall, the Agency projects that expanding PRISM and related projects will improve over 150 existing business process workflows supporting the implementation of PRIA. This digital transformation will consolidate over 30 different custom-built systems into a single platform to track registration or re-registration of a chemical from the moment EPA receives a case to the final regulatory decision. Being able to track all reviews in a single system will eliminate the need for hundreds of spreadsheets or Access databases that are currently used to track work at a team, branch, divisional, or office level. This transformation focuses on improving both the employee's experience and the customer experience.

Reducing Pesticide Risks to People through the Registration of Lower Risk Pesticides

In FY 2024, EPA will continue to promote reduced-risk pesticides by giving registration priority to pesticides that have lower toxicity to humans and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).[233] Several other countries and international organizations also have instituted programs to facilitate registering reduced-risk pesticides. EPA works with the international scientific community and the Organization for Economic Cooperation and Development (OECD) member countries to register new reduced-risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts, EPA will help reduce risks to Americans from foods imported from other countries. In FY 2024, EPA will continue to assist pesticide users in learning about new, safer products as well as safer methods for using existing products. Through its Center for IPM, educational webinars, science-based publications, informational social media outreach, and collaborations with federal partners, states, commodity and other non-governmental organizations, the Agency also will encourage the use of IPM tools, biological pesticides, and biotechnology where they present lower-risk solutions to pest problems.

Protecting Workers from On-the-Job Pesticide Risks

Millions of America's workers are exposed to pesticides in occupations such as agriculture, lawn care, food preparation, and landscape maintenance. A very large proportion of these workers are members of communities with EJ concerns. EPA's work in this area will be guided by Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through*

[233]For more information, please see: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program. Please also see EPA's IPM website: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles#for_more-information.

the Federal Government and, where regulatory action is taken, by the Agency's *Guidance on Considering Environmental Justice During the Development of an Action*[234] and its companion *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*.[235] Protecting pesticide applicators, handlers and agricultural workers from potential effects of pesticides is an important role of the Pesticide Program. Pesticide handlers in a number of sectors may be exposed to pesticides when they prepare pesticides for use, such as by mixing a concentrate with water or loading and applying the pesticide. In FY 2024, EPA will continue to support the implementation of the Agricultural Worker Protection Standard (WPS)[236] and the Certification of Pesticide Applicators (CPA)[237] rule through regulation development, guidance development, education and outreach, and grant programs. Efforts to implement the WPS include addressing EJ issues in rural communities, especially by considering farmworkers and their families. In FY 2024, following the FY 2023 publication of a proposed rule, EPA plans to finalize a rule for the WPS's Application Exclusion Zone provisions. Programs include a subaward program that supports community-based projects for the development of pesticide educational resources and training targeted toward agricultural workers and pesticide handlers. Efforts include addressing the education needs of the target audience to ensure trainings are effective and in the appropriate cultural context. As required by PRIA 5, EPA also will develop a grant program that considers stakeholder input to support healthcare providers in the recognition and management of pesticide-related illnesses. The grant program will focus on training health care providers serving the migrant and seasonal farmworker community, aiming to improve the treatment of agricultural workers and rural communities potentially exposed to pesticides. Support also will include efforts to improve reporting of occupation-related pesticide incidents. In addition, EPA will continue to support the development of resources, training, and educational forums for applicators, including the development of a virtual pesticide training for certification of private applicators in Indian Country covered under the EPA-administered plan to meet the requirements of using restricted use pesticides in agriculture.

Implementation of the CPA rule also includes continued support of state Pesticide Safety Education Programs, which play a crucial role in training and certifying pesticide handlers in proper pesticide use, thereby enabling the handlers to protect themselves and other workers, as well as the public and the environment. In FY 2024, EPA will focus on implementation of amended state, tribal, and federal certification programs based on the 2017 CPA rule. EPA will support that effort by providing technical assistance for updates to state/tribal applicator training materials including manuals, exams, and other recertification materials to meet the CPA rule requirements.

PRIA 5 amends FIFRA to require bilingual labeling on end use pesticide products for those parts of the label where translation exists in EPA's Spanish Translation Guide and provides a schedule for incremental implementation by registrants based on pesticide type and acute toxicity categories. EPA is directed to work with states on implementation and with stakeholders on ways to make these labels accessible to farmworkers, and to develop a plan to track adoption of the

[234] For more information, please see: https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justice-during-development-action.
[235] For more information, please see: https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis.
[236] For more information, please see: https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps.
[237] For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/revised-certification-standards-pesticide-applicators.

bilingual labeling. In FY24 EPA will continue the implementation of these bilingual labeling requirements.

Public Health Antimicrobials and Pandemic Preparedness

In FY 2024, the Pesticide Program will continue to update and modernize EPA's registered disinfectant lists. There are currently 16 disinfectant lists, lists A-Q, with different target public health microorganisms. The most viewed list, List N, contains disinfectants that are effective against SARS-CoV-2. The newest list, list Q, includes products that are effective against emerging viral pathogens including mpox (formerly monkeypox). A continued priority is to enhance search and sort functions for the disinfectant lists to enhance usability. OCSPP is also co-leading a PPDC (Pesticide Program Dialogue Committee) Emerging Viral Pathogens Workgroup to implement stakeholder recommendations and strategies for revisions to EPA's Emerging Viral Pathogen's guidance. In FY 2024, EPA expects to continue implementing recommendations from the Workgroup including but not limited to education through webinars and conferences on proper and effective antimicrobial pesticide use for different stakeholder groups (e.g., schools, food service, hospitality, etc.)

In FY 2024, the Pesticide Program is also working on policy and method updates that will expand the range of public health antimicrobial products available. We anticipate finalization of minimum testing criteria to support chemical air treatment claims for unoccupied spaces and posting for comment testing criteria for occupied spaces. There are very few registered antimicrobial products intended to treat the air, an important route of transmission from public health pathogens. In addition, the Pesticide Program anticipates finalization of a policy to expand virucidal claims to sanitizer products which were previously not eligible to have these claims. This policy change will be implemented with consideration of public of comment.

General Pesticide Outreach and Education

In FY 2024, the Pesticide Program will continue environmental education and training efforts for growers, pesticide applicators, and workers, as well as the public in general. Giving priority to reduced risk and Integrated Pest Management (IPM) friendly pesticides are two steps toward protecting human health. Also, the Pesticide Safety Education Program provides education through training and is a key component to the implementation of applicator certification programs across the nation, including on tribal lands and along the US-Mexico border, and helps ensure pesticides are used in a manner to protect human health and the environment. In addition, EPA will continue to make information easily accessible to the public and pesticide users, update safety information on pesticides, support the National Pesticide Information Center[238] that provides a bilingual hotline for pesticide information and develop outreach materials for the public and incident reporting.

Tribal Pesticide Program Council (TPPC)

The Pesticide Program will also continue to manage the Tribal Pesticide Program Council (TPPC) cooperative agreement. This national partnership group was formed in 1999 as a forum for tribes and Alaska Native Villages to work with EPA to address pesticide issues and concerns. The TPPC also provides a forum for tribes and Alaska Native Villages to provide input in developing policies that would strengthen their pesticide programs, provide guidance for tribes that do not have such programs, and provide networking opportunities and support for tribal pesticide regulators. In FY

[238] For additional information, please visit: http://npic.orst.edu/.

2024, EPA will continue to work with the TPPC to identify concerns related to EJ and climate change that EPA can begin to address.

Reducing Animal Testing

In FY 2024, the Agency will continue to use its guiding principles on data needs[239] to ensure that it has sufficient information to support strong regulatory decisions to protect human health, while reducing and, in some cases, eliminating unnecessary animal testing. EPA's Hazard and Science Policy Council (HASPOC) plays an important role in the implementation of the vision of the 2007 National Academy of Sciences (NAS) report on toxicity testing in the 21st Century—which recommended moving toward smarter testing strategies by waiving human health toxicity studies that do not provide useful information. Since its inception, HASPOC has waived hundreds of studies resulting in the saving of tens of thousands of animals and tens of millions of dollars without compromising the integrity of the science supporting EPA's regulatory decision-making for pesticides. In addition, the Agency will continue to develop and implement 21st Century toxicology and exposure methods, including additional retrospective analysis of the reproductive avian study, and the use of computer-modeling and in vitro testing techniques for acute oral toxicity, skin and eye irritation, and inhalation toxicity. All of these activities advance more efficient and effective human health risk assessments that support sound, risk-based, regulatory decision-making.

Related Metrics

In FY 2024, the Agency will be measuring performance for the second cycle of registration review, tracking intermediate stages such as docket openings, draft risk assessment completion, and final registration review case completions under the 15-year cycle of pesticide registration review. Additionally, EPA will be tracking metrics related to pesticide safety training of farmworkers funded through a 5-year cooperative grant; metric details will be provided by the grantee and will capture the number of farmworkers trained and knowledge comprehension based on pre- and post-training assessment.

Performance Measure Targets:

(PM WPS1a) Number of farmworkers receiving EPA-supported WPS pesticide safety training.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						20,000	12,000	12,000	Farmworkers
Actual						12,716			

(PM WPS1b) Percentage of content knowledge learned by farmworker/trainees upon completion of EPA-supported WPS pesticide training.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						95	95	95	Percent
Actual						96			

[239] Additional information on reducing animal testing may be found at: https://www.epa.gov/pesticides/new-epa-guidance-testing-pesticides-will-reduce-animal-testing.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$2,025.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$1,379.0) This program change is an increase for the modernization of the pesticides incident database where the regulated community reports human health and ecological incidents related to misuse of, or an unexpected adverse event related to pesticide usage. EPA plans to make this data more accessible to the public which requires a rebuild of the database to safeguard Personally Identifiable Information (PII) and other sensitive information.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

Pesticides: Protect the Environment from Pesticide Risk
Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$43,688***	***$48,704***	***$75,391***	***$26,687***
Science & Technology	$2,487	$2,334	$2,339	$5
Total Budget Authority	$46,175	$51,038	$77,730	$26,692
Total Workyears	312.7	259.6	282.1	22.5

Total program work years in FY 2024 include 53.2 FTE funded by the Reregistration and Expedited Processing Revolving Fund.

Program Project Description:

The goal of this program, authorized under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Act of 2022 (PRIA 5), is to protect the environment from the potential risks posed by pesticide use. To achieve this goal, EPA must conduct risk assessments before the initial registration of each pesticide for each use, as well as re-evaluate each pesticide at least every 15 years, as required by FQPA. This periodic review is accomplished through EPA's Pesticide Registration Review Program.[240] In addition to FIFRA responsibilities, the Agency has distinct obligations under the Endangered Species Act (ESA),[241] which include ensuring that pesticide regulatory decisions will not destroy or adversely modify designated critical habitat or jeopardize the continued existence of species listed as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) (jointly, "the Services").

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

Protection of Endangered Species

EPA is responsible for complying with the Endangered Species Act (ESA) and for ensuring that federally endangered and threatened species are not harmed from exposure when it registers pesticides. This presents a great challenge given that there are approximately 1,200 active ingredients in more than 17,000 pesticide products—many of which have multiple uses. Endangered species risk assessments are extraordinarily complex, national in scope, and involve comprehensive evaluations that consider risks to over 1,600 listed endangered species and 800

[240] FIFRA requires EPA to register a pesticide if, among other things, the product "will also not generally cause unreasonable adverse effects on the environment" when used in accordance with labeling and common practices.
[241] For additional information, please visit: https://www.epa.gov/endangered-species.

designated critical habitats in the U.S. with diverse biological attributes, habitat requirements, and geographic ranges.

Given the complexity of evaluating potential effects to diverse listed species under ESA, EPA has been subject to numerous successful litigation challenges to registration and registration review actions. This litigation has impacted EPA's ability to carry out its mission of protecting human health and the environment. In April 2022, EPA released a workplan outlining priorities for coming into compliance with ESA across the numerous types of actions it completes each year. In the short term and given its existing resources, EPA prioritized meeting its ESA obligations for all conventional new active ingredient applications whereby all new active ingredient registrations will only be registered under conditions that comply with ESA. EPA also continued to prioritize ESA determinations in response to litigation commitments and court decisions. The increase that EPA received in the FY 2023 enacted budget serves as initial funding which supports EPA in meeting these specific workplan commitments.

In November 2022, EPA released a Workplan Update that announced EPA's approach to incorporate additional ecological mitigations for non-target species, including listed species, into registration review processes. The Update also describes additional initiatives to make even faster progress on some of our ESA goals. In particular, the update describes multiple programmatic approaches to be conducted in FY2024 and beyond such as (1) developing mitigations for listed species that are particularly vulnerable to pesticides and applying them across pesticides, and (2) grouping pesticides such as insecticides for ESA analyses and early mitigations. EPA plans to continue to develop and expand on these programmatic approaches, which will ultimately reduce the Program's workload for future ESA environmental assessments and identification of mitigations for listed species for pesticide registration and registration review actions. [242]

In FY 2024, in order to continue to support EPA's priority ESA commitments and incrementally increase the extent to which EPA can integrate ESA mandates into the pesticide registration processes as described in the Workplan and Update, EPA requests an additional $24.7 million and 20 FTE for the Pesticide Program. As described above, these resources will enable EPA to make additional progress towards meeting our ESA obligations for an increased number of pesticide registrations and registration review decisions. This includes resources to ensure EPA can implement the mitigations required in biological opinions from the Services following completion of consultation and to develop tools to expedite the incorporation of measures to protect listed species in pesticide decisions. However, it still will not allow EPA to be in full ESA compliance for hundreds of pesticide registration and registration review actions it makes each year as well as those it has made over past decades, leaving these actions vulnerable to litigation, and limiting EPA's ability to protect human health and the environment.[243] These additional resources are needed to continue to demonstrate measured progress and increase EPA's ability to comply with its ESA obligations for pesticides.

In FY 2024, the Agency also will assess whether listed endangered or threatened species or their designated critical habitat may be affected by use of pesticide products in a manner described in

[242] For more information, please see: https://www.epa.gov/system/files/documents/2022-11/esa-workplan-update.pdf.
[243] For example, recently the Ninth Circuit Court of Appeals remanded to EPA for further consideration the interim registration review decision for glyphosate, the most widely used herbicide in the U.S., in part, due to noncompliance with the ESA.

reports to Congress.[244] Where effects are identified in a biological evaluation, EPA will continue to work with the Services in a consultation[245] process to ensure these new or existing pesticide registrations meet the ESA standard.[246] As required by the 2018 Farm Bill, EPA will continue to develop processes to protect listed species earlier in the regulatory and consultation processes as resources allow, and work with the Services, USDA, and other agencies to improve the consultation process and apply appropriate methods and exposure reduction measures to selected pesticide risk assessments.[247] EPA also will work with the Services towards developing approaches to conduct consultations programmatically which will also increase efficiency and reduce needed resources for EPA and the Services.

The Agency will continue to provide technical support for compliance with the requirements of the ESA. In FY 2024, EPA also will continue the advancement and integration of state-of-the-art science models, knowledge bases, and analytic processes to increase productivity and better address the challenge of potential risks of specific pesticides to specific species. Interconnection of the various databases within the Program also will provide improved support to the risk assessment process during registration review by allowing risk assessors to analyze complex scenarios more easily regarding endangered species. EPA also will continue to improve its system used to implement spatially explicit protections for listed species, *Bulletins Live! Two* (BLT).[248] EPA plans to continue to solicit and receive feedback on the usability of BLT, maintain and improve the underlying data, and enhance the usability of the system based on feedback as more bulletins continue to be created and released as part of registration and registration review decisions.

Assessing the Risks Pesticides Pose to the Environment

To accomplish the goals set out in FIFRA, in FY 2024, EPA will continue to conduct ecological risk assessments[249] to determine what risks are posed by each pesticide to plants, animals, and ecosystems that are not the targets of the pesticide and whether changes are necessary to protect these resources.[250] In FY 2024, EPA will continue to examine all toxicity and environmental fate data submitted with each new pesticide registration application to determine what risks the new active ingredient may pose to the environment. In FY 2024, EPA will continue to increase the number of pesticide registrations that include protections for federally threatened and endangered species under the Endangered Species Act (ESA). When complex scientific issues arise, the Agency may solicit external review, such as consultation with the FIFRA Scientific Advisory Panel,[251] for independent scientific advice.

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[244] For additional information, please visit: https://www.epa.gov/endangered-species/reports-congress-improving-consultation-process-under-endangered-species-act.

[245] For additional information, please visit: https://www.epa.gov/endangered-species/assessing-pesticides-under-endangered-species-act.

[246] Additional information on how EPA protects endangered species from pesticides can be found at: https://www.epa.gov/endangered-species.

[247] For more information, please see: https://www.epa.gov/endangered-species/epas-workplan-and-progress-toward-better-protections-endangered-species.

[248] For additional information, please visit: https://www.epa.gov/endangered-species/bulletins-live-two-blt-tutorial.

[249] For additional information, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/factsheet-ecological-risk-assessment-pesticides.

[250] Additional information may be found at: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.

[251] For additional information, please visit: https://www.epa.gov/sap.

Ensuring Proper Pesticide Use through Labeling

In FY 2024, EPA will continue to use pesticide labels to indicate what uses are appropriate and to ensure that the pesticide is used at the application rates and according to the methods and timing approved.[252]

Pesticide Registration Review

In FY 2024, EPA's activities will involve increased efforts on comprehensive risk assessments to protect the environment. With the reauthorization of PRIA on December 29, 2022, the deadline to complete the initial Registration Review of each pesticide or pesticide case was extended four years to October 1, 2026, and EPA will continue working on registration review cases in FY 2024. For pesticides registered before October 1, 2007, EPA is required to make registration review decisions by October 1, 2026. EPA has completed opening dockets for all 726 cases in registration review. EPA will focus its FY 2024 resources on completing decisions for cases that meet the FY 2026 statutory deadline and on cases with 15-year due dates in FY 2024 and beyond. Through FY 2023 Q1, EPA has completed a total of 685 draft risk assessments and 582 final or interim decisions, with 41 draft risk assessments and 144 final or interim decisions remaining to be completed to meet the FY 2026 statutory deadline.

As EPA approaches the October 1, 2026, deadline, many of the remaining cases involve highly complex scientific and regulatory issues, which has resulted in requests from stakeholders to extend the comment periods for proposed decisions, lengthening the amount of time needed to complete the necessary reviews. In addition, EPA continues to await data and/or registrant input critical to finalizing several registration review decisions. Further ongoing challenges in meeting the FY 2026 deadline include delayed registrant submittal of additional data, the need for inter- and intra-agency coordination, and resource constraints.

Pesticide Registration and Risk Reduction Through the Use of Safer Pesticides and Methods

In FY 2024, EPA will continue to promote reduced-risk pesticides by giving registration priority to pesticides that have lower toxicity to people and non-target organisms such as birds, fish, and plants; low potential for contaminating groundwater; lower use rates; low pest resistance potential; and compatibility with Integrated Pest Management (IPM).[253,254] Several other countries and international organizations also have instituted programs to facilitate registering reduced-risk pesticides. EPA works with the international scientific community and the Organization for Economic Cooperation and Development (OECD) member countries to register new reduced-risk pesticides and to establish related tolerances (maximum residue limits). Through these efforts, EPA will help reduce risks to Americans from foods imported from other countries. In FY 2024, EPA will continue to assist pesticide users in learning about new, safer products as well as safer methods for using existing products. Through its Center for IPM, educational webinars, science-based publications, informational social media outreach, and collaborations with federal partners,

[252] Under FIFRA, it is illegal to use a registered pesticide in a manner inconsistent with the label instructions and precautions.

[253] Attaining risk reduction would be significantly hampered without availability of alternative products to these pesticides for consumers. Consequently, the Registration Program's work in ensuring the availability of reduced risk pesticides plays a significant role in meeting the environmental outcome of improved ecosystem protection. For additional information on pesticide risk, please visit: https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program.

[254] For additional information on IPM, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.

states, commodity and other non-governmental organizations, the Agency also will encourage the use of IPM tools, biological pesticides, and biotechnology where they present lower-risk solutions to pest problems.

Reducing Animal Testing

In FY 2024, EPA will continue its efforts to promote the use of alternative methods to whole animal toxicity testing for characterizing the effects of pesticide active ingredients on terrestrial and aquatic vertebrates. EPA also will continue its partnership with the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM). A focus area will be the evaluation of Collaborative Acute Toxicity Modeling Suite (CATMoS) estimates of acute oral toxicity to potentially replace mammal testing in ecological risk assessment. EPA also will complete an evaluation of the feasibility of reducing the number of tested species of fish used to characterize acute effects. This effort is expected to complement EPA's work with other federal agencies to collect, describe, and develop performance-based evaluations for a suite of *in-silico* and *in-vitro* methods for estimating acute lethal endpoints in fish. By addressing both the endpoint needs and the available estimation tools concurrently, EPA expects to increase the efficiency of performance evaluation and narrow the scope of needed estimation methods for consideration, thereby expediting the acceptance process. Additionally, through stakeholder discussions and participation in intergovernmental working groups, the Agency will work to identify opportunities to reduce the use of animals in ecological hazard testing. EPA also will reach out to non-governmental organizations to collaborate on projects (*e.g.,* to retrospectively analyze the results of ecological hazard testing). Based on the results of those projects, EPA will then develop and disseminate guidance materials for companies to clarify ecotoxicology testing requirements/needs.

Minimizing Environmental Impacts through Outreach and Education

Through public outreach, the Agency will continue to encourage the use of IPM and other practices to maximize the benefits pesticides can yield while minimizing their impacts on the environment. As a continued requirement of the Office of Chemical Safety and Pollution Prevention's National Program Guidance, regional pesticide offices will initiate specific IPM-related projects that target disadvantaged communities, or vulnerable populations, such as children attending preschools and tribal schools. The Agency also will develop and disseminate pesticide safety brochures, videos, links, and webinars which provide education on potential benefits of IPM and promote outreach through its Center for IPM on the success of IPM to encourage its use.[255] To encourage responsible pesticide use that does not endanger the environment, EPA also will reach out to the public through its website and social media accounts, and to workers and professional pesticide applicators through worker training programs. The Pesticide Safety Education Program[256] provides education to professional pesticide applicators through training and is a key component to the implementation of applicator certification programs across the nation and helps ensure pesticides are used in a manner to protect human health and the environment.

Pollinator Protection

Bees and other pollinators play a critical role in ensuring the production of food. USDA is leading the federal government's effort to understand the causes of declining pollinator health and identify

[255] For additional information, please visit: https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles.
[256] For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/pesticide-safety-education-programs-0.

actions that will improve pollinator health. EPA is part of this effort and is focusing on the potential role of pesticides while ensuring that the pesticides used represent acceptable risks to pollinators and that products are available for commercial beekeepers to manage pests that impact pollinator health.

EPA continues to carefully evaluate potential effects that pesticides may have on bees through the registration of new active ingredients and registration review, in cooperation with the Government of Canada and the California Department of Pesticide Regulation. EPA is continuing to work with USDA to identify and address factors associated with declines in pollinator health. EPA also has been working with a wide range of stakeholders in the government and private sectors, both domestically and internationally, to develop and implement strategies to address factors associated with pollinator declines and to ensure that the best available science serves as a foundation for regulatory decisions. EPA is currently updating the estimated burden for collecting the suite of honeybee data.

In FY 2024, EPA also will continue to apply the best available science and risk management methods to reduce potential exposures to pollinators from pesticides.[257] In addition, some of the endangered species protection work described previously will protect pollinators. For example, several of the pilot ESA-FIFRA projects to identify mitigations for pesticides early in the registration review process are intended to result in protections to several pollinator species as well as protections for plants that provide sustenance for pollinator species.

Protection of Water Resources

Reduced concentration of pesticides in water sources is an indication of the effectiveness of EPA's risk assessment, management, mitigation, and communication activities. In FY 2024, the Agency will continue to evaluate monitoring data as it prepares aquatic exposure assessments and will continue to apply risk management measures, when appropriate, to reduce pesticide loadings in water. EPA also will update aquatic benchmarks so that states and other stakeholders can determine if measured pesticide levels might impact aquatic life. Water quality is a critical endpoint for measuring exposure and risk to the environment and a key factor in assessing EPA's ability to reduce exposure from these key pesticides of concern.[258]

Performance Measurement

In FY 2024, the Agency will be measuring performance for the registration review cases with 15-year due dates in FY 2024 and beyond, tracking intermediate stages such as docket openings, draft risk assessment completion, and final registration review case completions under the 15-year cycle of pesticide registration review. The Agency expects to improve protections to endangered species by increasing the percentage of new active ingredient registrations and registration review risk assessments that incorporate considerations of threatened and endangered species and leverage those improvements for other related processes in subsequent years (*e.g.*, new uses).

[257] Additional actions EPA is taking to protect pollinators from pesticides can be found at: https://www.epa.gov/pollinator-protection.

[258] The most sensitive aquatic benchmarks for the chemicals are posted on the website: http://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/aquatic-life-benchmarks-pesticide-registration.

Performance Measure Targets:

(PM ESA1) Percentage of risk assessments supporting pesticide registration decisions for new active ingredients that consider the effects determinations or protections for federally threatened and endangered species.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						40	80	90	Percent
Actual				50	62	100			
Numerator				8	8	14			Risk Assessments
Denominator				16	13	14			

(PM ESA2) Percentage of risk assessments supporting pesticide registration review decisions that include effects determinations or protections of federally threatened and endangered species.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						20	30	30	Percent
Actual				27		79			
Numerator				29		27			Risk Assessments
Denominator				107		34			

(PM FIFRA3a) Number of pesticide registration review cases completed with statutory due dates that fall after October 1, 2022.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						15	8	14	Cases
Actual						16			

(PM FIFRA3b) Number of pesticide registration review dockets opened for registration review cases with statutory completion dates that fall after October 1, 2022.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						25	20	28	Dockets
Actual						35			

(PM FIFRA3c) Number of draft risk assessments completed for pesticide registration review cases with statutory completion dates that fall after October 1, 2022.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						9	16	19	Draft Assessments
Actual						25			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,465.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$24,726.0 / +20.0 FTE) This program change supports an increase in available funding and FTE for EPA to implement Endangered Species Act (ESA) considerations into pesticide regulatory decisions, including ESA compliance for all new active ingredient registrations. These additional resources will allow EPA to continue to train employees and develop the regulatory processes, strategies, and approaches to allow EPA to come into fuller compliance with ESA. This includes $3.764 million in payroll.

- (+$496.0 / +2.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This includes $471.0 thousand in payroll.

Statutory Authority:

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Endangered Species Act (ESA).

Pesticides: Realize the Value of Pesticide Availability
Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$7,022***	***$7,637***	***$8,234***	***$597***
Science & Technology	$941	$925	$1,002	$77
Total Budget Authority	$7,963	$8,562	$9,236	$674
Total Workyears	32.7	35.8	35.8	0.0

Program Project Description:

This program seeks to realize the value of pesticides that can be used safely to yield many benefits, such as killing viruses and bacteria in America's hospitals. These benefits also include guarding the Nation's abundant food supply, protecting the public from disease-carrying pests, and protecting the environment from the introduction of invasive species from other parts of the world. In fulfilling its mission, the Program manages the following types of pesticide registrations and regulatory actions under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA):[259]

- Special Local Needs under FIFRA Section 24(c).
- Federal registrations at the national level under FIFRA Section 3.
- Experimental Use Permit Section 5.
- Emergency, Quarantine, and Crisis Exemption Section 18; and,
- Periodic review of existing chemicals under the Registration Review Program.[260]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

Meeting Agriculture's Need for Safe, Effective Pest Control Products

With the passage of the Food Quality Protection Act (FQPA), Congress acknowledged the importance of and need for "reduced-risk pesticides" and supported expedited agency review to help these pesticides reach the market sooner and replace other pesticides of higher risk.[261] In FY

[259] The primary federal law that governs how EPA oversees pesticide manufacture, distribution, and use in the United States is the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Originally enacted in 1947, FIFRA has been significantly amended several times, including by the Food Quality Protection Act of 1996 (FQPA) and the Pesticide Registration Improvement Extension Act of 2018 (PRIA). FIFRA requires that EPA register pesticides based on a finding that they will not cause unreasonable adverse effects to people and the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide.

[260] Additional information may be found here: https://www.epa.gov/pesticide-registration/types-registrations-under-fifra.

[261] The law defines a reduced risk pesticide as one that "may reasonably be expected to accomplish one or more of the following: (1) reduces pesticide risks to human health; (2) reduces pesticide risks to non-target organisms; (3) reduces the potential for

2024, EPA will continue to support and develop procedures and guidelines for expedited review of applications for registration or amendments for reduced risk pesticides.

Registration of Generic Pesticides

FIFRA authorizes EPA to register products that are identical to or substantially similar to already registered products (also known as "me too products"). Applicants for these products may rely on, or cite data already submitted by another registrant. The entry of these new products into the market can cause price reductions resulting from new competition and broader access to products, benefitting farmers and consumers. The Agency will continue to prioritize and review generic registrations consistent with the statutory decision-making schedule. Application submissions for these actions can generally be reviewed in four months. The Agency completed 1,656 "me too" new products and amendments in FY 2021. The Agency expects to complete a similar volume of registrations in FY 2024.

Outreach and Education

The Pesticide Program is invested in outreach and training efforts for people who use pesticides and the public in general. In FY 2024, the Agency will continue to encourage Integrated Pest Management (IPM), which emphasizes minimizing the use of broad-spectrum chemicals and maximizing the use of sanitation, biological controls, and selective methods of application. Providing on-the-ground assistance to our partners, EPA's regional offices work with states, tribes, and territories to implement their pesticide programs and carry out IPM projects that inform pesticide users about the pest control options, which pesticides to use, how to use them, and how to maintain the site so pests do not return. In addition, the Pesticide Program and its Center for IPM will provide outreach through webinars on a range of pest management and pollinator protection topics, many of which are of importance in areas with environmental justice (EJ) concerns and tribal communities.

Review and Registration

During FY 2024, EPA will continue to review and register new pesticides and new uses for existing pesticides, and act on other registration requests in accordance with FIFRA and Federal Food, Drug, and Cosmetic Act standards, as well as Pesticide Registration Improvement Extension Act timeframes. Many of these actions will be for reduced-risk conventional pesticides and biopesticides, which, once registered and used by consumers, will increase societal benefits, including for infants and children as well as susceptible subpopulations. Working together with the affected communities, through IPM and related activities, the Agency plans to accelerate the adoption of lower-risk products.

The Agency's work harmonizing pesticide tolerance levels with our top trade partners will reduce international trade barriers. For FY 2024, EPA will undertake regulatory decisions on an estimated seven new chemicals with food uses. For each of these evaluations, EPA will consider whether there are existing Maximum Residue Levels (MRLs) set by trade partners and whether the science supports harmonizing with those levels in which tolerance harmonization will be a component of a portion of these decisions. Also, during FY 2024, EPA will continue rulemaking and implementation efforts to improve its crop group system which provides the regulatory definitions

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contamination of valued, environmental resources, or (4) broadens adoption of Integrated Pest Management (IPM) or makes it more effective."

for crops which are in inter-state and international commerce, such as Phase VI of its proposed revisions to pesticide tolerance crop group regulations.

Emergency, Quarantine, and Crisis Exemptions

In FY 2024, EPA will continue to prioritize emergency exemptions under FIFRA Section 18, which authorizes EPA to allow an unregistered use of a pesticide for a limited time in the event of an emergency, such as a severe pest infestation, public health emergency, or invasive pest species quarantine. The economic benefit of the Section 18 Program to growers is the avoidance of losses incurred in the absence of pesticides exempted under FIFRA's emergency exemption provisions. In addition, exemptions serve as important public health controls to avert pests that may cause significant risk to human health. In FY 2021 the Agency received 76 requests for emergency uses; and EPA has received 30 requests for emergency uses in FY 2022 to date. Although emergency exemption submissions cannot be precisely predicted, EPA estimates it may receive approximately 45 requests in FY 2024.

Performance Measurement

In FY 2024, the Agency will be measuring performance for the registration review cases with 15-year due dates in FY 2024 and beyond, tracking intermediate stages such as docket openings, draft risk assessment completion, and final registration review case completions under the 15-year cycle of pesticide registration review. The Agency expects to improve protections to endangered species by increasing the percentage of new active ingredient registrations and registration review risk assessments that incorporate considerations of threatened and endangered species and leverage those improvements for other related processes in subsequent years (*e.g.*, new uses). Per its policy released in January 2022, EPA anticipates registering new conventional active ingredients only under conditions that are compliant with ESA. Additionally, EPA will be tracking metrics related to pesticide safety training of farmworkers funded through a 5-year cooperative grant; metric details will be provided by the grantee and will capture the number of farmworkers trained and knowledge comprehension based on pre- and post-training assessment.

Performance Measure Targets:

Work under this program supports performance results in the Pesticides: Protect the Environment from Pesticide Risk Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$295.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$302.0) This program change is an increase that supports enhancement of pesticides registration processes for the program.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug, and Cosmetic Act (FFDCA) § 408.

Science Policy and Biotechnology
Program Area: Pesticides Licensing
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$1,185***	***$1,811***	***$1,627***	***-$184***
Total Budget Authority	$1,185	$1,811	$1,627	-$184
Total Workyears	3.7	4.6	4.6	0.0

Program Project Description:

The Science Policy and Biotechnology Program provides scientific and policy expertise supporting independent, external scientific peer review of matters related to pesticides and toxic substances, including biotechnology. The Program primarily supports two federal advisory committees: the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (FIFRA SAP), and the Science Advisory Committee on Chemicals (SACC) established under the 2016 amendments to the Toxic Substances Control Act (TSCA). The FIFRA SAP and the SACC are both statutorily mandated, chartered Federal Advisory Committees drawing from a balanced range of non-EPA scientists and technical specialists from, for example, academia, other federal government agencies, states, non-governmental organizations, and industry. These Committees provide the EPA's Administrator independent advice and objective scientific peer review on the technical aspects of pesticide and toxic substance issues as well as the science used to establish guidelines and regulations, as requested. The scientific peer review conducted under this program promotes coordination among EPA programs including but not limited to pesticides, toxic substances, air, water, and research and development, facilitating coherent and consistent scientific policy from a broad Agency perspective.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*. In FY 2024, the Science Policy and Biotechnology Program will continue to support the peer review of the scientific and technical issues associated with pesticide and chemical safety. In addition, other science policy issues will be supported by the Program when decisions require expert scientific advice from an independent scientific peer review panel (*e.g.,* biotechnology and new approach methodologies).

FIFRA Scientific Advisory Panel
The FIFRA SAP, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's pesticide programs. As the Nation's primary pesticide regulatory agency, EPA makes decisions that require EPA to review scientific data on pesticide risks to wildlife, farmworkers,

pesticide applicators, sensitive and vulnerable populations, ecosystems, and the general public. The scientific data involved in these decisions are complex. A critical component of EPA's use of the best available science to address such issues is seeking technical advice and scientific peer review from the FIFRA SAP.

The FIFRA SAP conducts reviews each year on a variety of scientific topics. Specific topics to be placed on the FIFRA SAP agenda are usually confirmed in advance of each session and include difficult, new, or controversial scientific issues identified in the course of EPA's pesticide program activities. In early FY 2023, EPA appointed two new members and reappointed one existing member of the FIFRA SAP. One FIFRA SAP meeting is planned for late FY 2023. Consistent with the FIFRA SAP Charter, EPA anticipates convening approximately five FIFRA SAP meetings in FY 2024. These meetings will focus on the impact of pesticides on human health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

Science Advisory Committee on Chemicals

The SACC, operating under the rules and regulations of the Federal Advisory Committee Act, will continue to serve as the primary external independent scientific peer review mechanism for EPA's chemical safety programs. EPA makes decisions that require the Agency to review scientific data on risks that chemicals pose to a variety of populations including women, children, and other potentially exposed or susceptible subpopulations. The scientific data, assessments, methodologies, and measures involved in these decisions are complex. Many of EPA's tools and models for examining exposures to industrial chemicals rely on inputs that are sensitive to climate data. The SACC provides independent, expert scientific advice and recommendations to EPA on the scientific basis for risk assessments, methodologies, and pollution prevention measures and approaches for chemicals regulated under the Toxic Substances Control Act (TSCA) and is a critical component of EPA's use of the best available science to protect human health and the environment.

The SACC conducts reviews each year on a variety of scientific topics. Similarly, to the FIFRA SAP, specific topics to be placed on the SACC agenda include difficult, new, or controversial scientific issues identified in the course of EPA's chemicals program activities. Two SACC meetings are planned for mid- and late FY 2023. In addition, EPA anticipates appointing eight new SACC members in late FY 2023. Consistent with the SACC Charter, EPA anticipates convening approximately four to six SACC meetings in FY 2024. These meetings will focus on the impact of industrial chemicals on human health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

Planned Committee Meetings

Based on the estimates reflected in the 2022-2024 committee charters,[262] EPA anticipates convening up to a total of nine to 11 meetings in FY 2024. These meetings will focus on the impact of pesticides and chemicals on human health and the environment and include the peer review of scientific data, methodologies, models, and assessments, as needed.

[262] For additional information, please visit: https://www.epa.gov/sap/fifra-scientific-advisory-panel-charter and https://www.epa.gov/tsca-peer-review/science-advisory-committee-chemicals-charter.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$3.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$181.0) This program change is a decrease that will reduce support of science advisory committee oversight.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Federal Food, Drug and Cosmetics Act (FFDCA), §408; Toxic Substances Control Act (TSCA); Federal Advisory Committee Act (FACA).

Resource Conservation and Recovery Act (RCRA)

RCRA: Corrective Action

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$43,061***	***$40,512***	***$41,669***	***$1,157***
Total Budget Authority	$43,061	$40,512	$41,669	$1,157
Total Workyears	169.4	174.9	174.4	-0.5

Program Project Description:

To reduce risks from exposure to hazardous wastes, EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Program ensures that contaminated facilities subject to RCRA requirements are cleaned up by the responsible party, returns contaminated property to productive use, and keeps costs from being transferred to the taxpayer-funded portion of the Superfund Program. Implementing the Program's 2030 Goals[263] and RCRA Corrective Action regulations and administrative orders, EPA and authorized states will continue to oversee cleanups conducted by facility owner/operators to ensure that the facilities meet their cleanup obligations and to protect taxpayers from having to pay the bill. RCRA cleanups contribute many environmental and economic benefits to their communities. A recent EPA analysis of 79 RCRA cleanups showed that these facilities support 1,028 on-site businesses providing economic benefits including $39 billion in annual sales revenue, over 82,000 jobs, and $7.9 billion in estimated annual employment income.[264] Approximately 113 million Americans live within three miles of a RCRA corrective action facility (roughly 35 percent of the U.S. population),[265] and the total area covered by these corrective action sites is approximately 18 million acres.[266]

EPA works in close partnership with 44 states and one territory authorized to implement the Corrective Action Program[267] to ensure that cleanups protect human health and the environment. The Corrective Action Program allows for the return of properties to beneficial use, which benefits the surrounding communities, reduces liabilities for facilities, and allows facilities to redirect resources to productive activities. The Agency provides program direction, leadership, and support to its state partners. This includes specialized technical and program expertise, policy development for effective program management, national program priority setting, measurement and tracking, training and technical tools, and data collection/management/documentation. In addition, through

[263] U.S. EPA, Office of Resource Conservation and Recovery, 2020. RCRA Corrective Action Program Vision/Mission/Goals for 2030. https://www.epa.gov/sites/default/files/2020-09/documents/rcra_corrective_action_program_vision.pdf.
[264] U.S. EPA, Office of Resource Conservation and Recovery, 2022. Summary of 2021 RCRA Corrective Action Economic Benefits Study and Research Methodology.
[265] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: 1) RCRA CA site information as of the end of FY2020; and 2) population data from the 2015-2019 American Community Survey.
[266] Compiled RCRAInfo data.
[267] State implementation of the Corrective Action Program is funded through the STAG Categorical Grant: Hazardous Waste Financial Assistance and matching state contributions.

work-sharing, the Agency serves as lead or support for a significant number of complex and challenging cleanups in both non-authorized and authorized states.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Corrective Action Program will focus its resources on continuing cleanup of 3,983 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites, and on assessing others to determine whether cleanups are necessary. As of the end of FY 2022, only 41 percent of these facilities have completed final and permanent cleanups, leaving approximately 2,300 facilities still requiring oversight and technical support to reach final site-wide cleanup objectives. In FY 2022, EPA approved 124 RCRA corrective action facilities as ready for anticipated use (RAU), bringing the total number of RCRA RAU facilities to 1,922. In addition, in FY 2022 the Program achieved remedy construction at 55 facilities, resulting in a total of 2,896 with remedies constructed, and achieved performance standards attained at 66 facilities, resulting in a total of 1,653 facilities with standards attained.[268] The Program's goals are to control human exposures, control migration of contaminated groundwater, complete final cleanups for the Corrective Action Progress Track facilities, and identify, assess, and clean up additional priority facilities.

In FY 2024, EPA will:

- Continue to make RCRA corrective action sites RAU, ensuring that properties are returned to productive use and human health and the environment are protected into the future.

- Assess its universe of cleanup facilities, priorities, and measures to ensure that resources are directed to addressing those facilities that present risk to human health and the environment and supporting environmental justice and climate resiliency.

- Provide technical assistance to authorized states in the areas of site characterization, sampling, remedy selection, reaching final cleanup goals, and long-term stewardship for cleanups with contamination remaining in place in order to support communities at risk from multiple health stressors and/or climate change impacts.

- Prioritize and focus the Program on completing site investigations to identify the most significant threats, establishing interim remedies to reduce or eliminate exposure, and selecting and constructing safe, effective long-term remedies that also maintain the economic viability of operating facilities.

- For high priority facilities, utilize oversight tools and work-sharing agreements to assist with facilities that have complex issues[269] or special tasks.

[268] For more information, please refer to: https://www.epa.gov/hw/lists-facilities-resource-conservation-and-recovery-act-rcra-2020-corrective-action-baseline.
[269] For example, vapor intrusion, wetlands contamination, or extensive groundwater issues.

- Continue to improve cleanup approaches and share best practices and cleanup innovations[270] to speed up and improve cleanups.

- Complete rulemaking to clarify that the definition of hazardous waste found in RCRA section 1004(5) is applicable to corrective action for releases from solid waste management units.

- Update and maintain RCRAInfo, which is the primary data system that many states rely upon to manage their RCRA permitting, corrective action, and hazardous waste generator programs. RCRAInfo receives data from hazardous waste handlers for the National Biennial RCRA Hazardous Waste Report. The data from the 2021 biennial reporting cycle showed there were 19,141 generators of over 36 million tons of hazardous waste. RCRAInfo provides the only national-level RCRA hazardous waste data and statistics to track the environmental progress of approximately 20,000 hazardous waste units at 6,600 facilities.

- Contribute to efforts ensuring the proper management, disposal, and cleanup of per- and polyfluoroalkyl substances (PFAS).

Performance Measure Targets:

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target			98	98	73	55	55	52	Facilities
Actual	67	70	80	64	57	55			

(PM RSRAU) Number of RCRA corrective action facilities made Ready for Anticipated Use.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		75	91	117	133	114	100	85	Facilities
Actual	72	117	127	169	146	124			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,245.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$88.0 / -0.5 FTE) This program change reduces FTE support for RCRA Corrective Action activities including cleanups. This includes a reduction of $88.0 thousand for payroll.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3004, 3005, 8001.

[270] For more information, please refer to: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

RCRA: Waste Management

Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$77,838***	***$75,958***	***$90,634***	***$14,676***
Hazardous Waste Electronic Manifest System Fund	$12,482	$0	$0	$0
Total Budget Authority	$90,320	$75,958	$90,634	$14,676
Total Workyears	299.1	303.8	349.3	45.5

Total workyears in FY 2024 include 11.0 FTE funded by e-Manifest fees.
All actuals from the Hazardous Waste Electronic Manifest System Fund are funded by user fees.

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) established EPA's role as a federal leader in the conservation and recovery of resources. Under RCRA, EPA sets national standards for managing solid and hazardous wastes and provides federal agencies, state, tribal, and local governments, and industries with technical assistance on solid waste management, resource recovery, and resource conservation. Approximately 60,000 facilities generate and safely manage hazardous waste in the United States.[271] Eighty percent of the U.S. population live within three miles of one of these facilities, making national standards and procedures for managing hazardous wastes a necessity.[272]

The Waste Management Program safeguards the American people while facilitating commerce by supporting an effective waste management infrastructure. Cradle-to-grave hazardous waste management regulations help ensure safe management practices through the entire process of generation, transportation, recycling, treatment, storage, and final disposal. The Program increases the capacity for proper hazardous waste management in states by providing grant funding and technical support.

The RCRA permitting program serves to protect the millions of people in surrounding communities by facilitating clean closure where applicable and managing permits and other controls to protect human health and the environment for the approximately 6,700 hazardous waste units (*e.g.*, incinerators, landfills, and tanks) located at 1,300 permitted treatment, storage, and disposal facilities.[273] Just as businesses innovate and grow, the waste management challenges they

[271] Memorandum, February 18, 2014, from Industrial Economics to EPA, Re: Analysis to Support Assessment of Economic Impacts and Benefits under RCRA Programs: Key Scoping Assessment, Initial Findings and Summary of Available Data (Section 1), pages 5-11.
[272] U.S. EPA, Office of Solid Waste and Emergency Response Estimate. 2014. Data collected includes: 1) site information as of the end of FY 2011 from RCRAInfo; and 2) census data from the 2007-2011 American Community Survey.
[273] As compiled by RCRAInfo.

face also evolve; this requires new direction and changes in the federal hazardous waste program through updated regulations, guidance, and other tools.

EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the remaining states and territories authorized to implement the permitting program. Additionally, the Toxic Substances Control Act (TSCA) polychlorinated biphenyls (PCB) cleanup and disposal program is implemented under the Waste Management Program to reduce PCB exposure from improper disposal, storage, and spills. The Program reviews and approves PCB cleanup, storage, and disposal activities. This federal authority is not delegated to state programs. PCBs were banned in 1979, but legacy use and contamination still exists, and PCBs can still be released into the environment from poorly maintained hazardous waste sites that contain them.

Maintaining updated permits and controls ensures that facilities: 1) have consistent and protective standards to prevent release; 2) have proper standards for waste management to protect human health and prevent land contamination/degradation; and 3) avoid future cleanups and associated substantial costs. EPA will work with authorized states to ensure that permit decisions, including decisions to issue, renew, or deny permits, reflect the latest technology and standards. EPA also will work with authorized states to ensure that all communities, including those who are marginalized and overburdened, have an equitable opportunity to engage in the permitting process.

States, tribes, territories, communities, and RCRA facilities are beginning to experience impacts from climate change, such as extreme weather and wildfires, and these impacts are expected to increase in the future. EPA is working to implement the EPA Climate Adaptation Action Plan;[274] increase resilience of Corrective Action, PCB, and RCRA permitted facilities to extreme weather events and sea level rise; improve PCB guidance during emergency situations; assist municipalities with natural disaster preparedness and debris management planning; and strengthen the capacity of states, tribes, territories, communities, and businesses to adapt to climate change.

Where communities adversely impacted by environmental conditions are advocating for more transparency or involvement in decision-making or where the trust is strained, providing enhanced, tailored engagement through the Community Engagement and Technical Assistance (CETA) program will allow EPA to build a better bridge between the region, state, facility, and community. The CETA program serves as the vehicle to deliver risk communications, technical assistance, and engagement support to fenceline and overburdened communities, ensuring equitable access and the opportunity to participate in environmental decisions that impact their health and wellbeing.

There continues to be increased public and congressional attention to issues around post-consumer materials management, especially plastics, in the environment and EPA's role in addressing them (*e.g.*, marine litter prevention and reduction, environmental justice concerns in countries to which the U.S. exports plastics, and the climate impacts of single-use plastics). Marine litter and plastic pollution is an increasingly prominent global problem that can negatively affect public health, the

[274] For additional information, please see: https://www.epa.gov/system/files/documents/2021-09/epa-climate-adaptation-plan-pdf-version.pdf, https://www.epa.gov/system/files/documents/2022-10/bh508-OLEM%20CAIP_August%202022_POST_OGCreview_9.12.2022.pdf.

environment, and the economy. Most marine litter and plastic is from land-based sources and makes its way into our waterways and ultimately to the ocean, creating a direct link between waste management practices and ocean pollution.[275] The Save Our Seas 2.0 Act,[276] enacted in December 2020, was passed with bipartisan congressional support and provides EPA with authority to further act on post-consumer materials management.

The Program also plays a central role in establishing and updating standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment. This work provides the foundation that underlies waste management approaches and ensures that method standards evolve with technology for conducting these analyses.

In addition to overseeing the management of hazardous waste under RCRA Subtitle C, EPA also plays a role in solid waste management under Subtitle D. While much of this area is delegated to the states, EPA is actively working on aspects of coal combustion residuals (CCR) under this area of the law, including the establishment and refinement of appropriate regulations and, as directed by the 2016 Water Infrastructure Improvements for the Nation Act (WIIN Act), the development of a new federal permitting program for CCR surface impoundments and landfills. In implementing regulations for CCR, EPA is taking action to ensure that the concerns of nearby communities are addressed in a protective manner.

While the majority of the work is focused on domestic issues, the Program also is responsible for issues related to international movement of wastes. EPA oversees the notification and consent process for hazardous waste imports and exports. Most of these movements are for recycling and, thus, are critical to resource conservation. In coordination with other agencies and departments, EPA represents the U.S. Government in numerous international forums concerned with waste issues. This representation is vital to protecting U.S. interests and furthering U.S. policy goals.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an additional $14.7 million and 45.5 FTE for the RCRA Waste Management Recycling Program. The Program will:

- Provide technical assistance, guidance, tools, and support to regions, states, and tribes regarding the development and implementation of solid waste programs (*e.g.*, the RCRA hazardous waste generator, transporter, treatment, storage, and disposal regulations and implementing guidance; the RCRA non-hazardous waste program; the TSCA PCB disposal and cleanup program; and the hazardous waste import/export program).

[275] U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, "Ten Things you should Know about Marine Debris," https://oceanservice.noaa.gov/news/marinedebris/ten-things.html.
[276] For additional information, please refer to: https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf.

- Enhance risk communications and deliver technical assistance support directly to communities, particularly fenceline communities, with environmental concerns related to RCRA facilities.

- Provide technical and implementation assistance, oversight, and support to facilities that generate, treat, store, recycle, and dispose of hazardous waste.

- Review and approve PCB cleanup, storage, and disposal activities to reduce exposures, particularly in sensitive areas like schools and other public spaces. Issuing PCB approvals is a federal responsibility, non-delegable to states.

- Manage and monitor the RCRA permitting program and ensure the issuance of permits efficiently to achieve program goals. This includes progress towards meeting the Agency's goal of increasing the percentage of permits kept up to date for the approximately 6,700 hazardous waste units (*e.g.,* incinerators, landfills, and tanks) located at 1,300 permitted treatment, storage, and disposal facilities.

- Implement the EPA Climate Adaptation Action Plan and provide technical assistance and guidance to strengthen the capacity of states, tribes, territories, communities, and facilities to adapt to climate change.

- Continue analysis of existing regulations to ensure protective standards for managing solid and hazardous waste and PCBs. In FY 2024, this includes assessment of standards related to open burning/open detonation of hazardous waste, PCB cleanup and disposal, and other regulatory amendments to reflect current standards, policies, and practices.

- Manage the hazardous waste import/export notice and consent process in order to make shipping hazardous waste across borders more efficient. Managing hazardous waste imports and exports is a federal responsibility, non-delegable to states.

- Provide technical hazardous waste management assistance to tribes to encourage sustainable practices and reduce exposure to toxins from hazardous waste.

- Directly implement the RCRA Program in unauthorized states, on tribal lands, and other unauthorized portions of state RCRA programs. Issue and update permits, including continuing to improve permitting processes.

- Establish and update standards for analytical test methods that are used across the country and the world to provide consistent, reliable determinations as to whether waste is hazardous, as well as the presence and extent of hazardous waste in the environment.

- Take action to ensure protective management of CCR through the implementation of existing regulations, promulgation of additional regulations to address legacy surface impoundments, and the launch of a federal permitting program. The Agency promulgated regulations specifying improved management and disposal practices to ensure people and

ecosystems are protected. The Agency will continue to work with our stakeholders through technical assistance and guidance as we develop and implement regulations.

- Implement applicable provisions of the WIIN Act, which enables states to submit state CCR permit programs for EPA approval. The Agency will continue to work closely with state partners to review and make determinations on state programs. Subject to appropriations, EPA will implement a permit program for CCR disposal facilities in non-participating states and on tribal lands.

- As part of an EPA effort to reduce ocean pollution and plastics, the Program will provide technical expertise and funding to support development and implementation of solid waste management systems and infrastructure to help ensure that non-hazardous waste items are appropriately collected, recycled, reused, or properly disposed of to prevent litter from entering waterways from land.

Performance Measure Targets:

(PM HW5) Number of updated permits issued at hazardous waste facilities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		64	64	105	100	90	100	110	Permits
Actual	125	109	124	104	130	107			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$2,772.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$6,118.0 / +22.0 FTE) This program change will expand the Community Engagement and Technical Assistance program to help protect economically disadvantaged communities from hazardous substance releases from facilities. This investment includes $4.1 million for payroll.

- (+$4,599.0 / +22.5 FTE) This program change is to provide sufficient staffing levels to implement the coal combustion residual federal permitting program. This investment includes $4.2 million for payroll.

- (+$1,187.0 / +1.0 FTE) This program change will help implement the EPA Climate Adaptation Action Plan, support increased resilience at Transportation, Storage, and Disposal Facilities and PCB Storage facilities, and strengthen the capacity of states, tribes, territories, communities, and businesses to adapt to climate change. This investment includes $187.0 thousand for payroll.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) §§ 3002, 3004, 3005, 3017; Toxic Substances Control Act (TSCA) § 6. Save our Seas 2.0, 2020, Pub. L. 116-224.

RCRA: Waste Minimization & Recycling
Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$12,603***	***$10,252***	***$12,668***	***$2,416***
Total Budget Authority	$12,603	$10,252	$12,668	$2,416
Total Workyears	36.7	43.4	53.4	10.0

Program Project Description:

The RCRA Waste Minimization and Recycling Program supports the sustainable management of resources, including managing materials that sustainably promote economic growth, reducing environmental impacts, and advancing a circular economy for all.

The U.S. recycling industry provides approximately 680,000 jobs and $5.5 billion annually in tax revenues and there is opportunity for greater contribution to the economy and environmental protection, as recent data indicate materials worth as much as $9 billion are thrown away each year.[277] Recycling is an important part of a circular economy, which refers to a system of activities that is restorative to the environment, enables resources to maintain their highest values, and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas (GHG) emissions, as natural resource extraction and processing make up approximately 50 percent of total global GHG emissions.[278]

Further, living near waste and waste-related facilities can place burdens on communities when waste is not properly managed, which can lead to higher levels of chronic health issues. Communities whose residents are predominantly persons of color, Indigenous, or low-income continue to be disproportionately impacted by high pollution levels, resulting in adverse health and environmental impacts. It is critical to implement materials management strategies that are inclusive of communities with environmental justice concerns as well as pursue innovations that offer the benefits of cleaner processing of materials to all. Recycling is not enough to achieve a circular economy, but it is an important part of addressing climate change, creating jobs, and reducing environmental and social impacts.

EPA established a National Recycling Goal to increase the recycling rate from a rate of 32.1 percent in 2018 to 50 percent by 2030,[279] and finalized and released the National Recycling

[277] For more information, please refer to: https://www.epa.gov/smm/recycling-economic-information-rei-report.
[278] U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8. https://www.resourcepanel.org/reports/global-resources-outlook.
[279] In 2018, in the United States, approximately 292 million tons of municipal solid waste (MSW) were generated. Of the MSW generated, approximately 94 million tons were recycled or composted, equivalent to a 32.1 percent recycling and composting rate. https://www.epa.gov/sites/default/files/2021-01/documents/2018_ff_fact_sheet_dec_2020_fnl_508.pdf.

Strategy on November 15, 2021.[280] The National Recycling Strategy is part one of a series of strategies the Agency is developing to build a stronger, more resilient, and cost-effective recycling system and a circular economy for all. Reducing waste helps alleviate burdens on populations that bear the brunt of poorly run waste management facilities and transfer stations. When applied to critical minerals, a circular economy approach facilitates end-of-life recycling and the recovery of critical minerals in order to support a secure supply chain. Future strategies will focus on plastics, critical minerals and electronics, food waste/organics, textiles, and the built environment (*e.g.*, construction and demolition debris).

Congressional and public interest continues to grow regarding plastics in the environment and EPA's role in addressing them (*e.g.*, ocean plastics, environmental justice concerns in countries to whom the U.S. exports plastics, and the climate impacts of single-use plastics). The Save Our Seas 2.0 Act,[281] enacted in December 2020, was passed with bipartisan congressional support and provides EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and increased federal coordination. Additionally, the Infrastructure Investment and Jobs Act (IIJA), as well as STAG appropriations, provide funding for recycling infrastructure grants authorized by section 302(a) of the Save Our Seas 2.0 Act. IIJA also provided funding for education and outreach grants focused on improving material recycling, recovery, and management and established new programs focused on battery recycling. EPA was also charged with developing a model recycling program toolkit, increasing coordination and review of federal procurement guidelines, and providing assistance to the educational community to incorporate recycling best practices into school curriculum.

The RCRA Waste Minimization and Recycling Program also promotes the efficient management of food as a resource. Reducing food loss and waste means more food for communities, fewer GHG emissions and climate impacts, and increased economic growth. EPA works to meet the national goal of reducing food loss and waste by 50 percent by 2030 by providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste; working collaboratively with the U.S. Department of Agriculture and U.S. Food and Drug Administration to reduce food waste; and providing funding to demonstrate anaerobic digester applications.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 – 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an additional $2.4 million and 10.0 FTE for the RCRA Waste Minimization and Recycling Program. This investment will focus on efforts to strengthen the U.S. recycling system by investing in solid waste management infrastructure and consumer education and outreach, address the global issue of plastic waste, engage communities, and prevent and reduce food loss and waste. The Program will conduct the following activities:

[280] For more information, please refer to: https://www.epa.gov/system/files/documents/2021-11/final-national-recycling-strategy.pdf.
[281] For more information, please refer to: https://www.congress.gov/116/plaws/publ224/PLAW-116publ224.pdf.

- Provide national leadership and direction on approaches to reduce environmental impacts and increase the safe and effective reuse/recycling of materials, with a special focus on plastic waste, food waste, and critical minerals and electronics.

- Contribute towards global climate change efforts and demonstrate U.S. leadership internationally through participation in resource efficiency dialogues.

- Implement the National Recycling Strategy through the Solid Waste Infrastructure for Recycling (SWIFR) grant program, the Recycling Education and Outreach (REO) grant program, and other activities. Develop and implement additional strategies in key areas with the greatest potential to reduce the lifecycle impacts of materials, including plastic waste, food waste, critical minerals and electronics (*e.g.*, batteries), textiles, and construction and demolition debris.

- Increased resources will support efforts to gather data and provide high-quality scientific information on materials management, including releasing a report on the investment required to modernize waste management infrastructure to achieve consistent collection across the Nation and to provide all citizens with access to recycling services on par with access to disposal; releasing data on curbside recycling and single-use plastics; finalizing an analysis of different policy approaches for recovering materials; finalizing a study on the social costs associated with nonrecycling or uncontrolled disposal; and continuing to work with the National Academy of Sciences to analyze the cost of recycling programs to state and local governments.

- Continue to administer grants for state, territorial, tribal, and local governments to build and enhance recycling capacity, infrastructure, and consumer education and outreach around the country. The grant programs will continue to support state, territorial, and tribal communities seeking to enhance their capacity to recover and recycle materials by modernizing local waste management systems and improving education and outreach. Provide technical assistance to communities to enhance their capacity to apply for federal funding opportunities. Announce new funding opportunities for the SWIFR and REO grant programs that are primarily funded by IIJA.

- Administer and enhance the model recycling program toolkit developed for use in carrying out the REO grant program funded by IIJA, and provide assistance to the educational community to promote the introduction of recycling principles and best practices into public school curricula.

- Continue coordinating with federal agencies to reduce food waste in their facilities, increase composting, complete food waste prevention pilot projects, and connect stakeholders with food waste reduction technologies such as anaerobic digestion.

- Enhance the Knowledge Management System for grant programs for recycling infrastructure and education and outreach to assist in tracking funded project development through completion and expedite result reporting.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$522.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,894.0 / +10.0 FTE) This program change is an increase to assist EPA with implementation of the National Recycling Strategy, oversight of the Infrastructure Investment and Jobs Act grants, and challenges on recycling and the circular economy. This investment includes $1.8 million for payroll.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA); Save our Seas 2.0 Act, 2020, Pub. L. 116-224; Infrastructure Investment and Jobs Act (IIJA), Pub. L. 117-58

Toxics Risk Review and Prevention

Endocrine Disruptors
Program Area: Toxics Risk Review and Prevention
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$6,629***	***$7,614***	***$7,680***	***$66***
Total Budget Authority	$6,629	$7,614	$7,680	$66
Total Workyears	6.4	7.6	7.6	0.0

Program Project Description:

The Endocrine Disruptor Screening Program (EDSP) was established in 1996 under authorities contained in the Food Quality Protection Act (FQPA) and the Safe Drinking Water Act (SDWA) amendments. The EDSP is transitioning to the use of high throughput (HT) screening and computational toxicology (*CompTox*)[282] tools to screen thousands of chemicals for endocrine activity; establish policies and procedures for screening and testing; and evaluate data to ensure chemical safety by protecting public health and the environment from endocrine disrupting chemicals. Implementing EDSP work into the Agency's risk assessment and risk management functions supports EPA's environmental justice (EJ) priorities, both by targeting substances based on effects to sensitive life stages and deploying rapid methods for assessing disparate chemical exposures to vulnerable communities.

EPA has run thousands of chemicals through HT assays, including the estrogen receptor (ER) and androgen receptor (AR) pathway models and the HT steroidogenesis assay. To further support the evaluation and validation of HT approaches, the EDSP has completed some limited targeted *in vivo* Tier 1 & 2 assays and is conducting systematic reviews of relevant *in vivo* data meeting EPA guidelines.

The Agency continues to engage the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) in the scientific peer review of HT tools including *ToxCast*[283] to evaluate their use in chemical screening as alternatives to Tier 1 assays and to integrate into more complex evaluation frameworks. Embedded into the EDSP approach is a focus on sensitive life stages during the tiered testing and assessment processes. As this data is incorporated into conceptual risk assessment models, it can specifically inform decisions on vulnerable subpopulations. Further, as EDSP prioritizes future chemical assessments, HT tools such as *ExpoCast*[284] will assist in the identification of priority chemical targets with vulnerable subpopulations and EJ concerns for further investigation.

[282] For additional information, please visit: https://www.epa.gov/endocrine-disruption/use-high-throughput-assays-and-computational-tools-endocrine-disruptor.
[283] For additional information, please visit: https://www.epa.gov/chemical-research/toxicity-forecasting.
[284] For additional information, please visit: https://www.epa.gov/chemical-research/rapid-chemical-exposure-and-dose-research.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

Under the current tiered framework, imposing the EDSP Tier 1 battery for all 10,000+ substances in the EDSP Universe of Chemicals would cost the regulated community more than $10 billion in addition to EPA resources for staff to manage the regulatory infrastructure to order and review the tests.[285] Given the current national and international laboratory testing capacity, it would take many years to complete, and involve the sacrifice of many millions of animals. To address these issues, in FY 2024, the Agency will:

- Continue collaborations with EPA's research programs in order to increase scientific confidence in HT approaches which will support a more refined, integrated endocrine activity exposure-based approach to EDSP chemical screening.
- Continue execution of a multi-year plan for implementation of the EDSP for pesticide active ingredients and inerts.,
- In collaboration with EPA's research programs, continue HT screening on pesticide substances that were not part of the *ToxCast* chemical sets.

In FY 2024 these efforts will address several key milestones including: 1) working towards finalizing EDSP List 1, Tier 1 decisions including potential initiation of Tier 2 assays; and 2) implementing EDSP evaluations of pesticide active ingredients to support pesticide registrations and registration review, in line with Administration priorities on EJ. The EDSP screening and testing framework explicitly includes evaluations on vulnerable subpopulations such as differences among life stages including pregnancy, infancy, and early childhood. Moreover, the EDSP Tier 1 battery is designed to identify potential effects on reproduction, a key indicator for EJ.

In FY 2021, the EDSP was the subject of an EPA Office of Inspector General (OIG) report;[286] the milestones above are consistent with that report. In response to this report, in FY 2023, the EDSP will begin conducting annual internal program reviews, develop a strategic plan to support implementation, develop short-term performance metrics, and release a key document related to use of new approach methodologies (NAMs) in the EDSP. In response to the OIG, EPA has already established better communications between offices with testing responsibilities and updated the EDSP webpage to be more informative for stakeholders.[287]

Another accomplishment is the establishment in FY 2022 of the Endocrine Disruptor Science and Policy Committee (EDSPOC), whose primary function is to serve as OPP's central forum to review hazard and exposure evaluations to the extent relevant for making recommendations on FFDCA section 408(p)(4) exemptions. In January 2023, the EDSP published a white paper for

[285] https://www.sciencedirect.com/science/article/pii/S0273230011000055?via%3Dihub, https://www.epa.gov/endocrine-disruption/universe-chemicals-potential-endocrine-disruptor-screening-and-testing & https://www.federalregister.gov/documents/2023/01/19/2023-00940/availability-of-new-approach-methodologies-in-the-endocrine-disruptor-screening-program-notice-of

[286] For additional information on OIG's report "EPA's Endocrine Disruptor Screening Program Has Made Limited Progress in Assessing Pesticides," please visit: https://www.epa.gov/office-inspector-general/report-epas-endocrine-disruptor-screening-program-has-made-limited.

[287] For additional information, please visit: https://www.epa.gov/endocrine-disruption.

public comment titled "Availability of New Approach Methodologies (NAMs) in the Endocrine Disruptor Screening Program (EDSP)" which will designate certain NAMs as validated. The data from these validated NAMs will provide partial Tier 1 screening data for about 500 pesticide chemicals. In FY 2024, in addition to the milestones above, the EDSP will continue to make progress on potential issuance of test orders on outstanding chemicals and determinations of the endocrine-relevant data to make mandatory as part of the pesticide registration process.

As outlined in the OIG report, during FY 2024, EPA plans to begin and continue incorporating EDSP into the regulatory programs for which it was intended. Planning for this is ongoing, including development of a new strategic planning document focused on implementation, development of performance measures, and annual reviews. Further, no program has systematically incorporated HT and *CompTox* tools and results into their regulatory decision-making. A refined, multi-year estimate beyond the baseline testing and review costs cannot be established until the program has gained more experience with actual decisions.

The EDSP will continue to collaborate with relevant bodies and international partners, such as the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) and the Organization for Economic Co-operation and Development (OECD) to maximize the efficiency of EPA's resources and promote adoption of internationally harmonized test methods, particularly high throughput, or computational approaches, for evaluating the potential endocrine effects of chemicals. EPA represents the U.S. as either the lead or a participant in OECD projects involving the improvement of assay systems, including the development of non-animal screening and testing methods.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$145.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$79.0) This is a programmatic decrease for endocrine disruption screening contractual support.

Statutory Authority:

Federal Food Drug and Cosmetic Act (FFDCA), § 408(p); Safe Drinking Water Act (SDWA), § 1457.

Pollution Prevention Program
Program Area: Toxics Risk Review and Prevention
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Promote Pollution Prevention

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$11,988***	***$12,987***	***$29,009***	***$16,022***
Total Budget Authority	$11,988	$12,987	$29,009	$16,022
Total Workyears	45.6	51.2	69.2	18.0

Program Project Description:

The Pollution Prevention (P2) Program is one of EPA's primary tools for advancing environmental stewardship and sustainability for federal, state, and tribal governments as well as businesses, communities, and individuals. The program also is the primary implementation mechanism for the Pollution Prevention Act (PPA) of 1990. The P2 Program seeks to alleviate environmental problems by helping businesses and others with developing and implementing source reduction practices before pollution is created. As a result of these approaches, the P2 Program protects the environment by conserving and protecting natural resources while strengthening economic growth through cost reductions and increased market opportunities. Pollution prevention approaches include, but are not limited to, reducing hazardous releases to air, water, and land; the use of hazardous materials; the generation of greenhouse gases; and the use of water. The program's efforts advance EPA's priorities to pursue sustainability; to act on climate change; make a visible difference in communities, including advancing environmental justice (EJ) in disadvantaged communities; and ensure chemical safety. The program includes a counterpart P2 Categorical Grants Program in the State and Tribal Assistance Grants (STAG) account.[288]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention of the *FY 2022 – 2026 EPA Strategic Plan*. FY 2024 funding will continue to support the following P2 programs:

P2 Technical Assistance
The P2 technical assistance program supports businesses, states, tribes, and other partners to promote and facilitate the adoption of source reduction approaches that make good business sense and to improve multimedia environmental conditions and climate impacts through reductions in the release of hazardous materials and pollutants such as greenhouse gases. EPA invests in analyses, tool development, training, outreach, and partnerships to provide the information and tools needed to bring awareness to industries of P2 approaches and benefits and to enable their widespread implementation to prevent or reduce pollution. The P2 program leverages the success

[288] For additional information about the EPA P2 Program, please visit: http://www.epa.gov/p2/.

of EPA grantees and client businesses by amplifying and replicating environmental stewardship and sustainability successes for similar businesses in other locales.[289] Such economies of scale for P2 are central to maximizing the effectiveness of the program.

To further advance EJ in FY 2024, EPA will use analyses of toxic chemical releases from the Toxics Release Inventory (TRI) and other chemical release data to identify facilities and industries near communities with EJ concerns. These analyses will be combined with sector-specific case studies, best practices, and outreach and training efforts to facilitate adoption of P2 practices in such communities. In FY 2024, EPA also will initiate efforts to work with stakeholders to identify technically and economically feasible opportunities for small businesses to adopt safer alternatives for uses of TSCA High Priority Substances undergoing risk evaluation.

In FY 2024, an additional $9.7 million and 9.0 FTE will support small businesses with transitioning to TSCA compliant practices and mitigating any associated economic impacts. This new grant program would provide technical assistance to small businesses for identifying and adopting alternatives to current practices and minimizing economic impacts associated with such transitions, which may include direct financial assistance. EPA's P2 grant program has supported work by P2 grantees, over several years, to work with businesses and industry to identify technically and economically feasible alternatives to toxic chemicals, including some that are the focus of current TSCA risk evaluation and management (e.g., halogenated solvents used in a variety of industries such as degreasing in metal fabrication). The additional resources requested will facilitate the development of additional grant Request for Applications (RFAs) and grant performance measures publication of RFAs, evaluation of applications, awarding of grants, finalization of workplans, and initiation of grant work. Resources will also provide ongoing support to grantees including coordination, networking and information sharing, and documentation and dissemination of best practices.

P2 reporting under the TRI program collects information on facility-level P2 practices associated with reductions in use and release of toxic chemicals. In FY 2024, EPA will evaluate and integrate P2 case studies and best practices relevant to TSCA risk management efforts by small businesses, clarify technical and economic factors associated with such transitions, and develop and deploy pilot programs to leverage training and ongoing support for small businesses expected to make P2 transitions in response to TSCA risk management.

Safer Choice Program

EPA certifies and allows use of the Safer Choice label[290] on products containing ingredients that meet stringent health and environmental criteria and undergo annual audits to confirm the products are manufactured to the Safer Choice Standard's rigorous health and environmental requirements. Safer Choice is a voluntary program that certifies safer products so consumers, businesses, and purchasers can find products that work well and contain ingredients safer for human health and the environment, including helping reduce exposure to carcinogens in products.

With hundreds of partner companies and approximately 1,800 certified products in the marketplace, companies have invested heavily in this EPA partnership. Consumer, retailer, and

[289] For additional information, please see the Pollution Prevention Program narrative under the STAG account/appropriation.
[290] For additional information about the Safer Choice Program, please visit: https://www.epa.gov/saferchoice.

industry interest in Safer Choice and safer chemical products continues to grow across chemical product value chains. Under the same stringent criteria, EPA certifies disinfectant products registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) using the Design for the Environment logo. The Safer Choice Program will expand into additional product categories and seek to increase consumer and commercial recognition of Safer Choice products. In FY 2024, EPA will continue its Partner of the Year Awards Program,[291] which recognizes organizations and companies for their leadership in formulating products made with safer ingredients and making them available to communities.

In FY 2024, Safer Choice will integrate and address EJ concerns through outreach and partnership activities. Efforts to make Safer Choice-certified products more accessible to communities with EJ concerns will expand with particular focus on low-income, tribal, and indigenous populations and other vulnerable populations such as the elderly, children, and those with pre-existing medical conditions. Safer Choice will work with retailers and product manufacturers to help them develop even more products containing safer chemical ingredients that are easy to identify and purchase. Safer Choice will work to empower custodial staff and house cleaning companies and enable facilities through education to gain access to Safer Choice-certified products to improve indoor air quality and reduce exposure-related asthma.[292]

To enhance transparency and to facilitate expansion and use of safer chemicals and products, EPA has included on the program's website a list of non-confidential chemicals that meet the Safer Choice Program criteria and that are allowed in the program's labeled products. In Q1 of FY 2023, the Safer Chemical Ingredients List contained 1,055 safer chemicals, up from 1,033 in Q1 of FY 2022, and EPA will continue to update this list in future years as the program evaluates additional chemical ingredients and chemical categories and approves products for the use of the Safer Choice label.

Environmentally Preferable Purchasing Program (EPP)

The Environmentally Preferable Purchasing (EPP) Program[293] implements direction provided to EPA in the Pollution Prevention Act, the National Technology Transfer and Advancement Act,[294] Federal Acquisition Regulations, and Executive Orders that mandate sustainable federal procurement, including through development and use of sustainability standards, specifications, and ecolabels. In FY 2015 the EPP Program issued the EPA Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing. Through FY 2022 these recommendations have been maintained and updated to include 48 private sector standards and ecolabels covering 30 product and service categories. These recommendations help federal procurement officials determine which private sector standards and ecolabels, among sometimes dozens within a single purchase category, are appropriate and effective in meeting federal procurement goals and mandates. Beginning in FY 2023, the EPP Program is expanding the Recommendations in new

[291] For additional information on the Partner of the Year Awards program, please visit: https://www.epa.gov/saferchoice/safer-choice-partner-year-awards.

[292] For additional information, please see: https://journals.lww.com/joem/Fulltext/2003/05000/Cleaning_Products_and_Work_Related_Asthma.17.aspx.

[293] For additional information on the EPP Program, please visit:http://www.epa.gov/greenerproducts/buying-green-federal-purchasers.

[294] For additional information on the National Technology Transfer and Advancement Act, please visit: https://www.nist.gov/standardsgov/national-technology-transfer-and-advancement-act-1995.

categories to support the Biden-Harris Administration's environmental and human health goals and mandates including net-zero emissions procurement, low embodied carbon construction materials, and products that do not contain PFAS. The program has received applications for over 70 standards/ecolabels from 29 organizations to be considered for assessment and recommendation in federal purchasing. These cover the following high-impact federal procurement sectors: food and cafeteria services; uniforms/clothing; professional services; laboratories and healthcare; building/construction; infrastructure; and landscaping.

The EPP Program's work has generated significant cost savings and environmental benefits to the federal government. For example, for electronics products, the federal government purchased nearly 27.6 million Electronic Product Environmental Assessment Tool (EPEAT)-registered products in 2020, resulting in a cost savings to the federal government of around $830 million. EPEAT is one of over 40 referenced and relevant private sector standards and ecolabels that help federal purchasers identify and procure environmentally preferable products and services.[295] EPA also coordinates federal procurement programs that integrate environmental performance into procurement, including building tools for integrating sustainable procurement into government contracts, and putting tools into the hands of federal procurement officials, collaborating with federal agencies such as the General Services Administration, National Institute of Standards and Technology, the Departments of Defense and Energy, and more.

EPA is characterizing per- and polyfluoroalkyl substances (PFAS) provisions of existing private sector sustainability standards, ecolabels, and certifications to identify products and purchase categories associated with key PFAS use and to prioritize PFAS conditions of use. In FY 2024, EPA will enhance public protection from potential effects of PFAS through recommendations of additional standards/ecolabels to help purchasers identify products that meet specific environmental performance criteria. EPA will conduct the following activities:

- Assess and recommend additional ecolabels and standards with criteria specifically supporting reduction or elimination of PFAS use in key product categories not yet covered by the EPA Recommendations for Standards, Specifications, and Ecolabels for Federal Purchasing.[296]
- Build, implement, maintain, and update tools for integrating EPA recommendations into federal e-procurement systems, initiate identification and monitoring of relevant government contracts for sustainable purchasing requirements, and develop tools to ensure that PFAS data is captured for compliance in the Federal Procurement Data System (FPDS).
- Initiate and engage in private sector standards development activities that address product categories known to contain PFAS.
- Work with GSA and others to create a central product registry to identify products that meet EPA's assessment of PFAS specifications.
- Collaborate with the Department of Defense (DoD) on performance-based, rather than material-based, specifications and standards for equipment (*e.g.,* textiles, coatings, firefighting foam) for DoD and Department of Homeland Security uses.
- Work with other federal agencies and the private sector to initiate a performance-based technology innovation challenge for a set of PFAS-free product categories for which use of

[295] For additional information on Recommendations for Specifications, Standards and Ecolabels for Federal Purchasing, please visit: https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing.
[296] For additional information, please visit: https://www.epa.gov/greenerproducts/how-epas-recommended-standards-and-ecolabels-address-and-polyfluoroalkyl-substances.

non-PFAS options could be technically and economically feasible with respect to key federal purchasing categories.

To further support EPA's goals for equity and EJ, the EPP Program will begin to develop and implement training and outreach for disadvantaged communities, as well as state, tribal, and local governments, to assist in facilitating product and service procurement choices that are environmentally sound and promote human and environmental health.

Green Chemistry

The Green Chemistry Program[297] fosters the sustainable design of chemical products and processes. The program also analyzes green chemistry innovations and works with partners and external stakeholders to facilitate market adoption and penetration of new commercially successful chemistries and technologies. The program's Green Chemistry Challenge Awards serve a critical role in raising the profile, importance, and credibility of innovative and market-ready green and sustainable chemistry technologies. During the program's more than 25 years of progress, EPA has received more than 1,800 nominations and presented awards to 133 technologies, demonstrating the interest among stakeholders to be recognized at the national level for developing market-ready and/or market-mature green chemistry solutions. The contribution of greener chemistries to addressing climate change is clear. Winning technologies are estimated to eliminate 7.8 billion pounds of carbon dioxide equivalents released to air—the equivalent of taking 770,000 cars off the road each year.[298] In FY 2024 EPA will begin to utilize training materials developed in FY 2022 to help state, tribal, local, and industry stakeholders acquire information and understanding of the benefits from these innovations.[299]

In FY 2024 the Green Chemistry Program will begin to work with awardees and nominees to pursue the goal of market-oriented environmental and economic progress through increased adoption of these innovations. EPA will support and lead portions of EPA's responsibilities for implementation of the Sustainable Chemistry Research and Development Act of 2020.

Climate Adaptation

Additional funds are requested to fund the implementation of activities to fulfill the P2-related Long-Term Performance Goals of EPA's Strategic Plan (Objective 1.2), meet commitments in the EPA Climate Adaptation Action Plan, support increased resilience of EPA's programs, strengthen the adaptive capacity of states, tribes, territories, communities, and businesses, and increase the resilience of the nation, with a particular focus on advancing environmental justice. Resources will be used to oversee the integration of climate adaptation planning into these programs, policies, rules, and operations (including ensuring EPA facilities and supply chains are resilient to climate impacts).

Performance Measure Targets:

[297] For additional information on the Green Chemistry Program, please visit: https://www.epa.gov/greenchemistry.

[298] For additional information, please visit: https://www.epa.gov/greenchemistry/information-about-green-chemistry-challenge.

[299] P2 Training materials are available to the public on various EPA websites including but not limited to: 1) https://www.epa.gov/p2/grant-programs-pollution-prevention (Grant Programs for P2); 2) https://www.epa.gov/p2/p2-grant-program-resources-applicants (Resources for grant applicants [FAQs, application checklist, P2-EJ Facility Mapping Tool and a recorded webinar]); 3) https://www.epa.gov/p2/pollution-prevention-tools-and-calculators (P2 Tools and calculators); and 4) https://www.epa.gov/p2/p2-resources-business (P2 resources for business).

(PM P2mtc) Reduction in million metric tons of carbon dioxide equivalent ($MMTCO_2e$) released per year attributed to EPA pollution prevention grants.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target					No Target Established	1.2	1.2	1.2	$MMTCO_2e$
Actual	1.7	1.6	1.5	1.4	1.1	Data Avail 10/2023			

(PM P2sc) Number of products certified by EPA's Safer Choice program.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						1,950	2,000	2,100	Products
Actual	1,948	1,958	1,989	1,929	1,892	1,835			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$672.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$7,857.0 / +9.0 FTE) This program change is an increase for a new grant program supporting small businesses with transitioning to TSCA compliant practices and with mitigation of economic impacts. This includes $1.649 million for payroll.

- (+$6,201.0 / +8.0 FTE) This program change is an increase supporting analyses, tool development, training, outreach, and partnerships to provide the information and tools needed to bring awareness to industries of P2 approaches and benefits and to enable their widespread implementation to prevent or reduce pollution. This includes $1.466 million for payroll.

- (+$1,292.0 / +1.0 FTE) This program change is an increase to implement the EPA Climate Adaptation Action Plan, support increased resilience of EPA's programs, and strengthen the capacity of states, tribes, territories, communities, and businesses to adapt to climate change. This includes $192.0 thousand for payroll.

Statutory Authority:

Pollution Prevention Act of 1990 (PPA); Toxic Substances Control Act (TSCA).

Toxic Substances: Chemical Risk Review and Reduction
Program Area: Toxics Risk Review and Prevention
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$85,218***	***$82,822***	***$130,711***	***$47,889***
Total Budget Authority	$85,218	$82,822	$130,711	$47,889
Total Workyears	291.0	360.8	534.8	174.0

Total program workyears in FY 2024 includes 83.0 FTE funded by TSCA fees, an increase of 61.5 FTE. TSCA Service Fees and associated FTE are not included in the budget formulation nor in the explanations of change, but EPA is projected to collect $35.9 million in FY 2024 with the possibility of an additional $1.49 million down payment collected for one TSCA Section 6 Manufacturer-Requested Risk Evaluation, should the request be received and granted. Projected fee collections are subject to changes in the TSCA User Fee Rule, which is required by statute to be updated every three years.

Program Project Description:

EPA has significant responsibilities under the Toxic Substances Control Act (TSCA) for ensuring the safety of chemicals in or entering into commerce and addressing unreasonable risks to human health and the environment. These responsibilities are executed by EPA through the Chemical Risk Review and Reduction (CRRR) Program, which works to ensure the safety of:

- Existing chemicals,[300] by collecting chemical data, prioritizing chemicals for risk evaluation, conducting risk evaluations, and developing and issuing risk management rules to prevent any unreasonable risk posed by their manufacture, processing, use, distribution in commerce, and/or disposal.;
- New chemicals, by reviewing new chemical submissions from manufacturers and processors and taking action to mitigate potential unreasonable risks to health or the environment before those chemicals can enter the marketplace; and
- Other chemicals that may pose unreasonable risks to human health and the environment.

The CRRR Program plays an important role in achieving the Administration's goals to enhance environmental justice (EJ) and to tackle the climate crisis. Examples include engaging disadvantaged and vulnerable communities, including tribes, in identifying exposure pathways; issuing proposed risk management regulations to ensure needed low-global warming potential chemicals are available to manufacture refrigerants as the American Innovation and Manufacturing (AIM) Act is implemented; incorporating into TSCA chemical risk evaluations the assessment of risks to communities potentially facing disproportionate impacts from chemical exposure because they are located near industrial activity; adhering to EPA's Guidance on Considering

[300] "Existing Chemicals" are those already in use when TSCA was first enacted in 1976 and those which have since gone through review by the TSCA New Chemicals Program. These include certain prevalent, high-risk chemicals known generally as "legacy chemicals" (*e.g.,* PCBs, mercury), which were previously covered in a separate Chemical Risk Management (CRM) budget justification. The CRM program area was combined with Chemical Risk Review and Reduction effective FY 2015.

Environmental Justice During the Development of Regulatory Actions and TSCA's statutory requirement to consider risks to potentially exposed and susceptible subpopulations;[301] ensuring that TSCA chemical safety data analytical tools are made publicly available in ways that are accessible to vulnerable communities; and informing decision making that advances the introduction of more environmentally sustainable chemicals into commerce.

All elements of EPA's implementation of TSCA, including new chemicals, existing chemicals, and the information technology supporting those programs, also contribute to the Biden-Harris Administration's Cancer Moonshot. While not all chemicals cause cancer, when information indicates that cancer risk may be a concern, EPA's TSCA program evaluates and estimates the risk of an individual getting cancer during their lifetime from exposure to the chemical. Where the Agency finds that the risk is unreasonable, EPA establishes requirements and regulations to eliminate the unreasonable risk.

- TSCA authorizes EPA to collect fees from chemical manufacturers and processors to defray up to 25 percent of the costs for administering certain sections[302] of TSCA.[303] Fee levels are set by regulation and may be adjusted on a three-year basis for inflation and to ensure that fees defray approximately 25 percent of relevant costs. The first TSCA Fees rule became effective on October 1, 2018.[304] CRRR Program fees collected or projected to be collected in FY 2019–FY 2021 under this rule equated to approximately 14 percent of associated expenditures for those three fiscal years. EPA proposed revisions to the rule in January 2021, and in light of public comments supplemented the proposal in November 2022.[305]

EPA recently proposed revisions to the TSCA fees and expects to finalize the fees rule in 2023. The rulemaking is intended to establish TSCA fees that would defray up to 25 percent of relevant costs, as statutorily allowed,[306] and consistent with direction by Congress that the Agency should properly consider full costs in its rulemaking as intended by the Lautenberg Act.[307]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety, in the *FY 2022 – 2026 EPA Strategic Plan*.

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[301] For more information, please visit: https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justice-during-development-action.

[302] The costs of implementing TSCA Sections 4-6 are defrayable up to the statutory caps, as are the costs of collecting, processing, reviewing, and providing access to and protecting from disclosure, as appropriate, chemical information under Section 14.

[303] The authority to assess fees is conditioned on appropriations for the CRRR Program, excluding fees, being held at least equal to the amount appropriated for FY 2014.

[304] The statute authorizes EPA to collect fees from chemical manufacturers (including importers) and, in limited instances, processors who: are required to submit information (Section 4); submit notification of or information related to intent to manufacture a new chemical or significant new use of a chemical (Section 5); manufacture (including import) a chemical substance that is subject to an EPA-initiated risk evaluation (Section 6); or request that EPA conduct a risk evaluation on an existing chemical (Section 6), subject to the Agency's approval of the request.

[305] For more information on 87 FR 68647, please see https://www.epa.gov/tsca-fees/proposed-revisions-tsca-fees-rule.

[306] This rule may not go into effect until FY 2024. https://www.federalregister.gov/documents/2022/11/16/2022-24137/fees-for-the-administration-of-the-toxic-substances-control-act-tsca

[307] Joint Explanatory Statement from the House and Division G – Department of Interior, Environment, and Related Agencies Appropriations Act, 2022.

In FY 2024, EPA will emphasize the integrity of scientific products, adherence to statutory intent and requirements, and timelines applicable to pre-market review of new chemicals, chemical risk evaluation and management, data development and information collection, the review of Confidential Business Information (CBI) claims, and other statutory requirements. The resources requested are essential for EPA to address its workload, including:

- Maintaining at least 20 EPA-initiated existing chemical risk evaluations in development at all times and completing EPA-initiated existing chemical risk evaluations within the statutory timeframe.
- Having up to five existing chemical risk evaluations requested by manufacturers in development.
- Issuing protective regulations in accordance with statutory timelines addressing all unreasonable risks identified in each risk evaluation.
- Establishing a pipeline of chemicals to be prioritized for future risk evaluation.
- Using test orders and a new strategy for tiered data collection, requiring development of data critical to existing chemical risk evaluation and risk management activities, and systematically collecting, reviewing, and synthesizing data for risk assessments in a transparent manner as mandated by the 2016 TSCA Amendments.
- Conducting risk assessments for approximately 550 new chemical notices and exemption submissions and managing the identified risks associated with the chemicals.
- Continuing to implement a collaborative research program focused on developing new scientific approaches for performing risk assessments on new chemical substances.
- Reviewing and making determinations on CBI claims contained in TSCA submissions; making certain non-CBI information available to stakeholders; and publishing identifiers for each chemical substance for which a confidentiality claim for specific chemical identity is approved.
- Carrying out other required TSCA CRRR activities as described below.

Primary TSCA Implementation Activities

Section 4: Testing of Chemical Substances and Mixtures. In January 2021, the Agency issued Test Orders for nine additional chemicals currently undergoing TSCA risk evaluation and issued additional Test Orders for eight of these chemicals in March 2022. In addition, EPA will continue to implement and refine the National Per- and polyfluoroalkyl substances (PFAS) (PFAS) Testing Strategy in FY 2024. EPA issued the first Test Order for a PFAS in June 2022 and the second in January 2023. EPA will continue to refine and implement the National PFAS Testing Strategy and issue additional Test Orders for PFAS chemicals in FY 2024. In parallel with the Test Order approach, EPA has requested voluntary submission of PFAS test data. In FY 2024 EPA intends to refine the initial structural categories developed by EPA's Office of Research and Development (ORD) to incorporate additional substances as appropriate and consider physical-chemical properties. In FY 2024, the resources requested will support Agency review of test protocols review of test data submitted voluntarily or in response to Test Orders, Test Rules, and Enforceable Consent Agreements (ECAs); initial implementation of additional phases of the National PFAS Testing Strategy; and issuance of additional Test Orders.

Section 5: New Chemicals. The New Chemicals Program is important in ensuring the safety of new chemicals before they enter commerce. The 2016 TSCA amendments significantly changed

the way EPA implemented the New Chemicals Program. Under the prior law, EPA only issued formal written unreasonable risk determinations for about 20 percent of new chemical submissions, whereas under the amended law, EPA is required to issue determinations for 100 percent of new chemical submissions (a five-fold increase). In FY 2024, the Agency expects to conduct risk assessments for approximately 550 new chemical notices and exemption submissions;[308] make affirmative determinations on whether unreasonable risks are posed under those chemicals' conditions of use; manage identified risks associated with the chemicals through the issuance of Orders and Significant New Use Rules (SNURs); require development of additional data where information is insufficient to conduct a reasoned evaluation and then evaluate such data received.[309] The Agency also will conduct a similar effort on notices received in previous years that are not yet complete. In FY 2024, EPA will continue to implement innovative approaches to add consistency and efficiency to new chemical submission reviews for categories such as biofuels and mixed metal oxides and to develop new streamlined approaches. Additionally, the Agency will continue to support outreach to submitters on how to provide the most complete submissions to enable timely reviews. EPA also intends to continue its commitment to transparency by making information generated in the review of notices available to the public via the *ChemView* database[310] and on EPA websites -- to include TSCA Sections 5 and 8(e) data, CDR 2020 data, TSCA section 5 communications from submitters received via CDX, Notice of Commencement (NOC) data and TSCA section 4 data.

In FY 2024, EPA expects to finalize SNURs associated with approximately 150 consent orders previously issued for PFAS. Issuance of the SNURs will ensure that companies that are planning a significant new use beyond those allowed for the PFAS must notify EPA, and EPA will then have the chance to conduct a risk assessment of the new use and impose any needed restrictions before it is allowed into commerce. Additionally, EPA is implementing a performance metric to measure compliance with past TSCA regulatory actions, including consent orders and SNURs issued for PFAS. The new chemicals program also expects to continue implementing the policy of generally denying Low Volume Exemptions (LVEs) submitted for PFAS and requiring testing in Consent Orders for PFAS, as needed.

The New Chemicals Program will also continue implementation of its PFAS LVE Stewardship Program to encourage industry to voluntarily withdraw LVEs for PFAS already granted under the exemption. Furthermore, EPA expects to issue a final rulemaking amending TSCA section 5 procedural regulations to better align with the 2016 Lautenberg Amendments. EPA also will continue to make strides in its efforts to revise hundreds of critical high-priority standard operating procedures (SOPs) and science policies to increase consistency and ensure protection of human health and the environment when conducting new chemical reviews.

The New Chemicals Program has developed and implemented new strategies that will standardize new chemical review and risk management approaches to support the Administration's climate

[308] New chemical submissions may include Pre-Manufacture Notices (PMNs), significant new use notifications (SNUNs), microbial commercial activity notices (MCANs), low volume exemptions (LVEs), low releases and low exposures exemptions (LoREX), test marketing exemption (TME), TSCA experimental release application (TERA), and Tier 1 and 2 exemptions.
[309] For PMNs, MCANs, and SNUNs, as required by law, the Agency must generally complete the review, determination, and associated risk management activities within 90days of receiving the submission, subject to extensions or suspension under certain circumstances.
[310] To access *ChemView*, please visit: https://chemview.epa.gov/chemview.

adaptation goals. Under the Office of Chemical Safety and Pollution Protection's Climate Adaptation Plan, goals and priorities have been established to take actions that directly support climate adaptation related to new chemistries and innovative technologies or other related processes. For biofuels, the program has developed a robust, consistent, and efficient process to assess the risk and apply mitigation measures for substitutes to petroleum-based fuels and fuel additives, with focus to support qualifying advanced biofuels that could contribute to the annual volume mandates under the EPA's Renewable Fuel Standard (RFS) program and help support the goals of energy security through increasing domestic production within the United States.

In addition, EPA developed a standardized risk assessment and risk management approach for mixed metal oxides (MMOs), which include new and modified cathode active materials (CAMs), which are a key component in lithium-ion batteries used in electric vehicles. MMOs also have applications in semi-conductors and renewable energy generation and storage, such as solar cells and wind power turbines. Both efforts support the Biden-Harris Administration's agenda to tackle the climate crisis and will complement resources provided to EPA from legislative enactments such as clean energy initiatives under the Inflation Reduction Act, tax credits for electric vehicles, and the Bipartisan Infrastructure Law.

Section 6: Existing Chemicals. TSCA requires a continuing process of identifying existing chemicals for evaluation to identify unreasonable risks and, where unreasonable risks in existing chemicals are found, the Agency also must commence risk management action under TSCA Section 6 to address those risks. The resources requested in FY 2024 are critical for the Agency to continue implementing these additional requirements to prioritize, evaluate, and address the risks of existing chemicals, including:

- **Prioritization.** The initial step in the process of evaluating existing chemicals under TSCA, prioritization is codified in a final Chemical Prioritization Process rule.[311] The purpose of prioritization is to designate a chemical substance as either High-Priority for further risk evaluation or Low-Priority for which risk evaluation is not warranted at the time.[312,313] TSCA requires that upon completion of a risk evaluation for a High-Priority substance (HPS), EPA must designate at least one additional HPS to take its place, ensuring that at least 20 EPA-initiated risk evaluations are constantly underway. In FY 2024 EPA will continue working to identify additional HPS supported by obtaining, validating, and analyzing chemical safety data to identify chemicals for which sufficient data are available to conduct scientifically sound risk evaluations and the order in which such chemicals are evaluated.

- **Risk Evaluation.** EPA initiated risk evaluations for the first 10 chemicals in December 2016. EPA missed the statutory deadline for completing TSCA risk evaluations for nine of the chemicals, and work on many of those chemical risk evaluations has continued.[314] In FY 2021

[311] For additional information, please visit: https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0636-0074.
[312] TSCA required that EPA designate by December 2019 at least 20 chemical substances as High-Priority for risk evaluation and also at least 20 chemical substances as Low-Priority. On December 20, 2019, EPA finalized the designation of 20 chemical substances as High-Priority for upcoming risk evaluations. For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high.
[313] On February 20, 2020, EPA finalized the designation of 20 chemical substances as Low-Priority. For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/low-priority-substances-under-tsca.
[314] EPA revised its risk determinations for 8 of the first 10 chemicals to reflect EPA's unreasonable risk finding on the chemical substance as a whole, rather than on individual conditions of use; in addition, the revised risk determinations do not assume that

and FY 2022, EPA developed approaches for the consideration of exposure pathways (*i.e.*, air, water, disposal) that were originally omitted from the scopes of the HPS and Manufacturer-Requested Risk Evaluations (MRREs) and to address "fenceline" risk (risks to exposed populations in communities adjacent to the perimeter of manufacturing facilities, often vulnerable and underserved populations) for seven of the first 10 chemical risk evaluations. This work added to the challenge of completing additional risk evaluations, and in FY 2024 this work will continue, incorporating exposure to "fenceline" communities into the next 20 chemical evaluations initiated in December 2019 and currently underway.[315] EPA released final revised risk determinations for HBCD, PV29, methylene chloride, PCE, NMP, 1-BP, carbon tetrachloride, and TCE. The final revised risk determinations found that these chemicals present an unreasonable risk of injury to human health or the environment when evaluated under their conditions of use. EPA intends to revise its 2017 risk evaluation procedures rule to better align with statutory language, court decisions, and executive orders; build on the agency's experience with its first 10 risk evaluations; and increase program clarity, transparency, sustainability, and flexibility.

EPA initiated risk evaluations for the first set of 20 High-Priority chemicals in December 2019.[316] On September 4, 2020, EPA released final scoping documents for these chemicals.[317] Because of shifts in policy and resource constraints, EPA did not meet the December 2022 statutory deadline for completing these risk evaluations. In addition, in June 2022 EPA issued the final scope document for "Asbestos Part 2: Supplemental Evaluation Including Legacy Uses and Associated Disposals of Asbestos." EPA also is developing a supplement to the 1,4-dioxane risk evaluation to assess pathways and exposures not addressed in the risk evaluation. The Agency is expanding the focus of the risk evaluations to ensure that exposure pathways affecting the general public, "fenceline" communities, and disadvantaged communities are properly evaluated in accordance with the law. Specifically, it is expected that the Agency will include expanded consideration of potentially exposed and susceptible subpopulations (a term defined in the statute), including environmental justice considerations, as a result of engagement with overburdened communities through mechanisms including the National Tribal Operations Committee (NTOC)[318] and the National Tribal Toxics Council (NTTC).[319]

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workers always and appropriately wear personal protective equipment (consideration of PPE will be part of risk management). EPA also re-examined the risk evaluations of seven of those chemicals to address overlooked and/or inadequately assessed exposure pathways (including those affecting fenceline, underserved, or disproportionately burdened communities), is developing a supplemental risk evaluation for one chemical due to omission of exposure pathways, and, in part as a result of litigation against the Agency, and is conducting a second risk evaluation for asbestos to include types and uses that were excluded from the first one.

[315] In January 2022, EPA released for public comment and peer review version 1.0 of a screening methodology that will be used to further examine whether the policy decision to exclude air and water exposure pathways from the risk evaluations will lead to a failure to identify and protect fenceline communities. Review of the screening level methodology will include review by the Science Advisory Committee on Chemicals (SACC). *See*, https://www.epa.gov/newsreleases/epa-releases-screening-methodology-evaluate-chemical-exposures-and-risks-fenceline.

[316] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high.

[317] For additional information, please visit: https://www.epa.gov/chemicals-under-tsca/epa-releases-final-scope-documents-and-list-businesses-subject-fees-next-20.

[318] For additional information on NTOC, please visit: https://www.epa.gov/tribal/tribal-partnership-groups#ntoc.

[319] For additional information on NTTC, please visit: https://www.epa.gov/chemicals-under-tsca/national-tribal-toxics-council-nttc-technical-support-request-applications.

In addition, manufacturers may submit requests to EPA to evaluate specific additional chemicals. The first two MRREs began in FY 2020. A third was started in FY 2021, and a fourth request is currently being considered. Those initial MRREs will continue throughout FY 2023 and are for chemicals that were on the 2014 TSCA Work Plan.[320] The resources requested for FY 2024 will support efforts to meet statutory mandates and other requirements related to the evaluation of existing chemicals while maintaining EPA's commitment to evidence-based decisions guided by the best available science and data.

- **Risk Management.** When unreasonable risks are identified in the final risk evaluation, EPA must promulgate risk management actions under TSCA Section 6(a) to address the unreasonable risks. EPA commenced development of risk management actions in FYs 2020 and 2021 to address unreasonable risks identified for the first 10 chemicals evaluated under TSCA Section 6. On April 5, 2022, EPA released a proposed rule to ban chrysotile asbestos, the only known form of asbestos currently imported into the United States. Chrysotile asbestos is found in products such as asbestos diaphragms, sheet gaskets, brake blocks, aftermarket automotive brakes/linings, other vehicle friction products, and other imported gaskets. In FY 2023, EPA will finalize the asbestos rulemaking action. By the end of the first quarter of FY 2024, EPA plans to issue proposed TSCA section 6 rules for six chemicals. Later in FY 2024, EPA plans to propose additional rules and continue work on final rules for actions proposed in FY 2022 and FY 2023.[321] This work will adhere to EPA's Guidance on Considering Environmental Justice During the Development of an Action and its companion Technical Guidance for Assessing Environmental Justice in Regulatory Analysis.[322]

TSCA also mandates that EPA promulgate Section 6 risk management rules for certain Persistent, Bioaccumulative, and Toxic (PBT) chemicals on the 2014 TSCA Work Plan without undertaking further risk evaluation.[323] EPA issued five final rules for PBTs in January 2021. EPA requested and received comments on the January 2021 PBT rules and in September 2021 announced its intent to initiate a new rulemaking to further reduce exposures, promote environmental justice, and better protect human health and the environment, as well as implementation changes that may need to be made to current exclusions. EPA anticipates proposing new rules for certain of these PBTs in FY 2023, with finalization anticipated in FY 2024.

In addition, risk management actions for existing chemicals under TSCA Section 5 are ongoing. EPA expects to propose SNURs in FY 2023 for discontinued uses of the 20 high-priority substances (HPS) undergoing risk evaluation. When final, these rules will ensure that any phased-out uses of the 20 HPS cannot resume without EPA review and action, as necessary, to protect health and the environment from potential unreasonable risks. EPA is also issuing a proposed SNUR for inactive PFAS to ensure these uses cannot restart without prior EPA risk assessment and action, as necessary, under section 5. The inactive PFAS notice of proposed rulemaking (NPRM) was signed on January 17, 2023.

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[320] *See* https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-work-plan-chemicals.

[321] EPA will continue to engage stakeholders in dialogue regarding these risk management actions to ensure the Agency has the benefit of input from interested parties. This engagement will include meetings with key stakeholders and participation in events such as conferences and trade association meetings where EPA and stakeholders can share information.

[322] For additional information, please visit: https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis.

[323] TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 6(h) (1) and (2).

Section 14: Confidential Business Information. EPA is required under TSCA Section 14 to review and make determinations on CBI claims contained in TSCA submissions; to process requests from TSCA submitters and to make certain CBI information available to states, tribes, health and medical professionals, and first responders under defined circumstances; and to assign and publish unique identifiers for each chemical substance for which a confidentiality claim for a specific chemical identity is approved. In FY 2024 EPA will assign unique identifiers to chemicals where CBI claims for chemical identity are approved and expects to complete CBI claim reviews for more than 1,500 new cases and approximately 1,500 chemical identity claims made in existing Notice of Activity reports under the 2017 TSCA Inventory Notification (Active-Inactive) Requirements rule.

These reviews are expected to be conducted in accordance with new and updated procedures and with reporting and communications tools developed in the new CBI procedures rule, which is expected to be final in FY 2023. The same rule will provide the regulatory infrastructure necessary to develop further internal procedures and reporting tools to support the review of expiring CBI claims, beginning in FY 2026.

TSCA Information Technology (IT) and Data Tools Infrastructure. IT systems development and maintenance will continue in FY 2024 with the goal of minimizing reporting burdens on industry and streamlining data management by EPA, including the following activities:

- Continuing enhancement of the TSCA Chemical Information System to reduce manual handling of data, to increase internal EPA access to data relevant to chemical assessments, and to expedite review of chemicals.
- Initiating development of new tools for hazard and exposure identification, assessment, and characterization while improving existing tools to better assess chemical risks.
- Maintaining the functionality of *ChemView,*[324] continuing to increase transparency, and expanding the information ChemView makes available to the public, including newly completed chemical assessments, worker protection information, and other new data reported to EPA under TSCA.
- Continuing TSCA CBI LAN network and Chemical Information System stabilization and modernization efforts.

Implementing TSCA depends on the collection and availability of information on chemicals from a wide variety of public and confidential sources. EPA's data currently resides in multiple formats including paper files, microfiche, and numerous old electronic file formats. A critical need for improving EPA's performance on TSCA implementation is modernizing the IT systems necessary for chemical data collation, storage, and curation and making the data received under TSCA available in structured and consistent formats. The funding requested will support the following activities: advancing modernization of the existing TSCA IT infrastructure; enhancing the New Chemical Review (NCR) system; initiating steps toward automating publication of New Chemical Consent Orders and SNURs; continuing efforts regarding remaining TSCA CBI review workflow enhancements; analyzing and updating TSCA records data to identify and organize records for

[324] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/introduction-chemview.

publication; making progress toward the development of a framework for enabling CIS to automatically assign unique identifiers (UIDs) as CBI claims are approved; making progress in the effort to digitize the remaining legacy 8(e)s and publish them in *ChemView*; and initiating digitization of legacy documents.

Chemical Data Management Modernization. The international regulatory community has been moving toward using the International Uniform Chemical Information Database (IUCLID) to capture, store, maintain, and exchange data on intrinsic and hazardous properties of chemical substances. Data in IUCLID is centered around standardized reporting templates consistent with internationally accepted test guidelines and has CBI protection built in. EPA has initiated the process to incorporate IUCLID template structures into OPPT's CBI LAN, but resource constraints have limited EPA's implementation and adoption of IUCLID. With increased resources in FY 2024, the TSCA program will continue to collaborate with ORD to implement a IUCLID instance in its CBI LAN to capture, store, and maintain data on intrinsic and hazard properties of chemicals. The Agency also will work with international partners to modify software applications to ensure EPA's unique needs and federal IT requirements are incorporated. Along with integration and consolidation of other legacy data systems, this initiative will modernize EPA's chemical data management infrastructure and deliver more efficient searching, collating, managing, and integrating of data on chemicals, resulting in significant time and cost savings.

Collaborative Research Program to Support New Chemical Reviews.[325] In FY 2024 EPA will continue to develop and implement a multi-year collaborative research program in partnership with ORD and other federal agencies. This collaboration is focused on developing new science approaches for performing risk assessments on new chemical substances under TSCA. The effort is expected to bring innovative science to new chemical reviews; modernize the approaches used; increase the transparency of the human health and ecological risk assessment process; and expand utilization of current information technology tools and databases. The resources requested for FY 2024 will allow EPA to accelerate implementation of the collaborative research program, including application of new approach methodologies (NAMs) and the new chemicals program in accordance with statutory mandates and to address the backlog of older submissions. These resources also are critical to ensuring that the Agency can conduct robust risk assessments using best available science and data within the statutory timelines.

Other TSCA Sections, Mandates, and Activities

Chemical Data Reporting (CDR) & Tiered Data Reporting (TDR) Rule.[326] In FY 2024 EPA plans to propose a rule that expands reporting requirements for chemicals that are candidates for—or selected as—high-priority substances. The purpose is to acquire the most relevant and applicable data that will support risk evaluation. In FY 2024, EPA plans to finalize the Rule after responding to comments on the proposed Rule and modifying certain CDR requirements. Additionally, EPA

[325] *See*, https://www.epa.gov/newsreleases/epa-announces-collaborative-research-program-support-new-chemical-reviews.
[326] Section 8(a) of TSCA requires manufacturers (including importers) to provide EPA with information on the production and use of chemicals in commerce. In March 2020, EPA amended the Chemical Data Reporting (CDR) rule to reduce burden for certain CDR reporters, improve data quality, and align reporting requirements with amended TSCA. The recent Calendar Year 2020 CDR Reporting Cycle, which occurs every four years and covers CY 2016-2019, commenced on June 1, 2020, and concluded on January 29, 2021.

will update existing CDR guidance documents, refine the CDR reporting tool, and address questions from the reporting community ahead of the CDR cycle occurring in FY 2024.

Other Section 8 Activities. In FY 2024 EPA will analyze 300 Substantial Risk (Section 8(e)) Notifications submitted by industry[327] and continue issuing other data gathering rules to obtain data needed for Section 6 prioritization and risk evaluations. Also in FY 2024, EPA will continue to implement the data request under the section 8(a) asbestos reporting rule and section 8(a)(7) PFAS reporting rule, both of which will have been finalized in 2023. EPA continues to develop and test the reporting tools for each of these rules ahead of their respective data submission periods.

PFAS Roadmap Support. PFAS has been manufactured and used in a variety of industries globally since the 1940s, and they are still being used today. FY 2024 work will include continuing to implement the PFAS national testing strategy; ensuring a robust review process for new PFAS; reviewing previous decisions on PFAS; closing the door on abandoned PFAS and uses; implementing a new PFAS reporting rule; and leading the development of a voluntary PFAS Stewardship Program. The Notice of Proposed Rulemaking (NPRM) for the inactive PFAS was signed on January 17, 2023. The funding requested in the FY 2024 budget request will allow EPA to improve the Agency data submission process for test data and ensure early engagement with Test Order recipients and, where there is interest expressed, with other key stakeholders to facilitate robust data collection. The requested funding also will allow EPA to review study plans required to be submitted as a result of Test Orders and data submitted pursuant to the first round of Test Orders issued under TSCA for human health effects; to integrate submitted data into systematic review databases; and to analyze existing data in preparation for issuing additional orders to require additional testing for chemicals already subject to testing.

Polychlorinated Biphenyls (PCBs). PCBs are a nationwide problem and found in every region. TSCA requires essential work in evaluating a site for PCB exposures and reducing risks at that site. EPA Regions do this by making site-specific PCB "use" determinations, evaluating exposures, and providing recommendations and specialized technical support to address the risks associated with PCBs legally and illegally "in use." EPA's Regional offices will work with building owners to implement practical interim measures; to develop outreach and technical assistance materials to prevent or reduce exposure to PCBs; and to conduct risk evaluation of PCB exposure at local sites.

Mercury. In FY 2024 EPA will maintain the Mercury Electronic Reporting Application[328] and conduct outreach to stakeholders on reporting requirements. EPA also will continue work under the Mercury Export Ban Act and amendments related to prohibiting export of certain mercury compounds and to supporting compliance with the Minamata Convention on Mercury to which the United States is a party. EPA will collect and prepare information for publication in the CY 2024 update to the national mercury inventory and consider recommending actions to further reduce mercury use.

[327] TSCA Section 8(e) Notifications require EPA be notified immediately when a company learns that a substance or mixture presents a substantial risk of injury to health or the environment.
[328] The Mercury Electronic Reporting application is an electronic reporting interface and database within the Central Data Exchange (CDX).

TSCA Citizen Petitions. In FY 2024 EPA will continue to meet the requirements of section 21 of TSCA, which authorizes citizen petitions for the issuance, amendment, or repeal of certain actions (rules and orders) promulgated under specific components of TSCA sections 4, 5, 6, and 8. The Agency must grant or deny a section 21 petition within 90 days. If EPA grants a petition, the requested action must be initiated in a timely fashion. EPA has received a total of 29 TSCA section 21 petitions since September 2007. 11 of those petitions have been submitted since enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act.[329]

Formaldehyde Standards for Composite Wood Products. In FY 2024 EPA will continue implementing regulations under the TSCA Title VI Formaldehyde Standards for Composite Wood Products Act (Public Law 111-199), which established national emission standards for formaldehyde in new composite wood products.[330] In February 2023, EPA published a final rule providing technical updates to voluntary consensus standards cross-referenced in the Formaldehyde Emissions Standards for Composite Wood Products rule.[331]

TSCA User Fees. TSCA section 26 authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA sections 4, 5, 6, and 14.[332] In FY 2021 EPA collected $28.6 million: $3.3 million from Section 5, $24.05 million from 19 of the 20 Section 6 EPA-Initiated Risk Evaluations, and $1.25 million from one Section 6 MRRE for a TSCA Work Plan chemical.[333] EPA's FY 2021 collections were as follows:

TSCA Section	**Amount Collected**
Section 5	$3.3 million
Section 6 EPA-Initiated Risk Evaluations	$24.05 million
Section 6 MRREs	$1.25 million
Total	*$28.6 million*

Because nearly $17 million of the collections for the 19 Section 6 Risk Evaluations was not due to be paid until September 2, 2021, those funds were inaccessible to EPA until FY 2022. EPA will apportion FY 2021 section 6 collections over the risk evaluation lifecycle (3.5 years). In FY 2022 EPA collected approximately $5.1 million[334] and is projected to collect $5.23 million in FY 2023[335] and $35.9 million in FY 2024[336]. Projected collections also are subject to potential changes in fee levels, which are required to be updated every three years under TSCA.[337] EPA proposed revisions to the fee rule in January 2021. Based on public comments received on the proposed rule,

[329] For additional information, please visit: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-21.
[330] For additional information, please visit: http://www2.epa.gov/formaldehyde/formaldehyde-emission-standards-composite-wood-products.
[331] See https://www.federalregister.gov/documents/2023/02/21/2023-03444/voluntary-consensus-standards-update-formaldehyde-emission-standards-for-composite-wood-products
[332] TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 26(b) (1) and (4).
[333] The Agency invoiced $88.2 thousand for Section 4 Test Orders in FY 2020 and FY 2021 but did not start receiving submissions until FY 2022.
[334] $1.46 million from the remaining Section 6 EPA-Initiated Risk Evaluations invoices, $3.5 million from Section 5 submissions, and $88,200 thousand from Section 4 Test Order submissions.
[335] $3.65 million in Section 5 submissions, $93.2 thousand from Section 4 Test Order invoices, and an additional amount from one TSCA Section 6 Manufacturer-Requested Risk Evaluation at $1.49M if the MRRE request is granted.
[336] $3.8 million in Section 5 submissions and $32.1 million from the next round of Section 6 EPA-initiated chemical risk evaluations.
[337] For additional information, please visit: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.

as well as stakeholder engagement and EPA's continued experience in implementing the 2018 Fee Rule, the Agency issued a supplemental notice of proposed rulemaking in November 2022 that adds to and modifies this earlier proposal. EPA intends to finalize the rule in late FY 2023 or early FY 2024.

Cumulative risk methodologies. EPA is developing aggregate exposure and cumulative risk approaches to characterizing chemical exposure and risk in risk evaluations under TSCA. In FY 2024 the following foundational activities will be conducted to support statutory deadlines:

- Develop approaches to determine when aggregating chemical exposure across conditions of use is applicable in risk evaluations.
- Develop approaches to identify co-exposure to chemicals to inform prioritization and to determine when cumulative assessments should be considered for relevant chemicals.
- Apply, where appropriate and feasible, approaches for conducting aggregate exposure and cumulative risk assessments.
- Evaluate applicability and feasibility of using biomonitoring data in risk evaluations.
- To begin integrating cumulative assessment into the TSCA program, in May 2023 EPA plans to release for public comment and SACC peer review a cumulative risk assessment framework, with phthalate chemicals as a case study.
- In FY 2023, EPA will release for public comment and SACC peer review a 1,4-dioxane risk evaluation supplement that advances the Agency's use of aggregate exposure and fenceline analysis in its TSCA chemical evaluation program.
- Develop and revise exposure and hazard models.
- Support for scientific and other publications.

Continuous Improvement of TSCA Implementation. In FY 2024, the Agency will continue to monitor and evaluate its progress related to core responsibilities under TSCA, such as completing all EPA-initiated risk evaluations and associated risk management actions for existing chemicals within statutory timelines. In addition, EPA will continue to reduce the backlog and work towards meeting the applicable review period of 90 days for Section 5 new chemicals submissions (such as PMNs, MCANs, and SNUNs). EPA also will undertake other forms of assessment and data gathering in FY 2024. Based on experience and chemical-specific information EPA will continue to apply fit-for-purpose application of systematic review to support TSCA risk evaluations.

Performance Measure Targets:

(PM TSCA4) Number of HPS TSCA risk evaluations completed within statutory timelines.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						0	0	7	Evaluations
Actual				1	0	0			

(PM TSCA5) Percentage of existing chemical TSCA risk management actions initiated within 45 days of the completion of a final existing chemical risk evaluation.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						100	100	100	Percent
Actual						N/A			
Numerator									Actions
Denominator									

(PM TSCA6a) Percentage of past TSCA new chemical substances decisions with risk management actions reviewed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						5	25	30	Percent
Actual						N/A			
Numerator									Decisions
Denominator									

(PM TSCA6b) Percentage of TSCA new chemical substances with risk management actions reported to the 2020 CDR reviewed for adherence/non-adherence with TSCA Section 5 risk management actions that are determined to adhere to those requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						N/A	25	30	Percent
Actual						N/A			
Numerator									Substances
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$7,965.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$39,924.0 / +112.5 FTE) This increase enables EPA to develop and review data critical to existing chemical risk evaluation and risk management activities; update and develop 21st century information technology and data tools to meet increasing demands; and begin to transform New Chemicals review into an efficient and sustainable process to complete cases in keeping with the statutory requirements. This program change also will support an agencywide multi-year collaborative research program for new chemicals that is focused on modernizing the process and incorporating scientific advances in new chemical evaluations under TSCA. This investment includes $20.971 million in payroll.

Statutory Authority:

Toxic Substances Control Act (TSCA).

Toxic Substances: Lead Risk Reduction Program
Program Area: Toxics Risk Review and Prevention
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$12,404***	***$14,359***	***$14,437***	***$78***
Total Budget Authority	$12,404	$14,359	$14,437	$78
Total Workyears	56.1	62.9	62.9	0.0

Program Project Description:

EPA's Lead Risk Reduction Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain communities.[338] This program thereby plays an important role in achieving the Administration's goals to enhance environmental justice (EJ) and equity by:

- Implementing standards governing lead paint hazard identification and abatement practices.
- Identifying and providing access toa national pool of certified firms and individuals trained to carry out lead paint hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and
- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead paint hazards in their homes.

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention (CDC), no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected.[339,340] Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 34.6 million homes in the U.S. have LBP and that 29 million homes have significant LBP hazards.[341] Children living at or below the poverty line who live in older housing are at greatest

[338] Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.
[339] Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.
[340] *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.
[341] *See*, *American Healthy Homes Survey II Lead Findings* (HUD, 2021), found at: https://www.hud.gov/sites/dfiles/HH/documents/AHHS_II_Lead_Findings_Report_Final_29oct21.pdf.

risk. Additionally, some racial and ethnic groups and those living in older housing are disproportionately affected by LBP.[342]

Because of historic and persistent disproportional vulnerabilities of certain racial, low-income, and overburdened and underserved communities, the Lead Risk Reduction Program has the potential to create significant EJ gains and provides strategic opportunities to advance EPA's work in support of the Administration's goals to enhance EJ and equity as seen in the *Strategy to Reduce Lead Exposures and Disparities in U.S. Communities.*[343]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

Renovation, Repair and Painting Program

In FY 2024 EPA will continue to implement the Renovation, Repair and Painting (RRP) Rule to address lead hazards created by renovation, repair, and painting activities in homes and child-occupied facilities[344] and to advance EPA's EJ goals. Fifteen states and one tribe have been authorized to administer this program and rule. In the remaining non-authorized states, tribes, and territories, EPA will continue to accredit training providers, track training class notifications, and certify renovation firms. EPA also will assist in the development and review of state and tribal applications for authorization to administer training and certification programs, provide information to renovators and homeowners, provide oversight and guidance to all authorized programs, and disseminate model training courses for lead-safe work practices. As of October 2022, there were 299 accredited RRP training providers and almost 56,000 certified renovation firms. In FY 2022, about 31 percent of renovation firms with expiring certifications were recertified before their certifications expired.

DLHS, Definition of LBP, DLCL, and Public and Commercial Buildings (P&CBs)

As a result of a May 2021 decision by the U.S. Court of Appeals for the Ninth Circuit, the dust-lead hazard standards (DLHS), the definition of LBP, and the dust-lead clearance levels (DLCL) regulations have been identified by the Administration as rules to reconsider.[345] FY 2024 funding will enable EPA to finalize revisions to the DLHS and DLCL, while conducting activities necessary to revisit the definition of LBP and SLHS. In addition, EPA must continue work to evaluate whether hazards are created from renovations of public and commercial buildings (P&CBs). Reconsideration and development of these rulemakings will help ensure the most protective approaches are taken to reduce lead exposure in homes and child-occupied facilities,

[342] Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile BLL was 3.0 µg/dL, and among those in families at or above the poverty level, it was 2.1 µg/dL, a difference that was statistically significant. The 95th percentile BLL among all children ages 1 to 5 years was 2.5 µg/dL. The 95th percentile BLL in Black non-Hispanic children ages 1 to 5 years was 3.0 µg/dL, compared with 2.4 µg/dL for White non-Hispanic children, 1.8 µg/dL for Mexican-American children, and 2.7 µg/dL for children of "All Other Races/Ethnicities." The differences in 95th percentile BLL between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. See *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[343] Strategy to Reduce Lead Exposures and Disparities in U.S. Communities (EPA, 2022) found at https://www.epa.gov/system/files/documents/2022-11/Lead%20Strategy_1.pdf.

[344] For additional information, please visit: https://www.epa.gov/lead/lead-renovation-repair-and-painting-program.

[345] For additional information, please visit: https://cdn.ca9.uscourts.gov/datastore/opinions/2021/05/14/19-71930.pdf.

with benefits for overburdened and underserved communities where disproportionate impacts occur from LBP in support of the Administration's goals to enhance EJ and equity. The DLHS defines hazardous levels of lead in residential paint, dust, and soil, and post abatement clearance levels for lead in interior house dust.

As resources allow, EPA will conduct technical analyses and rulemaking efforts to address issues related to preventing childhood lead poisoning, revising the soil-lead hazard standards (SLHS); and continuing work to identify and subsequently address LBP hazards identified in public and commercial buildings. The definition of lead-based paint is incorporated throughout the lead-based paint regulations, and application of this definition is central to how the lead-based paint program functions. In collaboration with the Department of Housing and Urban Development (HUD), EPA will revisit the definition of LBP and, as appropriate, revise the definition to make it more protective. EPA is currently evaluating how best to move forward on this issue.

In FY 2024 EPA will continue to evaluate risk from renovations of public and commercial buildings pursuant to TSCA §402(c)(3), which directs EPA to promulgate regulations for renovations in target housing, public buildings built before 1978, and commercial buildings that create lead-based paint hazards. EPA will determine whether such renovations create LBP hazards and, if they do, EPA will address those hazards by promulgating work practice, training, and certification requirements for public and commercial buildings. Because low-income, minority children are disproportionally vulnerable to lead exposure, these efforts, as well as others that focus on reducing environmental lead levels, have the potential to create significant EJ gains.

Lead-Based Paint (LBP) Activities

In FY 2024 EPA will continue to implement the LBP Activities (Abatement, Risk Assessment, and Inspection) Rule by administering the federal program to review and certify firms and individuals and to accredit training providers. Ensuring that those who undertake LBP Activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and to work toward addressing the historic and persistent disproportional vulnerabilities of certain racial, low-income, and overburdened and underserved communities. Additionally, the Agency will continue to review and process requests by states, territories, and tribes for authorization to administer the lead abatement program *in lieu* of the federal program. Thirty-nine states, four tribes, the District of Columbia, and Puerto Rico have been authorized to run the LBP abatement program.

Education and Outreach

In FY 2024 the Agency will continue to provide education and outreach to the public on the hazards of LBP, emphasizing compliance assistance and outreach to support implementation of the RRP rule and to increase public awareness about preventing childhood lead exposure and lead poisoning. The Agency will further its work in reaching contractors and the public in underserved communities through the "Enhancing Lead-Safe Work Practices through Education and Outreach" initiative, by increasing the number of RRP certified contractors and by providing community leaders a means to educate their own communities about lead hazards, reducing and preventing potential exposure to lead, and the importance of hiring certified lead professionals. This initiative, in combination with other regional outreach, is designed to reduce harm to children from exposure to lead in underrepresented and underserved communities disproportionately affected by lead

exposure, including a focus on low income, overburdened, underserved, and tribal communities. The Agency will continue to provide multimedia outreach for the National Lead Poisoning Prevention Week, a collaboration with the Centers for Disease Control (CDC) and HUD. Actions include formal announcements, social media, web revisions, and other outreach. Finally, EPA will continue to provide support to the National Lead Information Center (NLIC) to disseminate information to the public.[346]

Performance Measure Targets:

(PM RRP30) Percentage of lead-based paint RRP firms whose certifications are scheduled to expire that are recertified before the expiration date.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						32	33	34	Percent
Actual	18	17	19	40	36	31			
Numerator	1,793	1,134	1,185	9,006	6,524	2,874			RRP Firms
Denominator	9,851	6,855	6,091	22,384	18,158	9,423			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$875.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (-$797.0) This program change is an offset to contracts for the increase for payroll fixed costs.

Statutory Authority:

Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 *et seq.* – Sections 401-412.

[346] For additional information, please visit: https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center.

Underground Storage Tanks (LUST/UST)

LUST / UST

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities, Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$11,807***	***$12,021***	***$14,451***	***$2,430***
Leaking Underground Storage Tanks	$9,707	$9,991	$14,665	$4,674
Total Budget Authority	$21,512	$22,012	$29,116	$7,104
Total Workyears	87.8	97.9	108.6	10.7

Program Project Description:

Environmental Program Management (EPM) resources fund EPA's work in the Leaking Underground Storage Tank (LUST)/UST Program to help prevent releases of petroleum through activities such as inspection and compliance assistance support. The EPM LUST/UST Program provides states[347] and tribes with technical assistance and guidance and directly funds projects that assist states and tribes in their program implementation, such as the Tribal Underground Storage Tanks Database (TrUSTD). EPA is the primary implementer of the UST Program in Indian Country. With few exceptions, tribes do not have independent UST program resources. EPA will provide facility-specific compliance assistance for UST facility owners and operators in communities with environmental justice concerns in Indian country.

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[348] As of July 2021, approximately 53 million people lived within a quarter mile of an active UST facility, representing 16 percent of the total U.S population. These communities tend to be more minority and lower income than the U.S. population as a whole.[349]

In 2005, Congress passed the Energy Policy Act (EPAct) which, along with other release prevention measures, requires states to inspect facilities at least once every three years. EPA has

[347] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[348] For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[349] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: 1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and 2) population data from the 2015-2019 American Community Survey.

been supporting states in these efforts. Between 2008 and 2022, the number of annual confirmed releases has decreased by 38 percent (from 7,364 to 4,568).[350]

An EPA study suggests that increased UST compliance is a result of increasing inspection frequency. EPA's statistical analysis, using the State of Louisiana's and Arkansas's UST data, showed a positive and statistically significant effect of increased inspection frequency on facility compliance.[351] This evidence supports the data trends the Agency witnessed: compliance rates rose notably after fully implementing the three-year inspection requirement.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan.*

EPA estimates that only two percent of the Nation's 125,000 retail fuel locations have the appropriate equipment to store higher blends of ethanol, which means that the remaining UST systems will need some level of upgrade before they can safely and legally store E15. This could pose a greater risk of an accidental fuel release in nearby communities. To help address this, EPA is requesting approximately $2.3 million and 5.0 FTE to establish a targeted, national program to improve the compatibility of UST systems with E15 in fenceline communities where E15 is more prevalently used.

Requested resources will be used to:

- Conduct outreach and education to UST owners to ensure they both understand the regulatory requirements to store E15 and the technical process they can use to determine their compatibility in complying with those requirements so they can safely store E15; and

- Hire staff to support state inspection programs and to conduct direct E15 compliance inspections in Indian Country.

Additionally, in FY 2024, EPA will continue to engage in the following core activities:

- Support enhanced inspections and evaluations for UST owners/operators to ensure that UST systems meet current regulations. This will include expanded development and use of a facility specific compliance assistance application for use in Indian Country.

- Develop tools and resources to assist states in adapting to the impacts of climate change and extreme weather events. This includes developing tools and resources to assist states in identifying facilities that are more prone to flooding or wildfires and helping these facilities prepare for these events before they occur.

[350] For more information, please refer to https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.
[351] Sullivan, K. A.; Kafle, A (2020). *The Energy Policy Act of 2005: Increased Inspection Frequency and Compliance at Underground Storage Tank Facilities*. OCPA Working Paper No. 2020-01.

- Provide oversight for state LUST prevention grants and provide compatibility compliance assistance for tribal facilities.

- Continue research studies that identify the compatibility of new fuel formulations with current tank systems.

- Continue to coordinate with state UST prevention programs.

- Provide technical assistance, compliance help, and expert consultation to states, tribes, and stakeholders on both policy and technical matters. This support strives to strengthen the network of federal, state, tribal, and local partners (specifically communities and people living and working near UST sites) and assists implementation of the UST regulations.

- Provide guidance, training, and assistance to the regulated community to improve understanding and compliance.

- Continue to work with industry, states, and tribes to identify causes and potential solutions for corrosion in diesel tanks. Work in this area is important given the significant findings regarding the increasing prevalence of corrosion of UST system equipment containing ethanol or diesel fuels.[352]

EPA will continue to collect data regarding both the compliance rate and the number of new releases for UST systems in Indian Country. The compliance rate will help determine progress toward meeting EPA's revised regulations and help identify any areas that need specific attention. In addition, EPA will continue its work to evaluate the effectiveness of its 2015 regulations, which are designed to ensure existing UST equipment continues to function properly.

Performance Measure Targets:

Work under this program supports performance results in the LUST Prevention Program under the LUST appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$171.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$2,259.0 / +5.5 FTE) This program change requests additional FTE to conduct direct E15 compliance inspections in Indian Country. Resources also will be used for the development and coordination of outreach materials to the regulated community. This investment includes $1.0 million for payroll.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9011.

[352] For more information, please refer to: www.epa.gov/ust/emerging-fuels-and-underground-storage-tanks-usts#tab-3.

Water Ecosystems

National Estuary Program / Coastal Waterways
Program Area: Protecting Estuaries and Wetlands
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$33,958***	***$40,000***	***$32,514***	***-$7,486***
Total Budget Authority	$33,958	$40,000	$32,514	-$7,486
Total Workyears	36.0	36.9	36.9	0.0

Program Project Description:

The National Estuary Program (NEP)/Coastal Waterways Programs work to restore the physical, chemical, and biological integrity of estuaries of national significance and coastal watersheds by protecting and restoring water quality, habitat, and living resources.[353]

The Nation's coasts are facing devastating ecological and societal stress now, and communities with environmental justice concerns, especially people of color, low-income, and indigenous communities, are experiencing disproportionate climate impacts. Sea level rise and shoreline loss, dead zones, harmful algal blooms, coral bleaching, coastal acidification, wetland and habitat loss, shifts in species composition and habitat, frequent flooding, degraded water quality, and storms that result in billion-dollar damages are becoming routine. The water quality and ecological integrity of estuarine and coastal areas is critical to the economic vitality of the U.S. While the estuarine regions of the U.S. comprise just 12.6 percent of U.S. land area, they contain 43 percent of the U.S. population and provide 49 percent of all U.S. economic output.[354] The economic value of coastal recreation in the U.S. – for beachgoing, fishing, bird watching, and snorkeling/diving – has been conservatively estimated by the National Oceanic and Atmospheric Administration to be in the order of $20 billion to $60 billion annually.[355]

Wetlands also protect coastal property, providing a buffer against storms, floods, and high waves. They stabilize shorelines, prevent land from eroding, and provide carbon sequestration. The storm damage mitigation services provided by wetlands are valued at over $23 billion dollars annually. The NEP has collectively protected and restored over 2.6 million acres of habitat within 28 estuaries of national significance since 2000. Most of these acres are wetland habitat providing the benefits described above to coastal watersheds and their communities stretching across 39 percent of U.S. shoreline miles and containing 24 percent of the U.S. population. NEPs do this by working collaboratively and proactively with local governments and other partners through broad networks and leveraging other sources of funding.

[353] For more information, please visit https://www.epa.gov/nep.
[354] For more information, please visit https://www.fisheries.noaa.gov/national/habitat-conservation/estuary-habitat.
[355] For more information, please visit https://www.fisheries.noaa.gov/national/habitat-conservation/coastal-wetlands-too-valuable-lose.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will:

- Provide $19.6 million in Clean Water Act Section 320 grants for 28 NEPs ($700 thousand per NEP). This is a highly leveraged program with projects that address coastal, estuarine, and inland freshwater ecosystem needs. On average, NEPs leverage more than $17 for every dollar provided by EPA. This funding will strengthen EPA's staff and internal resource capacity to support and manage core NEP programmatic activities, including the implementation of each NEP's Comprehensive Conservation and Management Plan, conducting and addressing findings from regular program evaluations of individual NEPs, oversight of the day-to-day operations of the NEPs, and management of Clean Water Act Section 320 grant funds;

- These resources provide capacity to support NEP programs that address priority issues such as nutrient management, habitat protection and restoration, water quality, green infrastructure, and marine litter. Throughout the NEPs' work, the program is seeking to prioritize climate adaptation and resiliency and greenhouse gas mitigation co-benefits through blue carbon measures, and equitably distribute federal investments and their benefits, including to disadvantaged communities. NEPs will continue to develop and implement climate adaptation and resiliency strategies, engage and educate stakeholders, and implement collaborative projects with regional, state, and local partners;

- Funding will also support the NEPs in developing the skills and capacity to integrate environmental and climate justice into their guiding documents and daily operations. These activities will benefit disadvantaged communities and help achieve the goals of the Administration's Justice40 initiative; and

- Conduct Program Evaluations to assess how the NEPs are making progress in achieving programmatic and environmental results through implementation of their Comprehensive Conservation and Management Plans. The evaluation process has proven to be an effective, interactive management process that ensures national program accountability and transparency, while incorporating local priorities and considerations. It also demonstrates the value of federal investment in estuarine and coastal watershed restoration and protection at the local and regional levels.

FY 2024 funding will be used to reinvigorate the Climate Ready Estuaries (CRE) program[356] and other important coastal program activities, including restoration and protection of coastal wetlands (*e.g.,* avoiding and removing tidal restrictions). CRE develops resources and provides technical support to NEPs and other coastal community leaders and advises on coastal climate resiliency nationally. EPA will continue to work with other federal agencies, states, and tribes to assess

[356] For more information, please visit: https://www.epa.gov/cre.

challenges such as increasing temperatures and ocean and coastal acidification and identify opportunities to implement actions to mitigate the effects of ocean acidification.

EPA continues to work with states, tribes, trust territories, NEPs, and Federal agencies to implement the National Aquatic Resource Survey (NARS) in coastal/estuarine waters. In FY 2023, the NARS coastal survey will complete analysis and interpretation of the sample results and share them with state and tribal partners. The web-report and results dashboard for the 2020 National Coastal Condition Assessment will be released in late FY 2023. In FY 2024, EPA will initiate planning activities with our partners for the 2025 National Coastal Condition Assessment.

EPA, as the federal chair of the Gulf Hypoxia Task Force, will work with other task force member federal agencies and twelve member states to continue implementation of the 2008 Gulf Hypoxia Action Plan. This activity complements other coordination and implementation resources in the Geographic Program: Gulf of Mexico and Surface Water Protection Program. A key goal of the Gulf Hypoxia Action Plan is to improve water quality in the Mississippi River Basin and reduce the size of the hypoxic zone in the Gulf of Mexico by implementing existing and innovative approaches to reduce nitrogen and phosphorus pollution in the Basin and the Gulf.

The Hypoxia Task Force is developing basin-wide metrics, while Task Force member states are using Infrastructure Investment and Jobs Act resources to implement nutrient reduction strategies, partner with land grant universities, report on measures to track progress, and identify a need for adaptive management. Excessive nutrients can have both ecological and human health effects. For example, high nitrate levels in drinking water have been linked to serious illness.[357] In addition to the public health risks, there are considerable economic costs from impaired drinking water. State support for effective nutrient reduction in the Gulf will be coordinated with other Hypoxia Task Force federal member agencies, such as the U.S. Department of Agriculture and U.S. Geological Survey, in high-priority watersheds.

The Infrastructure Investment and Jobs Act (Public Law 117-58) includes $38.4 million for this program in FY 2024.

Performance Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$379.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$7,865.0) This program change reduces the resources available for this program. Significant additional funding for these activities is available in FY 2024 through the Infrastructure Investment and Jobs Act.

[357] For more information, please visit: National Service Center for Environmental Publications.

Statutory Authority:

2021 Protect and Restore America's Estuaries Act; 1990 Great Lakes Critical Programs Act of the Clean Water Act; Great Lakes Legacy Reauthorization Act of 2008; Clean Water Act; Estuaries and Clean Waters Act of 2000; Protection and Restoration Act of 1990; North American Wetlands Conservation Act; Water Resources Development Act; 2012 Great Lakes Water Quality Agreement; 1987 Montreal Protocol on Ozone Depleting Substances; 1909 Boundary Waters Treaty; Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987, and the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 (16 U.S.C. 1451 note).

Wetlands

Program Area: Protecting Estuaries and Wetlands
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$21,103***	***$21,754***	***$26,671***	***$4,917***
Total Budget Authority	$21,103	$21,754	$26,671	$4,917
Total Workyears	116.4	118.4	138.0	19.6

Program Project Description:

EPA's Wetlands Protection Program has two primary components: 1) the Clean Water Act (CWA) Section 404 regulatory program and 2) the state and tribal wetland development program. Major activities of the Wetlands Protection Program include timely and efficient review of CWA Section 404 permit applications submitted to the United States Army Corps of Engineers (USACE) or authorized states; engaging and partnering with USACE, states, and other stakeholders to develop stream and wetland assessment tools, and improving compensatory mitigation effectiveness and availability of credits; assisting in the development of state and tribal wetlands protection and restoration programs under CWA, including 404 program assumption and 401 water quality certification; and providing technical assistance to the public on wetland management and legal requirements.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Working with federal, state, tribal, and local partners, EPA will strive to ensure an effective, consistent approach to wetlands protection, restoration, and permitting. To achieve this goal, the Agency will continue its collaborative relationship with USACE in the CWA Section 404 permitting program. In addition, EPA will continue its work with states and tribes to build their wetlands programs to monitor, protect, and restore wetlands to achieve multiple societal benefits, including adapting and mitigating the effects of climate change.

<u>CWA Section 404</u>
Section 404 of the CWA is an established program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. USACE is responsible for managing the day-to-day permit processes nationwide under CWA Section 404.[358] EPA engages in the CWA

[358] Currently, three states, Michigan, New Jersey, and Florida, have assumed the CWA Section 404 permit program. CWA Section 404(g) gives states and tribes the option of assuming, or taking over, the permitting responsibility and administration of the CWA Section 404 permit program for certain waters.

404 permit process to ensure compliance with the CWA Section 404(b)(1) guidelines as the permitting authority formulates their proposed permits. EPA will perform its CWA responsibilities to support new infrastructure projects funded through the Infrastructure Investment and Jobs Act of 2021. In 2008, EPA and USACE issued a final rule governing compensatory mitigation for activities authorized by the CWA 404 and associated losses of aquatic resources. The regulation prescribes a review and approval process for the establishment and management of mitigation banks and in-lieu of fees program. EPA and USACE will continue to work together to evaluate the effectiveness of the program, provide training to regulators and the public, and consider further enhancements to the rule and program.

In FY 2024, EPA will support the development of stream and wetland assessment methods, trainings for regulators, and regional crediting protocols for compensatory mitigation to improve the efficiency and environmental outcomes of federal and state agency review. In addition, EPA and USACE will continue to build internal capacity through trainings and improve efficiencies in federal CWA Section 404 permitting to help with reducing potential costs and delays; increasing consistency and predictability; improving protection of public health and the environment, including assessing climate impacts and impacts to disadvantaged communities; and ensuring permit decisions are legally defensible.

EPA also will continue carrying out its responsibilities as a member of the Gulf Coast Ecosystem Restoration Council authorized under the Resources and Ecosystem Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act, and as a Natural Resource Damage Assessment (NRDA) Trustee for the Deepwater Horizon oil spill under the Oil Pollution Act (OPA). Under CWA Section 404, the RESTORE Act, and OPA, EPA's responsibilities include timely, environmentally sound, and compliant implementation of National Environmental Policy Act (NEPA) review and associated permitting. Under NRDA, EPA is a cooperating or lead federal agency for NEPA on all Deepwater Horizon Trustee Implementation Group restoration plans and ensures the appropriate level of NEPA analysis is integrated into those referenced restoration plans. EPA's RESTORE responsibilities include NEPA analysis for projects that the Council assigns to EPA. As a NRDA Trustee, EPA undertakes mandatory independent third-party financial audits every three years to ensure accountability regarding the use of funds provided under a 2016 consent decree.[359] The first independent third-party financial audit was initiated in FY 2018 and concluded in FY 2020 with no negative findings. The second audit was initiated in FY 2021 and concluded in FY 2022 with no significant findings. EPA anticipates initiating its third audit in late FY 2023.

Building State and Tribal Wetlands Programs

EPA will continue to work with states and tribes to target Wetlands Protection Program funds to core statutory requirements while providing states and tribes flexibility to best address their priorities. This includes providing assistance to states and tribes interested in assuming the administration of the CWA Section 404 (g) program. EPA intends to finalize a regulation in FY 2024 to update the existing assumption regulations and provide greater clarity to state and tribes on what waters may be assumed. EPA also will continue to administer Wetland Program Development Grants, which is a Justice40 covered program, in support of state and tribal wetland programs. The Agency will focus on working more efficiently with states and tribes to achieve

[359] For more information, please see: https://www.epa.gov/deepwaterhorizon.

specific program development outcomes including protecting and restoring wetlands to address climate impacts, provide benefits to disadvantaged communities, support state and tribal assumption of the CWA Section 404 program, and support states and tribes with implementing CWA Section 401.[360]

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$25.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$4,942.0 / +19.6 FTE) This increase of resources and FTE supports the implementation of the Clean Water Act to protect and restore wetlands. This investment includes $3.385 million in payroll costs.

Statutory Authority:

CWA § 404, § 104(b)(3).

[360] For more information, please see: https://www.epa.gov/wetlands.

Water: Human Health Protection

Beach / Fish Programs
Program Area: Ensure Safe Water
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$1,209***	***$2,246***	***$2,381***	***$135***
Total Budget Authority	$1,209	$2,246	$2,381	$135
Total Workyears	1.8	2.7	3.8	1.1

Program Project Description:

The Beach/Fish Program provides up-to-date science, guidance, technical assistance, and nationwide information to state, tribal, and federal agencies to protect human health of beachgoers from contaminated recreation waters, as well as recreational and subsistence fishers (*e.g.*, tribal communities and other underserved populations) from consumption of contaminated fish.

The Agency implements the following activities under this Program:

- Develop and disseminate methodologies and guidance that states and tribes use to sample, analyze, and assess fish tissue in support of waterbody specific or regional consumption advisories.

- Develop and disseminate guidance that states and tribes can use to conduct local fish consumption surveys.

- Develop and disseminate guidance that states and tribes can use to communicate the risks of consuming chemically contaminated fish.

- Gather, analyze, and disseminate information to the public and health professionals that informs decisions on when and where to fish, and how to prepare fish caught by recreational and subsistence fishers.

- Provide best practices on public notification of beach closures and advisories.

- Develop tools such as the sanitary survey app, predictive modeling, and improved analytical methods; and

- Maintain the E-Beaches IT system to collect data required by the Beaches Environmental Assessment and Coastal Help (BEACH) Act.

In addition to providing technical support to states and tribes on beach monitoring and data reporting, these programs are part of EPA's ongoing effort to increase public awareness of the risks to human health associated with contact with recreational water contaminated with pathogens or Harmful Algal Blooms, and with eating locally caught fish that contain pollutants such as mercury, PCBs, or PFAS at levels of concern. These efforts are directly linked to the Agency's mission to protect human health.

FY 2024 Activities and Performance Plan:

Work in this Program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to:

- Update science and public policy to assess and manage the risks and benefits of fish consumption.
- Provide analytical tools and collect data associated with beach monitoring.
- Provide technical support to states in the operation of their fish consumption advisories and beach monitoring programs.
- Build program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews.
- Per the Agency's PFAS Roadmap, complete list of recommended target analytes for state and tribal fish advisory programs that are either known or thought to be present in samples of edible freshwater fish in high occurrence nationwide.
- Complete National Aquatic Resource Surveys (NARS) National Lakes Assessment analysis of fish tissue for contaminants including PFAS;
- Per the Agency's PFAS Roadmap, complete reporting for PFAS levels in the Nation's lakes for the first time; and
- Implement the Justice 40 initiative in the BEACH Act Program.

In FY 2024, EPA also will make investments in providing up-to-date science, guidance, and technical assistance so states and tribes have equitable and effective beach and fish advisory programs. This information allows the public, including underserved communities, to make informed choices about recreational activities in local waters and eating locally caught fish. EPA will maintain the E-Beaches IT system and make updates if needed.

Performance Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this Program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$89.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$46.0 / +1.1 FTE) This net change in resources and FTE builds program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews.

Statutory Authority:

Clean Water Act, § 101, 104, and 303.

Drinking Water Programs

Program Area: Ensure Safe Water
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$117,205***	***$121,607***	***$142,583***	***$20,976***
Science & Technology	$4,177	$5,098	$6,975	$1,877
Total Budget Authority	$121,382	$126,705	$149,558	$22,853
Total Workyears	473.1	539.4	554.5	15.1

Program Project Description:

Safe drinking water is critical for protecting human health and the economic vitality of the Nation. Approximately 320 million Americans rely on public water systems to deliver safe tap water that complies with national drinking water standards.[361] EPA's Drinking Water Program is based on a multiple-barrier and source-to-tap approach to protect public health from contaminants in drinking water.[362] EPA protects public health through:

- Source water assessment and protection;
- Promulgation of new or revised National Primary Drinking Water Regulations (NPDWRs);
- Training, technical assistance, and financial assistance programs to enhance public water system capacity to comply with regulations and provide safe drinking water;
- Underground Injection Control (UIC) programs;
- Support for implementation of NPDWRs by state and tribal drinking water programs through regulatory, non-regulatory, and voluntary programs and policies; and
- Funding, assistance, and resources for states and tribes to support the financing of water infrastructure improvements nationwide that will improve compliance, address drinking water contaminants such as lead, and ensure water systems are more resilient to threats, like cyber-attacks and natural hazards such as climate change.[363]

[361] For more information on the U.S. Environmental Protection Agency Safe Drinking Water Information System (SDWIS/FED), please see: http://water.epa.gov/scitech/datait/databases/drink/sdwisfed/index.cfm.
[362] For more information, please see: https://www.epa.gov/sites/production/files/2015-10/documents/guide_swppocket_2002_updated.pdf.
[363] For more information, please see: https://www.epa.gov/ground-water-and-drinking-water.

Current events, including the detection of lead and per- and polyfluoroalkyl substances (PFAS) in drinking water, highlight the importance of drinking water protection programs that safeguard public health. It is also important to protect the sources of drinking water. Moreover, incidents of drinking water contamination with lead and PFAS, such as perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), and GenX chemicals, exemplify the increased demand for risk communication and other resources that can help communities protect public health and address these chemicals.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the program will continue to support the Agency's national drinking water priorities and implementation of the Infrastructure Investment and Jobs Act (IIJA) of 2021 (Public Law 117-58), including:

- Addressing lead and emerging contaminants such as PFAS;
- Improving resilience in drinking water systems to address natural hazards, including climate change, and human threats by enhancing cybersecurity; and,
- Improving drinking water and water quality across the Nation, especially in rural, small, underserved, and disadvantaged communities across the country.

EPA is requesting additional resources in FY 2024 to integrate climate adaptation planning into water programs, policies, and rulemaking processes, and consult and partner with states, tribes, territories, local governments, environmental justice organizations, community groups, businesses, and other federal agencies to strengthen the adaptive capacity and increase the resilience of the Nation. The Agency also is requesting resources to support regulatory analysis, development and training, technical assistance for state, tribal, and local communities to address drinking water contaminants (including lead and emerging contaminants like PFAS) in their efforts to ensure safe and affordable drinking water.

The Agency will continue to improve the effectiveness and efficiency of its programs for states and tribes, including work to ensure EPA water programs and resources reach communities that too often have been left behind, including rural and tribal communities. In FY 2022, over 1,000 tribal, small, rural, or underserved communities were provided with technical, managerial, or financial assistance to improve operations of their drinking water or wastewater systems. The Drinking Water Program supports this effort by providing training and assistance to state drinking water programs, tribal drinking water officials, and technical assistance providers. The training includes:

- Achieving and maintaining compliance at drinking water systems;
- Developing and amplifying best practices and providing technical assistance;

- Strengthening state and tribal program capacity; and

- Certifying drinking water operators and maintaining an essential workforce.

EPA is overseeing state drinking water programs by completing the annual public water system supervision (PWSS) program review for each primacy agency as required under the Safe Drinking Water Act (SDWA). Information gained during the program reviews, which occur throughout the year, includes an analysis of the completion of sanitary surveys by primacy agencies and an evaluation of whether each primacy agency is implementing its programs in accordance with SDWA. The annual program reviews directly support the work of the states and the Agency to reduce the number of community water systems in noncompliance with health-based standards. As of January 2023, 2,988 of the 3,508 systems with health-based violations on September 30, 2017, have been returned to compliance (*i.e.,* 520 systems are still in violation).

In FY 2024, EPA will continue to work with states towards long-term remediation of systems with health-based violations. The Agency is also continuing to work with states on completing the development of the Drinking Water State-Federal-Tribal Information Exchange System (DW-SFTIES) as the long-term replacement for the Safe Drinking Water Information System for states (SDWIS-State). As of FY 2023, 42 states use SDWIS-State for day-to-day information management for implementing state drinking water programs. EPA is also supporting states in their transition planning activities, helping them to prepare to transition to DW-SFTIES after its scheduled completion in 2025. The information gained from the PWSS reviews and the database modernization efforts will continue to support evidence-building activities as part of EPA's implementation of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act).

The Agency also continues to provide training and collaborate with states on:

- Helping underserved, small, and disadvantaged communities with SDWA compliance and providing households access to drinking water services and household water quality testing, including testing for unregulated contaminants;

- Maintaining the states' capacity development programs and providing resources, tools, and technical assistance to help water systems with SDWA compliance;

- Effectively implementing Public Water System Supervision (PWSS Programs; and

- Providing operator certification programs to support the water sector workforce.

<u>Water Infrastructure</u>

Infrastructure investment is essential. The Nation's aging infrastructure poses a significant challenge for the drinking water and wastewater sectors to protect public health and the environment. These challenges are particularly pressing in small, rural, overburdened, and underserved communities. In FY 2024, EPA will continue to support improvements to the Nation's drinking water infrastructure, including identification of infrastructure needs and assistance for underserved and tribal communities. The Agency also will support activities to leverage and encourage public and private collaborative efforts and investments. This Program also supports

the Agency's efforts in implementing IIJA. EPA will focus on collaborating with the states to help small and underserved communities access the funding provided by IIJA.

In FY 2023, EPA will release the seventh Drinking Water Infrastructure Needs Survey and Assessment (DWINSA). This survey provides a 20-year capital investment need for public water systems that are eligible to receive funding from state Drinking Water State Revolving Fund (DWSRF) programs. The survey also informs the DWSRF allocation formula as required under SDWA. Beginning in FY 2024, early framework activities for the eighth DWINSA will begin. 'Lessons Learned' sessions will also be held with EPA's state partners to discuss the previous survey cycle and how to improve moving forward. The FY 2024 request includes up to $1.5 million set aside from the DWSRF to ensure there are consistent and reliable resources to fund this important work.

In addition to the DWSRF Program, in FY 2024 EPA will continue to support drinking water infrastructure programs by implementing the following statutes:

- Consolidated Appropriations Acts of 2022 and 2023 (EPA Community Grants);
- Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) within IIJA;
- America's Water Infrastructure Act of 2018 (AWIA);
- Water Infrastructure Improvements for the Nation Act of 2016 (WIIN); and
- The Water Infrastructure Finance and Innovation Act of 2014 (WIFIA).

Collectively, these laws strengthened existing programs and created new ones to tackle significant public health concerns and environmental needs. The programs created in these laws are vital to protecting public health, continuing to grow the United States' economy, and ensuring that rural and urban communities from coast-to-coast can thrive. EPA will continue to provide WIIN, AWIA, and IIJA grant funding to support projects focusing on reducing lead and addressing emerging contaminants in drinking water and to enhance water system resiliency to natural hazards such as climate change and man-made threats such as cyber-attacks, with a focus on small and disadvantaged communities.

Funding for infrastructure supports EPA's goal to increase the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs by $9.5 billion in FY 2024. These water infrastructure finance programs include the Clean Water State Revolving Fund, DWSRF, and the WIFIA program. In FY 2022, over $14.6 billion has been leveraged by these programs increasing the funds available to improve, repair, and modernize the Nation's water infrastructure. In addition, the IIJA provides $5 million for this program to support states seeking to gain primacy for UIC class CI wells in FY 2024.

Drinking Water Program Implementation

In FY 2024, the Agency is requesting additional resources to support continued work with states to implement requirements for all NPDWRs to ensure that systems install, operate, and maintain

appropriate levels of treatment and effectively manage their drinking water plants and distribution systems. The program activities are designed to improve drinking water and water quality across the Nation, especially in tribal and underserved and vulnerable communities. Activities include:

- Working with states to provide training, technical assistance, and resources to replace lead service lines and optimize corrosion control treatment, develop other strategies to minimize exposure to lead, and maintain simultaneous compliance;

- Developing guidance, tools, and trainings to support water systems and primacy agencies in implementing the Lead and Copper Rule and its revision;

- Implementing regulations to improve the clarity, readability, and accuracy of information in Consumer Confidence Reports;

- Implementing SDWA Section 1414 requirements allowing states to mandate water system restructuring assessments;

- Focusing on the reduction of the number of community water systems with health-based violations, especially small systems, tribal systems, and systems in underserved communities;

- In preparation of the PFAS NPDWR, supporting the development of the draft Small System Compliance Guidance Document; and,

- Developing implementation guidance manual and training for states in advance of the new Lead and Copper Rule Improvements (LCRI).

EPA will continue the development of the Drinking Water State-Federal-Tribal Information Exchange System (DW-SFTIES) and support state migration to the Compliance Monitoring Data Portal, which enables drinking water utilities and laboratories to report drinking water data electronically. In addition, EPA will continue the development of efficient program data management and reporting tools focusing on drinking water regulation, system technical, managerial, and financial capacity, and activities that inform status of SDWA compliance and decisions to support human health protection.

In FY 2024, EPA will conduct the following activities to facilitate compliance with drinking water rules:

- Overseeing the national PWSS Program by administering grants to states and measuring program results based on state reporting of health-based rule violations at public water systems for over 90 drinking water contaminants;

- Offering training and technical assistance to states, tribes, and public water systems, especially those in underserved and disadvantaged communities, with a priority on addressing significant noncompliance with the NPDWRs;

- Bolstering its strong partnership with the states to provide small system technical assistance, especially in disadvantaged communities, with a focus on compliance with rules, operational efficiencies, and system sustainability and resiliency to ensure public health protection;

- Directly implementing the Aircraft Drinking Water Rule, designed to protect millions of people who travel on approximately 5,700 aircraft in the United States annually; and,

- Directly implementing the Drinking Water Program where states and tribes do not have primacy (*e.g.,* Wyoming, the District of Columbia, and tribal lands excluding the Navajo Nation).

In FY 2024, EPA will continue to implement the Evidence Act and make evidence-based decisions guided by the best available science and data. EPA will continue to help develop statistical evidence where it is lacking and improve EPA's capacity to generate and share science and data, and use it in policy, budget, operational, regulatory, and management processes and decisions. Specifically, the Agency will be conducting evidence-building activities and gathering information from SDWIS that inform the data quality of the Agency's drinking water compliance information. Through these efforts, EPA has identified a need for access to states' compliance monitoring data and is developing the regulatory authority and tools necessary to fill this gap. Furthermore, EPA expects to identify additional data needs, potential sources of additional information, and mechanisms to fill data gaps. EPA also will identify system characteristics that support compliance and those that cause compliance challenges. EPA will use these findings to inform and develop policy instruments.

Drinking Water Standards

To assure the American people that their water is safe to drink, EPA's drinking water regulatory program monitors for a broad array of contaminants, evaluates whether contaminants are a public health concern, and regulates contaminants when there is a meaningful opportunity for health risk reduction for persons served by public water systems. In FY 2024, the Agency also will address drinking water risks with the following actions:

- Continuing to develop the new NPDWR, LCRI. In FY 2021, EPA issued the Lead and Copper Rule Revisions (LCRR) and subsequently reviewed those revisions in accordance with Executive Order 13990.[364] Through this review, the Agency concluded that there are significant opportunities to improve the LCRR to support the overarching goal of proactively removing lead service lines and more equitably protecting public health (86 FR 71574). EPA intends to propose the LCRI in 2023 and finalize by October 16, 2024.

- Conducting human health effects assessments for water contaminants to support SDWA actions, including the derivation of maximum contaminant level goals, drinking water health advisories, and human health benchmarks. Consideration of those potentially most

[364] For additional information, please see: https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis

at risk – especially sensitive subpopulations and critical life stages (*e.g.,* infants and children) – is key in development of health effects assessments for contaminants in water.

- Finalizing the PFAS NPDWR in FY 2024 after proposing the regulation in FY 2023. In FY 2021, EPA began the process to establish enforceable limits for PFAS chemicals, including PFOA and PFOS, under SDWA. The proposal will be supported by health effects assessments/science, external consultations, peer reviews, and other work undertaken in FY 2022 and continuing in FY 2023. EPA will address public comments; conduct additional analyses (if needed) in response to public comments; conduct stakeholder engagement activities; and revise support documents as part of drafting the final regulation.

- Continuing the development of the SDWA-mandated draft Regulatory Determinations (Reg Det) for the CCL 5 in FY 2023 and publishing the draft Reg Det for CCL 5 in FY 2024.

- Initiating the process to develop the Sixth Contaminant Candidate List (CCL 6) in FY 2024 following the FY 2023 publication of the Federal Register notice requesting nominations of drinking water contaminants for the CCL 6.[365]

- Continuing to participate in interagency actions and support cross-agency efforts to address PFAS; establishing better understanding of the health impacts and extent of their occurrence in the environment and resulting human exposures; and supporting priorities identified by the EPA's PFAS Council and in EPA's PFAS Strategic Roadmap.

- Developing drinking water health advisories for PFAS with final toxicity values.

- Continuing to develop risk communication and other tools to support states, tribes, and localities in managing PFAS and other emerging contaminants in their communities.

- Concluding the technical analyses that support the fourth six-year review (SYR4) of existing NPDWRs and publishing the SYR4 Federal Register notice.

- Continuing to support state and tribal efforts to manage cyanotoxins in drinking water, including providing technical assistance.

- Concluding the technical analyses requested by the National Drinking Water Advisory Council (NDWAC) Working Group and evaluating the NDWAC recommendations as the Agency considers the potential revisions to the existing Microbial and Disinfection Byproducts Rules.

- Continuing to monitor PFAS and lithium from January 2023 – December 2025 under UCMR 5, conducting occurrence analyses, and providing support to drinking water systems and laboratories as they collect and analyze samples during implementation.

[365] For additional information, please see: https://www.epa.gov/ccl/draft-contaminant-candidate-list-6-ccl-6.

- Collecting and analyzing Community Water System Survey data to capture changes in the conditions of public water systems that have taken place in water systems since 2006.

Source Water Protection

SDWA requires drinking water utilities that meet the definition of a public water system to meet requirements for source water protection set by EPA and state primacy agencies. Protecting source water from contamination helps reduce treatment costs and may avoid or defer the need for complex treatment. EPA will continue to partner with states, federal counterparts, drinking water utilities, and other stakeholders to identify and address current and potential threats to sources of drinking water. In FY 2024, the Agency will be:

- Continuing to develop data-layers and decision support tools to assist source water assessment, planning, and emergency preparation including updates to the Drinking Water Mapping Application for Protecting Source Waters (DWMAPS) on EPA's web-based geospatial platform, *GeoPlatform*;[366]

- Working with state, federal, utility, and local stakeholders to leverage resources, support efforts to assist communities in source water protection activities and projects, and promote ongoing efforts, including funding opportunities through the Funding Integration Tool for Source water (FITS), to protect drinking water sources;

- Continuing to partner with the Department of Agriculture (USDA)'s Natural Resources Conservation Service and Forest Service and state partners to support implementation of the source water protection provisions of the Agriculture Improvement Act of 2018 (2018 Farm Bill). This presents an opportunity to forge stronger connections between EPA and USDA to address agriculture-related impacts to drinking water sources; and

- Continuing to provide support for workshops that promote source water protection at the local level and support the integration of source water protection into related programs at the state and federal levels, focusing on reducing nutrient pollution impacts on drinking water sources.

Underground Injection Control

Roughly one-third of the United States' population is served by public water systems that receive water from groundwater. To safeguard current and future underground sources of drinking water from contamination, the UIC Program regulates the use of injection wells that place fluids underground for storage, disposal, enhanced recovery of oil and gas, and minerals recovery. Protecting ground water requires proper permitting, construction, operation, and closure of injection wells. In FY 2024, planned activities in the UIC Program include:

- Supporting implementation of DWWIA to support comprehensive carbon dioxide infrastructure in the United States by working with applicants on Class VI permits for

[366] For more information, please see: https://www.epa.gov/sourcewaterprotection/dwmaps.

secure geologic storage of carbon dioxide and with state UIC programs seeking to obtain primacy for the Class VI program;

- Supporting the implementation of the UIC STAG and IIJA funded Class VI grant programs;
- Supporting efforts to advance environmental justice in UIC programs;
- Supporting states and tribes in applying for primary enforcement responsibility and implementing UIC Program revisions;
- Continuing to provide technical assistance, tools, and strategies to states to improve implementation of UIC programs, including development of e-learning material, and to support permitting in direction implementation;
- Using national UIC data to assist with promoting consistent approaches to program oversight of state and EPA's UIC programs; and
- Streamlining EPA's UIC direct implementation permitting process and reducing the permit application backlog.

Water Reuse

To assure a safe and reliable source of water that is resilient to drought, flooding, and population growth, EPA is working to advance water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders, including non-governmental organizations, states, tribes, and local governments. In FY 2024, EPA will continue to support the National Water Reuse Action Plan and the Federal Water Reuse Interagency Working Group. The Agency will develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA will also pursue actions that provide technical and financial tools for stakeholders to ensure the accessibility of water reuse.[367]

One Water/One Community

EPA will coordinate CWA and SDWA resources toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Permitting Related to Infrastructure

EPA is requesting additional resources to help process the increase in permits across the country driven by this Administration's historical investment in infrastructure. These additional FTE are necessary to handle the influx in a variety of different permit types that require EPA approval.

[367] For more information, please see https://www.epa.gov/waterreuse.

This program also includes resources to support the increasing and new costs associated with mandatory Agency support services provided through the Working Capital Funding (WCF), support delegated responsibilities for Mission Support functions across the Agency, and support Agency-wide implementation of OMB Cybersecurity mandates.

Performance Measure Targets:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target					875	640	450	400	CWSs
Actual	3,508	1,718	1,128	1,048	654	537			

(PM DW-07) Number of drinking water and wastewater systems, state and tribal officials, and water sector partners provided with security, emergency preparedness, and climate resilience training and technical assistance.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2,000	3,500	3,500	Systems and Partners
Actual						3,939			

(PM DWT-02) Number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						100	55	35	CWSs
Actual						74			

(PM INFRA-06) Number of Tribal, small, rural, or underserved communities provided with technical, managerial, or financial assistance to improve system operations.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						339	542	542	Communities
Actual					187	1,668			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$11,071.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical Agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$218.0 / +1.2 FTE) This program change increases FTE to support Agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $218.0 thousand for payroll.

- (+$1,282.0 / + 1.0 FTE) This program change is an increase to support implementation of EPA's Climate Adaptation Action Plan. In particular, this increase will support priority commitments, such as actions to integrate climate adaptation into EPA programs, policies, and processes, efforts to address climate adaptation science and data needs, and efforts to consult and partner with outside stakeholders.

- (+$8,405.0 / +8.9 FTE) This program change is an increase in resources and FTE that supports regulatory analysis, development and training, permit review, technical assistance for state, tribal, and local communities to address drinking water contaminants (including Lead and PFAS) in their efforts to ensure safe and affordable drinking water. This increase also supports development of the Lead and Copper Rule Revisions and the Unregulated Contaminant Monitoring Rule. This investment includes $1.841 million for payroll.

Statutory Authority:

SDWA; CWA.

Water Quality Protection

Marine Pollution
Program Area: Ensure Clean Water
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$8,699***	***$10,187***	***$12,624***	***$2,437***
Total Budget Authority	$8,699	$10,187	$12,624	$2,437
Total Workyears	26.5	32.8	38.0	5.2

Program Project Description:

EPA's Marine Pollution Program: 1) aims to reduce marine litter in the Nation's waterways and communities in coastal regions and on major river systems, improve trash capture activities across the country, and support the Trash Free Waters Program; 2) addresses incidental discharges under the Clean Water Act Section 312; and 3) protects human health and the marine environment from pollution caused by dumping by implementing the Marine Protection, Research and Sanctuaries Act (MPRSA) and supporting the Ocean Dumping Management Program.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Trash Free Waters Program

The FY 2024 request includes resources and Full Time Equivalents (FTE) to support trash capture and prevention programs across the United States tied to water quality and waste management goals and to implement activities under the Save Our Seas Act 2.0. This program provides support to states and municipalities in coastal regions and on major river systems, with a special focus on lower-income areas with environmental justice concerns.

FY 2024 funding will allow the Program to:

- Support the installation of trash capture systems in stormwater conveyance systems and in waterways using technologies that are cost-effective and that have high trash-removal efficiencies;

- Provide assistance on integrating trash prevention provisions into municipal stormwater management permits and practices, as well as broader watershed plans.

- Aid targeted source reduction efforts.

- Promote appropriate protocols for trash monitoring efforts.
- Research and address microplastics (including microfibers) in waterways.
- Engage in targeted outreach and education efforts in support of place-based trash capture and reduction; and
- Validate and replicate the most effective tools, projects, metrics, and partnerships across the Nation for subsequent application in locations within the United States and in countries with the greatest need.

The Trash Free Waters Program has been able to increase the number of place-based projects year by year through active engagement with partners. Since 2013, over two hundred aquatic trash related projects have been undertaken with EPA assistance, public education and outreach, research, or implementation of regional program strategies. EPA will continue to work with its partners to advance this initiative in FY 2024 and evaluate progress by reviewing best practices and challenges and applying lessons learned to future projects.

Vessels Program

In December 2018, the Vessel Incidental Discharge Act (VIDA) was signed into law establishing a new framework for the regulation of discharges incidental to the normal operation of vessels. EPA is reviewing and considering public comments on the proposed rule and developing a supplemental proposal to set national performance standards for approximately thirty different categories of discharges from commercial vessels greater than 79 feet in length, and for ballast water from commercial vessels of all sizes. Following finalization of the regulations, EPA will coordinate with the United States Coast Guard on their implementing regulations. In FY 2023, EPA plans to issue revised sewage no-discharge zone guidance and in FY 2024 will continue to work with states on designating no-discharge zones within their waters.

Ocean Dumping Management Program

MPRSA regulates the disposition of any material in the ocean unless expressly excluded under MPRSA. In the United States, MPRSA implements the requirements of the London Convention. In FY 2024, EPA will evaluate MPRSA permitting inquiries and requests for the ocean dumping of all materials except dredged materials and, as appropriate, issue MPRSA emergency, research, general, and special permits. This will include investigating any needed regulatory updates and addressing MPRSA permitting requests for climate mitigation approaches including sub-seabed sequestration of CO_2 in geological formations, ocean-based carbon dioxide removal activities, ocean alkalinity enhancement activities, or ocean-based solar radiation management activities.

The U.S. Army Corps of Engineers uses EPA's ocean dumping criteria when evaluating requests for MPRSA permits and MPRSA federal project authorizations for the ocean dumping of dredged material (*e.g.,* to support the expansion of ports and harbors or maintenance of navigation channels). All dredged material MPRSA permits and federal project authorizations are subject to

EPA review and written concurrence and EPA will continue to work expeditiously consistent with the Permitting Action Plan. In FY 2024, EPA will manage approximately one hundred EPA-designated ocean disposal sites, conduct ocean monitoring surveys at approximately six sites and evaluate lessons learned from each survey, review and update, as necessary, MPRSA-required site management and monitoring plans established for each EPA-designated site, and evaluate requests to designate (through rulemaking) new ocean disposal sites and/or modify (*i.e.,* expand the capacity of) existing EPA-designated sites.

EPA will perform its MPRSA responsibilities to support new port and navigation infrastructure projects funded through the Infrastructure Investment and Jobs Act of 2021. EPA will maintain national program capacity by training EPA staff and developing technical/regulatory tools to improve MPRSA permitting, site designation, and site management and monitoring. EPA will provide training for new Chief Scientist candidates and existing Chief Scientists responsible for designing and implementing ocean monitoring surveys to meet MPRSA requirements. In FY 2024, EPA will serve as the Head of the United States Delegation for the annual London Convention (LC) and London Protocol (LP) Scientific Groups Meetings, serve as Alternate Head of the United States Delegation for the annual Consultative Meeting of the LC and LP Parties, and represent the United States at the annual LP Compliance Group Meeting. An EPA representative will chair the annual LC/LP Consultative Meeting. With the U.S. Army Corps of Engineers, EPA will submit the annual United States Ocean Dumping Report to the International Maritime Organization.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$539.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,898.0 / +5.2 FTE) This increase of resources and FTE builds program capacity, particularly in areas related to environmental justice, water infrastructure support and oversight, climate change resilience, and regulatory reviews. This investment includes $999.0 thousand for payroll.

Statutory Authority:

Clean Water Act; Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act); Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987; Save Our Seas Act 2.0.

Surface Water Protection
Program Area: Ensure Clean Water
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$217,125***	***$224,492***	***$267,969***	***$43,477***
Total Budget Authority	$217,125	$224,492	$267,969	$43,477
Total Workyears	937.2	1,010.3	1,056.4	46.1

Program Project Description:

The Surface Water Protection Program, under the Clean Water Act (CWA), directly supports efforts to protect, improve, and restore the quality of the Nation's coastal waters, rivers, lakes, wetlands, and streams. EPA works with states and tribes to make continued progress toward clean water goals.

EPA uses a suite of regulatory and non-regulatory programs to protect and improve water quality and ecosystem health in the Nation's watersheds. In partnership with other federal agencies, tribes, states, territories, local governments, and non-governmental partners, EPA works collaboratively with public and private sector stakeholders nationally and locally to establish innovative, broad-scale, and location-appropriate programs to achieve the Agency's goals.

This Program also supports implementation of water quality standards, effluent guidelines, impaired waters listing, water quality monitoring and assessment, water quality certification, National Pollutant Discharge Elimination System (NPDES) permitting, and management and oversight of the Clean Water State Revolving Fund (CWSRF).

FY 2024 Activities and Performance Plan:

Work in this Program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*. By September 30, 2023, and in support of this goal and objective, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances, which is an Agency Priority Goal for FY 2022 – 2023 to *Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities.*[368]

In FY 2024, EPA will work with states and tribes to target funds to core requirements while providing states and tribes with flexibility to best address their priorities for surface water protection. The FY 2024 request provides an increase in funding that will allow EPA to focus on the advancement of clean water infrastructure programs, with an emphasis on building climate

[368] This Agency Priority Goal is implemented jointly with Goal 6.

change resilience, conducting CWA regulatory reviews, and advancing environmental justice through technical assistance and stakeholder engagement. The FY 2024 request also provides an increase of funding that will focus on investing in programs to put in place the national regulatory requirements needed to identify and control discharge of per- and polyfluoroalkyl substances (PFAS), nutrients and bacteria in surface waters and publicly owned treatment works (POTWs). This program project also includes resources to support the increasing and new costs associated with mandatory Agency support services provided through the Working Capital Funding (WCF), support delegated responsibilities for Mission Support functions across the Agency, and support Agency-wide implementation of OMB Cybersecurity mandates.

Program Implementation

Water Quality Criteria and Standards. Water quality criteria and standards provide the scientific and regulatory foundation for water quality protection programs under the CWA. EPA will provide new and revised national recommended ambient water quality criteria as required by CWA Section 304. EPA also will be supporting states and tribes with the adoption and implementation of water quality standards in accordance with 40 CFR part 131. In FY 2024, the Agency will place special emphasis on engaging with underserved communities in the review and setting of state water quality standards. The Agency also will place special emphasis on improving the water quality standards in tribal waters on reserved lands and in waterways where tribes retain treaty rights to better ensure that tribes' health and natural resources are protected.

Effluent Limitations Guidelines (ELGs). As required under the CWA, EPA will continue to annually review industrial sources of pollution and publish a preliminary ELG plan for public review, followed by a final biennial ELG plan informed by public comment. These plans will identify any industrial categories where ELGs need to be revised or where new ELGs need to be developed. In FY 2023, EPA intends to increase the capability of EPA's Effluent Guidelines program to reduce industrial pollutant discharges through innovative technology nationwide. EPA will continue the ELG rulemaking to strengthen wastewater guidelines for power plants that use steam to generate electricity. As part of the rulemaking, EPA remains committed to meaningful engagement with impacted communities and other stakeholders on potential revisions to the Steam Electric ELGs. EPA expects to publish a proposed rule in FY 2023 and complete the final rule in FY 2024.

In FY 2024, EPA will seek to complete a rulemaking to establish more protective nutrient limits on wastewater discharges from meat and poultry product facilities. EPA also will propose and finalize rulemakings to establish PFAS limits for the organic chemical manufacturing, metal finishing/electroplating, and landfills industrial point source categories. Additionally, EPA will collect data on additional industrial discharges of PFAS to surface waters and influent to POTWs and conduct rulemakings on one or more additional categories of industrial dischargers of PFAS as the Agency determines necessary.

Clean Water Act Analytical Methods Program. EPA will continue developing and updating analytical methods (test procedures) that are used by industries and municipalities to analyze the chemical, physical, and biological components of wastewater and other environmental samples. EPA periodically updates existing analytical methods to reflect advances in analytical

instrumentation and to foster innovation and improvement in the analytical chemistry community. In addition, as novel pollutants are identified for regulation under CWA programs, EPA develops and promulgates new analytical methods than can then be incorporated into NPDES and other permits. During FY 2024, EPA intends to continue developing analytical methods for determining PFAS in industrial wastewater to support ongoing PFAS industrial category rulemakings, as well as investing in updating existing analytical methods for pollutants such as pesticides/herbicides, microbial contaminants, radiological contaminants, and nutrients in wastewater.

Biosolids. EPA will continue to implement the Biosolids (sewage sludge) Program as required under CWA Section 405, including reviewing the biosolids regulations at least every two years to identify additional toxic pollutants and promulgate regulations for such pollutants consistent with the CWA. EPA also will continue to develop tools to conduct risk assessments for chemicals and pathogens found in biosolids. EPA will focus resources on obtaining and using the latest scientific knowledge to identify resource recovery and reuse alternatives, understanding and managing the biosolids lifecycle, engaging partners — particularly those communities most affected — and conducting research. Investment in the biosolids program is critical to addressing near term risks from PFAS, dioxins and dibenzofurans, polychlorinated biphenyls (PCBs), and other chemicals known to be in domestic sewage sludge that is currently applied to land.

Impaired Waters Listings and Total Maximum Daily Loads (TMDLs). EPA will work with states, territories, tribes, and other partners to identify impaired waters, as required by CWA Section 303(d), and on developing and implementing TMDLs for listed impaired waterbodies. TMDLs focus on clearly defined environmental goals and establish a pollutant budget, which is then implemented through local, state, and federal watershed plans and programs to restore waters. EPA will work with and provide support to states, territories, and tribes to ensure that TMDLs are effective and implementation ready. EPA also will support states, territories, and tribes develop other restoration approaches and plans for the protection of unimpaired or high-quality waters.

The TMDL Program is at an important inflection point as EPA begins the new "2022 - 2032 Vision for the Clean Water Act Section 303(d) Program" and continues to build on the work done throughout the first 10-year 303(d) Vision. As part of the 2022 - 2032 Vision, EPA provided four themes to consider in the CWA Section 303(d) program implementation - 1) Environmental Justice, 2) Climate Change, 3) Tribal Water Quality and Program Development, and 4) Program Capacity Building.

Monitoring and National Aquatic Resource Surveys (NARS). EPA will continue working with states and tribes to support the NARS statistically representative monitoring of the condition of the Nation's waters which supports CWA Section 305(b). EPA will explore opportunities to leverage NARS data analysis to gain insight on disparities in water quality and the impacts of climate change. EPA will leverage NARS training programs to support workforce development in water quality monitoring and build tribal capacity for monitoring and assessment. EPA will continue working with states and tribes to support base water quality monitoring programs and priority enhancements that serve state and tribal CWA programs in a cost-efficient and effective manner. The FY 2024 request would support EPA's assistance for states and tribes to expand monitoring and reporting for PFAS and other priority water quality concerns. EPA will continue

supporting state and tribal water quality data exchange and tools to maximize the use of data from multiple organizations to support water quality management decisions.

Waters of the United States. EPA and the Department of the Army published the final revised definition for the "Waters of the United States" rule in January 2023. The agencies developed this rule with consideration of the relevant provisions of the Clean Water Act and the statute as a whole, relevant Supreme Court case law, and the agencies' technical expertise after more than 45 years of implementing the longstanding pre-2015 "Waters of the United States" framework. EPA will continue to support the development of tools and resources with state and federal partners to facilitate implementation, such as the Streamflow Duration Assessment Methods.

Water Quality Certification. In accordance with Executive Order 13990, EPA completed a review of the 2020 CWA Section 401 certification rule and proposed a new rule on June 9, 2022, which will be completed in 2023. EPA will continue to support the development of tools and resources with the federal licensing and permitting agencies as well as the certifying agencies. Section 401 of the CWA gives states and authorized tribes the authority to assess potential water quality impacts of discharges from federally permitted or licensed projects that may affect the "Waters of the United States."

Water Quality Programs. The NPDES Program protects human health, safety, and the environment by regulating point sources that discharge pollutants into waters of the United States. In an average year, over 10 thousand permits are issued to address discharges from among the approximately 15 thousand wastewater treatment facilities, nearly 60 categories of industries, and almost 300 thousand stormwater facilities. EPA authorizes the NPDES permit program to state, tribal, and territorial governments, and currently 48 states, tribes in Maine, and U.S. Virgin Islands have authorized programs.

In FY 2024, EPA will continue to implement a permitting program that helps control point source discharges through permitting and pretreatment programs. The permitting process is a vital tool for protecting waterways, particularly in underserved communities that may suffer from a combination of economic, health, and environmental burdens, by setting effluent limits, monitoring, and reporting requirements, and other provisions. As climate change increases the stress on waterways, these permits allow EPA and the states to set appropriate requirements for the waste streams to protect water quality and public health.

In addition, as required under the CWA and Executive Order 12866*: Regulatory Planning and Review,*[369] EPA will continue to support cost-benefit analysis for CWA regulatory actions. EPA will work with states, tribes, territories, and local communities to safeguard human health; maintain, restore, and improve water quality; and make America's water systems sustainable and secure, supporting new technology and innovation wherever possible.

Nutrient and Harmful Algal Bloom (HAB) Reductions. The FY 2024 request includes resources and FTE to support efforts to reduce nutrient pollution and HABs, which remain the most significant widespread water quality challenge across the country, despite decades of efforts to

[369] For more information, please see: https://www.epa.gov/laws-regulations/summary-executive-order-12866-regulatory-planning-and-review.

achieve reductions.[370] Climate change is exacerbating HABs. The sources and impacts of nutrient pollution and HABs vary depending on geographic location, and span urban, rural, and coastal landscapes. EPA has been working with its partners to address these challenges. At the end of 2022, almost 12 thousand square miles of watersheds with waters identified as impaired by nutrients are now attaining standards. The FY 2024 request will allow EPA to assist states, territories, and authorized tribes in the development of numeric nutrient criteria through the Nutrient Scientific Technical Exchange Partnership & Support (N-STEPS) Program, establishment of numeric targets to apply narrative water quality standards (WQS), perform assessments and identify impaired waters, develop TMDLs, and support science research related to HABs.

Per- and Polyfluoroalkyl Substances (PFAS). The FY 2024 request directs resources toward addressing PFAS in surface waters through the development of national recommended ambient water quality criteria for PFOA and PFOS; biosolids risk assessments for PFOA and PFOS; methods for detecting PFAS in wastewater; national collection of information on discharges of PFAS from industrial point source categories to determine if revisions to ELGs are warranted; revising existing ELGs for metal finishing operations, organic chemical manufacturers, and landfills to include numeric effluent limits on PFAS discharges; incorporating PFAS monitoring requirements in NPDES permits; and fish tissue monitoring. In FY 2024, EPA will continue to implement the four-year PFAS Strategic Roadmap which contains a comprehensive set of actions that guide the Agency's efforts on PFAS.

Water Reuse. To assure that communities have safe, reliable sources of water that are resilient to drought, flooding, and population growth, EPA is working to advance water reuse nationwide. This work is being done in collaboration with a broad group of stakeholders including non-governmental organizations, states, tribes, and local governments. In FY 2024, EPA will continue to support the National Water Reuse Action Plan and the Federal Water Reuse Interagency Working Group. The Agency will develop and pursue actions that prioritize advancing technical and scientific knowledge on water reuse to ensure its safety across a range of uses and applications. EPA also will pursue actions that provide technical and financial tools to stakeholders to ensure the accessibility of water reuse.[371]

WaterSense. The WaterSense Program is a key component of the Agency's efforts to ensure long-term sustainable water infrastructure. WaterSense provides consumers with a simple label to identify and select water-efficient products to help them save water and money and provides resources and tools to help water utilities carry out efforts to manage water demand and wastewater flows. Products and homes may only bear the WaterSense label after being independently certified to ensure that they meet WaterSense criteria for efficiency and performance. As of February 2023, the Program has labeled more than 39 thousand models of plumbing and irrigation products, and more than 6,400 homes have earned the WaterSense label. Through 2021, the Program helped save more than 6.4 trillion gallons of water and 288 metric tons of greenhouse gases.[372] In FY 2024, the Program will work on a new specification for point-of-use reverse osmosis water treatment

[370] For more information, please see https://www.epa.gov/nutrientpollution.
[371] For more information, please see https://www.epa.gov/waterreuse.
[372] WaterSense Accomplishment Reports (updated annually). For more information visit: https://www.epa.gov/watersense/accomplishments-and-history.

systems and irrigation spray sprinkler nozzles and carry out consumer campaigns that encourage consumers to switch to WaterSense-labeled products.

Urban Waters Federal Partnership Program (UWFP). The Urban Waters Federal Partnership Program (UWFP reconnects urban communities with their waterways, particularly communities that are overburdened and underserved. The Program supports local urban water champions (Ambassadors) who work with diverse local stakeholder groups to collaborate on community-led revitalization efforts to improve the Nation's waters and promote their economic, environmental, and social well-being. At the national level, EPA leads a coalition of over 15 federal agencies that support 21 designated UWFP partnership locations. In FY 2024, the UWFP will continue to implement the actions identified in the Framework for the Future that was included in the 2021 Partner Recommitment,[373] including: strengthening the existing Partnership, increasing the number of communities that benefit from it, and leveraging the UWFP to address Administration and community priorities, including climate resilience and using nature-based solutions for multiple community benefits.

One Water/One Community: EPA will coordinate CWA and Safe Drinking Water Act resources toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Infrastructure

EPA will continue its support of the Nation's infrastructure, focusing on efforts to leverage and encourage public and private collaborative efforts and investments in improving the Nation's water infrastructure. This program supports the policy and fiduciary oversight of the Clean Water State Revolving Fund (CWSRF) Program, which provides low-interest loans and additional subsidization to help finance wastewater treatment facilities and other water quality projects.[374] Federal capitalization to the SRFs is significantly leveraged; since 1988, the CWSRF Program has made 46,224 assistance agreements, funding over $163 billion in wastewater infrastructure and other water quality projects.

The FY 2024 request:

- Supports funding for the Environmental Finance Centers Program which will help communities across the country improve their wastewater and stormwater systems, particularly through innovative financing.

- Drives progress on water infrastructure by increasing non-federal dollars leveraged by EPA water infrastructure finance programs (CWSRF, Drinking Water State Revolving Fund,

[373] For more information visit: https://www.epa.gov/system/files/documents/2021-11/urban-waters-recommitment-report-112221_508.pdf.
[374] For more information, please see https://www.epa.gov/cwsrf.

and Water Infrastructure Finance Innovation Act). EPA leveraged $14.6 billion in non-federal dollars in FY 2022.

- Supports decentralized systems (septic or onsite) that provide communities and homeowners with a safe, affordable wastewater treatment option by implementing the 2020 Decentralized Wastewater Management Memorandum of Understanding and by improving access to CWSRF financing for communities who rely on decentralized systems.

- Supports the Wastewater Technology Center that provides accurate and objective resources on innovative and alternative wastewater technologies with a focus on small, mid-sized, and underserved communities.

- Supports the Wastewater Technology Clearinghouse, a searchable database that will provide reliable, objective information on proven innovative and alternative technologies for decentralized and centralized alternative wastewater treatment, such as water reuse, small system technologies used by lagoons, resource recovery, and nutrients.

- Supports the Sustainable Utility Management programs, implemented in partnership with industry associations and designed to protect and improve infrastructure investments through the Effective Utility Management Program, the Water Workforce Initiative, and tools such as augmented alternatives analysis that help communities leverage investments to achieve water protection goals and other community economic and societal goals; and

- Supports the Water Infrastructure and Resiliency Finance Center in assisting local leaders in identifying financial approaches for their drinking water, wastewater, and stormwater infrastructure needs.

Program Oversight/Accountability

The Assessment TMDL Tracking Implementation System (ATTAINS). ATTAINS is an online system for accessing information about the conditions in the Nation's surface waters. ATTAINS provides key information to the Agency, as well as states, territories, and tribes, who play a critical role in implementing the CWA. The Agency will continue to support states, tribes, and territories in electronically reporting CWA Section 303(d) and Section 305(b) assessment conclusions through ATTAINS to track improvements in impaired waters. This tool allows states and EPA to track and report progress in meeting water quality standards.

EPA, through a new "bridge metric," continues to track state progress in completing TMDLs, other restoration approaches, or protection approaches with the goal of approximately 19 thousand square miles of addressed bridge metric waters by the end of FY 2024. As of December 2022, over four thousand square miles of state bridge metric waters were addressed by a TMDL, other restoration approach, or protection approach. Following the conclusion of this bridge metric, EPA's plan is that states will continue to set priorities every two years under a long-term Vision metric until the conclusion of the 2022 303(d) Vision.

EPA continues to support streamlining efforts to allow states to reduce the time they spend on administrative reporting. EPA will work on improved reporting of the Agency's metric to reduce the number of square miles of watershed with surface water not meeting standards. In FY 2022, over 20 thousand square miles of watersheds that contained previously impaired waters attained compliance with water quality standards.

NPDES Oversight. The National Program continues to work with the federal and state permitting authorities to provide oversight, technical assistance, and training to the permit writers in an effort to support program implementation and pursue comprehensive protection of water quality on a watershed basis. EPA's oversight includes the National Pretreatment Programs, which is a cooperative effort of federal, state, and local governments that perform permitting and enforcement tasks for discharges to publicly owned treatment works.

EPA continues to collaborate with the federal and state permitting authorities to identify opportunities to enhance the integrity and timely issuance of NPDES permits and permitting backlogs. After program improvements, between March 2018 and the end of September 2022, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 20 and 547 to 229, respectively. In FY 2024, EPA will continue to host NPDES-related workshops and provide technical assistance to build permit writer capacity on a range of topics including permit writing, pretreatment, whole effluent toxicity, stormwater, and nutrients. EPA also will issue general permits where appropriate to address permit integrity and timeliness to continue to reduce the backlog of permits.

In FY 2024, EPA will continue to work with the federal and state permitting authorities to address PFAS in NPDES permitting. In FY 2023, EPA published a memorandum titled, *Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs,* which provides detailed instructions regarding how permitting authorities would address PFAS discharges in NPDES permits. EPA encourages permitting authorities to propose monitoring requirements at facilities where PFAS are expected or suspected to be present in wastewater and stormwater discharges, utilizing EPA's recently published analytical method 1633, which addresses 40 unique PFAS. In FY 2024, EPA also will continue to build upon this strategy by compiling best practices from state permitting authorities to address PFAS in NPDES permits, conducting training, and sharing the latest research and practices to prevent these contaminants from reaching surface waters.

EPA will work on addressing court decisions related to Maui, Hawaii in the permitting program. In *County of Maui v. Hawaii Wildlife Fund*, the Supreme Court held that discharges from point sources through groundwater that eventually reach a water of the United States require an NPDES permit if they are the "functional equivalent" of a direct discharge to a water of the United States. In FY 2024, EPA will continue to provide technical assistance to permit writers to implement this decision effectively in permits.

Integrated Planning. Clean water infrastructure investment needs are documented to be several hundred billion dollars, with wet weather improvements (combined sewer overflows [CSOs], sanitary sewer overflows [SSOs], bypasses, and stormwater discharges) comprising a significant portion of this total. Investment needs of this magnitude affect utility rates and disproportionately

impact underserved communities. Integrated planning, utilizing green infrastructure, and other tools allow communities to synchronize infrastructure investments with broader community development goals. An integrated approach creates opportunities for affordable, multi-benefit investments that protect public health and enhance resiliency. As an effort to promote the adoption of green or nature-based infrastructure as effective solutions to advance climate resilience or support the resilience of traditional hard infrastructure, EPA has reinvigorated the Green Infrastructure Federal Collaborative.[375] This cooperative effort fosters engagement and cooperation between agencies that actively work to promote the implementation of green infrastructure. In FY 2024, EPA will continue to implement integrated planning and green infrastructure practices to address wet weather challenges and increase infrastructure resiliency.

Building Coalitions to Advance the Permitting Program. EPA continues to work with stakeholders and industry to identify challenges in implementation and best management practices. In FY 2024, EPA will continue to lead the Animal Agriculture Discussion Group (AADG), which consists of animal agriculture representatives from the U.S. Department of Agriculture, the animal feeding industry, and the states. AADG provides a forum for industry to engage with permitting authorities, resulting in a shared understanding of how to enhance agricultural practices that lead to greater water quality protection.

Improving National Aquatic Resource Survey (NARS) Data. Another process improvement effort is focused on streamlining the flow of NARS data from EPA labs to state partners and data analysts. The Agency will continue to implement these process improvements and monitor the impact of data delivery on timeliness of analysis and reporting.

Improving Timeliness of Water Quality Standards Actions. EPA is investing in reducing the backlog of WQS actions. The Agency will continue to work to decrease the number of state and tribal WQS revision actions that have been submitted to EPA which EPA neither approved nor disapproved within the first 60 days after submittal and that have yet to be acted upon. The CWA requires EPA to review state and tribal WQS revisions and either approve within 60 days or disapprove within 90 days.

401(a)(2) Notifications. In FY 2022, EPA developed a system to track 401(a)(2) notifications. EPA will track whether a "may effect" determination has been made and to who (state or tribe) and then note the follow-up coordination, including potential public hearings, EPA recommendations, and whether the EPA recommendation led to improvements in the federal permit or license. The notifications will mostly come from the Army Corps of Engineers but can come from any federal permitting or licensing agency.

Permitting Related to Infrastructure. EPA is requesting additional resources to help process the increase in permits across the country driven by the Administration's historical investment in infrastructure. These additional FTE are necessary to handle the influx in a variety of different permit types that require EPA approval or review, including Section 401 certification.

[375] For more information please visit: https://www.epa.gov/green-infrastructure/green-infrastructure-federal-collaborative.

Performance Measure Targets:

(PM INFRA-06) Number of tribal, small, rural, or underserved communities provided with technical, managerial, or financial assistance to improve system operations.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						339	542	542	Communities
Actual					187	1,668			

(PM NPDES-03) Number of existing EPA-issued NPDES individual permits in backlog.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target			360	280	230	250	210	195	Permits
Actual		456	373	333	284	229			

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						8,000	8,000	17,100	Square Miles
Actual						20,511			

(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2,100	1,400	1,400	Square Miles
Actual						12,833			

(PM TMDL-03) Square miles of priority areas covered by TMDLs, other restoration plans, or protection approaches.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							7,940	19,280	Square miles
Actual									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$13,685.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change also includes support for critical agencywide infrastructure for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$14,053.0 / +22.0 FTE) This program change increases resources and FTE to accelerate progress on EPA's PFAS Strategic Roadmap, to enable EPA to move more quickly on policy, regulatory, and enforcement actions across multiple statutory authorities, and to support states and tribes in taking action on PFAS. This investment includes $4.053 million for payroll.

- (+$15,500.0 / +22.8 FTE) This increase of resources and FTE supports the advancement of clean water infrastructure programs, with an emphasis on building climate change resilience, conducting Clean Water Act regulatory and permit reviews, and advancing environmental justice. This investment also includes $4.2 million for payroll.

- (+$239.0 / +1.3 FTE) This program change increases FTE to support Agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements. This investment includes $239.0 thousand for payroll.

Statutory Authority:

Clean Water Act; Marine Protection, Research, and Sanctuaries Act; Marine Debris Research, Prevention and Reduction Act of 2006; Marine Plastic Pollution Research and Control Act of 1987.

Congressional Priorities

Congressional Priorities
Program Area: Clean and Safe Water Technical Assistance Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	***$21,700***	***$30,700***	***$0***	***-$30,700***
Science & Technology	$7,492	$30,751	$0	-$30,751
Total Budget Authority	$29,192	$61,451	$0	-$61,451

Project Description:

The purpose of the Water Quality Research and Support Grants Program is to provide training and technical assistance for small public water systems, to help such systems achieve and maintain compliance with the Safe Drinking Water Act (SDWA), and to provide training and technical assistance for small publicly owned wastewater systems, communities served by onsite / decentralized wastewater systems, and private well owners improving water quality under the Clean Water Act (CWA).

FY 2024 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2024. States have the ability to develop technical assistance plans for their water systems using Public Water System Supervision Program grant funds and set asides from the Drinking Water State Revolving Fund.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$30,700.0) This program change proposes to eliminate this Grant Program. Resources are available through other existing programs and states are best positioned to develop technical assistance plans for their water systems.

Statutory Authority:

SDWA § 1442(e); Federal Food, Drug and Cosmetic Act; Food Quality Protection Act; Endangered Species Act; CWA § 104(b)(3).

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Environmental Protection Agency
FY 2024 Annual Performance Plan and Congressional Justification

APPROPRIATION: Inspector General
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Inspector General				
Budget Authority	$48,605	$44,030	$64,526	$20,496
Total Work years	244.4	227.5	284.5	57.0

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Bill Language: Office of Inspector General

For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, $64,526,000, to remain available until September 30, 2025.

Program Projects in IG
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$48,605	$44,030	$64,526	$20,496
TOTAL IG	**$48,605**	**$44,030**	**$64,526**	**$20,496**

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Audits, Evaluations, and Investigations

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Inspector General	***$48,605***	***$44,030***	***$64,526***	***$20,496***
Hazardous Substance Superfund	$8,706	$11,800	$13,847	$2,047
Total Budget Authority	$57,310	$55,830	$78,373	$22,543
Total Work years	285.0	270.0	333.5	63.5

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is pursued through the mission of the OIG.

The OIG conducts independent audits, evaluations, special reviews, and investigations. The OIG also makes evidence-based recommendations to promote economy, efficiency, and effectiveness. The OIG seeks to identify risks and vulnerabilities within the Agency to prevent and detect fraud, waste, abuse, mismanagement, and misconduct for EPA as well as the U.S. Chemical Safety and Hazard Investigation Board (CSB).

The OIG promotes public trust and safety by keeping the head of the Agency, Congress, and the CSB Chair fully and immediately informed of deficiencies, vulnerabilities, and other activities that indicate the presence of fraud, waste, and/or abuse, the necessity for and progress toward OIG recommended corrective actions, and for being responsive with a sense of urgency to hotline and whistleblower complaints submitted for immediate action. The OIG's activities assist in the prevention and detection of fraud in EPA's and CSB's programs and operations, including but not limited to financial, scientific, cyber, and other. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's and CSB's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity.[1] In FY 2021, the OIG's appropriation was $55,086,000, with a return of investment of $149,632,858. The results were a 272 percent return on investment from audits and investigations.

OIG's auditing arm resides within the Office of Audit (OA). The OA is comprised of five permanent directorates: Financial; Business Operations; Information Resources Management;

[1] For more information, please see: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

Pollution Control and Cleanup; and Environmental Investment and Infrastructure. In addition to these five directorates, OA established another four directorates to provide oversight of the EPA's implementation of the Infrastructure Investment and Jobs Act: Drinking Water Investments; Special Drinking Water Projects; Clean Water Investments; and Recycling, Clean Up, and Pollution Prevention. Together, they are responsible for independent oversight of EPA and CSB programs and for recommending needed improvements to programs and operations. Specifically, OA conducts performance audits to assess the economy, efficiency, effectiveness, internal control, and compliance of EPA programs and EPA business operations. In addition, OA conducts up to 15 statutorily mandated audits each year, including financial audits of EPA and CSB financial statements as required by the Federal Managers' Financial Integrity Act and audits of the information security practices of EPA and CSB as required by the Federal Information Security Modernization Act.

OIG's evaluations arm resides with the Office of Special Review and Evaluation (OSRE). OSRE is comprised of four directorates. OSRE's three evaluation directorates are responsible for independent oversight of EPA programs and recommending needed improvements to programs and operations. The three evaluation directorates within OSRE are: 1) Programs, Offices, and Centers Oversight Directorate; 2) the Implementation, Execution, and Enforcement Directorate; and 3) the Environmental Infrastructure Oversight Directorate. OSRE's fourth directorate, the Administrative Investigations Directorate, conducts administrative investigations into allegations of misconduct by senior agency employees and complaints of whistleblower reprisal by agency employees, or employees of agency contractors, subcontractors, grantees, subgrantees or personal services contractors. The directorate also performs special reviews of significant events and emergent issues of concern that involve a suspected or alleged violation of law, regulation, or policy, or allegations of serious mismanagement.

OA conducts its mission in compliance with the Inspector General Act, as amended, and the Generally Accepted Government Accounting Standards. OSRE conducts its mission in compliance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation* and *Quality Standards for Federal Offices of Inspector General,* as applicable based upon the work performed. Work efforts focus on efficiency and program operations: program performance, including the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, performance audits, program reviews, evaluations, and inspections are conducted specifically to ensure targeted coverage of EPA programs and offices providing the greatest impact and receiving the greatest resources.

The investigative mission of the OIG is to conduct criminal, civil, and administrative investigations into fraud and serious misconduct within EPA that undermine the organization's integrity and public trust or creates an imminent risk or danger. OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities, as appropriate. These investigations may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include fraudulent practices, program integrity, laboratory fraud, serious employee misconduct, and cyber-crimes.

The audit, special review and evaluations, and investigative core mission program offices are directly supported by the OIG's management and administrative functions of its Office of the Chief of Staff, and Office of Counsel and Congressional and Public Affairs.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 – 2026 EPA Strategic Plan*.

The OIG is focused on assessing EPA and CSB programs and operations in order to improve upon human health and the environment through the conduct of audits, special reviews and evaluations, and investigations. The goal is to improve EPA and CSB business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste, and abuse; and resolve identified top management challenges and internal control weaknesses. These efforts are designed to promote cleaner air, land, and water, and ensure chemical safety for America. During FY 2021, the Agency implemented 122 corrective actions in response to OIG's recommendations to improve EPA programs and/or processes. In FY 2024, the OIG will target initiatives supporting EPA's Top Management Challenges; EPA's stated priorities within its *FY 2022 – FY 2026 EPA Strategic Plan* and as they align with the Administration's priorities and targeted funding (i.e., climate change, environmental justice, infrastructure, etc.); Congressional interests; environmental issues with significant public interest; and invest $1 million to provide oversight of EPA's execution of the $41.5 billion received in the Inflation Reduction Act of 2022 (IRA), with a particular focus on its implementation of the Greenhouse Gas Reduction Fund. In order to carry out its foci, the OIG will seek to increase its agility to assess emerging environmental threats; increase its use of data analytics and business intelligence to increase its capability to strategically target resources to address high risk, high vulnerability areas of interest; commit $5 million as an initial investment to begin expanding its IT capabilities to maintain autonomy from the EPA and anonymity for whistleblowers and hotline complaints; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact; and increase its return on investment to the American public through substantive recommendations followed through to implementation. With the OIG's initial investment for IRA oversight, it will be able to identify initial lessons learned, perform site inspections, and oversight capacity to manage the rapid flow of funding to the Agency. Additionally, the OIG's expanded evaluation capacity enhances its ability for oversight in other emerging areas.

Based on prior work, cross-agency risk assessment, agency challenges, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2024:

<u>Audits, Special Reviews, and Evaluations</u>

<u>Sound and Economical Management</u>

- Annual mandated improper payments audits in EPA and CSB

- Annual mandated financial statement audits in EPA and CSB, including audits of toxic substances fees in accordance with the Pesticide Registration Improvement Act and Federal Insecticide, Fungicide, and Rodenticide Act
- Audits of costs claimed by selected grantees and contractors
- Grant, cooperative agreement, and contract administration, such as grantee management of funds
- Cost efficiencies maximization and process improvement, such as improved acquisition planning
- Mandated travel card program, including risk assessment in accordance with the Government Charge Card Abuse Prevention Act of 2012
- Mandated purchase card and convenience check program, including risk assessment
- Efficiency and effectiveness of collection and payment processes
- Single audit activity monitoring
- Internal controls

Efficient Processes and Use of Resources

- Partnerships and coordination with other federal, state, and local agencies to maximize efficiencies
- Opportunities to reduce duplication, overlap, and fragmentation within EPA
- Efficiency and effectiveness of human capital management programs/workforce analysis and management
- Assessment of high-risk contractors
- Continuity of Operations (COOP) readiness of delegated programs to continue their operations/business as usual during COOP event

Ensuring the Integrity of EPA Information

- Agency efforts to enhance its capability to respond to cyber-attacks
- Cybersecurity/infrastructure development; and assessment of processes to ensure protection and security of information systems from fraud, waste, and abuse
- Classification and security controls of EPA's high-value information technology assets
- Annual mandated audit of compliance with the Federal Information Security Modernization Act for EPA and CSB
- Oversight of Chief Information Officer's responsibilities under the Federal Information Technology Acquisition Reform Act
- IT support to the mandated financial statement audits

Assessing Risk Management and Performance Measurement

- Implementation of Federal Managers Financial Integrity Act, Federal Information Security Management Act, and Government Performance and Results Act
- Resilience of water infrastructure against climate change
- EPA's annual review of Clean Water State Revolving Funds
- Technical assistance to communities for Drinking Water State Revolving Fund resources for lead service lines and emerging contaminants
- Oversight of state drinking water system operator certification programs
- Adherence of Clean School Bus Program awards to prioritization and eligibility criteria

- Assistance agreements related to cleanup and Brownfields

Assessing Program Integrity, Results, Oversight, Enforcement

- Evaluation of EPA's programs, activities, requirements, and initiatives to address environmental justice
- Evaluations of EPA's programs and activities to protect human health and the environment through progress toward goals and compliance with requirements
- Evaluation of EPA's programs and adherence to requirements to protect and restore water that sustains human health and the environment
- Evaluation of controls and processes in EPA's research and development and enforcement programs
- Evaluation of the effectiveness of EPA's oversight and enforcement activities
- Evaluations on the EPA's adherence to scientific integrity policies and procedures, including frequent coordination with the Agency's Scientific Integrity Official on scientific misconduct concerns for the OIG's attention
- Oversight of clean and drinking water state revolving loan funds
- Assess EPA's policy, procedures, and internal controls to prevent or reduce improper computer use
- Oversight of grant, rebate, and loan programs in the Inflation Reduction Act of 2022, including programs for clean heavy-duty vehicles, reducing air pollution at ports, zero-emission technologies, diesel emissions reductions, air monitoring, testing of wood heater emissions, and methane reduction
- Oversight of EPA's use of funds from the Inflation Reduction Act of 2022 related to technical assistance, education, partnerships, testing, compliance monitoring, and permitting

Investigations

The Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA and CSB programs, operations, and resources. Investigations focus on allegations of criminal activity and serious misconduct in EPA and CSB programs and operations. The OIG performs its proactive work strategically as opportunities and resources allow. Investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2019 – 2023 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OI investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations,* as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal and civil investigations into fraud and serious misconduct within EPA programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other

law enforcement duties. To strengthen the organization's integrity and public trust, and in compliance with Executive Order 14074, *Advancing Effective, Accountable Policing and Criminal Justice Practices to Enhance Public trust and Public Safety,* the OIG needs $500 thousand to equip its law enforcement personnel with body worn cameras. The OI often collaborates with other law enforcement entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. Additionally, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within the EPA "whose actions protect the government from doing business with entities that pose a business risk to the government." The OIG's measure to capture criminal, civil, and administrative actions showed a result of 58 OIG investigations on fraud, waste, and abuse in FY 2021.

The OIG plays a critical oversight role helping to ensure that EPA and CSB funds are properly expended and not subject to fraud, waste, or abuse. The recent COVID-19 pandemic and the resulting frauds have emphasized the nature of the OIG in protecting the integrity of the EPA's programs. Major areas of investigative focus in this oversight include: 1) financial fraud related to agency grants and contracts concerning State Revolving Funds, interagency and cooperative agreements, and fraud related to mischarging, defective pricing, defective products and collusion on contracts; 2) laboratory fraud, including that related to water quality data as well as payments made by EPA for erroneous environmental testing; 3) employee integrity and alleged criminal conduct or serious administrative misconduct focusing on activities that could undermine the integrity of agency programs involving safety and public health, and erode confidence in the Agency pursuing its mission; 4) program integrity focusing on serious misconduct or criminal activity that could undermine or erode the public trust and confidence in EPA, its programs, or its employees; and 5) cybercrime to identify and counter information technology security threats, illegal intrusions, and abuse of EPA computer systems, critical environmental infrastructure in the air and water sectors, as well as investigations and responses in support of EPA's Office of Homeland Security, to include possible cyber terrorist attacks on EPA's computer infrastructure. Over the last year, the OIG has seen an increase in ransomware attacks and business email compromises resulting in significant financial disruption to critical environmental infrastructure and operations. To combat the rapidly expanding cyberthreat landscape, the OIG continues to increase its participation and presence with law enforcement cyber investigations, task forces, critical infrastructure security partners, and agency directorates. Furthermore, together with its local, state and federal law enforcement partners, OIG will respond to growing threats against water utilities implicating public safety and the environment.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity. The results of the OI's investigations are published in the OIG's semiannual reports and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved, and administrative actions are taken to prevent those involved from further participation in any of EPA's programs or operations which may lead to better accountability and deterrence.

The OI has organized its Field Operations Directorate into two regional offices – the Eastern Region Field Office and the Western Region Field Office, with five associated field offices – the Northeast, Washington Metropolitan, Southeast reporting to the Eastern region and Southwest and Western reporting to the Western region. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters hired an attorney-advisor to support its investigative operations.

Follow-up and Policy/Regulatory Analysis

To further promote economy, efficiency, and effectiveness, the OIG will publish compendiums of unimplemented recommendations, which report instances where agency corrective actions have not been planned or implemented for OIG recommendations or where intended improvements have not been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act, as amended, the OIG's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation to identify vulnerability to waste, fraud, and abuse. These assessments also consider possible duplication, gaps, or conflicts with existing authority, leading to recommendations for improvements in their structure, content, and application.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$2,307.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$11,937.0 / +31.0 FTE) This investment will expand the oversight arm of audit, evaluations, investigation, and support offices within the OIG, to include administrative investigations into allegations of misconduct by senior agency employees and complaints of whistleblowers; data analytics and business intelligence tools to address high risk, high vulnerability areas of interest. This investment includes $5.8 million for payroll.

- (+$4,877.0 / + 24.0 FTE) This program change provides resources and FTE to oversee the creation of a standalone IT system. This investment change includes $4.5 million for payroll.

- (+$1,000.0) This program investment provides resources to oversee the Agency's spending under the Inflation Reduction Act of 2022 with a particular focus on EPA's implementation of the Greenhouse Gas Reduction Fund.

- (+$375.0 / +2.0 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

Inspector General Act of 1978.

Inspector General Reform Act:

The following information is provided pursuant to Section 6(g)(2) of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is $78.4 million ($64.5 million Inspector General: $13.8 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $78.4 million ($64.5 million Inspector General: $13.8 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is $1.1 million ($864.0 thousand Inspector General: $190.0 thousand Superfund Transfer)
- The portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is $282.4 thousand ($231.6 thousand Inspector General: $50.8 thousand Superfund Transfer)

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2024".

Table of Contents – Buildings and Facilities

Environmental Protection Agency
FY 2024 Annual Performance Plan and Congressional Justification

APPROPRIATION: Building and Facilities

Resource Summary Table

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Building and Facilities				
Budget Authority	$31,730	$48,752	$111,685	$62,933
Total Work years	0.0	0.0	0.0	0.0

Bill Language: Building and Facilities

For construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities of, or for use by, the Environmental Protection Agency, $111,685,000, to remain available until expended.

Program Projects in B&F

(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	$7,049	$6,676	$6,676	$0
Operations and Administration				
Facilities Infrastructure and Operations	$24,681	$42,076	$105,009	$62,933
TOTAL B&F	**$31,730**	**$48,752**	**$111,685**	**$62,933**

Homeland Security

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$4,903	$5,188	$5,158	-$30
Science & Technology	$501	$625	$501	-$124
Building and Facilities	***$7,049***	***$6,676***	***$6,676***	***$0***
Hazardous Substance Superfund	$1,201	$1,029	$1,530	$501
Total Budget Authority	$13,653	$13,518	$13,865	$347
Total Work years	12.0	13.3	9.2	-4.1

Total work years in FY 2024 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

EPA's Buildings and Facilities resources, in the Homeland Security: Protection of EPA Personnel and Infrastructure Program, support the protection of federal employees, contractors, grantees, and private citizens (occupants) who work within or visit EPA facilities nationwide. EPA's buildings are a combination of headquarters and regional administrative offices, program and research laboratories, and support facilities/warehouses. These facilities are either EPA owned/leased or General Services Administration (GSA) owned/leased. This funding ensures federal mandates are met as they relate to physical security and local emergency preparedness for all agency locations. These funds support the physical security protection equipment and mechanisms required to protect occupants, facility relocation (*e.g.*, moves, new leases, consolidations, etc.), physical equipment upgrades/modernization, or corrective actions required to address security vulnerabilities identified during security assessments.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA will continue to partner with GSA on the Enterprise Physical Access Control System (ePACS). ePACS supports the Agency's modernization of its security infrastructure in compliance with *Homeland Security Presidential Directive-12* (HSPD-12)[1] and ensures that the Agency is undertaking every effort to enhance safety, security, and efficiency by more effectively controlling access into all EPA-controlled physical space and networks.

[1] For additional information, please see: https://www.dhs.gov/homeland-security-presidential-directive-12.

In FY 2024, EPA will complete security projects to ensure protection of occupants and compliance with federal mandates for physical security, including:

- Migrating to ePACS at the Research Triangle Park, NC Laboratory; the Ann Arbor, MI Laboratory; the Newport, OR Environmental Laboratory; the Kansas City, KS Digitization Center West; the Ann Arbor, MI Office of Air and Radiation Laboratory and Office; the Duluth, MN Office of Research and Development Laboratory; the Chicago, IL Laboratory, Office, and Warehouse; and the EPA Headquarters facilities in Washington, DC.

- Upgrading closed-circuit television and physical security in response to vulnerabilities identified from previously conducted physical security assessments.

The Agency will continue to utilize GSA's Managed Service Office program, USAccess, for Personal Identity Verification card enrollment and issuance. USAccess is a GSA managed, shared services solution that provides EPA the ability to produce and maintain secure and reliable forms of identification, as required per HSPD-12, for all EPA employees and contractors.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Operations and Administration

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$291,501	$283,330	$305,753	$22,423
Science & Technology	$68,347	$67,500	$72,043	$4,543
Building and Facilities	***$24,681***	***$42,076***	***$105,009***	***$62,933***
Leaking Underground Storage Tanks	$922	$754	$727	-$27
Inland Oil Spill Programs	$854	$682	$641	-$41
Hazardous Substance Superfund	$76,108	$65,634	$71,540	$5,906
Total Budget Authority	$462,412	$459,976	$555,713	$95,737
Total Workyears	310.6	321.8	330.4	8.6

Total work years in FY 2024 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

EPA's Buildings and Facilities (B&F) appropriation supports the design, construction, repair, and improvement of EPA's federally owned and leased land and structures in accordance with applicable codes and standards; construction, renovation, and alteration projects costing more than $300 thousand must use B&F funding per statute. B&F resources ensure that the Agency complies with various mandates and goals including: the Energy Policy Act of 2005; the Energy Act of 2020; the Energy Independence and Security Act of 2007 (EISA); and regulatory mandates associated with soil and water pesticides testing.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In accordance with the Memorandum on Implementation of agencywide Real Property Capital Planning (M-20-03) and the *Federal Assets Sale and Transfer Act of 2016*, [2,3] the Agency will continue to review its space needs. EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied leased facilities, consolidate and optimize space within owned facilities, and reduce square footage wherever practical. B&F resources are essential to the implementation of the long-term space consolidation plan. B&F resources also support facility-related construction and the repair and improvement (R&I) of EPA's aging real estate inventory, including the laboratory facilities necessary to support EPA's mission. Good stewardship practices

[2] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/11/M-20-03.pdf.
[3] For additional information, please refer to: *Federal Assets Sale and Transfer Act of 2016, https://www.congress.gov/114/plaws/publ287/PLAW-114publ287.pdf*.

demand that the physical conditions, functionality, safety and health, security, and research capabilities of the Agency's facilities are adequately maintained to ensure successful completion of EPA's mission requirements and goals.

In FY 2024, EPA proposes an administrative provision to raise the B&F per project threshold from $300 thousand in FY 2023 to $350 thousand. The purpose of this proposed increase is to regularly adjust the threshold to keep it in line with construction and labor costs for smaller-scale construction and R&I projects. The current $300 thousand project threshold was set in FY 2023 after 10 years at $150 thousand. Additional information is found in the Proposed FY 2024 Administrative Provisions section.

In FY 2024, the Agency proposes an investment of $62.9 million for this program. In FY 2024, the Agency will reconfigure and modernize the EPA-owned lab space at the Andrew W. Breidenbach Environmental Research Center (AWBERC) in Cincinnati, Ohio to improve the Agency's per- and polyfluoroalkyl substances (PFAS) research conducted by the Office of Research and Development. Currently this work is conducted across several isolated PFAS analytical laboratories in the AWBERC facility, resulting in inefficient processes that limit the timeliness and number of analyses that can be completed. This reconfiguration would create one contiguous laboratory dedicated to PFAS research, invest in state-of-the-art equipment to advance PFAS analyses, and support the implementation of a modernized and integrated Laboratory Information Management System (LIMS) for sample tracking, analysis, data validation, and data reporting. The Agency also will utilize this investment to support critical facility space consolidation, construction and the repair and improvement (R&I) of EPA's aging real estate inventory, including laboratory facilities necessary to support EPA's mission. EPA also will work on reducing its over $100 million in backlogged R&I projects across its real estate portfolio.

This program supports EPA's efforts to increase facility resiliency and sustainability to combat the effects of climate change while adapting EPA space to a growing workforce.[4] In FY 2024, EPA will continue to conduct climate resiliency assessments at all EPA-owned facilities and prioritize additional opportunities to reduce climate-related fiscal risks. Assessments will identify potential projects the Agency can undertake to increase facility resiliency against the impacts of climate change, such as roof stability or seawall construction projects. EPA will initiate all high-priority projects within 24 months of a climate assessment.

Through master planning and nationwide efforts to use space more efficiently, EPA identifies B&F projects which support the long-term conditions and efficiency of EPA facilities. Further, B&F resources are necessary for EPA to comply with GSA leasing practices requiring agencies to fund construction initiatives, including sustainable features as tenant improvements (TI) or up front and ongoing project costs.[5] These requirements significantly increase TI cost for new leases, pulling

[4] Work in this program takes direction for climate change and sustainability related initiatives from the following:

- EO 14008: *Tackling the Climate Crisis at Home and Abroad* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/)
- EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/)

[5] Many of these features are required by EISA or executive orders.

critical funding from ongoing efforts to consolidate space and reduce the Agency's footprint in accordance with the *Federal Asset Sale and Transfer Act of 2016*.

Space consolidation and reconfiguration enable EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace; in FY 2024, the Agency will continue to reconfigure EPA's workplaces to ensure the space footprint can accommodate a growing and increasingly hybrid workforce. EPA will consider all opportunities for supporting the Future of Work, in line with OMB Memoranda M-21-25, including the potential for releasing underutilized space or sharing with other federal agencies, investing in facility enhancements to assess utilization and inform future consolidations or releases, and converting workspaces to support hoteling and hybrid collaboration. EPA will ensure that its facilities continue to remain a critical place to collaborate, maintain connections – including engagement with local stakeholders and the public, and perform specialized work. Overall, EPA will work to ensure that its space footprint is optimized to keep long-term rent costs from increasing.

The FY 2024 request will support the initiation of, and ongoing, projects that provide critical maintenance for aging laboratory facilities and are key to ensuring that the Agency has access to preeminent laboratory science. EPA must invest in structural infrastructure (*e.g.*, architectural and design) and mechanical systems (*e.g.*, electrical, water/steam, HVAC). These projects also will maintain a safe workplace, provide for high quality science, support Agency priorities, and advance the Agency's mission. EPA will focus on critical facility repairs and infrastructure upgrades to maintain an acceptable Facility Condition Index (FCI), which measures the current state of EPA owned facilities and informs B&F investment decisions.[6] Delaying essential repairs results in the deterioration of EPA's facilities, which increases long-term repair costs and presents safety risks.

In FY 2024, the Agency will continue to prioritize climate sustainability and resiliency investments in new construction and the rehabilitation of United States Government installations, buildings, and facilities to ensure they are climate ready. Examples of shovel-ready investments include:

- **Narragansett, Edison, and Newport Laboratories.** EPA will invest in climate resiliency-infrastructure protection for these regional and programmatic laboratories, including sea level and storm rise protection and power resiliency. Facility climate resiliency assessments at Newport, Edison and Narragansett will be completed by the end of FY 2023; identified high priority resiliency projects must be initiated within 24 months of the completed assessment.

In FY 2024, the Agency will continue the following space optimization projects with the potential for the greatest long-term cost and energy savings:

- **Co-Locating in the Ada, Oklahoma laboratory.** EPA will continue its work to consolidate employees currently in leased laboratory space into owned space. The Agency is co-locating operations for the regional laboratory in Houston, Texas with the EPA-

[6] For additional information on the Synthesis Report of the U.S. EPA Laboratory Enterprise Evaluation, please refer to: https://www.epa.gov/sites/production/files/2015-03/documents/synthesisreportoftheusepalaboratoryenterprise.pdf.

owned laboratory in Ada, Oklahoma. In FY 2024, EPA will begin Phase 2 and 3 of construction.

- **Optimizing space at the Athens, Georgia laboratory.** In FY 2024, EPA will continue construction in the Main Lab Building (Office of Research and Development - Athens).

- **Co-Locating in the Corvallis, Oregon laboratory.** The Agency is co-locating operations for the Region 9 laboratory in Richmond, California with the EPA-owned laboratory in Corvallis, Oregon. In FY 2024, the Agency will finalize construction of the Region 9 Facilities Support Services Center, which is designed for Region 9 laboratory support. In FY 2024, there will be minor renovations to the Plant Ecology Building to accommodate Region 9 laboratory storage space in Corvallis, Oregon.

Performance Measure Targets:

(PM CAA) Number of EPA-owned facility climate adaptation assessments completed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2	5	6	Assessments
Actual						1			

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned facilities initiated within 24 months of a completed facility climate assessment and project prioritization.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									Projects
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$51,933.0) This program change supports implementation of EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* requirements that will require EPA to increase facility resiliency against the impact of climate change and to advance sustainability of EPA operations. EPA will invest in climate resiliency projects at the Narragansett, Edison, and Newport Laboratories and work to modernize structural and mechanical systems.

- (+$6,000.0) This program change will reconfigure lab space and invest in state-of-the-art equipment at the Andrew W. Breidenbach Environmental Research Center (AWBERC) in Cincinnati, Ohio to improve the Agency's PFAS research conducted by ORD.

- (+$5,000.0) This program change is an increase to modernize and transform EPA workplaces to support a hybrid workforce and to ensure an optimal footprint to support the proposed FTE increase in the FY 2024 Budget request.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Table of Contents – Superfund

APPROPRIATION: Hazardous Substance Superfund

Resource Summary Table

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund				
Budget Authority	$1,249,039	$1,282,700	$355,856	-$926,844
Total Workyears	2,623.2	2,678.0	2,726.4	48.4

For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Bill Language: Hazardous Substance Superfund

For necessary expenses to carry out the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including sections 111(c)(3), (c)(5), (c)(6), and (e)(4) (42 U.S.C. 9611), and hire, maintenance, and operation of aircraft, $355,856,000, to remain available until expended, consisting of such sums as are available in the Trust Fund on September 30, 2023, and not otherwise appropriated from the Trust Fund, as authorized by section 517(a) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and up to $355,856,000 as a payment from general revenues to the Hazardous Substance Superfund for purposes as authorized by section 517(b) of SARA: Provided, That funds appropriated under this heading may be allocated to other Federal agencies in accordance with section 111(a) of CERCLA: Provided further, That of the funds appropriated under this heading, $13,847,000 shall be paid to the "Office of Inspector General" appropriation to remain available until September 30, 2025, and $31,928,000 shall be paid to the "Science and Technology" appropriation to remain available until September 30, 2025.

Program Projects in Superfund

(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Indoor Air and Radiation				
Radiation: Protection	$2,011	$2,472	$3,010	$538
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$8,706	$11,800	$13,847	$2,047

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Compliance				
Compliance Monitoring	$1,278	$1,017	$1,032	$15
Enforcement				
Criminal Enforcement	$8,149	$7,999	$8,644	$645
Forensics Support	$1,676	$1,240	$1,648	$408
Superfund: Enforcement	$169,444	$171,347	$0	-$171,347
Superfund: Federal Facilities Enforcement	$7,263	$8,192	$10,366	$2,174
Subtotal, Enforcement	$186,532	$188,778	$20,658	-$168,120
Environmental Justice				
Environmental Justice	$1,065	$5,876	$5,888	$12
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$35,026	$34,661	$56,484	$21,823
Homeland Security: Protection of EPA Personnel and Infrastructure	$1,201	$1,029	$1,530	$501
Subtotal, Homeland Security	$36,226	$35,690	$58,014	$22,324
IT / Data Management / Security				
Exchange Network	$1,137	$1,328	$1,328	$0
Information Security	$1,209	$1,062	$7,859	$6,797
IT / Data Management	$16,075	$19,764	$17,727	-$2,037
Subtotal, IT / Data Management / Security	$18,421	$22,154	$26,914	$4,760
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$698	$791	$880	$89
Legal Advice: Environmental Program	$475	$599	$477	-$122
Subtotal, Legal / Science / Regulatory / Economic Review	$1,173	$1,390	$1,357	-$33
Operations and Administration				
Central Planning, Budgeting, and Finance	$29,102	$31,338	$30,207	-$1,131
Facilities Infrastructure and Operations	$76,108	$65,634	$71,540	$5,906
Acquisition Management	$23,550	$27,247	$33,758	$6,511
Human Resources Management	$7,253	$7,419	$8,751	$1,332
Financial Assistance Grants / IAG Management	$4,188	$4,002	$4,601	$599
Subtotal, Operations and Administration	$140,202	$135,640	$148,857	$13,217
Research: Sustainable Communities				

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Research: Sustainable and Healthy Communities	$16,562	$16,937	$17,364	$427
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$9,405	$4,901	$5,005	$104
Research: Chemical Safety for Sustainability	$2,579	$8,060	$8,060	$0
Subtotal, Research: Chemical Safety for Sustainability	$11,984	$12,961	$13,065	$104
Superfund Cleanup				
Superfund: Emergency Response and Removal	$239,807	$195,000	$0	-$195,000
Superfund: EPA Emergency Preparedness	$9,071	$8,056	$8,445	$389
Superfund: Federal Facilities	$23,911	$26,189	$37,405	$11,216
Superfund: Remedial	$552,089	$618,740	$0	-$618,740
Subtotal, Superfund Cleanup	$824,879	$847,985	$45,850	-$802,135
TOTAL Superfund	**$1,249,039**	**$1,282,700**	**$355,856**	**-$926,844**

For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.

Audits, Evaluations, and Investigations

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Inspector General	$48,605	$44,030	$64,526	$20,496
Hazardous Substance Superfund	***$8,706***	***$11,800***	***$13,847***	***$2,047***
Total Budget Authority	$57,310	$55,830	$78,373	$22,543
Total Workyears	285.0	270.0	333.5	63.5

Program Project Description:

EPA's Office of Inspector General (OIG) is an independent office of the U.S. Environmental Protection Agency, created by the Inspector General Act of 1978, as amended. In support of that independence, Congress provides the OIG with a separate appropriation, within the Agency's budget to support OIG's Superfund activities. The vision of the OIG is to be a premier oversight organization trusted to speak the truth, promote good governance, and contribute to improved human health and the environment. This vision is met through the mission of the OIG.

The OIG conducts independent audits, special reviews, evaluations, and investigations. The OIG makes evidence-based recommendations to promote economy, efficiency, and effectiveness. The OIG seeks to identify risks and vulnerabilities within the Agency to prevent and detect fraud, waste, abuse, mismanagement, and misconduct for the U.S. Environmental Protection Agency as well as the U.S. Chemical Safety and Hazard Investigation Board (CSB).

The OIG promotes public trust and safety by keeping the head of the Agency and Congress fully and immediately informed of deficiencies, vulnerabilities, and other agency activities that indicate the presence of fraud, waste and/or abuse, and the necessity for and progress toward OIG recommended corrective actions and being responsive with a sense of urgency to hotline and whistleblower complaints submitted for immediate action. The OIG's activities assist in the prevention and detection of fraud in EPA's Superfund programs and operations. The OIG consistently provides a significant positive return on investment to the public in the form of recommendations for improvements in the delivery of EPA's mission, reduction in operational and environmental risks, costs savings and recoveries, and improvements in program efficiencies and integrity.[1] In FY 2021, the OIG's appropriation was $55,086,000, with a return of investment of $149,632,858. The results were a 272 percent return on investment from audits and investigations.

OIG's Office of Audit (OA) is comprised of five permanent directorates: Financial; Business Operations; Information Resources Management; Pollution Control and Cleanup; and Environmental Investment and Infrastructure. In addition to these five directorates, OA established

[1] For more information, please see: https://www.epa.gov/office-inspector-general/epa-oig-organization-profile.

another four directorates to provide oversight of the EPA's implementation of the Infrastructure Investment and Jobs Act: Drinking Water Investments; Special Drinking Water Projects; Clean Water Investments; and Recycling, Clean Up, and Pollution Prevention. Together, they are responsible for independent oversight of EPA and CSB programs and for recommending needed improvements to programs and operations. Specifically, OA conducts financial and performance audits to assess the economy, efficiency, and effectiveness, internal control, and compliance of EPA Superfund programs and EPA Superfund business operations.

OIG's evaluations arm resides with the Office of Special Review and Evaluation (OSRE). OSRE is comprised of four directorates. OSRE's three evaluation directorates are responsible for independent oversight of EPA programs and recommending needed improvements to programs and operations. The three evaluation directorates within OSRE are: 1) Programs, Offices, and Centers Oversight Directorate; 2) the Implementation, Execution, and Enforcement Directorate; 3) the Environmental Infrastructure Oversight Directorate. OSRE's fourth directorate the Administrative Investigations Directorate, conducts administrative investigations into allegations of misconduct by senior agency employees and complaints of whistleblower reprisal by agency employees, or employees of agency contractors, subcontractors, grantees, subgrantees or personal services contractors. The directorate also performs special reviews of significant events and emergent issues of concern that involve a suspected or alleged violation of law, regulation, or policy, or allegations of serious mismanagement.

OA conducts its mission in compliance with the Inspector General Act, as amended, and the Generally Accepted Government Accounting Standards. OSRE conducts its mission in compliance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation* and *Quality Standards for Federal Offices of Inspector General,* as applicable based upon the work performed. Work efforts focus on efficiency and program operations: program performance, including the award and administration of grants and contracts; statutorily mandated audits; financial reviews of grantees and contractors; and information resources management. In addition, performance audits, program reviews, evaluations, and inspections are conducted specifically to ensure targeted coverage of EPA programs and offices providing the greatest impact and receiving the greatest resources.

The investigative mission of the OIG is to conduct criminal, civil, and administrative investigations into fraud and serious misconduct within the EPA that undermine the organization's integrity and public trust or creates an imminent risk or danger. OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities, as appropriate. These investigations may lead to prosecution and civil judgments wherein there is a recovery and repayment of financial losses. The major areas of investigative focus include fraudulent practices, program integrity, laboratory fraud, serious employee misconduct, and cyber-crimes.

The audit, special review and evaluations, and investigative core mission program offices are directly supported by the OIG's management and administrative functions of its Office of the Chief of Staff, and Office of Counsel and Congressional and Public Affairs.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 – 2026 EPA Strategic Plan*.

The activities of the OIG are supported through the core value to be the best in public service through customer service, integrity, and accountability. The summary of this value is to contribute to improved EPA Superfund and other cleanup programs and operations, protecting human health and the environment, and enhancing safety; and conduct audits, evaluations, and investigations that enable EPA to improve business practices and accountability to meet stakeholders' needs. The OIG assists the Agency in its efforts to develop and enforce regulations that implement environmental laws by making recommendations to improve program operations; save taxpayer dollars; reduce the potential for fraud, waste, and abuse; respond to cybercrimes; and resolve previously identified major management challenges and internal control weaknesses resulting in cleaner air, land, and water, and ensured chemical safety for America. During FY 2021, the Agency implemented 122 corrective actions in response to OIG's recommendations to improve EPA programs and/or processes.

In FY 2024, the OIG will target initiatives supporting EPA's Top Management Challenges and stated priorities. To execute this mission, the OIG will increase its agility to assess emerging environmental threats; increase its use of data analytics, business analytics, and business intelligence to better target resources to address high risk, high vulnerability areas of interest; employ best practices in support of improving efficiency, effectiveness, accountability, and monetary benefits; focus on measurable impact; and increase its return on investment to the American public regarding issues related to the Superfund Program.

Based on prior work, agency challenges, cross-agency risk assessment, future priorities, and extensive stakeholder input, the OIG will focus its resources on efforts in the following areas of concentration during FY 2024:

Audits and Evaluations

The OIG Office of Audit and Office of Special Review and Evaluation conduct projects to oversee EPA's efforts to improve human health and the environment. The Offices will identify program and management risks and determine if EPA is efficiently and effectively reducing human health risks; taking effective enforcement actions; cleaning up hazardous waste; managing waste; restoring previously polluted sites to appropriate uses; and ensuring long-term stewardship of those sites. The OIG assignments will include: assessment of the adequacy of internal controls in EPA (and its grantees and contractors) to protect resources and achieve program results; project management to ensure that EPA (and its grantees and contractors) have clear plans and accountability for performance progress; enforcement to evaluate whether there is consistent, adequate, and appropriate application of the laws and regulations across jurisdictions with coordination between federal, state, and local law enforcement activities; and evaluation of grants and contracts to verify that such awards are made based upon uniform risk assessment, and that grantees and contractors perform with integrity.

Prior audits and evaluations of the Superfund Program have identified numerous barriers to implementing effective resource management and program improvements. Therefore, the OIG will concentrate its resources on efforts in the following assignment areas:

- Whether EPA is managing its Superfund special accounts in accordance with statutory and regulatory requirements and EPA's policy and guidance.
- Whether EPA is using funds from the Infrastructure and Investment Jobs Act to begin construction projects at Superfund sites awaiting funding as required by the Act.
- Whether EPA has achieved its goal, through Superfund institutional controls, to prevent human exposure at Superfund sites.
- How the EPA's Office of Land and Emergency Management allocates funding and staffing resources to accomplish work required by statute or executive order versus work that is not statutorily required.

In addition, the OIG will assess ways to minimize fraud, waste, and abuse, with emphasis on identifying opportunities for cost savings and reducing risk of resource loss, while maximizing results achieved from Superfund contracts and assistance agreements.

Investigations

The Inspector General Act identifies the Assistant Inspector General for Investigations as responsible for developing and implementing an investigative program that furthers OIG objectives. The OIG's Office of Investigations (OI) conducts independent investigations to detect and prevent fraud, waste, and abuse, while protecting the integrity of EPA's Superfund Program. Investigations focus on allegations of criminal activity and serious misconduct in EPA Superfund programs and operations. The OIG performs its proactive work strategically as opportunities and resources allow. Investigations are opened in accordance with priorities set forth in the OIG Strategic Plan for FY 2019 – 2023 and in consideration of prosecutorial guidelines established by U.S. Attorneys. OIG investigations are governed by the *Attorney General Guidelines for Offices of Inspector General with Statutory Law Enforcement Authority* and by the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Investigations*, as well as other federal statutes and regulations.

The investigative mission of the OIG continues to evolve in conducting criminal and civil investigations into fraud and serious misconduct within EPA Superfund programs and operations that undermine the organization's integrity and public trust or create an imminent risk or danger. Special Agents within the OI are duly appointed federal criminal investigators and have statutory authority to carry firearms, make arrests, execute search and seizure warrants, and perform other law enforcement duties. The OI often collaborates with other law enforcement entities and external stakeholders to enhance the effectiveness of its work. The OIG investigations are coordinated with the Department of Justice and other federal, state, and local law enforcement entities for criminal and civil litigation or with EPA management for administrative action. Investigative efforts may lead to criminal convictions, administrative sanctions, civil monetary penalties, and judgments wherein there is a recovery and repayment of financial losses. In addition, during and at the conclusion of investigations, the OI works with the Suspension and Debarment Office within EPA, "whose actions protect the government from doing business with entities that pose a business risk

to the government." The OIG's measure to capture criminal, civil, and administrative actions showed a result of 58 OIG investigations on fraud, waste, and abuse in FY 2021.

The OIG plays a critical oversight role helping to ensure that EPA and CSB funds are properly expended and not subject to fraud, waste, or abuse. Investigative focus in this oversight include: 1) fraudulent practices in awarding, performing, and paying Superfund contracts, grants, or other assistance agreements; 2) program fraud or other acts that undermine the integrity of, or confidence in the Superfund Program and create imminent environmental risks; 3) laboratory fraud relating to data, and false claims, or erroneous laboratory results that undermine the basis for decision-making, regulatory compliance, or enforcement actions in the Superfund Program; 4) criminal conduct or serious administrative misconduct by EPA employees involved in the Superfund Program; and 5) intrusions into and attacks against EPA's network supporting Superfund Program data, contractors and grant recipients handling sensitive EPA data, as well as incidents of computer misuse and theft of intellectual property or sensitive/proprietary Superfund data.

Finally, the OI often makes observations or "lessons learned" for EPA's management to reduce the Agency's vulnerability to criminal activity in the Superfund Program. The results of OI's investigations are published and can serve as a deterrent to future misconduct. In addition, the OI's investigations provide measurable results wherein recovery and restitution of financial losses are achieved, and administrative actions are taken to prevent those involved from further participation in any Superfund Program or operation which may lead to better accountability and deterrence.

The OI has organized its Field Operations Directorate into two regional offices – the Eastern Region Field Office and the Western Region Field Office, with five associated field offices – the Northeast, Washington Metropolitan, Southeast reporting to the Eastern region and Southwest and Western reporting to the Western region. The Eastern Region Field Office is responsible for matters within EPA Regions 1 through 5 while the Western Region Field Office is responsible for matters within EPA Regions 6 through 10. This realignment has improved the efficiency, effectiveness, and consistency of the OI's operations by allowing the Field Operations Directorate to better oversee its field operations and investigations. In addition, the OI Headquarters hired an attorney-advisor to support its investigative operations.

Follow-up and Policy/Regulatory Analysis

To further promote economy, efficiency, and effectiveness, the OIG will publish compendiums of unimplemented recommendations, which report instances where appropriate agency corrective actions have not been planned or implemented for OIG recommendations or where intended improvements have not been achieved. This process will serve as a means for keeping Congress and EPA leadership apprised of accomplishments and opportunities for needed corrective actions and facilitate greater accountability for results from the OIG operations.

Additionally, as directed by the IG Act, as amended, the OIG's audits and evaluations often cover assessment of proposed and existing policies, rules, regulations, and legislation pertaining to the clean-up programs, to include Superfund, to identify vulnerability to waste, fraud, and abuse. These assessments also consider possible duplication, gaps, or conflicts with existing authority, leading to recommendations for improvements in their structure, content, and application.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$649.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$1,300.0 / +6.0 FTE) This investment provides resources to create a standalone IT system and to conduct audits, evaluations, and investigations relating to oversight of the Agency's Superfund Program. This investment includes $1.2 million for payroll.

- (+$98.0 / +0.5 FTE) This program change increases FTE to support agencywide implementation of EPA's Diversity, Equity, Inclusion, and Accessibility Strategic Plan and Evidence Act data stewardship and governance requirements.

Statutory Authority:

Inspector General Act of 1978.

Inspector General Reform Act:

The following information is provided pursuant to Section 6(g)(2) of the Inspector General Reform Act:

- The aggregate budget request from the Inspector General for the operations of the OIG is $78.4 million ($64.5 million Inspector General: $13.8 million Superfund Transfer)
- The aggregate President's Budget for the operations of the OIG is $78.4 million ($64.5 million Inspector General: $13.8 million Superfund Transfer)
- The portion of the aggregate President's Budget needed for training is $1.1 million ($864.0 thousand Inspector General: $190.0 thousand Superfund Transfer)
- The portion of the aggregate President's Budget needed to support the Council of the Inspectors General on Integrity and Efficiency is $282.4 thousand ($231.6 thousand Inspector General: $50.8 thousand Superfund Transfer)

"I certify as the Inspector General of the Environmental Protection Agency that the amount I have requested for training satisfies all OIG training needs for FY 2024".

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$108,996	$112,730	$162,105	$49,375
Inland Oil Spill Programs	$278	$649	$2,152	$1,503
Hazardous Substance Superfund	***$1,278***	***$1,017***	***$1,032***	***$15***
Total Budget Authority	$110,552	$114,396	$165,289	$50,893
Total Workyears	438.5	478.9	520.4	41.5

Program Project Description:

The Superfund Compliance Monitoring Program supports enforcement of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or "Superfund" law. EPA's national enforcement and compliance data system, the Integrated Compliance Information System (ICIS) and the Enforcement Compliance History Online (ECHO), include and tracks Superfund-related enforcement activities. Electronic tracking of Superfund enforcement work allows EPA to ensure that its enforcement resources are allocated to address the most significant concerns and facilitates transparency.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will focus on timely enforcement in communities with potential environmental justice (EJ) concerns. The Program will continue to support tracking of CERCLA compliance and enforcement activities in ICIS and ECHO.

Performance Measure Targets:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	14,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	Inspections & Evaluations
Actual	11,800	10,600	10,300	8,500	10,800	13,900			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$15.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.).

Exchange Network
Program Area: IT / Data Management / Security
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$13,016	$14,995	$14,685	-$310
Hazardous Substance Superfund	***$1,137***	***$1,328***	***$1,328***	***$0***
Total Budget Authority	$14,153	$16,323	$16,013	-$310
Total Workyears	25.2	30.2	30.2	0.0

Program Project Description:

EPA's Environmental Information Exchange Network (EN) is a standards-based, secure approach for EPA and its state, tribal, and territorial partners to exchange and share environmental data over the internet. Capitalizing on advanced technology, data standards, open-source software, shared services for EPA's Digital Strategy, and reusable tools and applications, the EN offers its partners tremendous capabilities for managing and analyzing environmental data more effectively and efficiently, leading to improved decision-making.

The Central Data Exchange (CDX) is the largest component of the EN Program and serves as the point of entry on the EN for environmental data transactions with the Agency.[2] CDX provides a set of core shared services that promote a leaner and more cost-effective service framework for the Agency by avoiding the creation of duplicative applications. It enables faster and more efficient transactions for internal and external EPA clients, resulting in reduced burden.

Working in concert with CDX is EPA's System of Registries, which is a system of shared data services designed to enhance efficiency, reduce burden on the regulated community, and improve environmental outcomes, including environmental justice (EJ). EPA and EN partners routinely reference these shared data registries, from commonly regulated facilities and substances to the current list of federally recognized tribes. They identify the standard or official names for these assets, which, when integrated into EPA and partner applications, foster data consistency and data quality as well as enable data integration.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to support core functions for the EN information technology (IT) systems. The EN Program will continue to be a pivotal component of EPA's Digital Strategy that

[2] For more information on the Central Data Exchange, please see: https://cdx.epa.gov/.

supports business process change agencywide. Under this strategy and the 21st Century Integrated Digital Experience Act,[3] the Agency is streamlining business processes and systems to reduce reporting burden on states and regulated facilities and to improve the effectiveness and efficiency of environmental programs for EPA, states, and tribes. EPA also is responsible for managing EN technical governance groups and administering the pre- and post-award phases of the EN grants to states, tribes, and territories. These efforts support a standards-based, secure approach for EPA and its state, tribal, and territorial partners to efficiently exchange and share environmental data electronically. The Agency also administers and implements the Cross-Media Electronic Reporting Regulation (CROMERR) that removes regulatory obstacles for e-reporting to EPA programs under Title 40 of the Code of Federal Regulations (CFR).

EPA aims to reduce burden and avoid costs while improving IT. The Agency provisioned Virtual Exchange Services (VES), or virtual nodes, to facilitate data transactions supporting states and tribal partners. EPA will continue to carry out the baseline support for the adoption and onboarding of VES and associated services for EPA and its partners. This includes providing a technology framework – shared CROMERR services – which reduces the burden on programs and external reporters by providing CROMERR compliant solutions. For example, the shared electronic identity proofing and signature services for CROMERR support 31 partner regulatory reporting programs to date. EPA estimates that partners adopting shared CROMERR services save $120 thousand in development and at least $30 thousand in operations each year, which results in a cost avoidance of greater than $2.5 million for EN partners.

In FY 2024, EPA will continue to improve the functionality and use of the System of Registries.[4] In addition to streamlining the Registries, EPA will continue to implement a broader effort across the enterprise to engage organizations and facilitate the adoption of these data services through Cloud technology and Representational State Transfer (REST or RESTful) application programming interfaces (API). Registries are shared data services in which common data are managed centrally but shared broadly. They improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information. An example is the Agency's effort to promote the adoption of data services is the integration of tribal identification services (TRIBES) across EPA systems.

In FY 2024, EPA will continue implementing a solution related to shared facility identification information. Centralized facility management also is fundamental to better environmental management by bringing together EPA data across programmatic silos. Like facility data, substance information also is regulated across EPA programs, with many EPA programs relying on the Substance Registry Service (SRS) to improve data quality and reduce burden.

EPA tracks a wide range of data for each registry to measure customer usage and engagement. The Agency also tracks web service hits to measure the number of users leveraging publicly available APIs. For example, the SRS website receives approximately 90 thousand pageviews per month; many of these pageviews are users visiting SRS web area to understand regulatory information about chemicals. SRS also receives between 20 thousand and 140 thousand web service hits per

[3] For more information on the 21st Century Integrated Digital Experience Act, please refer to: https://www.congress.gov/115/plaws/publ336/PLAW-115publ336.pdf.
[4] For more information, please see: https://ofmpub.epa.gov/sor_internet/registry/sysofreg/about/about.jsp.

month (depending on reporting cycles), mostly by EPA systems that have incorporated the web services into their online reporting forms. In FY 2024, priorities for EPA registries include continually improving registry technologies by migrating the registries to the cloud environment to make them easier to locate, access, and utilize.

In FY 2024, EPA will continue to expand the number of EPA and partner systems that integrate registry services into their online reports and systems, reducing burden and improving data quality. This includes updating EPA's dataset registry to allow EPA scientists, external partners, and others to share information and make information easier to find in the cloud.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Federal Information Security Management Act (FISMA); Clean Air Act (CAA); Clean Water Act (CWA); Toxic Substances Control Act (TSCA); Federal Insecticide Fungicide and Rodenticide Act (FIFRA); Resource Conservation and Recovery Act (RCRA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

Enforcement

Criminal Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$55,343	$62,704	$66,487	$3,783
Hazardous Substance Superfund	***$8,149***	***$7,999***	***$8,644***	***$645***
Total Budget Authority	$63,492	$70,703	$75,131	$4,428
Total Workyears	252.9	269.3	296.0	26.7

Program Project Description:

The Criminal Enforcement Program investigates and works with the U.S. Department of Justice (DOJ) to prosecute criminal violations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated violations of Title 18 of the United States Code such as fraud, conspiracy, false statements, and obstruction of justice. EPA's criminal investigators (Special Agents) do this through investigation of criminal conduct, committed by individual and corporate defendants that threatens public health and the environment.

The Criminal Enforcement Program is strengthened by an ongoing collaboration with the Environmental Justice (EJ) Program, other EPA program offices, and DOJ to ensure our Superfund enforcement work is informed and targeted to address overburdened or vulnerable communities and to expand outreach opportunities through those offices.

Within the Criminal Enforcement Program, forensic scientists, attorneys, technicians, engineers, and other program experts assist Special Agents in their investigations. EPA's criminal enforcement attorneys provide legal and policy support for all the program's responsibilities, including forensics and expert witness preparation, information law, and personnel law to ensure that program activities are carried out in accordance with legal requirements and agency policies. These efforts support environmental crimes prosecutions primarily by the United States Attorneys and DOJ's Environmental Crimes Section. In FY 2022, the Criminal Enforcement Program opened 117 new cases. The conviction rate for criminal defendants charged because of EPA criminal enforcement investigations in FY 2022 is 94 percent, with a total of 21 years of incarceration given for defendants sentenced in criminal enforcement investigations.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency requests an additional $546.0 thousand and 0.7 FTE to support efforts to interdict the illegal import, manufacture, and use of certain hydrofluorocarbon (HFC) products, pursuant to the American Innovation and Manufacturing (AIM) Act. EPA will continue efforts to devote resources toward, and effectively focus on, those areas and communities that are disproportionally affected by pollution and environmental crime.

EPA will continue to address Superfund-related issues within criminal enforcement, including in overburdened communities. The Criminal Investigation Division (CID) works with partners at DOJ to jointly prosecute wrongdoing and reduce the impact pollution has on these areas through investigation, judicial actions, and settlements. The Environmental Justice Criminal Initiative focuses prioritization of investigative resources to overburdened and vulnerable communities,[5] while maintaining case initiation standards and reducing the impact of pollution. In FY 2024, EPA will continue to prioritize criminal enforcement resources for investigations which involve vulnerable communities or those that have historically been overburdened by pollution. This effort has been focused as a Criminal Enforcement Program Initiative with an emphasis on addressing environmental crimes and crime victims in these areas. EPA program goals and priorities include the following:

- In FY 2024, EPA's Environmental Crime Victim Witness Assistance Program will closely align its implementation of the Criminal Victims' Rights Act and the Victims' Rights and Restitution Act with EPA's environmental justice work. Activities will include data mining and mapping to identify where communities with EJ concerns, crime victims, and public health impacts overlap. This strategy will aid the Program in identifying sources of pollution impacting these communities and will focus criminal enforcement resources on the nation's most overburdened and vulnerable populations and, where appropriate, use of crime victim program resources and emergency funds to assist individuals in such communities. EPA conducts outreach to crime victims and overburdened communities using the social media platform Nextdoor, sharing information relating to EJ, sources of pollution, and links to EPA's Report a Violation webpage directly to households in overburdened communities.

- In FY 2024, the Criminal Enforcement Program, working with Office of Air and Radiation and the Department of Homeland Security, will continue implementing its responsibilities as a part of the HFC Enforcement Task Force, whose permanent mission is to ensure U.S. compliance with the AIM Act. The Task Force will continue to identify, intercept, and interdict illegal HFC imports, share data to support allowances, train customs officers and enforcement personnel, and address common HFC import experiences with other countries. EPA will need to continue standing up its new enforcement and compliance framework. EPA would leverage our experience working with Customs and Border Protection (CBP), DOJ, and other federal partners to successfully enforce federal laws related to HFCs. Critically important to success in this media are dedicated analysts in the Criminal Enforcement Program to research, assess, and coordinate with federal partners, private industry, and task force members.

[5] For additional information, please see: https://www.govinfo.gov/content/pkg/FR-2023-01-12/pdf/2023-00500.pdf.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$99.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$546.0 / +0.7 FTE) This program investment will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, transport, and store HFCs. The increase in FTE will allow analysts to research, assess, and coordinate with federal partners, private industry, and task force members. This investment includes $157.0 thousand for payroll.

Statutory Authority:

Title 18 of the U.S.C.; 18 U.S.C. § 3063; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); American Innovation and Manufacturing Act.

Forensics Support
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	$14,815	$15,532	$18,657	$3,125
Hazardous Substance Superfund	***$1,676***	***$1,240***	***$1,648***	***$408***
Total Budget Authority	$16,491	$16,772	$20,305	$3,533
Total Workyears	71.6	70.3	76.3	6.0

Program Project Description:

The Forensics Support Program provides expert scientific and technical support for Superfund civil and criminal enforcement cases, as well as technical expertise for the Agency's compliance efforts. EPA's National Enforcement Investigations Center (NEIC) is an environmental forensic center accredited for both laboratory analysis and field sampling operations that generate environmental data for law enforcement purposes. It is fully accredited under International Standards Organization (ISO) 17025, the main standard used by testing and calibration laboratories, as recommended by the National Academy of Sciences.[6] The NEIC maintains a sophisticated chemistry and physical science laboratory, and a corps of highly trained inspectors and scientists with expertise across environmental media. The NEIC works closely with EPA's Criminal Enforcement Program to provide technical support (*e.g.*, sampling, analysis, consultation, and testimony) to criminal investigations. The NEIC also works closely with other EPA programs to provide technical assistance, consultation, and on-site inspection, investigation, and case resolution services in support of the Agency's Superfund Enforcement Program.

The Forensics Support Program will continue to provide expert scientific and technical support for EPA's Superfund enforcement efforts, focus its work on collecting and analyzing materials to characterize contamination, and attribute it to individual sources and/or facilities. The work NEIC performs typically represents the most complex cases nationwide, requiring a level of expertise and equipment not found elsewhere in EPA, as well as support to evaluate and leverage emerging technologies. The laboratory also will continue to coordinate its support for the Agency's Superfund, Research and Development, and Land and Emergency Management Programs.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

[6] *Strengthening Forensic Science in the United States: A Path Forward*, National Academy of Sciences, 2009, available at: http://www.nap.edu/catalog.php?record_id=12589.

In FY 2024, the Agency requests an additional $109.0 thousand and 0.2 FTE to ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, and transport hydrofluorocarbons (HFCs). Effective enforcement relies on the best available science, and the additional funding and FTE will help ensure the Agency is well positioned to address the harm presented by HFCs. The additional funding supports critical climate change initiatives, including forensics support of climate change enforcement efforts both in civil and criminal enforcement. This is vital to EPA's ability to enforce HFC phase down regulations which are imperative to reducing climate impacts. In FY 2024, NEIC will make significant investments to assist with HFC-related enforcement capabilities, including inspector training, acquisition of field sampling equipment, and expansion of laboratory analytical capabilities to the meet the urgent demand for highly complex HFC analysis.

In FY 2024, NEIC will support the President's directive to deliver environmental justice (EJ) to communities across America and to hold polluters accountable for their actions. To achieve these goals, the Agency will employ NEIC's environmental forensics expertise to investigate violations of environmental statutes and prosecute environmental crimes in communities that are disproportionally affected by pollution and environmental crime, and to target those areas more effectively. NEIC supports EJ concerns by targeting critical industry inspections in overburdened or vulnerable communities and utilizes the data to work with the EPA regional office to take an enforcement action that could ultimately improve air and water quality in such communities. NEIC also will further develop and deploy the Agency's Geospatial Measurement of Air Pollution (GMAP) van, a mobile tool to help identify Clean Air Act noncompliance throughout the United States.

In FY 2024, NEIC will continue to streamline its forensics work and identify enhancements to the Agency's sampling and analytical methods, using existing and emerging technology. The NEIC will continue to build on its previous progress to maximize the efficiency and effectiveness of its operations, reduce the time for completion of civil inspection reports, improve procurement processes, and continue to identify and implement further efficiencies in laboratory operations. NEIC will continue to enhance the work completed in FY 2021 and FY 2022 to support criminal and civil program efforts to combat climate change. The results of these efforts will inform EPA's work in FY 2024 and beyond.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$12.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, changes to benefits costs, and changes to lab utilities and security costs.

- (+$109.0 / +0.2 FTE) This program investment will ensure EPA has the capacity and technical expertise to investigate, analyze, sample, test, transport, and store HFCs. This investment includes $37.0 thousand for payroll.

- (+$287.0) This program net increase will be used to support the Agency's forensics laboratory at the National Enforcement Investigations Center.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); American Innovation Manufacturing Act.

Superfund: Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund	***$169,444***	***$171,347***	***$0***	***-$171,347***
Total Budget Authority	$169,444	$171,347	$0	-$171,347
Total Workyears	737.9	771.3	771.8	0.5

In FY 2024, the Budget proposes to transition the Superfund 771.3 FTE from the annual Superfund appropriated resources to the Superfund tax receipts as reimbursable FTE. These FTE are built into the Agency's FTE ceiling.

Program Project Description:

The Superfund Enforcement Program protects communities by ensuring prompt site cleanup using an "enforcement first" approach that maximizes the participation of liable and viable parties in performing and paying for cleanups and preserving federal dollars for sites where there are no liable or viable parties. The Superfund Enforcement Program obtains potentially responsible parties' (PRPs) commitments to perform or pay for cleanups through judicial and administrative enforcement actions. The Superfund Enforcement Program works closely with the Superfund Remedial and Superfund Emergency Response and Removal Programs and the U.S. Department of Justice (DOJ) to combine legal and technical skills to bring enforcement actions and address emerging issues. Superfund enforcement efforts ensure that_Superfund sites with responsible parties are cleaned up in a timely manner and result in more site cleanups than would be possible using only government funds.

The Superfund Enforcement Program:

- Obtains cleanup commitments from responsible parties and other third parties, thereby providing long term human health and environmental protections and making contaminated properties available for reuse.
- Negotiates site cleanup agreements and, where necessary, takes enforcement actions to require cleanup and recover costs, thereby preserving federal taxpayer dollars for sites where there are no viable contributing parties.
- Develops cleanup enforcement policies.
- Provides guidance and tools that clarify potential environmental cleanup liability, with specific attention to the cleanup, reuse, and revitalization of contaminated properties.

In FY 2022, the Superfund Enforcement Program secured commitments for cleanup and cost recovery and billed parties for oversight costs, all totaling more than $670.2 million. The use of Superfund enforcement tools resulted in cleanup and redevelopment at 131 private party sites in FY 2022.

Payments received pursuant to settlement agreements with responsible parties for past costs EPA

expended on cleanups as well as cash-out funds received from parties for future site cleanup may be deposited into site-specific special accounts established for use consistent with a settlement agreement for a specific site. Site specific special accounts provide needed cleanup dollars at many sites that otherwise may not have received funding. In FY 2022, EPA collected $280.9 million from responsible parties to deposit into special accounts and disbursed or obligated approximately $237.7 million from special accounts to perform cleanup actions at sites (excluding reclassifications).

The Superfund Enforcement Program continues to encourage and facilitate PRPs' expeditious and thorough cleanup of sites, to create oversight efficiencies, and to promote the redevelopment and reuse of sites by encouraging PRPs to invest in cleanup that facilitate reuse outcomes. In addition, the Superfund Enforcement Program encourages new private investment in the cleanup and reuse of sites by optimizing tools to encourage third-party investment. EPA also works to ensure that legally enforceable institutional controls and financial assurance requirements are in place at Superfund sites to ensure the long-term protectiveness of Superfund cleanup remedies.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the President's Budget proposes to transition the Superfund Enforcement Program from the annual Superfund appropriated resources to the Superfund tax receipts.[7] The Program will continue to encourage and facilitate PRP's prompt site cleanup in FY 2024 to preserve more of the tax dollars for cleanups where there are no viable PRPs.

In FY 2024, the Agency will continue to strengthen EPA's Superfund Enforcement Program, complement work in the Superfund Remedial and Superfund Emergency Response and Removal Programs, provide financial support for DOJ to pursue judicial actions to compel PRP cleanup, and support possible actions in response to per- and polyfluoroalkyl substances (PFAS) releases. EPA will continue its work to achieve prompt site cleanup, maximize the work participation by PRPs, and secure private party funding of cleanups. In addition, the Agency will prioritize its efforts on the most significant sites in terms of human health and environmental impact. To support the Agency's focus on environmental justice and climate change, the Superfund Enforcement Program intends to:

- Require responsible parties to take early cleanup actions;
- Ensure prompt cleanup actions by responsible parties;
- Develop robust enforcement instruments that address impacts on communities and climate change vulnerabilities;
- Increase oversight of enforcement instruments;
- Build trust and capacity through increased community engagement; and
- Integrate sustainability principles into enforcement tools, policies, and guidance used for the cleanup and reuse of contaminated sites.

[7] The U.S Treasury forecasts collecting a total of $2.54 billion in Superfund tax receipts in FY 2023 which will be available for use in FY 2024 across EPA Superfund programs.

The Agency will continue its efforts to establish site-specific special accounts to facilitate cleanup. As special account funds may only be used for sites and uses specified in the settlement agreement, special account resources, annually appropriated resources, and Superfund tax receipts are critical to the Superfund Program to clean up Superfund sites. In addition, the Agency continues to work under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to address PFAS contamination by gathering information to support possible actions under multiple statutory authorities in response to PFAS releases. In anticipation of PFAS being designated as CERCLA hazardous substances, the Agency expects the Superfund enforcement workload to increase significantly. In addition, the Superfund Enforcement Program will continue its efforts to address contamination at historically impacted communities, focusing on community engagement and facilitating cleanup at such sites.

DOJ's participation in CERCLA cases is statutorily mandated for settlements related to remedial action cleanups, most cost recovery settlements, and is required for all judicial enforcement matters. DOJ's support will be prioritized to maximize PRP performance of cleanup, particularly protection of human health at sites located in historically impacted communities. EPA provides financial support to DOJ for these activities. In FY 2024, similar to the Superfund Enforcement program, DOJ's support is proposed to be transitioned to the Superfund tax receipts through an interagency agreement.

Cost Recovery Support:

In FY 2024, the Agency also will continue to standardize and streamline the financial management processes for the financial management aspects of Superfund cost recovery and the collection of debt to the federal government. EPA's financial, programmatic, and legal offices will continue to maintain the accounting and billing of Superfund oversight costs attributable to responsible parties. These costs represent EPA's cost of overseeing Superfund site cleanup efforts by responsible parties as stipulated in the terms of settlement agreements. In FY 2022, the Agency collected $303.9 million in cost recoveries, of which $24.9 million were returned to the Superfund Trust Fund and $279 million were deposited in site-specific, interest-bearing special accounts.

The Agency will continue to pursue an "enforcement first" approach that maximizes PRP participation at Superfund sites by performing enforcement activities such as conducting PRP searches, negotiating site-specific settlements, and recovering costs. These activities ensure that responsible parties conduct or pay for cleanups and preserve federal dollars for sites where there are no viable contributing parties. EPA also will work to increase opportunities for community engagement.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$171,347.0 / -771.3 FTE) In FY 2024, the Superfund Enforcement Program is proposed to be transitioned from the annual Superfund appropriated resources to the Superfund tax receipts. In FY 2023, the U.S Treasury forecasts collecting a total of $2.54 billion in Superfund taxes which will be available for use in FY 2024 across EPA Superfund programs. As a result, the pace of work is not expected to be impacted.

- (+771.8 FTE) In FY 2024, the Agency proposes to transition 771.8 Superfund Enforcement FTE from the annual Superfund appropriated resources to the Superfund tax receipts as reimbursable FTE.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Federal Facilities Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund	***$7,263***	***$8,192***	***$10,366***	***$2,174***
Total Budget Authority	$7,263	$8,192	$10,366	$2,174
Total Workyears	33.6	40.9	45.2	4.3

Program Project Description:

EPA's Superfund Federal Facilities Enforcement Program monitors compliance and pursues enforcement primarily at sites where there is federal ownership or a federal operator, whether full or partial, and the federal owner conducts or is involved in the cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund"). After years of service and operation, many federal facilities are contaminated with hazardous substances, pollutants, and contaminants, such as unexploded ordnance and radioactive wastes. Enforcement actions can facilitate timely cleanup and potential redevelopment of these sites to protect public health and the environment.

Pursuant to CERCLA Section 120, EPA must enter into Interagency Agreements, commonly referred to as Federal Facility Agreements (FFAs), with responsible federal entities to ensure protective and timely cleanup of their National Priorities List (NPL) sites. The agreements provide that EPA will oversee the cleanups to ensure that they protect public health and the environment. These FFAs govern cleanups at 174 federal facility Superfund sites, which include many of the Nation's largest and most complex cleanup projects. While only 10 percent of the NPL sites are federal facility sites, over 41 percent of the total Operable Units in the Superfund Program are at these sites. Operable units are sites that can be divided into a number of distinct areas depending on the complexity of the problems associated with the site. These areas called operable units may address geographic areas of a site, specific site problems, or areas where a specific action is required. An example of a typical operable unit could include removal of drums and tanks from the surface of a site.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue to support possible actions in response to significant contamination from federal facilities, including a request for an increase of approximately $2.2 million and 4.3 FTE to address per- and polyfluoroalkyl substances (PFAS) releases. EPA will

continue to focus its enforcement resources on the highest priority sites, particularly those that may present an imminent and substantial endangerment, have human exposure not yet under control, have an impact on overburdened or vulnerable communities with environmental justice concerns, or have the potential for beneficial redevelopment. EPA also will negotiate and amend, as appropriate, FFAs for federal facility sites on the NPL, and continue to monitor FFAs for compliance. EPA will expedite cleanup and redevelopment of federal facility sites, particularly those located in communities with environmental justice concerns, and will use alternative dispute resolution processes and other approaches to timely resolve formal and informal cleanup disputes. EPA also will continue to seek ways to improve its engagement with other federal agencies, state, tribal, local governments, and their partners, emphasizing protective, timely cleanups that address communities' needs. EPA will work with its federal partners to encourage greater community outreach and transparency.

The Agency also will work to address PFAS contaminations and releases by developing information to support possible actions under multiple statutory authorities. Federal facilities (*e.g.*, Department of Defense military bases and Department of Energy sites) are starting to act at their PFAS-contaminated NPL sites. As federal agencies conduct this work at their federal facility NPL sites, CERCLA requires EPA to oversee the work. An increased investment for EPA's Superfund Federal Facilities Enforcement Program will support EPA's efforts to monitor the increasing number of initiated PFAS remedial investigations projected to occur at federal facilities in the coming years. In FY 2024, the Program will pursue enforcement actions, where needed, to ensure compliance with CERCLA and other federal environmental laws, and to protect public health.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$1.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. The reduction is offset by an increase in critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$2,175.0 / +4.3 FTE). This program increase will be used to address PFAS contamination by overseeing the increasing number of initiated remedial investigations projected to occur at federal facilities. This investment includes $792.0 thousand for payroll.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

Environmental Justice

Environmental Justice

Program Area: Environmental Justice
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$20,455	$102,159	$369,106	$266,947
Hazardous Substance Superfund	***$1,065***	***$5,876***	***$5,888***	***$12***
Total Budget Authority	$21,520	$108,035	$374,994	$266,959
Total Workyears	51.8	223.6	264.6	41.0

Program Project Description:

EPA's Environmental Justice (EJ) Program coordinates the Agency's efforts to address the needs of overburdened and vulnerable communities by decreasing environmental burdens, increasing environmental benefits, and building collaborative partnerships with all stakeholders to build healthy, sustainable communities based on residents' needs and desires. EPA's EJ Program focuses on collaboration as a central principle and method of advancing justice. The Program's core philosophy is that EJ challenges need strong collaborative partnerships that include federal, state, local, and tribal governments along with the private sector, academia, and philanthropy–to support communities in addressing multifaceted problems and positively changing conditions on the ground. The Program provides technical assistance and expert consultative support to communities, partners at all levels of government, and other stakeholders such as business and industry, to achieve protection from environmental and public health hazards for people of color, low-income communities, and indigenous communities at or near Superfund sites.

Work in this program directly supports Administrator Michael Regan's message "Our Commitment to Environmental Justice" issued on April 7, 2021,[8] in addition to supporting implementation of Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*,[9] EO 14008: *Tackling the Climate Crisis at Home and Abroad*,[10] and Goal 2, Take Decisive Action to Advance Environmental Justice and Civil Rights, of the *FY 2022 - 2026 EPA Strategic Plan*. In accordance with the American Water Infrastructure Act of 2018 (P.L. 115-270), every EPA regional office employs a dedicated EJ coordinator, and the Agency maintains a list of these persons on the EPA's website.[11] The

[8] For more information, please see: https://www.epa.gov/newsreleases/epa-administrator-regan-announces-new-initiatives-support-environmental-justice-and.
[9] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[10] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.
[11] For more information on EPA's regional office contacts, please see: https://www.epa.gov/environmentaljustice/forms/contact-us-about-environmental-justice.

Superfund portion of this program has focused on issues that affect people of color, low income, and indigenous communities at or near Superfund sites. The EJ Program complements the Agency's community outreach and other work done under the Superfund Program at affected sites.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.2, Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will advance implementation of EJ activities in support of the Superfund Program. The EJ Program will elevate and expand the use of coordinated and collaborative community-driven partnerships to address community priorities by promoting the active engagement of community-based organizations, other federal agencies, and tribal, state, and local governments. This will advance environmental protection and public health for overburdened communities at or near Superfund sites. The EJ Program will guide EPA's efforts to empower communities to identify and develop solutions to address environmental harms, working to utilize nationally consistent data that combines environmental and demographic indicators in mapping and prioritizing communities with EJ concerns at or near Superfund sites. These efforts help build healthy and sustainable communities through technical assistance, enabling overburdened and vulnerable communities to revitalize their local economies while also better facilitating EPA efforts to further focus federal resources and program design to benefit communities with EJ concerns and those most at risk of climate change impacts at or near Superfund sites.

The EJ Program will continue to partner with and support other agency programs in their efforts to fully integrate EJ considerations into all of EPA's policies, programs, and activities while also developing nationally consistent data that combines environmental and demographic indicators in mapping and prioritizing communities with EJ concerns at or near Superfund sites.

Performance Measure Targets:

Work under this program supports performance results in the Environmental Justice Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$12.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This funding change includes a slight reduction to the Program. The Agency will continue to address the needs of overburdened, underserved, and vulnerable communities.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Homeland Security

Homeland Security: Preparedness, Response, and Recovery
Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	$24,536	$25,347	$39,539	$14,192
Hazardous Substance Superfund	***$35,026***	***$34,661***	***$56,484***	***$21,823***
Total Budget Authority	$59,561	$60,008	$96,023	$36,015
Total Workyears	121.8	124.1	138.3	14.2

Program Project Description:

EPA leads or supports many aspects of preparing for and responding to a nationally significant incident involving possible chemical, biological, radiological, and nuclear (CBRN) agents. The Homeland Security Preparedness, Response, and Recovery Program implements a broad range of activities that cover multifaceted federal efforts, including:

- National trainings;
- Participation in national interagency exercises with federal and state partners;
- Support for headquarters and regional Emergency Operations Centers;
- Enhancements for national information technology systems;
- Secured warehouse space for homeland security operations and storage; and
- Laboratory analyses of environmental samples and site decontamination projects.

EPA's homeland security effort develops these responsibilities through research and maintaining a level of expertise, training, and preparedness specifically focused on threats associated with CBRN. This work is consistent with the Department of Homeland Security's (DHS') National Response Framework.

EPA assists with multi-media training and exercise development and implementation for responders, which establishes and sustains coordination with states, local communities, tribes, and other federal agencies (OFAs). The Agency also provides technical assistance to OFAs, including DHS, the Department of Defense (DOD), the Department of Justice (DOJ), and the Department of Health and Human Services (HHS), in the areas of environmental characterization, decontamination, and waste disposal methods. In addition, the program operates a national environmental laboratory for chemical warfare agents and implements EPA's National Approach to Response.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, the Homeland Security Preparedness, Response, and Recovery Program will:

- Utilize the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft. ASPECT aids first responders by providing aerial surveillance screening for wide-area chemical, radiological, and nuclear detection, as well as infrared and advanced imagery products with real-time data delivery.

- Initiate a multi-year strategic modernization of the ASPECT airborne screening capability to the Chemical Incident and Radiological Reconnaissance on Unmanned Systems (CIRRUS) program. In FY 2024, EPA is requesting an increase of $12.3 million and 1.8 FTE to support CIRRUS needed to expedite emergency response. Transition this capability to remotely piloted platforms to more effectively and efficiently support emergency response, climate crisis, and environmental justice missions. This system would simultaneously reduce response time to a broader geographic area, enhance response redundancy, capitalize on potential cost-efficiencies of remotely piloted vehicles, and significantly reduce the hazards associated with crewed flight operations at extremely low altitudes.

- Operate, enhance, and significantly overhaul the aging Portable High-Throughput Integrated Identification System (PHILIS) capability. PHILIS units provide the Nation with mobile analytical "all hazards" confirmatory labs (qualitative and quantitative) with unique capability to analyze chemical and biological warfare threat agents. PHILIS provides on-scene, high-throughput analyses of air, soil, and water samples in areas that have experienced a significant incident. PHILIS can support risk mitigation of contaminated sites which face climate change impacts and affect communities with environmental justice concerns by mobilizing laboratory capabilities to areas of need. In FY 2024, EPA is requesting an increase of $10 million to replace outdated PHILIS equipment. This modernization will upgrade the platform (mobility) and the laboratory (analytical equipment). The platform replacements will provide greatly improved long-distance mobility, reliability, maintenance and operating costs, and operational uniformity. The equipment investment will procure state-of-the-art systems to increase overall automation, throughput, and sensitivity of the PHILIS assets as well as bring parity in capabilities between the two ("East" and "West") PHILIS labs.

- Participate in trainings and exercises on CBRN preparedness and response topics with key federal response partners (e.g., DHS, DOD, and DOJ) on select inter-agency workgroups.

- Target exercises to improve preparedness for communities with environmental justice concerns and increase incorporation of environmental justice into preparedness activities.

- Provide expertise on detection, environmental characterization, decontamination, and waste disposal methods following the release of a CBRN agent.

- Maintain operational support for the Emergency Management Portal and WebEOC response systems.

- Conduct research to enhance response capabilities by developing methods, tools, and information for site characterization, decontamination, waste management, and clearance for priority chemical, biological, and radiological threats all while reducing time and cost, and ensuring safety.

- Conduct research to generate resources, tools, and training for risk communication outreach, building relationships, and community engagement to empower under-resourced communities and populations with environmental justice concerns.

- Proceed with the development of sample collection protocols and analysis methods for inclusion in EPA's Environmental Sampling & Analytical Methods (ESAM)[12] on-line tool. EPA's ESAM detection, sampling, and analysis tool helps local, state, territorial, tribal, and federal emergency response field personnel and their supporting laboratories more effectively and efficiently respond to incidents, enabling smooth transitions of samples and data from the field to the laboratory to decision makers.

- Maintain a highly skilled, well-trained, and well-equipped response workforce that has the capacity to respond to simultaneous incidents as well as threats involving CBRN substances. This includes training On-Scene Coordinators, volunteers of the Response Support Corps (RSC), and members of Incident Management Teams. RSC volunteers provide critical support to headquarters and regional Emergency Operations Centers and assist with operations in the field. To ensure technical proficiency, this cadre of response personnel requires initial training and routine refresher training.

Performance Measure Targets:

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness program under the Superfund appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$531.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$12,346.0 / +1.8 FTE) This program change is an increase in resources and FTE to support Chemical Incident and Radiological Reconnaissance on Unmanned Systems (CIRRUS) needed to expedite emergency response and provide additional assistance to

[12] For more information, please see: https://www.epa.gov/esam.

partners external to the agency. These efforts will assist in improving preparedness for communities with environmental justice concerns such as fenceline communities. This investment includes $332.0 thousand for payroll.

- (+$10,000.0) This program change is an increase in resources to replace outdated PHILIS equipment. These funds will allow the program to complete a PHILIS equipment upgrade, update all mobile lab technology, and replace vehicle platforms. These efforts will assist in improving preparedness for communities with environmental justice concerns such as fenceline communities.

- (-$178.0) This program change is a decrease in resources for site characterization and decontamination research.

- (+$186.0 / +1.2 FTE) This program change increases resources and FTE for homeland security preparedness efforts. This includes $186.0 thousand for payroll.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act, §§ 104, 105, and 106; Homeland Security Act of 2002.

Homeland Security: Protection of EPA Personnel and Infrastructure

Program Area: Homeland Security
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$4,903	$5,188	$5,158	-$30
Science & Technology	$501	$625	$501	-$124
Building and Facilities	$7,049	$6,676	$6,676	$0
Hazardous Substance Superfund	***$1,201***	***$1,029***	***$1,530***	***$501***
Total Budget Authority	$13,653	$13,518	$13,865	$347
Total Workyears	12.0	13.3	9.2	-4.1

Total workyears in FY 2024 include 9.2 FTE to support Homeland Security Working Capital Fund (WCF) services.

Program Project Description:

The federal government develops and maintains Continuity of Operations (COOP) plans and procedures that provide for the continued performance of its essential functions. The Homeland Security COOP Program works with other government and non-government organizations to ensure that Mission Essential Functions (MEFs) and Primary Mission Essential Functions (PMEFs) continue to be performed during emergency situations. The Department of Homeland Security/Federal Emergency Management Agency's (FEMA) Federal Continuity Directive-1 requires EPA to develop a continuity plan that ensures its ability to accomplish its MEFs from an alternate site during a national disaster continues, and that the Agency will be able to continue operations successfully with limited staffing and without access to resources available during normal activities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA will:

- Expand efforts, under FEMA's Federal Mission Resiliency (FMR) directives, including assessment of the FMR strategy, building upon existing National Continuity Policy, updating training and exercise materials to incorporate FMR constructs, and developing assessment tools to measure progress.

- Conduct selected annual reviews of regional COOP plans, PMEFs and MEFs, and make updates as needed.

- Monitor the continuity programs across the Agency, focusing on testing, training, and exercises as related to general COOP awareness and procedures.

- Undergo a monthly evaluation of the headquarters' COOP Program, including program plans and procedures, risk management, budgeting, and essential functions. Further, FEMA will perform an in-person biannual review of EPA's COOP Program and provide the results to the Administrator and to the Executive Office of the President.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$501.0) This program change is an increase in resources to support EPA's COOP implementation and training.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act §§ 104, 105, 106; Intelligence Reform and Terrorism Prevention Act of 2004; Homeland Security Act of 2002; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Indoor Air and Radiation

Radiation: Protection
Program Area: Indoor Air and Radiation
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$8,244	$9,088	$11,638	$2,550
Science & Technology	$2,224	$1,683	$2,349	$666
Hazardous Substance Superfund	***$2,011***	***$2,472***	***$3,010***	***$538***
Total Budget Authority	$12,479	$13,243	$16,997	$3,754
Total Workyears	53.9	54.8	67.2	12.4

Program Project Description:

This program addresses potential radiation risks that may be found at Superfund and hazardous waste sites. Through this program, EPA ensures that Superfund site cleanup activities reduce and/or mitigate the health and environmental risks of radiation by including support of removal actions, as needed.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

Work in this program directly supports protecting communities from hazardous waste and environmental damage, thereby protecting human health and the environment and contributing to the well-being of disadvantaged communities that may be disproportionately impacted by radioactive releases. In FY 2024, EPA's National Analytical Radiation Environmental Laboratory (NAREL) in Montgomery, Alabama, and National Center for Radiation Field Operations (NCRFO) in Las Vegas, Nevada, will continue to provide analytical and field support to manage and mitigate radioactive releases and exposures. These two organizations provide analytical and technical support for the characterization and cleanup of Superfund and hazardous waste sites.

NAREL and NCRFO provide data evaluation and assessment, document review, and field support through ongoing fixed and mobile analytical capability. Thousands of radiochemical analyses are performed annually at NAREL on a variety of samples from contaminated sites. NAREL is EPA's only radiological laboratory with in-house radiochemical analytical capability. NCRFO provides field-based technical support for screening and identifying radiological contaminants at Superfund and non-Superfund sites across the country, including air sampling equipment and expert personnel.

More specifically, these organizations focus on providing technical support and high-quality data to support agency decisions at sites across the country. They also develop guidance for cleaning up Superfund and other sites that are contaminated with radioactive materials.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$31.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$37.0) This change to fixed and other costs is an increase due to the recalculation of lab utilities.

- (+$532.0 / +2.4 FTE) This program change reflects an increase in program capacity for activities such as analytical and field support to assess, manage, and mitigate radioactive releases and exposures at contaminated sites. This investment includes $418.0 thousand in payroll costs.

Statutory Authority:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

IT/ Data Management/ Security

Information Security
Program Area: IT / Data Management / Security
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$10,450	$9,142	$23,889	$14,747
Hazardous Substance Superfund	***$1,209***	***$1,062***	***$7,859***	***$6,797***
Total Budget Authority	$11,659	$10,204	$31,748	$21,544
Total Workyears	10.9	14.1	17.1	3.0

Program Project Description:

Digital information is a valuable national resource and a strategic asset that enables EPA to fulfill its mission to protect human health and the environment. The Information Security Program's mission is to protect the confidentiality, integrity, and availability of EPA's information assets. The information protection strategy includes, but is not limited to, risk management, oversight, and training; network management and protection; and incident management.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests $6.8 million to support enhancements to protect the Agency's information technology portfolio. This investment will increase EPA's information technology resiliency and limit vulnerabilities in the event of a malicious attack. EPA will work toward full compliance with the five high priority directives (Adoption of Multifactor Authentication, Encryption of Data At Rest, Encryption of Data In Transit, Zero Trust Architecture, and Event Logging) in Executive Order (EO) 14028: *Improving the Nation's Cybersecurity*.[13]

[13] Work in this program takes direction for IT implementation practices and priorities from the following:

- EO 14028: *Improving the Nation's Cybersecurity* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/)
- OMB Memo M-23-03: *Fiscal Year 2023 Guidance on Federal Information Security and Privacy Management Requirements* (https://www.whitehouse.gov/wp-content/uploads/2022/12/M-23-03-FY23-FISMA-Guidance-2.pdf)
- OMB Memo M-19-26: *Update to the Trusted Internet Connection (TIC) Initiative* (https://www.whitehouse.gov/wp-content/uploads/2019/09/M-19-26.pdf)
- OMB Memo M-21-30: *Protecting Critical Software Through Enhanced Security Measures* (https://whitehouse.gov/wp-content/uploads/2021/08/M-21-30.pdf)
- OMB Memo M-21-31: *Improving the Federal Government's Investigative and* OMB Memorandum *Remediation Capabilities Related to Cybersecurity Incidents* (https://www.whitehouse.gov/wp-content/uploads/2021/08/M-21-31-Improving-the-Federal-Governments-Investigative-and-Remediation-Capabilities-Related-to-Cybersecurity-Incidents.pdf)
- OMB Memo M-22-01: *Improving Detection of Cybersecurity Vulnerabilities and Incidents on Federal Government Systems through Endpoint Detection and Response* (https://www.whitehouse.gov/wp-content/uploads/2021/10/M-22-01.pdf)
- OMB Memo M-22-09: *Moving the U.S. Government Toward Zero Trust Cybersecurity Principles* (https://www.whitehouse.gov/wp-content/uploads/2022/01/M-22-09.pdf)

Improving the Defense and Resilience of Government Networks

Zero Trust Architecture (ZTA)

A key priority for EPA's information security needs is the development of networks which can resist malevolent actions regardless of their origin. ZTA will grant authorized users full access to the tools and resources needed to perform their jobs but limit access to unnecessary areas. Proper permissions for a given user's needs are a critical component of Zero Trust Architecture and coding for more granular control over the network environment is an information security priority.

EPA will continue to improve defense and resilience of government networks in accordance with ZTA security principles, which focuses on virtual identity management capabilities. These improvements ensure agency staff can access necessary software applications while providing resistance to malicious phishing campaigns and sophisticated online attacks. For those system environments not integrated into the larger enterprise system, which may not be compatible with the enterprise-wide identity management capabilities, EPA will continue efforts to harden those systems with continuous monitoring capabilities to reduce risk.

EPA will continue to implement cybersecurity enhancements necessary to support a larger remote workforce, which includes strengthening cloud security monitoring and access to sensitive data, cyber incident response, and cloud platform management services. These enhancements allow agency staff to securely use systems and services in the cloud while also improving application performance and reducing costs associated with Trusted Internet Connections (TIC). The Agency also will pilot enterprise web application control tools to protect web applications by preventing malicious traffic from accessing the web application or agency data. The Agency will continue to build its Insider Threat Program for the unclassified network to monitor Privileged Users and Systems Administrators activity, as recommended by several cybersecurity assessments,[14] and to monitor and report on EPA networks and systems.

IT Modernization for Federal Cybersecurity by Design

EPA will continue to strengthen information technology (IT) assets and develop resiliency against potential cybersecurity threats. This work includes enhancing Multifactor Authentication to strengthen access controls to data and evaluating areas which still may require implementation of encryption for Data at Rest and Data in Transit to protect data. EPA has prioritized investments to protect the most sensitive systems and information. Additionally, EPA will work with the Department of Homeland Security and the Continuous Diagnostics and Mitigation Program (CDM) to ensure up-to-date technologies are implemented.

- OMB Memo M-22-16: *Administration Cybersecurity Priorities for the FY 2024 Budget (https://www.whitehouse.gov/wp-content/uploads/2022/07/M-22-16.pdf)*
- *OMB Memo M-23-03: Fiscal Year 2023 Guidance on Federal Information Security and Privacy Management Requirements* (https://www.whitehouse.gov/wp-content/uploads/2022/12/M-23-03-FY23-FISMA-Guidance-2.pdf)
- NIST 800-53

[14] These assessments include Annual Assessments and Classified briefings with the Department of Homeland Security and EPA's Office of Homeland Security, as well as a 2017 OIG Report, available at: https://www.epa.gov/sites/production/files/2017-10/documents/_epaoig_20171030-18-p-0031.pdf.

Cyberattacks are rapidly increasing in volume and sophistication, impacting both IT and operational technology systems. EPA's Agency IT Security and Privacy (AITSP) Program enables agencywide implementation, management, and oversight of the CIO's Information Security and Privacy Programs through continuous monitoring functions. These capabilities serve to identify and address security vulnerabilities and incidents quickly, ensuring that EPA's information environment remains safe.

EPA will continue to support the ongoing implementation of capabilities for data labeling and data loss prevention, which will improve security information and event management by collecting, synthesizing, managing, and reporting cybersecurity events for systems across the Agency.

The Information Security Program supports EPA's Enterprise Security Operations Center (SOC), which manages the Computer Security Incident Response Capability (CSIRC) processes to support identification, response, alerting, and reporting of suspicious activity. EPA will mature the system logging capabilities in Event Logging (EL) Level 3 for Advanced Logging requirements at all criticality levels, leveraging Security Orchestration, Automation, and Response tools to streamline threat and vulnerability management, incident response, and security operations automation. Additionally, EL 3 will employ User Behavior Monitoring analytics to enable early detection of malicious behavior. Through CSIRC, EPA will continue to maintain relationships with other federal agencies and law enforcement entities, as needed, to support the Agency's mission.

The Agency's Security Operations Center will continue work to integrate End Point Detection and Response capabilities with the CDM Program to support proactive detection of cybersecurity incidents, active cyber hunting, containment and remediation, and incident response. EPA will continue modernizing its network and system logging capabilities (on-premises systems and connections hosted by third parties, such as Cloud Service Providers) for both investigation and remediation purposes.

EPA leverages CDM capabilities to address the Agency's cybersecurity security gaps and efficiently identify and respond to government-wide cybersecurity threats and incidents. In FY 2024, as part of the work with the Department of Homeland Security to support implementation of current and future Phase CDM requirements, the CDM Program will continue closing gaps in privileged access to EPA's network and will continue to provide critical security controls for the Agency's cloud applications. The CDM Program also will review interior EPA network boundary protection from interconnections to external networks, expand endpoint detection, and response capabilities. In line with OMB and DHS direction, the CDM Program will implement priority capabilities as they are identified. In FY 2024, EPA estimates a $13 million budget for the CDM Program.

Strengthening the Foundations of our Digitally-Enabled Future

Securing Infrastructure Investments

The Agency collects Federal Information Security Modernization Act (FISMA) metrics and evaluates related processes, tools, and personnel to identify gaps and opportunities for

improvement.[15] EPA's CIO, who also is the Senior Agency Official for Privacy (SAOP), in coordination with the Chief Information Security Officer, will continue to monitor and report on these metrics. EPA will:

- Modernize and automate the methodology and workflow for collecting Federal Information Registry data supporting the System of Record Notice Management process.
- Continue implementing Ground Truth Testing to validate security and find weaknesses through manual and automated penetration testing and red team exercises.

The Agency continues to work on refinements to improve the ability to track and report on critical software used by the Agency in compliance with Federal Information System Reporting and OMB direction.

EPA includes cybersecurity and privacy components in senior leadership program reviews. These reviews enhance CIO oversight by enabling better risk area determination and targeted improvement to system and mission program managers. While EPA program and regional offices maintain responsibility for improving their performance in specific cybersecurity measures, EPA's senior leadership routinely reviews performance results and potential challenges for achieving continuous improvement.

Human Capital

EPA will further enhance agency-specific role-based training to ensure personnel in key cybersecurity roles have a comprehensive understanding of modern, secure IT and cybersecurity requirements, with the skills, knowledge, and capabilities to effectively support EPA's cybersecurity posture.

Technology Ecosystems

EPA will build on efforts to fully carry out the Agency's program to implement Cybersecurity Supply Chain Risk Management Controls to comply with the Government Accountability Office findings and *NIST 800-53 Rev 5 Security and Privacy Controls for Information Systems and Organization*.[16,17] This work includes coordinating across the Agency with professionals from Information Technology, Information Security, and Procurement to update the policy and obtain the necessary tools to address these critical security requirements. EPA will continue to implement standards, procedures, and criteria to harden and secure software development environments, and investigate the addition of automated tools to secure the development environment.

[15] Including those found in Federal Information Security Modernization Act of 2014 and Federal Information Security Cybersecurity Act of 2015.
[16] Government Accountability Office Report on information and communications technology (ICT) Supply Chain: GAO-21-164SU.
[17] For more information, please see: https://csrc.nist.gov/publications/detail/sp/800-53/rev-5/final.

Performance Measure Targets:

(PM ALR) Implementation of advanced event logging requirements (EL3) across EPA networks.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						EL1	EL3	EL3	Tier
Actual						EL0			

(PM DAR) Percentage of EPA data at rest in compliance with encryption requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							90	95	Percent
Actual									
Numerator									Systems
Denominator									

(PM DIT) Percentage of EPA data in transit in compliance with encryption requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							90	95	Percent
Actual									
Numerator									Systems
Denominator									

(PM MFA) Percentage of EPA applications in compliance with multifactor authentication requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						75	85	90	Percent
Actual						48			
Numerator						223			Applications
Denominator						463			

(PM ZTA) Percentage of "Zero Trust Architecture" projects completed on time.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									TBD
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$6,797.0) This program change supports enhancements to protect the Agency's information technology infrastructure and advance the implementation of Executive Order 14028: Improving the Nation's Cybersecurity. This investment will increase EPA's information technology resiliency and limit vulnerabilities in the event of a malicious attack.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Cybersecurity Act of 2015; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$90,029	$91,821	$105,868	$14,047
Science & Technology	$2,799	$3,197	$3,313	$116
Hazardous Substance Superfund	***$16,075***	***$19,764***	***$17,727***	***-$2,037***
Total Budget Authority	$108,903	$114,782	$126,908	$12,126
Total Workyears	463.6	490.9	503.9	13.0

Total work years in FY 2024 include 172.0 FTE to support IT/Data Management working capital fund (WCF) services.

Program Project Description:

The work performed under the Information Technology/Data Management (IT/DM) Program supports human health and the environment by providing critical IT infrastructure and data management. The Program ensures analytical support for interpreting and understanding environmental information; exchange and storage of data, analysis, and computation; rapid, secure, and efficient communication; and access to scientific, regulatory, policy, and guidance information needed by the Agency, regulated community, and the public.

This program supports the maintenance of EPA's IT and Information Management (IT/IM) services that enable citizens, regulated facilities, states, and other entities to interact with EPA electronically to access, analyze and understand, and share environmental data on-demand. The IT/DM Program also provides support to other IT development projects and essential technology to EPA staff, enabling them to conduct their work effectively and efficiently in the context of federal IT requirements, including the Federal Information Technology Acquisition Reform Act (FITARA); Technology Business Management (TBM); Capital Planning and Investment Control; and the Open, Public, Electronic, and Necessary Government Data Act.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue to support Future of Work efforts of the Agency through maintaining and enhancing the IT infrastructure required to support a permanent increase in telework, remote work, and operational readiness, consistent with Office of Management and Budget Memorandum M-21-25.[18] This includes modernizing the Agency's obsolete voice

[18] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf

communications system and investing in the enterprise network to support enhanced collaboration flowing smoothly and efficiently within a widely distributed community.

In FY 2024, EPA will continue to maintain and modernize the Agency's enterprise network switch infrastructure necessary for the operations of the EPA network including data centers. This will ensure critical infrastructure is replaced when it reaches end of life/end of support. Failure to replace switch infrastructure may result in network degradation, which leaves EPA vulnerable to cybersecurity threats, and can disrupt operations.

In FY 2024, EPA will continue implementation of the Agencywide Digitization Strategy, which includes the operation of two EPA digitization centers and the development and operation of a modernized electronic Agency Records Management System (ARMS), which is necessary to meet the requirements of Memoranda M-19-21 *Transition to Electronic Records* issued by the Office of Management and Budget and the National Archives and Records Administration.[19] In FY 2024, two EPA digitization centers will digitize, validate, and upload electronic files into the ARMS. Additionally, EPA will leverage artificial intelligence and machine learning to assist staff with appropriately scheduling electronic records that are saved to ARMS. The Agency will operate the Paper Asset Tracking Tool (PATT) to track paper records as they are submitted and processed through the digitization centers.

In FY 2024, EPA will continue to maintain and manage its core IT/ DM services, including Information Collection Requests, the National Library Network, the Agency's Docket Center, and EPA's Section 508 Program, which directly supports the requirements under Executive Order 14035.[20] Key initiatives include,

- Further strengthening the Agency's IT acquisition and portfolio review process as part of the implementation of FITARA. In the most recent FITARA scorecard, released in December 2022,[21] EPA scored an overall B. EPA will continue to use the results of the FITARA scorecard to drive agency priorities and investments.

- Continuing work on converting prioritized internal administrative paper or analog workflows into modern digital workflows to speed up common administrative tasks, reduce burdensome paperwork for EPA employees and managers, improve internal data collection and reporting, and improve cross-agency data interoperability and delivery to the public. This work includes identifying a set of processes which will yield the greatest benefit for the Agency upon automation and complete a high priority pilot automation project.

- Continuing work on EPA's Controlled Unclassified Information Program to standardize, simplify, and improve information management and IT practices to facilitate the sharing of important sensitive data within the Agency, with key stakeholders outside of the Agency,

[19] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/08/M-19-21-new-2.pdf.
[20] For more information, please refer to Executive Order: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/. For more information, please refer to Executive Order: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/.
[21] For additional information, please refer to: https://oversight.house.gov/sites/democrats.oversight.house.gov/files/COR%20Scorecard%2014.pdf.

and with the public, meeting federal standards as required by Executive Order 13556: *Controlled Unclassified Information*.[22]

- Increasing the use of registries, continue migration to a cloud infrastructure, and improve registry quality by modernizing from custom built solutions to commercial off-the-shelf tools with expanded capabilities. Registries are shared data services in which common data are managed centrally but shared broadly; they improve data quality in EPA systems, enable integration and interoperability of data across program silos, and facilitate discovery of EPA information publicly and internally.

EPA's Customer Experience (CX) Program will focus on improving the mission support experience of EPA staff to improve their ability to serve the public, in line with the guidance in Executive Order 14058.[23] The Program focuses on collaborations such as the Hiring and Onboarding process, which collects feedback from IT professionals, hiring managers, regions, programs, and other stakeholders to improve the experience for hiring authorities and new employees at EPA. The CX Program collects customer feedback, conducts data analytics, assesses priorities within a governing community of practice, and presents recommendations to senior leaders to allocate resources to improve CX initiatives.

The Agency's Chief Technology Officer, Chief Architect, and Chief Data Officer will continue to enhance enterprise software development and architecture capabilities, including application development, deployment approaches, and technical platform support. EPA will identify and prioritize the interoperability of data within EPA and across federal agencies that benefits internal and public-facing services. Driven by demand from federal partners, EPA will identify opportunities to share data with other federal partners in the National Secure Data Service and other sharing platforms. EPA will support data collection in a few priority areas, where required, to improve our efforts to address our learning agenda priority questions, environmental justice, and other agency efforts focused on civil rights and equity challenges.

In FY 2024, the Agency will continue to support the essential capabilities of GeoPlatform, a shared technology enterprise for geospatial information and analysis. By implementing geospatial data, applications, and services such as the Facility Registry System, the Agency can integrate, interpret, and visualize multiple data sets and information sources to support environmental decisions. The Agency will continue developing and increasing capabilities of EPA's Data Management and Analytics Platform, which has both internal and public facing elements, such as Envirofacts. EPA will partner with other agencies, states, tribes, and academic institutions to propose innovative ways to use, analyze, and visualize data through EPA's Data Management and Analytics Platform. Throughout FY 2023 and FY 2024, based on the Agency's assessment of options for improving regulated facility data, EPA will establish a governance framework for implementing an enterprise data life cycle approach for managing regulated facility data.

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[22] For more information, please refer to Executive Order: https://www.federalregister.gov/documents/2010/11/09/2010-28360/controlled-unclassified-information.

[23] For additional information, please refer to: https://www.federalregister.gov/documents/2021/12/16/2021-27380/transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government For additional information, please refer to: https://www.federalregister.gov/documents/2021/12/16/2021-27380/transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government.

In FY 2024, Web Infrastructure Management will continue to modernize EPA's web presence to support internal and external users with information on EPA business, support employees with internal information, and provide a clearinghouse for the Agency to communicate initiatives and successes. EPA also will continue upgrading its web infrastructure to ensure that it meets current statutory and security requirements.

Performance Measure Targets:

Work under this program supports performance results in the Information Technology/Data Management Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$14.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$2,051.0) This decrease represents a resource shift within the Information Technology/Data Management/Security Program Area to support the high-priority implementation of Executive Order 14028 – Improving the Nation's Cybersecurity in the Information Security Program Project.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Information Technology Acquisition Reform Act; Federal Information Security Modernization Act (FISMA); Government Performance and Results Act (GPRA); Government Management Reform Act (GMRA); Clinger-Cohen Act (CCA); Rehabilitation Act of 1973 § 508.

Legal / Science / Regulatory / Economic Review

Alternative Dispute Resolution
Program Area: Legal / Science / Regulatory / Economic Review
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$1,196	$972	$2,194	$1,222
Hazardous Substance Superfund	***$698***	***$791***	***$880***	***$89***
Total Budget Authority	$1,894	$1,763	$3,074	$1,311
Total Workyears	5.5	5.9	10.0	4.1

Program Project Description:

EPA's Alternative Dispute Resolution (ADR) Program offers cost-effective processes for preventing and resolving conflicts on Superfund Program matters as an alternative to litigation. The Program provides facilitation, mediation, public involvement, training, and consensus building advice and support for the entire Agency. The Program's ADR services support the Superfund Program's work with communities, Potentially Responsible Parties, and other stakeholders, and in particular assist the Superfund Program in meeting their legal requirements to engage meaningfully with communities by helping to develop collaborative and effective partnerships.

Significantly, the ADR Program provides conflict resolution and community engagement support for the Superfund Program to assist with contentious situations at some of the most challenging sites, including a recent request for ADR Program support for public meetings in Ohio in the wake of the Norfolk Southern freight train derailment. In addition to the conflict prevention and resolution support that the ADR Program provides at several Superfund sites across the country, the ADR Program also supports the Superfund Program's needs for training in negotiation, public involvement, and other similar topics. Beginning in FY 2023, for the first time in nearly a decade, the ADR Program will deliver conflict resolution training for the Community Involvement Training Program, the National Association of Remedial Project Managers Training Program, and the On-Scene Coordinators Readiness Training Program. The Program expects to do so again in FY 2024.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA expects to provide conflict prevention and ADR services on an increasing number of Superfund Program matters. This program also supports implementation of Executive

Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[24]

Specifically, the ADR Program will:

- Administer its five-year, $53 million Conflict Prevention and Resolution Services contract, through which it provides most of its conflict prevention and resolution services to the Agency. The contract supports more than 34 Superfund projects by providing facilitators and mediators to resolve conflicts at Superfund sites and is expected to take on an additional 20 to 30 projects in FY 2024. The ADR Program has experienced an increase in requests for contract services to support community involvement at Superfund sites in FY 2022 and thus far in FY 2023, and the trend is expected to continue. Contract support contributes to more productive engagement between the Superfund Program and affected communities, especially underserved and overburdened communities.

- Provide the services described above through the four conflict resolution specialists on staff and Regional Environmental Collaboration and Conflict Resolution (ECCR) Specialists, who perform environmental ADR work as collateral duty with support from the ADR Program. The ADR Program expects to provide support through conflict resolution specialists and ECCR Specialists for agency programs and stakeholders by providing facilitation of public meetings, mediation, or other consensus building support on 6 to 10 Superfund projects. As with contract support, direct staff support promotes greater collaboration and the inclusion of underserved and overburdened communities at Superfund sites experiencing conflict.

- Provide training to EPA staff in conflict resolution concepts and skills. The ADR Program offers this training through eight interactively designed courses to all national program offices and regional offices. The ADR Program delivered two trainings to agencywide Superfund audiences in FY 2022, including negotiation training for the National Association for Remedial Project Managers' annual conference. As of February 2023, the ADR Program has delivered two trainings to Superfund audiences and has at least two more planned. The ADR Program expects to increase routine training for Superfund Community Involvement Coordinators in FY 2024. Trainings include the building of critical skills for Superfund personnel, such as working across cultural divides and supporting productive dialogue. These skills help Superfund Program staff better engage with communities.

- Help to achieve the goals of President Biden's Justice40 initiative by tracking the number of ADR program projects in which services are provided to underserved and overburdened communities. In FY 2024 the ADR Program expects to increase services to underserved and overburdened communities.

The following are examples of FY 2022 accomplishments supporting the Superfund Program:

[24] For more information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

- Provided facilitation and mediation assistance for more than 41 agency supported Superfund projects, an increase of 37 percent over FY 2021, including multiple sites with challenging community engagement issues.

- Developed a Community Involvement Plan for the Baird & McGuire Superfund Site in Region 1 after completing a conflict assessment. The detailed plan guides community involvement efforts to support environmental justice at the site, design meetings and materials that are accessible to marginalized communities, provide access to site information and cleanup efforts, practice consistent outreach and communication, and coordinate with state, local, and tribal governments.

- Provided facilitation services for a Region 2 Superfund Community Advisory Group with a high degree of ethnic, religious, and socio-economic diversity. The facilitator has assisted the group with conflicts related to issues of diversity and inclusion, and they have helped the group improve communication and engagement practices.

- Provided training support for Superfund audiences, including negotiation and other courses for Community Involvement Coordinators, Remedial Project Managers, and others working on Superfund sites.

Performance Measures Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$89.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change includes a program increase for the use of alternative dispute resolution processes, such as mediation and facilitation, to promote equity by including underserved communities in negotiations.

Statutory Authority:

Administrative Dispute Resolution Act (ADRA) of 1996; Negotiated Rulemaking Act of 1996; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Legal Advice: Environmental Program
Program Area: Legal / Science / Regulatory / Economic Review
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$63,795	$60,061	$85,252	$25,191
Hazardous Substance Superfund	***$475***	***$599***	***$477***	***-$122***
Total Budget Authority	$64,270	$60,660	$85,729	$25,069
Total Workyears	262.6	273.3	343.5	70.2

Total Workyears in FY 2024 include 8.3 FTE funded by TSCA fees and 17.1 FTE to support Legal Advice working capital fund (WCF) services.

Program Project Description:

The Legal Advice Environmental Program provides legal representation, legal counseling, and legal support for environmental activities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Funding supports legal advice needed in the Superfund Program's extensive work to clean up contaminated sites, which advances environmental justice (EJ) for neighboring communities and supports EPA's state, tribal, and local partners. For example, the Program provides legal analysis and advice to help inform EPA's decisions regarding the assessment of certain contaminants at a given Superfund site under federal law, and a party's potential liability under CERCLA.

The Program supports EPA's Superfund work at thousands of sites spanning the wide array of Superfund legal issues regarding removal and remedial cleanups costing billions of dollars. The Program is essential to providing the high-quality legal work to ensure that EPA's decisions protect human health and the environment.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will prioritize legal support for the Superfund Program in order to assist with the Administration's priorities including: tackling the climate crisis, advancing EJ, and supporting state, tribal and local partners. The Program's increasing work to support CERCLA activities and these priorities includes but is not limited to: counseling on how to address EJ and climate resiliency in EPA's remedy decisions at Superfund sites, counseling on authorities to address emergencies and disasters, counseling on the defensibility of agency actions, drafting significant portions of agency actions, and participating in litigation in defense of agency actions.

In particular, the Program expects a continued significant increase in work to provide key legal advice related to cleanups, enforcement, rulemakings, guidance, and litigation concerning PFAS.

The Program provides critical legal advice on actions that are part of the EPA's "PFAS Strategic Roadmap", an Administration priority which takes a whole-of-agency approach to address per- and polyfluoroalkyl substances (PFAS). For example, the Program will provide significant counsel on EPA's proposal to designate PFAS as a CERCLA hazardous substance, an action that, if finalized, could significantly advance EJ goals for communities across the country impacted by PFAS. Similarly, the Program provides legal counsel on other agency actions, including an advance notice of proposed rulemaking on various PFAS and guidance related to the destruction and disposal of PFAS. Legal review is critical to the Superfund Program at many points throughout the cleanup process. This program also provides legal advice and counseling for final rules adding Superfund sites to the National Priorities List (NPL), an important step in advancing cleanup at the Nation's most contaminated sites. This benefits states, tribes, and local communities, who may not have adequate resources to address these sites on their own. The Program also provides legal advice on the statutory and regulatory requirements governing the remedy selection process (such as the consideration of state and tribal standards). This work also benefits states, tribes and local communities to allow for state/tribal and public engagement on cleanups in their communities.

The following are examples of FY 2022 accomplishments, which illustrate this program's important role in implementing the Agency's core priorities and mission:

- Legal Support on PFAS: Provided a significant amount of critical legal advice on a top Administration priority of addressing PFAS contamination. The Solid Waste and Emergency Response Law Office (SWERLO) counseled on multiple complex issues, including a proposed rule to designate Perfluorooctanoic acid (PFOA)/Perfluorooctane sulfonic acid (PFOS) as CERCLA hazardous substances (published Sept. 6, 2022), the use of CERCLA authority to compel potentially responsible parties to investigate and address PFAS, and the impacts of proposed legislation on EPA's authorities. SWERLO also represented EPA's interests in ongoing interagency discussions related to the federal government's approach to PFAS investigation and cleanup, including at military bases.

- Gold King Mine Litigation Settlements (In re Gold King Mine Release, No. 1:18-md-02824, (D.N.M., May 13, 2021)): Served as the Agency lead in settlement negotiations with New Mexico and Navajo Nation, resulting in a $32 million and a $31 million settlement, respectively, in exchange for dismissal of all claims – valued by plaintiffs at approximately $300 million – pending against EPA and the United States. As a result of these settlements, EPA will not further litigate its potential CERCLA liability for involvement with the 2015 Gold King Mine release. An adverse outcome on EPA's liability could have had significant implications for the Superfund Program.

- Favorable Decision in Superfund Litigation (*Daikin Applied Americas, Inc., et al v. EPA,* No. 20-1479 (D.C. Cir. July 8, 2022)): Served as the Agency lead in successfully defending EPA in the D.C. Circuit case challenging EPA's placement of the Highway 100 and County Road 3 Groundwater Plume site near Minneapolis, Minnesota on the Superfund NPL. The D.C. Circuit upheld EPA's listing, concluding that EPA properly followed the Hazard Ranking System (HRS) scoring procedures, supported its conclusions with substantial evidence and adequately addressed the petitioners' comments.

- Legal Support for Superfund cleanups: Provided critical legal support related to cleanup of Superfund and related sites, including performing legal review of Action Memos for almost $100 million in CERCLA removal actions and counseling on remedial action legal issues at numerous high-profile sites, such as Hunters Point Naval Shipyard, Agriculture Street Landfill, and Oak Ridge Reservation.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$122.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This funding change includes a slight reduction to the Program. The Program will continue to provide legal representation, counsel, and support for the Agency's CERCLA activities.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Operations and Administration

Acquisition Management
Program Area: Operations and Administration
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$36,051	$37,251	$41,609	$4,358
Leaking Underground Storage Tanks	$158	$181	$136	-$45
Hazardous Substance Superfund	***$23,550***	***$27,247***	***$33,758***	***$6,511***
Total Budget Authority	$59,759	$64,679	$75,503	$10,824
Total Workyears	281.7	307.7	355.7	48.0

Program Project Description:

Superfund resources in the Acquisition Management Program support EPA's contract activities, which cover planning, awarding, and administering contracts for the Agency. Efforts include issuing acquisition policy and interpreting acquisition regulations; administering training for contracting and program acquisition personnel; providing advice and oversight to regional procurement offices; and providing information technology (IT) improvements for acquisition.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue to strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged businesses; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. Efforts to process and award contract actions in a timely manner will be in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP).

In FY 2024, EPA will continue to support the implementation of supply chain risk requirements in Section 889 of the 2019 National Defense Authorization Act and the "Made in America" laws referenced in Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers,*[25] while furthering Category Management implementation requirements The Agency will develop a Made in America Acquisition training curriculum to help educate the acquisition workforce on navigating the process. EPA also will focus on establishing a

[25] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/25/executive-order-on-ensuring-the-future-is-made-in-all-of-america-by-all-of-americas-workers/.

comprehensive architecture for the Agency's supply chain as well as mechanisms to identify and mitigate risk.

In FY 2024, EPA will continue working to eliminate barriers to full and equal participation in agency procurement and contracting opportunities for all communities. The Agency will promote the equitable delivery of government benefits and opportunities by making contracting and procurement opportunities available on an equal basis to all eligible providers of goods and services. This work aims to increase the percentage of EPA contract spend awarded to small businesses located in Historically Underutilized Business Zones (HUBZones). These businesses often lack dedicated resources and in-house capacity to master complex federal requirements needed to capitalize on agency acquisition and financial assistance opportunities.

In FY 2024, in support of Administration climate sustainability initiatives, EPA will work with applicable program offices to identify and prioritize procurement plans that spur innovation, commercialization, and deployment of clean energy technologies.

EPA remains committed to leveraging Category Management, Spend Under Management (SUM), Best-In-Class (BIC), and strategic sourcing principles in each of its programs and purchasing areas to save taxpayer dollars and improve mission outcomes. In FY 2024, EPA will continue to utilize data provided by the General Services Administration and implement spend analysis, trend analysis, and data visualization tools to measure progress toward the implementation of Category Management and the adoption of federal strategic sourcing vehicles and BIC acquisition solutions.

OMB's SUM initiative focuses on managed total acquisition spend and agency activities which transition spend to contract vehicles unaligned with Category Management principles. In accordance with OMB Memorandum M-22-03, *Advancing Equity in Federal Procurement*,[26] EPA revised its Acquisition Guidance section 8.0.100, *Requirements for Mandatory Use of Common Contract Solutions*, to add clarification of the SUM Tier 2-SB designation which is afforded to contracts of any size awarded to small and disadvantaged businesses. The revision emphasizes EPA's focus on small business utilization and ensures continued alignment with federal category management and equity goals.

In FY 2024, EPA will continue to implement SUM principles to leverage pre-vetted agency and government-wide contracts. Through SUM Tier 2 and BIC solutions, acquisition experts will optimize spending within the government-wide category management framework and increase the transactional data available for agency-level analysis of buying behaviors. To modernize the acquisition process and remove barriers to entry for obtaining government contracts, EPA has developed two innovative tools available agencywide: the EPA Solution Finder, which provides solution and ordering information for all EPA enterprise-wide contract solutions; and the BIC Opportunity Tool, which recommends BIC solutions to address newly identified agency requirements for commodities and services and those supported on expiring contracts.

EPA also will elevate its focus on the Category Management approach to improvement management and results of its portfolio of contracts. EPA will continue to maximize considerations for implementing Strategic Sourcing Initiatives (SSIs), thereby enhancing purchase coordination,

[26] For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-03.pdf.

improving price uniformity and knowledge-sharing, and leveraging small business capabilities to meet acquisition goals. EPA will continue to implement strategic sourcing initiatives first launched in FY 2023 in the areas of Lab Equipment Maintenance; Diversity, Equity, Inclusion, and Accessibility (DEIA); Memberships; Freight Services; Business and Financial Services; and Intellitrak software.

In FY 2024, EPA will continue to evaluate options for replacing the EPA Acquisition System with an approved government-wide Federal Shared Service Provider for a contract writing system in line with government-wide mandates to increase the use of shared services.[27] The Agency is focusing on a modern acquisition solution that reduces costs while increasing efficiency by standardizing federal procurement planning, contract award, administration, and close-out processes. Transition preparations include data management strategies, business process reviews, and user engagement to develop a business case and ensure data elements conform with Federal Government Procurement standards. As part of this effort, in FY 2024, EPA will continue to utilize a government-wide Unique Entity Identifier for acquisition awards in line with General Services Administration and OMB requirements. EPA will continue implementing FITARA through competing contracts with multiple vendors and avoid vendor lock-in by confining the scope of a contract to a limited task. Additionally, the Agency will develop acquisition vehicles to further support FITARA compliance and implementation.

Performance Measure Targets:

Work under this program supports performance results in the Small Minority Business Assistance Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$2,350.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$5,231.0 / +28.0 FTE) This program change will strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged business; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. This investment includes $5.2 million for payroll.

- (-$1,070.0) The program change is a reduction in system operations and development resources for EPA's Acquisition System.

[27] OMB-19-16 "*Centralized Mission Support Capabilities for the Federal Government*, for more information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-16.pdf.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$82,781	$87,099	$99,812	$12,713
Leaking Underground Storage Tanks	$360	$457	$469	$12
Hazardous Waste Electronic Manifest System Fund	$149	$0	$0	$0
Hazardous Substance Superfund	***$29,102***	***$31,338***	***$30,207***	***-$1,131***
Total Budget Authority	$112,392	$118,894	$130,488	$11,594
Total Workyears	435.5	469.0	480.0	11.0

Total workyears in FY 2024 include 2.0 FTE funded by TSCA fees.
Total workyears in FY 2024 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

Program Project Description:

EPA's financial management community maintains a strong partnership with the Superfund Program. EPA's Office of the Chief Financial Officer (OCFO) supports this continuing partnership by providing a full array of financial management support services and systems necessary to pay Superfund bills and recoup cleanup and oversight costs for the Trust Fund. EPA's OCFO manages Superfund activities under the Central Planning, Budgeting, and Finance Program in support of integrated planning, budget formulation and execution, financial management, performance and accountability processes, financial cost recovery, and systems to ensure effective stewardship of Superfund resources. This program supports agency activities to meet requirements of the Government Performance and Results Modernization Act (GPRMA) of 2010,[28] as amended by the Foundations for Evidence-Based Policymaking Act of 2018 ("Evidence Act"), with an emphasis on Title I of the Act;[29] the Digital Accountability and Transparency (DATA) Act of 2014;[30] the Federal Information Technology Acquisition Reform Act (FITARA) of 2015;[31] the Federal Management Financial Integrity Act (FMFIA);[32] the Inspector General Act of 1978.[33]

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

[28] For more information, please see: https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf.
[29] For more information, please see: https://www.congress.gov/115/plaws/publ435/PLAW-115publ435.pdf.
[30] For more information, please see: https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf.
[31] FITARA became law as a part of the National Defense Authorization Act for Fiscal Year 2015 (Title VIII, Subtitle D), https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf.
[32] For more information, please see: https://www.govinfo.gov/content/pkg/STATUTE-96/pdf/STATUTE-96-Pg814.pdf.
[33] For more information, please see: https://www.govinfo.gov/content/pkg/USCODE-2012-title5/pdf/USCODE-2012-title5-app-inspector.pdf.

In FY 2024, the Agency requests an additional 0.5 FTE in this program project. This increase invests in a solution that would move the Agency forward in assessing enterprise and programmatic risk, internal control, and audit management and provides for necessary fixed costs increases. EPA will continue to provide resource stewardship to ensure that all agency programs operate with fiscal responsibility and management integrity, financial services are efficiently and consistently delivered nationwide, and programs demonstrate results. EPA will maintain key planning, budgeting, and financial management activities. EPA will ensure secure and efficient operations and maintenance of core agency financial management systems: Compass, PeoplePlus (Time and Attendance), Budget Formulation System, which includes a Performance Module, and related financial reporting systems. The Agency is reviewing its financial systems for modernization opportunities to support greater efficiencies and effectiveness and targeting legacy systems for replacement. Dashboards are now in place to support payroll and FTE management, and to support GPRMA performance planning and systematic tracking of progress.

In FY 2024, EPA also will continue to standardize and streamline business processes and operations to promote transparency and efficiency. The Program will apply Lean Management techniques and leverage input from customer-focused councils, advisory groups, and technical workgroups to continue improving as a high-performance organization. Additionally, EPA has implemented Treasury's Invoice Processing Platform (IPP) for reviewing invoices and paying commercial vendors. As of July 2023, roughly 98 percent of contract invoices are being handled through this system. Beginning in FY 2023, EPA will add additional payment types to this system, including Superfund Contract Laboratory Program and Simplified Acquisition payments through a system interface. This implementation will greatly reduce manual effort, improve data quality, and allow for the elimination of two legacy administrative systems. By the end of FY 2023, the Agency will have fully implemented G-invoicing for new and existing agreements, which will streamline processing and improve management of Interagency Agreements (IA) with the Army Corps of Engineers for Superfund site clean-up. In FY 2024, EPA will focus on post implementation activities and review and address system user process concerns.

In FY 2024, the Program will continue to focus on core responsibilities in the areas of strategic planning and budget preparation, financial reporting, transaction processing, and Superfund Cost Recovery. In FY 2024, EPA will be using a new eRecovery system for Superfund, Federal Emergency Management Agency, and Oil Spill billing and cost recovery. This new system will modernize and replace the legacy system to improve functionality and security. The Program will continue to implement FITARA requirements in accordance with EPA's Implementation Plan.[34] The Chief Information Officer will continue to be engaged throughout the budget planning process to ensure that information technology (IT) needs are properly planned and resourced in accordance with FITARA.

The Program will continue to conduct internal control program reviews and use the results and recommendations from the Office of Inspector General (OIG) to provide evidence of the soundness of EPA's financial management program and identify areas for further improvement. Annually, EPA conducts internal control reviews of multiple programs. The Program also will collect key operational statistics for its financial management program to further evaluate its operations and

[34] For more information please see: http://www.epa.gov/open/fitara-implementation-plan-and-chief-information-officer-assignment-plan.

for management decision-making. For example, in FY 2022, OCFO recognized additional opportunities for engagement with the OIG by providing an Audit Preparedness Guide. The Audit Preparedness Guide is intended as a tool to encourage a proactive approach to addressing common OIG and Government Accountability Office findings before audits are initiated. Additionally, OCFO is utilizing data analytics in validating and documenting measures to ensure that the process is standardized across the Agency while providing more customer-level support.

With increased focus on internal controls, audit management, and enterprise risk assessment, in FY 2024, the Agency requests resources to oversee an integrated solution. The new Integrity Tool would allow the Agency to easily crosswalk the anticipated increase in the number of audits related to Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) activities for program integrity to the 600+ risks and internal controls. The Integrity Tool will help the Agency to better monitor the effectiveness and impact of the internal controls set in place.

EPA has made significant strides in recent years to strengthen programs considered susceptible to improper payment. However, the Agency continues to be vigilant in reducing fraud, waste, and abuse, and strengthening internal controls over improper payments. In addition, as required by the Payment Integrity Information Act of 2019 (PIIA) (P.L. 116-117),[35] and OMB Memorandum *M-21-19 Appendix C*,[36] EPA conducts risk assessments of all its payment streams. Other improvements include the recent implementation of upgraded systems used for payments and invoice processing through which the Agency anticipates even fewer payment errors moving forward. To strengthen our processes, EPA is developing risk assessment plans for significant increases or new funding the Agency receives. These risk assessments outline potential areas that will need additional guidance as well as tracking and reporting, performance measures, and internal controls that will be established to prevent and detect possible improper payment activities.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,481.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE from annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes support for critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$91.0 / +0.5 FTE) This program change invests in a management integrity tool to turn manual data collection and analysis activities into a streamlined, customer-focused and agencywide tool that meets the analytical needs for IIJA and IRA activities and agencywide

[35] For more information, please see: https://www.congress.gov/116/plaws/publ117/PLAW-116publ117.pdf.
[36] For more information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/03/M-21-19.pdf.

needs of enterprise risk, internal control, and audit environments. The FTE will support system configuration, training, on-going administrative functions and expanded agency analysis and compilation activities. This investment includes $91.0 thousand for payroll.

- (-$1,203.0) This disinvestment reflects the cost savings from the decommissioning of the SCORPIOS cost recovery system in FY 2023 and the development costs of the replacement system, e-recovery, which will fully transition to operations and maintenance status in FY 2024. The program change also includes efficiencies gained in adopting G-Invoicing for IAs.

- (-$1,500.0) This disinvestment reflects a one-time cost to complete enhancements for the agency infrastructure investment for devolution and Continuity of Operations projects and other workforce support needs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$291,501	$283,330	$305,753	$22,423
Science & Technology	$68,347	$67,500	$72,043	$4,543
Building and Facilities	$24,681	$42,076	$105,009	$62,933
Leaking Underground Storage Tanks	$922	$754	$727	-$27
Inland Oil Spill Programs	$854	$682	$641	-$41
Hazardous Substance Superfund	***$76,108***	***$65,634***	***$71,540***	***$5,906***
Total Budget Authority	$462,412	$459,976	$555,713	$95,737
Total Workyears	310.6	321.8	330.4	8.6

Total work years in FY 2024 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Superfund resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Agency the Agency proposes an investment of $5.9 million and 0.5 FTE for the Facilities Infrastructure and Operations Program. These additional resources will support agencywide climate sustainability and resiliency, EPA facilities projects, and EPA's Climate Adaptation Plan. The Agency will continue to pursue agencywide climate sustainability and resiliency initiatives and EPA facilities projects. Investing in the reconfiguration of EPA's workspaces enables the Agency to release office space and avoid long-term rent costs, consistent with HR 4465, the *Federal Assets Sale and Transfer Act of 2016*.[37] EPA is implementing a long-term space consolidation plan that aims to reduce the number of occupied facilities, consolidate and optimize space within remaining facilities, and reduce square footage wherever practical. The Agency's space consolidation efforts are expected to result in cost avoidances due to projected

[37] For additional information, please refer to: https://www.congress.gov/bill/114th-congress/house-bill/4465, *Federal Assets Sale and Transfer Act of 2016*.

rent increases over ten years. EPA also will continue working to enhance its federal infrastructure and operations in a manner that increases efficiency. These enhancements also support the Future of Work as the Agency continues to implement hybrid, remote, and physical workspaces, consistent with Office of Management and Budget Memorandum M-21-25.[38] For FY 2024, the Agency is requesting $41.41 million for rent, $2.46 million for utilities, and $9.27 million for security in the Superfund appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level.

EPA also will work to secure physical and operational resiliency for agency facilities. As part of this work, EPA will continue conducting climate resiliency assessments at all EPA-owned facilities to identify critical upgrades that are necessary to improve facility resiliency against the impacts of climate change, such as roofing stability or seawall construction projects. In FY 2024, EPA will conduct climate assessments at the following facilities: Office of Air and Radiation Laboratory – Montgomery; Edison Environmental Center; Region 4 Field Annex – Athens; Athens Environmental Center; Corvallis Environmental Laboratory; and Newport Environmental Laboratory. EPA will initiate all high-priority projects within 24 months of the completion of a climate assessment.

Further, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce.[39] Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050.

In FY 2024, EPA will pursue aggressive energy, water, and building infrastructure requirements with emphasis on environmental programs (*e.g.,* Environmental Management Systems, Environmental Compliance Programs, Leadership in Energy and Environmental Design Certification, alternative fuel use, fleet reductions, telematics, sustainability assessments). This investment in infrastructure (*e.g.,* architectural and design) and mechanical systems (*e.g.,* Optimized Building Managements Systems for heating and cooling with load demand driven controls) is necessary to meet the Administration's climate sustainability goals. Additionally, in 2024, EPA will continue to transition to electric vehicles through direct purchase (mobile lab vehicles) or lease through the General Services Administration (GSA) for all future fleet procurements where economically feasible. EPA also will identify opportunities to build out necessary charging infrastructure at EPA facility locations. In line with federal sustainability goals, EPA will work to utilize 100 percent carbon pollution-free electricity on a net annual basis by 2030.

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[38] For additional information, please refer to: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.

[39] Work in this program takes direction for climate change and sustainability related initiatives from the following:
EO 14008: *Tackling the Climate Crisis at Home and Abroad* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/).
EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/).

EPA also will meet regulatory Occupational Safety and Health Administration (OSHA) obligations and provide health and safety training to field staff (*e.g.,* inspections, monitoring, on-scene coordinators), and track capital equipment of $25 thousand or more. The Agency will continue its partnership with GSA to utilize shared services solutions, *USAccess* and Enterprise Physical Access Control System (ePACS) programs. *USAccess* provides standardized HSPD-12 approved Personal Identity Verification (PIV) card enrollment and issuance and ePACS provides centralized access control of EPA space, including restricted and secure areas.

Performance Measure Targets:

(PM CAA) Number of EPA-owned facility climate adaptation assessments completed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2	5	6	Assessments
Actual						1			

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned facilities initiated within 24 months of a completed facility climate assessment and project prioritization.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							100	100	Percent
Actual									
Numerator									Projects
Denominator									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,379.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. This change includes adjustments to rent, utilities, security, and transit subsidy needs.

- (+$4,527.0 / +0.5 FTE) This program change supports implementation of EO 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* requirements that will require EPA to increase facility resiliency against the impact of climate change and to advance sustainability of EPA operations. EPA will invest in facility climate assessments and Optimized Building Managements Systems; EPA facilities projects to optimize space, avoid costs, and increase efficiency; and EPA's Climate Adaptation Plan. This investment includes $92.0 thousand for payroll.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute). at Title 5, App.) (EPA's organic statute).

Financial Assistance Grants / IAG Management
Program Area: Operations and Administration
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$29,070	$30,188	$34,350	$4,162
Hazardous Substance Superfund	***$4,188***	***$4,002***	***$4,601***	***$599***
Total Budget Authority	$33,258	$34,190	$38,951	$4,761
Total Workyears	141.1	156.8	184.5	27.7

Program Project Description:

Superfund resources in the Financial Assistance Grants and Interagency Agreement (IA) Management Program support the management of grants and IAs as well as suspension and debarment activities for assistance and procurement programs. Grants and IAs historically comprise approximately 60 percent of EPA's annual appropriations. Resources in this program ensure that EPA manages grants and IAs to meet the highest fiduciary standards and achieve measurable results for environmental programs and agency priorities, and that the government's financial resources and business interests are protected from fraud and mismanagement. These objectives are critically important for the Superfund Program, as a substantial portion of the Program is implemented through IAs with the U.S. Army Corps of Engineers and the U.S. Coast Guard.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will continue to provide technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and process financial assistance agreements in a timely manner. EPA will continue to implement grants management activities to achieve efficiency, enhance quality, and ensure fiscal accountability. In addition, EPA will conduct a robust training program for EPA staff and grant applicants and recipients. In FY 2024, the training program will focus on helping applicants find and apply for competitive and non-competitive grant opportunities, compliance-assistance under the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA); and understanding the federal requirements that are passed down to subrecipients, and the oversight that pass-through entities are responsible for on EPA's behalf. EPA also will explore methods to use or update the grant competition and grant-making processes to promote equity and support for underserved communities. For example, EPA will provide technical assistance to potential grantees from underserved communities on sound financial management practices to reduce barriers to competition for EPA grant resources. EPA also will track grant place of performance

to help determine whether underserved and environmental justice (EJ) communities are realizing the benefits of EPA grant programs.

EPA will continue investments in modernizing grant and IA information technology/information management (IT/IM) systems, support the improved capacity for oversight and tracking of new and increased grant investments, and ensure the timely processing of financial assistance agreements. EPA will manage its Next Generation Grants System (NGGS) to ensure it aligns with the requirements of the Grant Reporting Efficiency and Agreements Transparency (GREAT) Act, applicable OMB Quality Service Management Offices (QSMO) standards, and the Federal Integrated Business Framework for grants (*i.e.,* required standard data elements for grants reporting). In FY 2024, EPA will operate and maintain an electronic grants record management system that integrates with EPA's enterprise records management system and aligns with applicable QSMO standards. The Agency also will utilize the government-wide Unique Entity Identifier system for grant awards to meet OMB requirements.

Further, EPA will continue to focus on reducing the administrative burden on EPA and grant applicants and recipients, and on improving grants management procedures. The Agency will continue implementing the *FY 2021-2025 Grants Management Plan*, focusing on the award and effective management of assistance agreements, enhancing partnerships within the grants management community, promoting EJ, and ensuring effective grant oversight and accountability.

EPA will complete all activities to align its IA business processes to ensure compatibility with the government-wide mandate to adopt G-Invoicing, the federal shared service for intragovernmental transactions. EPA met the October 1, 2022, deadline for new IAs, and will complete the transition for existing IAs by Treasury's October 1, 2023, deadline. EPA provides quarterly progress updates to Treasury that highlight activities under the Agency's approved G-Invoicing Implementation Plan.

In FY 2024, the Agency will continue to make use of discretionary debarments and suspensions as well as statutory disqualifications under the Clean Air Act and Clean Water Act to protect the integrity of federal assistance and procurement programs. Congress and federal courts have long recognized federal agencies' inherent authority and obligation to exclude non-responsible parties from eligibility to receive government contracts and federal assistance awards (*e.g.*, grants, cooperative agreements, loans, and loan guarantees).

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$220.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$872.0 / +4.7 FTE) This program change will support technical assistance and outreach to first time recipients of federal funding; improve capacity for oversight and tracking of new and increased grant investments; and the timely processing of financial assistance agreements. This investment includes $872.0 thousand for payroll.

- (-$53.0) This program change is attributed to completing development on an interagency agreement pre-work processing system.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Federal Grant and Cooperative Agreement Act; Federal Acquisition Streamlining Act § 2455.

Human Resources Management
Program Area: Operations and Administration
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$56,709	$51,261	$71,093	$19,832
Hazardous Substance Superfund	***$7,253***	***$7,419***	***$8,751***	***$1,332***
Total Budget Authority	$63,963	$58,680	$79,844	$21,164
Total Workyears	221.8	254.4	327.4	73.0

Total work years in FY 2024 include 0.2 FTE to support Human Resources Management working capital fund (WCF) services.

Program Project Description:

Superfund resources for the Human Resources (HR) Management Program support human capital management (HCM) activities throughout EPA. To help achieve its mission and maximize employee productivity and job satisfaction, EPA continually works to improve business processes for critical HCM functions including recruitment, hiring, employee development, performance management, leadership development, workforce planning, and labor union engagement. This includes personnel and payroll processing through the Human Resources Line of Business. These resources also support overall federal advisory committee management and Chief Human Capital Officer Council activities under applicable statutes and guidance, including the Agency's Human Capital Operating Plan.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency's HR Management Program will continue to implement EPA's Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan, establishment of a centralized EPA intern program, evidence-gathering under EPA's Learning Agenda, and strengthening agencywide capacity to hire and onboard staff in a timely and equitable manner. The activities supported by EPA's HR Management Program contribute to effective workforce management and are critical for strengthening the workforce, retaining expertise, and capturing institutional knowledge. EPA continues developing mechanisms to ensure that employees have the right skills to successfully achieve the Agency's core mission today and in the future.

EPA is committed to advancing equity, in line with President Biden's Executive Orders (EOs) 13985,[40] 13988,[41] 14020,[42] 14035,[43] and 14075.[44] In FY 2024, in line with EO 14035, EPA will implement the actions identified in the DEIA Strategic Plan to assess whether agency recruitment, hiring, promotion, retention, professional development, performance evaluations, pay and compensation policies, reasonable accommodations access, and training policies and practices are equitable. EPA will undertake an evidence-based and data-driven approach to determine whether, and to what extent, agency practices result in inequitable employment outcomes, and whether agency actions may help to overcome systemic societal and organizational barriers. Further, the Agency will assess the status and effects of existing DEIA initiatives or programs and review the institutional resources available to support human resources activities. For areas where evidence is lacking, the Agency will propose opportunities to advance DEIA. EPA will continue to involve employees at all levels of the organization in the assessment of DEIA initiatives and programs.

In FY 2024, EPA will continue its Senior Executive Service Candidate Development Program launched in FY 2023. The Program will focus on incorporating DEIA strategies so that future executives reflect the diversity of the American population and possess the skills necessary to lead a diverse and talented workforce operating in a hybrid work environment. The Agency will implement a centralized paid internship program, which expands on existing internship opportunities across the Agency to strengthen talent and workforce acquisition. This paid internship program focuses on expanding federal work experience opportunities for underrepresented and underserved populations, which may experience barriers to applying or fully participating in existing opportunities. EPA's program will provide a total of approximately 180 four-month internship opportunities across EPA Programs and Regional Offices. Additionally, EPA will implement a plan to convert eligible interns to permanent federal service based on performance and completing program requirements.

EPA has increased efforts to improve DEIA with virtual outreach events, targeting diverse networks such as veterans, persons with disabilities, Returned Peace Corps Volunteers, and Historically Black Colleges and Universities and other Minority Serving Institutions. To recruit EPA's next generation of employees, EPA will continue outreach to new potential sources for future employees and use all available hiring authorities, including Schedule A and recruitment incentives. In FY 2024, EPA will continue to work with Science, Technology, Engineering, and Mathematics-focused institutions and organizations such as the Society of Hispanic Professional Engineers and National Society of Black Engineers. EPA also will participate in the President's Management Council Interagency Rotational Program to create leadership development assignments for GS 13-15 level employees. EPA will continue to review applicant flow diversity data every quarter to assess progress and identify areas for improvement.

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[40] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.

[41] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01761/preventing-and-combating-discrimination-on-the-basis-of-gender-identity-or-sexual-orientation.

[42] For additional information, please refer to: https://www.federalregister.gov/documents/2021/03/11/2021-05183/establishment-of-the-white-house-gender-policy-council.

[43] For additional information, please refer to: https://www.federalregister.gov/documents/2021/06/30/2021-14127/diversity-equity-inclusion-and-accessibility-in-the-federal-workforce.

[44] For additional information, please refer to: https://www.federalregister.gov/documents/2022/06/21/2022-13391/advancing-equality-for-lesbian-gay-bisexual-transgender-queer-and-intersex-individuals.

In FY 2024, EPA will continue to implement flexible work policies in line with OMB Memoranda M-21-25 - *Integrating Planning for A Safe Increased Return of Federal Employees and Contractors to Physical Workplaces with Post-Reentry Personnel Policies and Work Environment*,[45] including designation of remote work status to certain positions, providing work schedule flexibilities, and increasing the use of telework. EPA strives to be a model federal employer and these efforts will strengthen the Agency's ability to attract, recruit, retain and empower top talent while advancing DEIA.

EPA also will continue to support front-line supervisor training for managing individuals and teams working in hybrid environments, with a focus on employee communication, mentorship, and equity. EPA will identify the most critical need for climate literacy training for its workforce. These efforts will focus on integrating climate adaptation, risk disclosure, and other education activities into the management of EPA's procurement, real property, public lands, and waters as well as financial programs.

The Agency will continue to build Talent Teams to effectively expand recruitment and hiring to meet critical agency skill needs, as well as continue to leverage childcare subsidies to support retention. EPA also will continue to support evidence-building activities to carry out a workforce strategy guided by data-driven decisions as part of its implementation of the Evidence Act through the Workforce Planning learning priority area in EPA's Learning Agenda. This work includes determining Mission Critical Competencies, enhancement of EPA's competency assessment tool, skills gap analysis across the Agency, and knowledge transfer strategies to support Succession Management.

In FY 2024, EPA will continue to operate and maintain the Talent Enterprise Diagnostic (TED) tool to allow EPA to make data-driven, strategic workforce decisions. TED data will serve a crucial role in EPA's Workforce Planning and Succession Management activities by identifying potential competency gaps across the Agency and by increasing management's understanding of where needed skill sets should reside within EPA. Additionally, EPA will continue to maintain and operate dashboards related to Mission Critical Occupations, Workforce Demographics, and Diversity. These dashboards provide data visualizations and easy-to-understand information about the current workforce, assisting EPA with succession planning by identifying workforce gaps due to anticipated retirements and attrition trends. This is critical considering approximately 23 percent of EPA's workforce is retirement eligible and another 15 percent of the current workforce will become retirement eligible over the next five years.

The Agency will continue to implement Executive Order 14003, *Protecting the Federal Workforce*,[46] issued on January 22, 2021. EPA reviewed its Unions' agreements to identify and eliminate provisions influenced by four revoked executive orders and will increase the focus on pre-decisional involvement and interest-based bargaining. In FY 2024, EPA will continue working to reset and repair relationships and involve unions in a collaborative way, promoting the Agency's and the unions' shared goal of the positive and equitable treatment of newly empowered employees.

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[45] For additional information, please see: https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-25.pdf.

[46] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/22/executive-order-protecting-the-federal-workforce/.

Finally, EPA's advisory committees have proven effective in building consensus among the Agency's diverse external partners and stakeholders. In line with President Biden's *Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking,*[47] EPA remains committed to ensuring that highly qualified external experts serve on agency committees and that those members and future nominees of EPA advisory committees reflect the diversity of America in terms of gender, race, ethnicity, geography, and other characteristics.

Performance Measure Targets:

Work under this program supports performance results in the Human Resources Management Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,685.0 / +10.0 FTE) This program change is an increase to develop and implement a new paid internship program to strengthen talent and workforce acquisition and focus on expanding Federal work experience opportunities for underrepresented and underserved populations. This investment includes $1,130.0 thousand for payroll.

- (+$200.0 / +0.6 FTE) This program change is an increase in support of the Foundations for Evidence-Based Policymaking Act of 2018. Resources will be used for Learning Agenda's evidence-gathering activities. This investment includes $68.0 thousand for payroll.

- (-$913.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$360.0) This program change is an increase to support the continuation of the Senior Executive Service Candidate Development Program with a goal that EPA senior leaders reflect the diversity of the American people and will include a special focus on developing diversity, equity, accessibility, and inclusivity competencies.

Statutory Authority:

Title 5 of the U.S.C.; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

[47] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.

Research: Chemical Safety and Sustainability

Health and Environmental Risk Assessment
Program Area: Research: Chemical Safety for Sustainability
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	$38,740	$39,918	$44,942	$5,024
Hazardous Substance Superfund	***$9,405***	***$4,901***	***$5,005***	***$104***
Total Budget Authority	$48,145	$44,819	$49,947	$5,128
Total Workyears	159.5	155.9	177.9	22.0

Program Project Description:

EPA's Health and Environmental Risk Assessment (HERA) Research Program is focused on the science and practice of assessments that inform decisions made by EPA and others, including states and tribes. These assessments provide the scientific basis for decisions under an array of environmental laws including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). With funding from Superfund, the HERA program supports the risk assessment needs of the Agency's Superfund Program and regional risk assessors by providing Provisional Peer-Reviewed Toxicity Values (PPRTVs) and other fit-for-purpose human health assessments. The HERA Research Program also provides technical support on the application of human health and ecological risk assessment practices at hazardous waste sites for Superfund. These assessment tools and activities support risk-based management decisions at contaminated Superfund and hazardous waste sites.

The HERA Research Program supports the Agency's mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals of concern to the Superfund Program and responding to technical requests on topics relevant to human health or ecological risk assessment at hazardous waste sites. EPA scientists in the HERA Research Program synthesize available scientific information on the potential health and environmental impacts of exposures to individual chemicals and chemical mixtures in the environment, such as per- and polyfluoroalkyl substances (PFAS). PPRTVs and other assessments under the HERA program are an important source of toxicity information and toxicity values to ensure improvements in human health and the environment in communities near Superfund sites.

Priorities for PPRTV development are based on the needs of the Agency's Office of Land and Emergency Management (OLEM), with input from agency regional offices, and are re-evaluated annually. Research areas under the HERA program include applying new data streams; read-across approaches and computational tools; enhancement of supporting data/knowledge bases; and efficiency of derivation for PPRTV values.

There are over 1,300 Superfund sites on the National Priorities List.[48] Communities near Superfund sites or in emergency situations are faced with an urgent need for coordinated assistance to assess and address issues of environmental contamination. The HERA Research Program anticipates environmental contamination issues and develops new assessment approaches to enhance rapid response and screening capabilities and to augment toxicity value derivation procedures for health assessments.

Recent Accomplishments of the HERA Research Program include:

The HERA Research Program has been developing assessment products to inform science-based decision-making, enhance timely responses, improve screening capabilities, and augment toxicity value derivations for use in risk assessments.

- **Portfolio of Chemical Assessments:** In FY 2022, EPA finalized seven PPRTV assessments under the HERA program, including updating *PPRTVs for Complex Mixtures of Total Petroleum Hydrocarbons*.[49] In FY 2023, EPA anticipates delivering four to nine additional high-priority PPRTV assessments[50] based on the needs and priorities of EPA's Superfund Program. The HERA Research Program also continues to support the needs of EPA's Office of Land and Emergency Management through the development of other assessment products of priority chemicals, such as PFAS, polychlorinated biphenyls, methylmercury, hexavalent chromium, and inorganic arsenic.[51]

- **Advancements in Lead Modeling:** In FY 2021, EPA released updates to the Integrated Exposure Uptake Biokinetic (IEUBK) model to support lead biokinetic modeling in children. The agency anticipates finalizing updates to the All-Ages Lead Model (AALM) in FY 2023 which will include improved lead biokinetic modeling in adults and children.

- **Technical Support:** The HERA Research Program responds to ongoing requests for scientific support on human and ecological assessment via the Superfund Health Risk Technical Support Center[52] and Ecological Risk Assessment Support Center.[53] Recent efforts have included providing risk assessment support at Saint-Gobain McCaffrey Street (New York), Plattsburg Air Force Base (Vermont), Velsicol Chemical Corp (Michigan), Tittabawassee River (Michigan), LA. Clarke & Son (Virginia), and ASARCO Superfund Site (Nebraska). Ongoing requests include assistance with employing new approach methods, review of probabilistic risk assessment models, and continued stakeholder engagement on complex science to address needs of Superfund sites across the United States. Additionally, issue papers on nominated topics of interest also have been developed to support risk assessment activities including, "*Allometric Scaling of Terrestrial Wildlife Oral Toxicity Measurements and Comparison of Ecological to Human Health Assessment Contexts*"[54] and "*Summary Report, Separating*

[48] For more information, please see: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.
[49] For more information, please see: https://cfpub.epa.gov/ncea/pprtv/recordisplay.cfm?deid=355902.
[50] For more information, please see: https://www.epa.gov/pprtv.
[51] For more information, please see: https://www.epa.gov/iris/iris-recent-additions.
[52] For more information, please see: https://www.epa.gov/land-research/superfund-health-risk-technical-support-center-stsc.
[53] For more information, please see: https://www.epa.gov/land-research/epas-technical-support-centers.
[54] For more information, please see: https://cfpub.epa.gov/ncea/erasc/recordisplay.cfm?deid=353936.

Anthropogenic Metals Contamination from Background: A Critical Review of Geochemical Evaluations and Proposal of Alternative Methodology."[55]

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, the HERA Research Program's work will focus explicitly on efforts integral to achieving the Agency's priorities and informing EPA's implementation of key environmental regulations. Examples of this work include:

- **PFAS Research:** Per- and polyfluoroalkyl substances (PFAS) are a class of chemicals of concern in the environment. Decision-making on PFAS chemicals is hindered by a limited number of standard toxicity values. There are still large numbers of PFAS, of high interest to partners, that currently have no federal published, peer-reviewed toxicity values. As described in the *PFAS Strategic Roadmap*,[56] within the HERA Research Program, EPA is prioritizing additional PFAS for development of peer-reviewed toxicity values. This will result in an expanded set of high-quality peer-reviewed toxicity values for use by federal, state, and tribal decision makers in making risk assessment and management decisions.

- **PPRTV Assessments**: In FY 2024, the HERA Research Program anticipates delivering four to nine additional high-priority PPRTV assessments as prioritized by EPA's Office of Land and Emergency Management.

- **Portfolio of Assessment Products:** In FY 2024, EPA will complement the PPRTVs by providing additional human health assessment products for priority chemicals. Having modernized its assessment infrastructure, the Agency will use evidence mapping to provide a better understanding of the extent and nature of evidence available to address program needs (i.e., 'fit for purpose').

- **Linking Databases and Management Tools:** In FY 2024, the HERA Program will continue to collaborate with the Chemical Safety for Sustainability (CSS) Research Program to link the architecture of assessment databases and literature management tools, including *Health and Environmental Research Online*[57] and the *Health Assessment and Workplace Collaborative*[58] with the *CompTox Chemicals Dashboard*.[59]

- **Rapid Technical Support:** In FY 2024, the HERA Program will continue essential technical assistance across EPA to provide rapid technical support to programs and regions. These activities will provide expedited technical support for evaluating chemical-specific exposures

[55] For more information, please see: https://cfpub.epa.gov/ncea/erasc/recordisplay.cfm?deid=347774.
[56] For more information, please see EPA's PFAS Strategic Roadmap at: https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf.
[57] For more information, please see: https://hero.epa.gov/hero/.
[58] For more information, please see: https://hawcprd.epa.gov/.
[59] For more information, please see: https://comptox.epa.gov/dashboard.

at Superfund and contaminated sites, as well as incorporating case-specific information related to urgent situations.

- **Lead:** Childhood lead exposure continues to be one of the highest priorities for EPA. To advance the application of lead exposure and biokinetic models in EPA regulatory decisions and site assessments, the HERA Research Program will enhance, evaluate, and apply lead biokinetic models for estimating potential blood lead levels for regulatory determinations.[60] Additionally, the Exposure Factors Handbook[61] will be continually updated to provide up-to-date data on various human factors, including soil and dust ingestion rates, used by risk assessors.

Please note that certain activities within this program could have implications associated with the Administration's Cancer Moonshot Initiative.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published the fourth generation of the StRAPs,[62] which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
  - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
  - EPA's state engagement[63] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

[60] For more information, please see: https://www.epa.gov/superfund/lead-superfund-sites-software-and-users-manuals.
[61] For more information, please see: https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.
[62] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.
[63] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$47.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$151.0) This program change reflects an increase for the Health and Environmental Risk Assessment program. This increase will assist in advancing science assessments, such as PPRTV's, as well as analytical approaches for the application of risk assessments.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$178	$0	$0	$0
Science & Technology	$92,353	$92,550	$103,878	$11,328
Hazardous Substance Superfund	***$2,579***	***$8,060***	***$8,060***	***$0***
Total Budget Authority	$95,110	$100,610	$111,938	$11,328
Total Workyears	275.2	276.7	307.4	30.7

Program Project Description:

EPA's Chemical Safety for Sustainability (CSS) Research Program provides scientific and technical approaches, information, tools, and methods to support the Agency and others to make better-informed and more timely decisions about chemicals and their potential risks to human health and the environment.[64] CSS products strengthen the Agency's ability to use the best available science to evaluate and predict human health and ecological impacts from the use, reuse, recycling, and disposal of manufactured and naturally occurring chemicals and their by-products.

The CSS Research Program informs Agency decisions about chemicals, accelerates the pace of chemical assessment and decision-making, and helps to replace, reduce, and refine the use of mammals used to evaluate chemical risk to ecological and human health. CSS products under the Superfund appropriation conduct mitigation activities at Superfund sites under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Research activities under CSS are coordinated with the activities of other national research programs to inform high priority research topics, such as research focused on per- and polyfluoroalkyl substances (PFAS). Coordination with the Health and Environmental Risk Assessment (HERA) Program ensures that the approaches, tools, and information produced under the CSS Research Program can be used to improve chemical risk assessments, reduce uncertainties associated with those assessments, and increase the speed of delivering chemical information to the Agency.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, the CSS Research Program will continue to provide information needed to inform Agency decisions about PFAS. PFAS are a large class of fluorinated substances of concern. EPA is committed to supporting tribes, states, and local communities to understand and manage risks

[64] For the CSS StRAP, please see: Strategic Research Action Plans Fiscal Years 2023-2026 (Drafts) | US EPA.

associated with these chemicals.[65] EPA research on PFAS represents a major integrative effort that will provide systematic information on a broad range of topics. EPA scientists will continue to identify, curate, evaluate, and extract available physicochemical, structural, exposure, and toxicological data from the published and gray literature to inform study design, categorization approaches, and interpretation of emerging studies.

PFAS chemicals will be acquired to expand and maintain the existing PFAS physical library of compounds to include those PFAS of interest to agency and external partners. Relevant PFAS data were included in the most recent CompTox Chemicals Dashboard[66] release and will continue to be added in future releases. PFAS fate, transport, occurrence, and persistence in the environment and in consumer products will be evaluated to help understand exposure scenarios. In addition, a tiered toxicity testing strategy will be executed which utilizes new approach methods (NAMs) to evaluate single PFAS chemicals and mixtures in a high throughput manner, followed by targeted *in vivo* testing for chemicals identified as priorities. This testing approach will include several systems-specific toxicity tests, including developmental neurotoxicity, thyroid toxicity, immunotoxicity, and developmental and reproductive toxicity. Various types of modeling will be used to translate *in vitro* results into *in vivo* outcomes and will include the use of adverse outcome pathway (AOP) models that link *in vitro* results to outcomes relevant to regulatory objectives and *in silico* predictive toxicity models. NAMS can be used to group and prioritize chemicals, e.g., as illustrated in the recent PFAS categorization paper.[67] In the ecological domain, EPA is developing multispecies approaches to evaluate species sensitivity differences across taxa to inform aquatic risk benchmarks. Furthermore, work continues to determine the bioaccumulation of PFAS in aquatic species, because fish consumption is relevant to human health and exposure. Resources requested in FY 2024 will build upon the research foundation formed from completed work outlined in the *PFAS Strategic Roadmap*.[68]

Research Planning:

EPA's research is built around six integrated and transdisciplinary research programs. Each of the six integrated and transdisciplinary research programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of agency program and regional offices, states, and tribes, and is implemented with their active collaboration and involvement. Each research program has developed and published the fourth generation of the StRAPs,[69] which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

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[65] For more information, please see: https://www.epa.gov/pfas/pfas-community-engagement.
[66] For more information, please see: https://comptox.epa.gov/dashboard.
[67] For more information, please see https://www.sciencedirect.com/science/article/pii/S246811132200038X
[68] For more information, please see: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024.
[69] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026

- EPA's Board of Scientific Counselors (BOSC)
    - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
    - EPA's state engagement[70] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
    - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives of mutual benefit and responsibility to work collaboratively on environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Chemical Safety for Sustainability Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Clean Air Act §§ 103, 104; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Children's Health Act; 21st Century Nanotechnology Research and Development Act; Clean Water Act; Federal Food, Drug, and Cosmetic Act (FFDCA); Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); Pollution Prevention Act (PPA); Resource Conservation and Recovery Act (RCRA); Safe Drinking Water Act (SDWA); Toxic Substances Control Act (TSCA).

[70] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	$133,808	$137,857	$146,642	$8,785
Leaking Underground Storage Tanks	$312	$341	$351	$10
Inland Oil Spill Programs	$782	$675	$681	$6
Hazardous Substance Superfund	***$16,562***	***$16,937***	***$17,364***	***$427***
Total Budget Authority	$151,463	$155,810	$165,038	$9,228
Total Workyears	422.1	421.8	444.3	22.5

Program Project Description:

This area of EPA's Sustainable and Healthy Communities (SHC) Research Program responds directly to the Superfund law requirements for a comprehensive and coordinated federal "program of research, evaluation, testing, development, and demonstration of alternative or innovative treatment technologies…which may be utilized in response actions to achieve more permanent protection of human health and welfare and the environment."[71]

SHC has made a commitment to foster environmental, public health, and economic benefits for overburdened communities. Superfund remedial technologies will directly support communities with environmental justice concerns and accelerate solutions to ameliorate the negative impacts Superfund sites pose for underserved communities. The research will emphasize remediation technologies that improve long-term site resilience including to the current and potential future impacts of climate change (e.g., flooding, fire, sea level rise). SHC will apply an integrated systems approach to incorporate diverse data streams to increase understanding of linkages between the total environment (built, natural, and social) and public health to support communities and will highlight climate change and environmental justice related research throughout the program.

SHC's research under the Superfund appropriation provides federal, regional, and community decision-makers with 1) engineering tools, methods, and information to assess current conditions at Superfund sites; 2) decision support tools to evaluate the implications of alternative remediation approaches and technologies, and reuse of sites; 3) the latest science to support policy development and implementation; and 4) rapid access to technical support through EPA's Superfund Technical Support Centers.

[71] 42 U.S.C. § 9660(b).

Recent Accomplishments of the SHC Research Program include:

- **PFAS Human Exposure Modeling Methodology (published January 2022 - January 2023):**[72] This research provided a protocol to investigate household exposure to Per- and polyfluoroalkyl substances (PFAS) via non-drinking water pathways. While exposure to PFAS in impacted communities is generally through contaminated drinking water, the presence of PFAS chemicals in 98% of NHANES samples implies that other sources, such as household dust, and/or pathways may be important exposure routes. The PFAS human exposure modeling methodology was published as a series of journal articles and databases that provide scientific evidence of important exposure sources and pathways and their contributions to PFAS body burdens. Collectively, this body of work provides concordant exposure data on PFAS data in indoor media and serum; identifies important exposure pathways for 20 PFAS chemicals; provides detailed information on PFAS occurrence in household and environmental media; and outlines the development of a human cohort study. The results of these studies provide important information required to characterize the contribution of these exposure sources to body burden PFAS in highly exposed communities.

- **Soil Amendment Technologies to Stabilize Mercury: Sediment, Soil, Mine Tailing and MIW Remediation (published February 2022 and January 2023):**[73] Hundreds of thousands of mercury (Hg) contaminated sites within the U.S. have contributed to elevated fish methylmercury (MeHg) concentrations in downstream waterbodies. These sites include abandoned mines and former industrial/manufacturing facilities, only a small fraction of which are currently being remediated. This work, a state of science review, addresses critical issues related to the processes controlling mercury mobilization and methylation at a range of Superfund sites. The state of the science review is intended for use by Superfund regional project managers, state environmental departments, academics, and others working in the field of mercury contamination. The review provides a detailed listing of the tools currently available for site assessment for a wide variety of landscapes, the specific techniques that are required for analysis, and the most up to date verified remediation techniques. This research is being used by regional project managers and on-scene site coordinators to better understand the fate of mercury present and the types of issues that will need to be addressed or monitored during remedy selection and implementation.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, SHC will conduct research, and provide technical assistance and support, to inform analyses and decisions by the Office of Land and Emergency Management (OLEM), regional offices, tribes, and states regarding characterization, remediation, and management of contaminated soil, sediment, and groundwater—issues which are especially concerning to vulnerable, overburdened communities. The tools developed under the SHC Research Program

[72] For more information, please see: https://pubmed.ncbi.nlm.nih.gov/34373583/, https://pubmed.ncbi.nlm.nih.gov/35240384/, and https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8118191/.
[73] For more information, please see: https://pubmed.ncbi.nlm.nih.gov/36279994/ and https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7903515/.

will help the Agency address complex contamination problems, which may be made more complex by the impacts of climate change at Superfund, Resource Conservation Recovery Act (RCRA), and Brownfields sites in the United States. EPA research personnel and associated support staff also will identify, monitor, and develop options to control vapor intrusion to reduce exposures, reduce contaminant sources, and define sampling strategies that address when, where, and how to sample. SHC researchers will evaluate source control technologies at mine waste sites and investigate remediation and recovery for reuse of critical minerals from contaminated sites. Scientific journal articles, datasets, models, and tools will be published and used to support communities.

PFAS will continue to be a priority research topic for SHC. SHC will develop methods to evaluate PFAS presence and characteristics in wastes, soils, and sediments, and investigate PFAS fate and transport in the environment to support the need of EPA partners, states, tribes, and local communities to identify and characterize PFAS concentrations and distributions at contaminated sites and solid waste sites. Additionally, SHC will identify locations and source contributors to high potential human exposure for children and other populations by evaluating multimedia PFAS sources and pathways. SHC also will investigate approaches, methodologies, and technologies to treat, remove, destroy, and dispose of PFAS in environmental matrices.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published their fourth generation of the StRAPs,[74] which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
    - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
    - EPA's state engagement[75] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

[74] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026

[75] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

- Tribal Partnerships
    - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$206.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$15.0) This change to fixed and other costs is an increase due to the recalculation of laboratory fixed costs.

- (+$618.0) This program change reflects an increase that will build capacity to help respond directly to the Superfund law research requirements.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund Cleanup

Superfund: Emergency Response and Removal
Program Area: Superfund Cleanup
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund	***$239,807***	***$195,000***	***$0***	***-$195,000***
Total Budget Authority	$239,807	$195,000	$0	-$195,000
Total Workyears	261.7	247.7	250.7	3.0

In FY 2024, the Budget proposes to transition the Superfund Removal FTE from the annual Superfund appropriation to the Superfund tax receipts as reimbursable FTE. These FTE are built into the Agency's FTE ceiling.

Program Project Description:

The Emergency Response and Removal Program (Superfund Removal) is the cornerstone and principal institution of federal emergency response to releases of hazardous substances, pollutants, or contaminants and is paramount to managing corresponding threats and dangers that occur. During a national emergency, EPA takes action to prevent, limit, mitigate, or contain chemical, oil, radiological, biological, or hazardous materials releases. Circumstances requiring emergency response and removal actions vary considerably in size, nature, and location, and includes chemical releases, fires or explosions, natural disasters, and other threats to people from exposure to hazardous substances. EPA's 24-hour-a-day response capability is a critical component of the National Contingency Plan.[76] Further, this program is responsible for the Agency's only Primary Mission Essential Function. Superfund Removal cleanups vary in complexity and contain a wide variety of contaminants including lead, mercury, and asbestos.[77]

Since 2013, EPA has completed or managed more than 2,420 Superfund removal actions across the country. Responses are a multilayered activity that can fluctuate due to requirements for supplies and customized instruments, specialized training and instruction, and the intricate measures taken to ensure ongoing assessments and responses are appropriate to meet the demands of site conditions. Superfund Removal sites are found in remote rural areas as well as large urban settings. Nearly 41 million people, or about 13 percent of the population, live within 3 miles of a Superfund Removal site where EPA addressed a removal action between FY 2016 and FY 2020.[78] In addition, over 41 percent of removal completions in FY 2019 and FY 2020, and 36 percent in FY 2021 were in communities with populations surpassing the 80th percentile for being people of color, low income, or having less than a high school education.[79]

[76] For more information, please refer to: https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview.
[77] Data from US EPA Superfund Enterprise Management System.
[78] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) Superfund removal site information from SEMS from FY2016-FY2020; and (2) population data from the 2015-2019 American Community Survey.
[79] Data from US EPA Superfund Enterprise Management System and US EPA EJ Screen.

The Superfund Removal Program provides technical assistance and outreach to industry, states, tribes, and local communities as part of the Agency's effort to ensure national safety and security for chemical and oil responses. EPA trains, equips, and deploys resources to manage, contain, and remove contaminants. Until contained or removed, these substances have the potential to significantly damage property, endanger public health, and have critical environmental impact on communities.

EPA Federal On-Scene Coordinators (OSCs) make up the core of the Superfund Removal Program. These trained and equipped EPA personnel respond to, assess, mitigate, and clean up environmental releases regardless of the cause. States, local, and tribal communities rely upon the OSC's experience and assistance to address environmental emergencies that are beyond their capabilities and resources.

Climate change, emerging contaminants, and new scientific developments are adding to the demands of the Superfund Removal Program. The greater frequency of intense weather events that lead to releases of hazardous substances, pollutants, or contaminants increases the workload on the Program. In addition, emerging contaminants such as PFAS are expected to significantly expand the Program as the understanding of the toxicity levels of these compounds continue to drive down cleanup levels.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the President's Budget proposes to transition the Superfund Removal Program from the annual Superfund appropriation to the Superfund tax receipts.[80] The Program will continue to:

- Respond to and provide technical assistance for emergency responses and removal assessments and time critical response actions (non-emergency responses). The removal program conducts its work with an emphasis on advancing environmental justice and equitable outcomes by working through possible candidate time critical actions that exist in the regions.

- In addition to other work addressing abandoned uranium mines (AUM) in other EPA program projects, this program addresses AUM impacts on the Navajo Nation (NN). EPA is working to establish a Region 9 based NN field office allowing for 3 FTE to focus on work specific to this area needed to advance cleanup through removal actions at NN AUM sites. This additional capacity will assist EPA and NN in accelerating actions articulated in the 2020 Ten Year Plan: Federal Actions to Address Impacts of Uranium Contamination on the Navajo Nation.[81]

- Support the EPA Special Teams (e.g., Chemical, Biological, Radiological, and Nuclear Consequence Management Advisory Team, Environmental Response Team (ERT),

[80] The U.S Treasury forecasts collecting a total of $2.54 billion in Superfund tax receipts in FY 2023 which will be available for use in FY 2024 across EPA Superfund programs.
[81] For more information, please refer to: https://www.epa.gov/sites/default/files/2021-02/documents/nnaum-ten-year-plan-2021-01.pdf.

Radiological Emergency Response Team, or the National Criminal Enforcement Response Team), which provide nationwide assistance and consultation for emergency response and removal actions, including unusual or complex incidents. In such cases, the Special Teams provide the OSC, or lead responder, with direct support from an operational asset, special equipment, and/or technical or logistical assistance.

- Conduct and participate in selected multi-media training and exercises for emergency responders. These events ensure readiness by focusing on necessary coordination and consistency across the Agency, enhance specialized technical skills and expertise, and strengthen partnerships with state, local, tribal, and other federal responders.

- Support the ERT, which provides nationwide assistance and consultation for emergency response actions, including unusual or complex incidents. In such cases, the ERT supplies the OSC, or lead responder, with special equipment and technical or logistical assistance.

- Continue to train and deploy the National Incident Management Assistance Team and regional Incident Management Teams to set up organizational systems that help with the long-term strategic planning and response efforts.

Performance Measure Targets:

(PM 137) Number of Superfund removals completed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	275	175	175	141	141	183	183	183	Removals
Actual	255	242	233	197	150	195			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$195,000.0 / -247.7 FTE) In FY 2024, the Superfund Emergency Response and Removal Program is proposed to be transitioned from the annual Superfund appropriated resources to the Superfund tax receipts. In FY 2023, the U.S. Treasury forecasts collecting a total of $2.54 billion in Superfund taxes which will be available for use in FY 2024 across EPA Superfund programs. As a result, the pace of work is not expected to be negatively impacted.

- (+250.7 FTE) In FY 2024, the Agency proposes to transition 250.7 Superfund Removal FTE from the annual Superfund appropriation to the Superfund tax receipts as reimbursable FTE.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 104, 105, 106; Clean Water Act (CWA); and Oil Pollution Act (OPA).

Superfund: EPA Emergency Preparedness
Program Area: Superfund Cleanup
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund	***$9,071***	***$8,056***	***$8,445***	***$389***
Total Budget Authority	$9,071	$8,056	$8,445	$389
Total Workyears	33.9	37.4	37.4	0.0

Program Project Description:

The Superfund Emergency Preparedness Program provides for EPA's engagement on the National Response Team (NRT), Regional Response Teams (RRT), and Inland Area Committees where it ensures federal, state, and tribal agencies are prepared to respond to national incidents, threats, and major environmental emergencies. EPA implements the Emergency Preparedness Program in coordination with the Department of Homeland Security and other federal agencies to deliver federal hazard assistance to state, local, and tribal governments.

The Agency carries out its responsibility under multiple statutory authorities as well as the National Response Framework (NRF), which provides the comprehensive federal structure for managing national emergencies. EPA is the designated lead for the NRF's Oil and Hazardous Materials Response Annex - Emergency Support Function #10, which covers responsibilities for responding to releases of hazardous materials, oil, and other contaminants that are a threat to human health and the environment. As such, the Agency participates and leads applicable interagency committees and workgroups to develop national planning and implementation policies at the operational level.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA will continue working to improve its oversight of emergency response assets to more appropriately manage large, unprecedented incidents which increase cost effectiveness and avoid costly cleanup actions. The Superfund Emergency Preparedness Program participates in national and local exercises and drills, coordinates with stakeholders to develop Area and Regional Contingency Plans, and provides technical assistance to industry, states, tribes, and local communities. Specific activities include:

- Chair the NRT[82] and co-chair the 13 RRTs. The NRT and RRTs are the only active environmentally focused interagency executive committees addressing oil and hazardous substance emergencies. They serve as multi-agency coordination groups supporting emergency responders when convened as incident specific teams.

- Lead Inland Area Committees to ensure policies, procedures and tools are in place to assist federal, state, tribal, local, and industry responders effectively address spills.

- Participate in the development of limited, scenario-specific exercises and regional drills designed to assess national emergency response management capabilities. These activities will involve the RRTs, NRT, and/or principal level participants.

- Continue to implement the National Incident Management System[83], which provides the approach to manage incidents and closely works with the NRF.

Performance Measure Targets:

(PM ER01) Number of emergency response and removal exercises that EPA conducts or participates in.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						120	120	120	Exercises
Actual					120	164			

(PM ER02) Percentage of emergency response and removal exercises that EPA conducts or participates in that incorporate environmental justice.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						14	30	40	Percent
Actual						49			
Numerator						80			Exercises
Denominator						164			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$286.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$103.0) This program change increases essential support for Superfund Emergency Preparedness Program core activities, such as national and local exercises and drills.

[82] For more information, please refer to: https://www.nrt.org/.
[83] For more information, please refer to: http://www.fema.gov/national-incident-management-system.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), §§ 104, 105, 106; Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Superfund: Remedial
Program Area: Superfund Cleanup
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund	***$552,089***	***$618,740***	***$0***	***-$618,740***
Total Budget Authority	$552,089	$618,740	$0	-$618,740
Total Workyears	910.0	890.8	874.8	-16.0

In FY 2024, the Budget proposes to transition the Superfund Remedial FTE from the annual Superfund appropriated resources to the Superfund tax receipts as reimbursable FTE. These FTE are built into the Agency's FTE ceiling.

Program Project Description:

The Superfund Remedial Program addresses many of the worst contaminated areas in the United States by investigating contamination and implementing long-term cleanup remedies at sites on the National Priorities List (NPL). The Program also oversees response work conducted by potentially responsible parties (PRPs) at NPL and Superfund Alternative Approach (SAA) sites.

By cleaning up and returning land to productive use, the Superfund Remedial Program improves the health and livelihood of all Americans and supports the Administration's goal to reduce exposure to Superfund site contamination, especially in disadvantaged communities. Approximately 22 percent of the U.S. population lives within three miles of a Superfund site, and this population is predominantly minority, low income, linguistically isolated, and less likely to have a high school education than the U.S. population as a whole.[84]

In FY 2022, more than 75 percent of Superfund Remedial appropriated and Infrastructure Investment and Jobs Act (IIJA) site-specific funds were obligated to Superfund NPL sites where there is potential for addressing environmental justice concerns. In the same period, more than 90 percent of the Superfund sites that achieved Human Exposure Under Control and more than 40 percent of sites that achieved Sitewide Ready for Anticipated Reuse had potential for environmental justice concern.[85]

While conducting cleanup at NPL and SAA sites, remedial construction projects can enhance our national infrastructure while addressing harmful exposures. For example, recent research indicates that Superfund cleanup actions lowered the risk of elevated blood lead levels by roughly 13 to 26 percent for children living within two kilometers of a Superfund NPL site where lead is a contaminant of concern.[86] For Superfund sites contaminated with lead, 18 percent of the

[84] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) Superfund site information from SEMS as of the end of FY2020 and site boundary data from FY 2014 FOIA Request; and (2) population data from the 2015-2019 American Community Survey.
[85] Data from EPA's Superfund Enterprise Management System and EPA's EJSCREEN Version 2.1.
[86] For more information, please refer to: https://www.epa.gov/environmental-economics/research-environmental-economics-ncee-working-paper-series.

surrounding population is below poverty level, 15 percent is without a high school diploma, and 51 percent of the population is minority.

By addressing the human health and environmental risks posed by releases at NPL and SAA sites, the Superfund Remedial Program strengthens the economy and spurs economic growth for all Americans by returning Superfund sites to productive use. Reuse and restoration of Superfund NPL sites directly support the Administration's Justice40 initiative[87], as articulated in President Biden's Executive Order (EO) 14008: *Tackling the Climate Crisis at Home and Abroad* (January 27, 2021)[88], as this EO acknowledges the urgent need to restore lands and natural assets.[89] The Superfund Remedial Program is one of EPA's Justice40 pilot programs. The Superfund Remedial Program considers environmental burdens and other socio-economic challenges when developing community involvement and cleanup plans. Assessing environmental justice concerns in the communities we serve provides important information which influences how EPA communicates, makes cleanup decisions, and plans for future reuse of Superfund sites. The Program also works to maximize cleanup benefits as well as state and tribal benefits, enforcement opportunities, enhancements to community involvement, and the Superfund Redevelopment Program.

In FY 2022, while 16 Superfund sites achieved the status of Sitewide Ready for Anticipated Use, EPA rescinded this status for 64 sites that had previously achieved it. The retractions in FY 2022 were the result of a review which identified sites which no longer met protectiveness requirements due to detection of per- and polyfluoroalkyl substances (PFAS) and other emerging contaminants, aging remedies, and new exposure pathways requiring new institutional controls. As of FY 2022, EPA data show that approximately 1,000 Superfund sites are in reuse - more than half the total number of sites placed on the NPL over the Program's existence. EPA has data on more than 10,253 businesses at 671 of these sites. These businesses' ongoing operations generate annual sales of $74.1 billion. These businesses provided more than 236,000 jobs who earned a combined income of $18.6 billion. Over the last twelve years, these businesses generated at least $590 billion in sales.

Additionally, cleanup work under the Superfund Remedial Program improves property values. A study conducted by researchers at Duke University and the University of Pittsburgh found that residential property values within 3 miles (4.8 kilometers) of Superfund sites increased between 18.7 and 24.4 percent when sites were cleaned up and deleted from the NPL.[90]

FY 2024 Activities and Performance Plan:

[87] For more information, please refer to: https://www.whitehouse.gov/environmentaljustice/justice40/
[88] For more information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad
[89] For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.
[90] Shanti Gamper-Rabindran and Christopher Timmons. 2013. "Does cleanup of hazardous waste sites raise housing values? Evidence of spatially localized benefits," Journal of Environmental Economics and Management 65(3): 345-360, http://dx.doi.org/10.1016/j.jeem.2012.12.001.

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the President's Budget proposes to transition the Superfund Remedial Program, including associated FTE costs, from the annual Superfund appropriated resources to the Superfund tax receipts[91]. EPA will continue to execute its non-delegable, federal responsibility to remediate sites and protect human health, welfare, and the environment. EPA endeavors to maximize the use of special account resources collected from PRPs for site-specific response actions as stipulated in settlement agreements so that available Superfund resources are prioritized for sites without other sources of funding. More than half of non-federal sites on the final NPL do not have an associated open special account and available Superfund resources are critical to the Superfund Remedial Program to clean up sites.

The IIJA invested $3.5 billion in environmental remediation at Superfund NPL sites and reinstated the Superfund chemical taxes, and the Inflation Reduction Act reinstated the Superfund petroleum taxes.[92] These laws provide one of the largest investments in American history to address the legacy pollution that harms public health in communities and neighborhoods, creating good-paying jobs, and advancing economic and environmental justice in the process.

In FY 2024, EPA will continue to initiate new work on remedial construction, as well as continue ongoing cleanups at NPL sites across the country. As IIJA funds available for site work are anticipated to be fully obligated by no later than FY 2025 based on current site information, the FY 2024 Budget proposes Superfund tax receipts to continue funding construction work at an optimal pace and avoid a backlog of new construction projects.

The Superfund Remedial Program will continue to start and complete critical pre-construction projects such as site characterization and construction design, which will complement construction projects that utilize IIJA funding. The Program also will continue to support the Superfund's community involvement and outreach activities at sites. These activities play a pivotal role in ensuring communities have the resources they need to meaningfully participate in the decision-making process, including an increased involvement of communities to develop their visions for revitalization by identifying economic drivers and connecting community needs to federal investments. The Program will continue to support capacity building technical assistance, and the Superfund Job Training Initiative.

In FY 2024, EPA will reduce exposure to lead and associated health impacts including the risk of elevated blood lead levels for children by completing 45 Superfund lead cleanup projects. EPA

[91] The U.S Treasury forecasts collecting a total of $2.54 billion in Superfund tax receipts in FY 2023 which will be available for use in FY 2024 across EPA Superfund programs.

[92] On November 15, 2021, the Infrastructure Investment and Jobs Act [(IIJA), P.L. 117-58] reinstated and modified the excise taxes on certain listed chemicals and imported substances that are used as materials in their manufacture or production one or more of those listed chemicals ("Superfund chemical taxes"). The Superfund chemical taxes went into effect beginning July 1, 2022, and expire on December 31, 2031. On August 16, 2022, the Inflation Reduction Act [(IRA), P.L. 117-169] reinstated and modified the taxes on oil and petroleum products ("Superfund petroleum taxes"). The Superfund petroleum taxes went into effect on January 1, 2023, and do not have an expiration date. On December 29, 2022, the Consolidated Appropriations Act 2023 (P.L. 117-328) allowed all tax receipts collected in the Superfund Trust Fund from the prior fiscal year to be available to carry out the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, without further appropriation by Congress and designated as emergency funding.

also will continue to support the cleanup of PFAS and will collaborate on cross-cutting strategies; advance new science; develop coordinated policies, regulations, and communications; assess the nature and extent of PFAS contamination and other contaminants of concern at sites; and engage with affected states, tribes, communities, and stakeholders. Additionally, completing these cleanup projects, which include legacy sites that expose Americans to contaminants shown to pose increased cancer risks, advances work in cancer prevention as part of President Biden's Cancer Moonshot Initiative.

EPA's regional labs provide cutting-edge science to inform immediate and near-term, multi-media decisions on environmental conditions, emergency response, and enforcement. Regional laboratory science also helps inform communities about the risks the site may pose in terms of chemical exposures and cumulative environmental impacts. This work will support the ambitious environmental and clean up goals of President Biden's agenda.

Performance Measure Targets:

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	9	8	12	10	10	12	12	12	Sites
Actual	24	32	17	20	13	-14			

(PM 155) Number of Superfund cleanup projects completed that address lead as a contaminant.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						45	45	45	Projects
Actual					56	45			

(PM 170) Number of remedial action projects completed at Superfund sites.[93]

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	105	95	95	80	80	80	75	75	Projects
Actual	97	87	89	91	75	74			

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	45	51	51	51	51	25	15	10	Sites
Actual	43	51	48	34	26	-48			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$618,740.0 / -890.8 FTE) In FY 2024, the Superfund Remedial Program is proposed to be transitioned from the annual Superfund appropriated resources to the Superfund taxes. In FY 2023, the U.S. Treasury forecasts collecting a total of $2.54 billion in Superfund taxes which will be available for use in FY 2024 across EPA Superfund programs. As a result, the pace of work is not expected to be negatively impacted.

- (+874.8 FTE) In FY 2024, the Agency proposes to transition 874.8 Superfund Remedial FTE from the annual Superfund appropriated resources to the Superfund tax receipts as reimbursable FTE.

[93] Indicates that this measure also is used to track progress in implementing the Bipartisan Infrastructure Law.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Superfund: Federal Facilities
Program Area: Superfund Cleanup
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Substance Superfund	***$23,911***	***$26,189***	***$37,405***	***$11,216***
Total Budget Authority	$23,911	$26,189	$37,405	$11,216
Total Workyears	102.4	113.2	112.7	-0.5

Program Project Description:

The Superfund Federal Facilities Program oversees and provides technical assistance for the protective and efficient cleanup and reuse of Federal Facility National Priorities List (NPL) sites. Program responsibilities include: 1) inventory and assess potentially contaminated sites; 2) select and implement protective remedies; 3) facilitate early transfer of property; and 4) ensure ongoing protectiveness of completed cleanups.

The Federal Facility NPL sites, where the other federal agencies (OFAs) are the lead agency and EPA is the lead oversight agency, are among the largest in the Superfund Program and can encompass specialized environmental contaminants such as munitions and radiological waste, and contaminants of emerging concern such as per- and polyfluoroalkyl substances (PFAS). EPA jointly selects site remedies with OFAs and uses its oversight authority to provide an independent assessment of federal cleanups to ensure work conducted is in accordance with site cleanup plans and yields protective remedies. To ensure efficiencies and consistent approaches to cleanup, the Program collaborates with OFAs and state, local, and tribal governments. There are 175 Federal Facility sites on the NPL, which are part of the approximately 2,400 sites on the Federal Agency Hazardous Waste Compliance Docket (Docket) maintained by EPA. The sites result in nearly $9 billion per year expended by OFAs under EPA oversight. The resulting cleanup, restoration, and reuse of Federal Facility NPL sites contributes significantly to Superfund program accomplishments. In FY 2022, the Program completed response action decisions at 41 federal facility sites to address environmental contamination. The Program also achieved 26 Remedial Action Project Completions and reviewed 39 Five-Year Reviews to confirm protective remedies remain in place.

The Superfund Federal Facilities Program supports President Biden's Executive Order (EO) 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*[94] by recognizing and working to repair inequities that serve as barriers to equal opportunity in the Federal Facility Superfund Program. This is accomplished by working to improve the health and livelihood of communities through cleaning up and returning land to

[94] For additional information, please refer to: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government.

productive use. Over 68 percent of Federal Facility NPL sites are in communities disproportionately affected by environmental burdens. Cleaning up contaminated sites at federal facilities also can serve as a catalyst for economic growth and community revitalization.

The Superfund Federal Facilities Program has successfully worked with EPA's partners to facilitate the redevelopment of Federal Facility NPL sites across the country. Since Federal Facility NPL sites often encompass thousands of acres with buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth and environmental vitality. Reuse and restoration of Federal Facility NPL sites directly support President Biden's EO 14008: *Tackling the Climate Crisis at Home and Abroad*.[95] Redevelopment projects have included ecological preserves, recreational areas, cultural/historical resources, public transit infrastructure, and alternative energy sources. A 2022 economic analysis of 70 Federal Facility Superfund Sites identified over 2,400 businesses that generated $28 billion in annual sales, provided over 450,000 jobs, and $44 billion in estimated annual employment income.[96] The Superfund Federal Facility Program provided content for the FY 2022 - 2023 Office of Land and Emergency Management Climate Change Adaptation Plan.[97] Future climate actions by the Program include developing a training to address ways to consider climate change impacts in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, and continuing collaboration with OFAs to include climate impact considerations in remedial actions.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Superfund Federal Facilities Program, as part of its statutorily mandated oversight responsibilities, will support EPA's PFAS Strategic Roadmap by overseeing the growing number of PFAS cleanups at Department of Defense (DoD), the Department of Energy (DOE), and OFA sites. The Program will benefit from a significant investment to keep pace with the surge of PFAS cleanups under CERCLA and adjust core program capacity. Currently, the Program provides oversight at the 110 Federal Facility NPL sites with PFAS detections. Additionally, DoD is expected to initiate approximately 50 additional PFAS investigations in FY 2024.

In FY 2024, EPA proposes an investment of $11.2 million in the Superfund Federal Facilities Program. This investment will allow EPA to minimize disruptions and delays to its oversight responsibilities, enable DoD to meet their Congressional cleanup obligations for PFAS under the 2022 National Defense Authorization Act and subsequent CERCLA response actions, and adjust EPA core capacity in its cleanup oversight for legacy contamination such as radioactive waste and unexploded ordnance. EPA plans to utilize the additional resources to leverage knowledge and best practices developed from Federal Facilities PFAS investigations to aid PFAS cleanups across the country.

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[95] For additional information, please refer to: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad.
[96] For additional information, please refer to: https://www.epa.gov/fedfac/redevelopment-economics-federal-facilities.
[97] For additional information, please refer to: https://www.epa.gov/system/files/documents/2022-10/bh508-OLEM%20CAIP_August%202022_POST_OGCreview_9.12.2022.pdf

In addition to the growing workload related to PFAS, the Program will prioritize and continue to partner with OFAs; state, local, and tribal governments; and communities to limit human exposure to potentially harmful levels of lead in the environment. EPA will continue to oversee complex cleanups at Federal Facility NPL sites, such as contamination in groundwater, munitions and explosives of concern, contaminants of emerging concern, and contamination from legacy nuclear weapons development and energy research. For example, while the DOE has completed cleanup work at many of its sites, DOE estimates that the remaining legacy Cold War sites will take decades to complete due to groundwater, soil, and waste processing. Similarly, the DoD inventory includes sites that contain chemical and explosive compounds which require special handling, storage, and disposal practices, as well as cleanup. EPA will continue to provide oversight and technical assistance at DoD's military munitions response sites and support DoD's development of new technologies to streamline cleanups.

To ensure the long-term protectiveness of the remedies, the Agency will continue monitoring, overseeing progress, and improving the quality and consistency of Five-Year Reviews conducted at federal sites where waste has been left in place and land use is restricted. Five-Year Reviews are required under Section 121(c) of CERCLA and EPA's role is to concur or make its own independent protectiveness determination. EPA has been working collaboratively with DoD, DOE, and Department of the Interior (DOI) to improve the technical quality, timeliness, and cost of the five-year review reports and to ensure engagement with pollution-burdened and underserved communities. In FY 2024, the Superfund Federal Facilities Program will review approximately 35 five-year review reports to fulfill statutory requirements and to inform the public about the protectiveness of remedies.

In FY 2024, the Superfund Federal Facilities Program will target the highest risk sites and focus on activities that bring human exposure and groundwater migration under control. In addition, EPA manages the Docket which contains information reported by federal facilities that manage hazardous waste or from which hazardous substances, pollutants, or contaminants have been or may be released. The Docket: 1) identifies all federal facilities that must be evaluated through the site assessment process; 2) determines whether they pose a risk to human health and the environment sufficient to warrant inclusion on the NPL; and 3) provides a mechanism to make the information available to the public. The Docket is updated semi-annually and has approximately 2,400 facilities listed. EPA anticipates additional engagement on non-NPL federal facilities on the Docket to address new information on and ensure appropriate assessment and referral of these sites to appropriate cleanup programs.

Performance Measure Targets:

Work under this program supports performance results in the Superfund Remedial Program under the Superfund appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$865.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$10,351.0 / -0.5 FTE) This net program change will help address critical gaps in EPA's ability to oversee DoD PFAS cleanup under CERCLA and to adjust core program capacity, including keeping pace with the Agency's oversight role at Federal Facilities NPL sites.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120.

SUPERFUND SPECIAL ACCOUNTS

Background

EPA has the authority to collect funds from parties to support Superfund investigations and cleanups. Section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorizes EPA to retain and use funds received pursuant to a settlement agreement with a party to carry out the purpose of that agreement. Funds are deposited in Superfund special accounts for cleanup at the sites designated in individually negotiated settlement agreements. Through use of special accounts, EPA ensures responsible parties pay for cleanup so that annually appropriated resources from the Superfund Trust Fund, resources made available through the Infrastructure Investment and Jobs Act of 2021 and available Superfund tax receipts are generally conserved for sites where no viable or liable potentially responsible parties (PRPs) can be identified. Each account is set up separately and distinctly and may only be used for the sites and uses outlined in the settlement(s) with the party or parties.

Special accounts are sub-accounts in the Superfund Trust Fund. Pursuant to the specific agreements, which typically take the form of an Administrative Order on Consent or a Consent Decree, EPA uses special account funds to finance site-specific CERCLA response actions at the site for which the account was established. Of the current 1,334 Superfund sites listed as final on the National Priorities List, more than half do not have special account funds available for use. As special account funds may only be used for sites and uses specified in the settlement agreement, special account resources, Superfund tax receipts, and annually appropriated resources are critical to the Superfund Program to clean up Superfund sites.

Special account funds are used to conduct many different site-specific CERCLA response actions, including, but not limited to, investigations to determine the nature and extent of contamination and the appropriate remedy, design, construction and implementation of the remedy, enforcement activities, and post-construction activities. EPA also may provide special account funds as an incentive to another PRP(s) who agrees to perform additional work beyond the PRP's allocated share at the site, which EPA might otherwise have to conduct. Because response actions may take many years, the full use of special account funds also may take many years. Once all site-specific response work pursuant to the settlement agreement is complete and site risks are addressed, special account funds may be used to reimburse EPA for site-specific costs incurred using appropriated resources (*i.e.*, reclassification), allowing the latter resources to be allocated to other sites. Any remaining special account funds are transferred to the Superfund Trust Fund, where they are available for future appropriation by Congress to further support response work.

FY 2022 Special Account Activity

Since the inception of special accounts through the end of FY 2022, EPA has collected approximately $8.1 billion from parties and earned approximately $797.6 million in interest. Approximately 59 percent of the funds have been disbursed or obligated for response actions at sites and plans have been developed to guide the future use of the remaining 41 percent of available special account funds. In addition, at sites with no additional work planned or costs to be incurred by EPA, EPA has transferred approximately $59.0 million to the Superfund Trust Fund. As of the

end of FY 2022, over $4.8 billion has been disbursed for site response actions and approximately $416.5 million has been obligated but not yet disbursed.

The Agency continues to receive site-specific settlement funds that are placed in special accounts each year, so progress on actual obligation and disbursement of funds may not be apparent upon review solely of the cumulative available balance. In FY 2022, EPA deposited approximately $282.9 million into special accounts and disbursed over $172.3 million from special accounts (including reclassifications). At the end of FY 2022, the cumulative amount available in special accounts was over $3.6 billion.

Special accounts vary in size. A limited set of accounts represent the majority of the funds available. At the end of FY 2022, 5 percent of open accounts had greater than $10 million available and held approximately 71 percent of all available funds in open accounts. There are many accounts with lower available balances. 72 percent of all open accounts with up to $1 million available represent approximately 5 percent of available funds in all open accounts.

The balance of over $3.6 billion is not equivalent to an annual appropriation. The funds collected under settlements are intended to finance future response work at particular sites for the length of the project(s). EPA is carefully managing those funds that remain available for site response work and develops plans to utilize the available balance. EPA will continue to plan the use of funds received to conduct site-specific response activities or reclassify and/or transfer excess funds to the Superfund Trust Fund to make annually appropriated funds available for use at other Superfund sites.

For some Superfund sites, although funds are readily available in a special account, remedial action may take time to initiate and complete. The timeframe required to implement a given remedial action is driven largely by site-specific conditions, such as the specific requirements for special account use set forth in the settlement agreement, the stage of site cleanup, the viability of other responsible parties to conduct site cleanup, and the nature of the site contamination. EPA has plans to spend approximately $1.4 billion of currently available special account funds over the next five years, but funds also are planned much further into the future to continue activities, such as conducting five-year reviews or remedy optimization, at sites where waste has been left in place.

Over the past five fiscal years, the EPA has obligated or disbursed more than $1.1 billion from special accounts (excluding reclassifications), resulting in the Superfund Program performing a significant amount of work in addition to work the Agency performed using annually appropriated funds. In FY 2022, EPA disbursed and obligated approximately $237.7 million from special accounts (excluding reclassifications) for response work at more than 695 Superfund sites. Site-specific examples of this work include $25.1 million to support work at the Welsbach & General Gas Mantle site in New Jersey; $10.1 million for the Tronox Navajo Area Uranium Mines on the Navajo Nation; and approximately $7.0 million for the Bunker Hill Mining & Metallurgical Complex site in Idaho. In the absence of special account funds, annually appropriated funds would have been necessary for these response actions to be funded. In other words, EPA was able to fund approximately $237.7 million in response work at sites in addition to the work funded through appropriated and IIJA funds obligated or disbursed in FY 2022.

The summary charts below provide additional information on the status of special accounts. Exhibit 1 illustrates the cumulative status of open and closed accounts, FY 2022 program activity, and planned multi-year uses of the available balance. Exhibit 2 provides the prior year (FY 2022), current year (FY 2023), and estimated future budget year (FY 2024) activity for special accounts. Exhibit 3 provides prior year data (FY 2022) by EPA regional offices to exhibit the geographic use of the funds.

Exhibit 1: Summary of FY 2022 Special Account Transactions and Cumulative Multi-Year Plans for Using Available Special Account Funds

Account Status[1]	Number of Accounts
Cumulative Open	1,142
Cumulative Closed	460
FY 2022 Special Account Activity	**$ in Thousands**
Beginning Available Balance	$3,506,736.7
FY 2022 Activities	
+ Receipts	$282,861.1
- Transfers to Superfund Trust Fund (Receipt Adjustment)	($3,829.0)
+ Net Interest Earned	$63,252.1
- Net Change in Unliquidated Obligations	($76,216.3)
- Disbursements - For EPA Incurred Costs	($156,745.4)
- Disbursements - For Work Party Reimbursements under Final Settlements	($4,755.5)
- Reclassifications	($10,799.6)
End of Fiscal Year (EOFY) Available Balance[2]	$3,600,504.2
Multi-Year Plans for EOFY 2022 Available Balance[3]	**$ in Thousands**
2022 EOFY Available Balance	$3,600,504.2
- Estimates for Future EPA Site Activities based on Current Site Plans[4]	$3,466,727.9
- Estimates for Potential Disbursement to Work Parties Identified in Final Settlements[5]	$83,399.6
- Estimates for Reclassifications for FYs 2023-2025[6]	$40,021.4
- Estimates for Transfers to Trust Fund for FYs 2023-2025[6]	$10,355.2
- Available Balance to be Planned for Site-Specific Response[7]	$0.0

[1] FY 2022 data is as of 10/02/2022. The Beginning Available Balance is as of 10/01/2021.
[2] Numbers may not add due to rounding.
[3] Planning data were recorded in the Superfund Enterprise Management System (SEMS) as of 10/31/2022 in reference to special account available balances as of 10/01/2022.
[4] "Estimates for EPA Future Site Activities" includes all response actions that EPA may conduct or oversee in the future, such as removal, remedial, enforcement, post-construction activities as well as allocation of funds to facilitate a settlement to encourage PRPs to perform the cleanup. Planning data are multi-year and cannot be used for annual comparisons.
[5] "Estimates for Potential Disbursements to Work Parties Identified in Finalized Settlements" includes those funds that have already been designated in a settlement document, such as a Consent Decree or Administrative Order on Consent, to be available to a PRP for reimbursements but that have not yet been obligated.
[6] "Reclassifications" and "Transfers to the Trust Fund" are estimated for three FYs only. These amounts are only estimates and may change as the EPA determines what funds are needed to complete site-specific response activities.
[7] These include resources received by the EPA at the end of the fiscal year and will be assigned for site-specific response activities.

Exhibit 2: Actual and Estimated Special Account Transactions FY 2022 – FY 2024[1]

	FY 2022	FY 2023 estimate	FY 2024 estimate
	$ in Thousands		
Beginning Available Balance	$3,506,736.7	$3,600,504.2	$3,780,838.3
Receipts[1]	$282,861.1	$350,000.0	$350,000.0
Transfers to Trust Fund (Receipt Adjustment)[2]	($3,829.0)	($7,693.4)	($7,693.4)
Net Interest Earned[3]	$63,252.1	$86,000.0	$100,000.0
Net Obligations[2,4]	($237,717.2)	($230,433.8)	($230,433.8)
Reclassifications[2]	($10,799.6)	($17,538.7)	($17,538.7)
End of Year Available Balance[5]	$3,600,504.2	$3,780,838.3	$3,975,172.4

[1] The estimates for Receipts are in line with more typical years.

[2] The estimates for Transfers to Trust Fund, Net Obligations, and Reclassifications are based on a three year historical average.

[3] Net interest earned in FY 2023 and FY 2024 are estimated utilizing economic assumptions for the FY 2024 President's Budget.

[4] Net Obligations reflect special account funds no longer available for obligation, excluding reclassifications and receipts transferred to the Trust Fund.

[5] Numbers may not add due to rounding.

Exhibit 3: FY 2022 Special Account Transactions by EPA Regional Offices

$ in Thousands

	Beginning Available Balance	Receipts	Transfers to Trust Fund (Receipt Adjustment)	Net Interest Earned	Net Obligations	Reclassifications	End of Year Available Balance[2]
Region 1	$167,779.2	$10,556.7	($2,478.8)	$2,829.3	($9,375.8)	($2,601.8)	$166,708.8
Region 2	$563,816.6	$43,068.1	$0.0	$10,947.2	($98,713.9)	$0.0	$519,118.1
Region 3	$167,182.8	$4,405.6	($7.2)	$3,066.0	($18,459.2)	($334.4)	$155,853.5
Region 4	$64,546.9	$6,137.1	($1,192.1)	$565.2	($4,395.5)	($5,453.4)	$60,208.1
Region 5	$467,624.9	$32,573.2	$0.0	$8,791.0	($11,115.7)	($986.6)	$496,886.9
Region 6[3]	$99,568.9	$317,430.1	$0.0	$4,640.3	($3,511.5)	($318.6)	$417,809.1
Region 7	$138,927.3	$3,117.7	$0.0	$2,637.1	($13,132.3)	($808.3)	$130,741.5
Region 8	$280,452.2	$91,984.1	($17.7)	$3,909.1	($24,184.0)	($61.2)	$352,082.6
Region 9[3]	$1,391,408.0	($249,896.2)	($133.2)	$22,266.0	($29,277.0)	($100.5)	$1,134,267.1
Region 10	$165,429.9	$23,484.7	$0.0	$3,600.9	($25,552.2)	($134.9)	$166,828.4
Total	$3,506,736.7	$282,861.1	($3,829.0)	$63,252.1	($237,717.2)	($10,799.6)	$3,600,504.1

[1] FY 2022 data is as of 10/02/2022. The Beginning Available Balance is as of 10/01/2021.

[2] Numbers may not add due to rounding.

[3] The notable decreases in Region 9 and increase in Region 6 are due mostly to funds transferred between Region 9 and Region 6 for Tronox Navajo Abandoned Uranium Mines special accounts in accordance with the Tronox NAUM Resource Allocation Strategy.

SUPERFUND TAX RECEIPTS

(Dollars in Thousands)

	FY 2022	FY 2023 Collections Available	FY 2024 Estimates of Collections to Be Available[98]
Superfund Chemical Taxes	$0	$413,002	$1,686,000
Superfund Taxes on Oil and Petroleum Products	$0	$0	$858,000
Hazardous Substance Superfund Tax Total Receipts	**$0**	**$413,002**	**$2,544,000**

Background

On November 15, 2021, the Infrastructure Investment and Jobs Act [(IIJA), P.L. 117-58] reinstated and modified the excise taxes on certain listed chemicals and imported substances that use as materials in their manufacture or production one or more of those listed chemicals ("Superfund chemical taxes").[99] The Superfund chemical taxes went into effect beginning July 1, 2022 and expire on December 31, 2031. On August 16, 2022, the Inflation Reduction Act [(IRA), (P.L. 117-169)] reinstated and modified the taxes on oil and petroleum products. The oil and petroleum taxes went into effect on January 1, 2023. On December 29, 2022, the Consolidated Appropriations Act, 2023 (P.L. 117-328) included legislative language that allows all tax receipts collected in the Superfund Trust Fund from the prior fiscal year to be available to implement the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) without further congressional appropriation and designated as emergency funding. As of September 30, 2022, there was $413 million of tax receipts in the Superfund Trust Fund which are available to utilize in FY 2023.[100]

FY 2023 and FY 2024 Superfund Tax Receipt Activity

EPA is in the process of developing its budget priorities for the Superfund tax receipts available in FY 2023. EPA will utilize the Superfund tax receipts to implement CERCLA and continue to plan for the use of available tax receipts in FY 2024.

In FY 2023, the U.S Treasury forecasts collecting a total of $2.54 billion in Superfund taxes which will be available for use in FY 2024. The FY 2024 President's Budget proposes to transition the Superfund Remedial, Superfund Emergency Response and Removal, and the Superfund Enforcement programs, and EPA anticipates these programs will be sufficiently funded from the tax receipts to support mission critical functions. EPA will then evaluate available budgets and resources across the Agency's Superfund programs to determine the most appropriate use of the tax receipts. EPA will prioritize the Superfund tax receipts to leverage all funding available to continue to clean up NPL sites at their optimal pace. The Agency will continue its "enforcement first" policy to pursue and compel responsible parties to conduct response work or finance

[98] Estimates are developed by the U.S. Treasury and based on their economic assumptions.
[99] The original Superfund taxes expired on December 31, 1995, and applied to crude oil and imported petroleum products, chemicals used in the production of hazardous substances listed in Title 26 section 4661 and imported substances that use hazardous chemicals as a feedstock, and corporate modified alternative minimum taxable income more than $2 million a year.
[100] Please see: https://treasurydirect.gov/ftp/dfi/tfmb/dfihs0922.pdf.

cleanups. By doing so, annually appropriated and Superfund tax receipt resources will be conserved for cleanups at sites and activities where potentially responsible party (PRP) resources are not available. This will allow the Agency to maximize progress in returning sites to community use. EPA also will continue to start new construction projects to avoid the creation of another backlog; more efficiently fund ongoing construction projects; promptly address emergency and short-term CERCLA response actions; and implement Administration and Agency priorities (*e.g.,* environmental justice, per- and polyfluorinated substances, lead, etc.).

Table of Contents – Leaking Underground Storage Tanks

Environmental Protection Agency
FY 2024 Annual Performance Plan and Congressional Justification

APPROPRIATION: Leaking Underground Storage Tanks
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Leaking Underground Storage Tanks				
Budget Authority	$84,427	$93,205	$108,739	$15,534
Total Workyears	42.3	49.4	54.6	5.2

Bill Language: Leaking Underground Storage Tanks

For necessary expenses to carry out leaking underground storage tank cleanup activities authorized by subtitle I of the Solid Waste Disposal Act, $108,739,000, to remain available until expended, of which $82,070,000 shall be for carrying out leaking underground storage tank cleanup activities authorized by section 9003(h) of the Solid Waste Disposal Act; $26,669,000 shall be for carrying out the other provisions of the Solid Waste Disposal Act specified in section 9508(c) of the Internal Revenue Code: Provided, That the Administrator is authorized to use appropriations made available under this heading to implement section 9013 of the Solid Waste Disposal Act to provide financial assistance to federally recognized Indian tribes for the development and implementation of programs to manage underground storage tanks.

Program Projects in LUST
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Enforcement				
Civil Enforcement	$631	$661	$682	$21
Operations and Administration				
Central Planning, Budgeting, and Finance	$360	$457	$469	$12
Facilities Infrastructure and Operations	$922	$754	$727	-$27
Acquisition Management	$158	$181	$136	-$45
Subtotal, Operations and Administration	$1,440	$1,392	$1,332	-$60
Underground Storage Tanks (LUST / UST)				
LUST / UST	$9,707	$9,991	$14,665	$4,674
LUST Cooperative Agreements	$50,294	$55,040	$65,040	$10,000
LUST Prevention	$22,045	$25,780	$26,669	$889
Subtotal, Underground Storage Tanks (LUST / UST)	$82,045	$90,811	$106,374	$15,563
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$312	$341	$351	$10
TOTAL LUST	**$84,427**	**$93,205**	**$108,739**	**$15,534**

Enforcement

Civil Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$179,062	$205,942	$242,585	$36,643
Leaking Underground Storage Tanks	***$631***	***$661***	***$682***	***$21***
Inland Oil Spill Programs	$2,660	$2,565	$2,665	$100
Total Budget Authority	$182,354	$209,168	$245,932	$36,764
Total Workyears	883.8	998.1	1,041.7	43.6

Program Project Description:

The Civil Enforcement Program's goal is to ensure compliance with the Nation's environmental laws to protect human health and the environment. The Program collaborates with the Department of Justice, and state, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

To protect the Nation's groundwater and drinking water from petroleum and hazardous substance releases from Underground Storage Tanks (UST), the Civil Enforcement Program provides guidance, technical assistance, and training to promote and enforce cleanups at sites with UST systems.[1] The Enforcement and Compliance Assurance Program uses its Leaking Underground Storage Tanks (LUST) resources to oversee cleanups by responsible parties.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will work with states and tribes on a case-by-case basis to prioritize LUST enforcement goals for cleanup. The Program will continue to provide guidance, technical assistance, oversight, and training to enforce cleanups at LUST sites by responsible parties.

Performance Measure Targets:

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

[1] For more information, please refer to: https://www.epa.gov/ust.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$3.0) This net change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. The reduction is offset by an increase in includes critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (+$24.0) This program investment supports enforcement under the Leaking Underground Storage Tanks Program by prioritizing LUST cleanup sites by responsible parties.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic authority); Subtitle I of the Solid Waste Disposal Act.

Operations and Administration

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$36,051	$37,251	$41,609	$4,358
Leaking Underground Storage Tanks	***$158***	***$181***	***$136***	***-$45***
Hazardous Substance Superfund	$23,550	$27,247	$33,758	$6,511
Total Budget Authority	$59,759	$64,679	$75,503	$10,824
Total Workyears	281.7	307.7	355.7	48.0

Program Project Description:

Leaking Underground Storage Tank (LUST) resources in the Acquisition Management Program support the Agency's contract activities.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue to strengthen EPA's capacity to process new, increased, and existing award contract actions in a timely manner; advance EPA utilization of small and disadvantaged businesses; support "Made in America" initiatives; and support supply chain risk management activities for information and communication technology. Efforts to process and award contract actions in a timely manner will be in accordance with Federal Acquisition Regulation (FAR) and guidance from the Office of Management and Budget (OMB) Office of Federal Procurement Policy (OFPP).

EPA must scale up its federal grants and contractor workforce to support underserved communities, ensure the future is "Made in America," and manage global supply chains. This investment will enable national programs to target their critical resources on environmental and programmatic priorities in partnership with the states, tribes, and local governments. The Agency will work with agency partners and stakeholders to include environmental justice considerations into grants policies and requirements and provide underserved communities better awareness and access to the Agency's financial assistance opportunities.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$45.0) This program change reallocates system operations and development resources to Environmental Program Management and Superfund to better align funding needs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$82,781	$87,099	$99,812	$12,713
Leaking Underground Storage Tanks	***$360***	***$457***	***$469***	***$12***
Hazardous Waste Electronic Manifest System Fund	$149	$0	$0	$0
Hazardous Substance Superfund	$29,102	$31,338	$30,207	-$1,131
Total Budget Authority	$112,392	$118,894	$130,488	$11,594
Total Workyears	435.5	469.0	480.0	11.0

Total workyears in FY 2024 include 2.0 FTE funded by TSCA fees.
Total workyears in FY 2024 include 39.0 FTE to support Central Planning, Budgeting, and Finance working capital fund (WCF) services.

Program Project Description:

EPA's financial management community maintains a strong partnership with the Leaking Underground Storage Tanks (LUST) Program. Activities under the Central Planning, Budgeting, and Finance Program support the management of integrated planning, budgeting, financial management, performance and accountability processes, and systems to ensure effective stewardship of LUST resources. This includes providing financial payment and support services for specialized fiscal and accounting services for the LUST Programs.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will ensure secure, efficient, and sound financial and budgetary management of the LUST Program using routine and ad hoc analysis, statistical sampling, and other evidence-based decision-making tools. Building on the work begun in previous years, EPA will continue to monitor and strengthen internal controls with a focus on sensitive payments and property. In addition, the Agency is reviewing its financial systems for efficiencies and effectiveness, identifying gaps, and targeting legacy systems for replacement.

Performance Measure Targets:

Work under this program supports performance results in the Central Planning, Budgeting, and Finance Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5, App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$291,501	$283,330	$305,753	$22,423
Science & Technology	$68,347	$67,500	$72,043	$4,543
Building and Facilities	$24,681	$42,076	$105,009	$62,933
Leaking Underground Storage Tanks	***$922***	***$754***	***$727***	***-$27***
Inland Oil Spill Programs	$854	$682	$641	-$41
Hazardous Substance Superfund	$76,108	$65,634	$71,540	$5,906
Total Budget Authority	$462,412	$459,976	$555,713	$95,737
Total Workyears	310.6	321.8	330.4	8.6

Total work years in FY 2024 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

Leaking Underground Storage Tank (LUST) resources in the Facilities Infrastructure and Operations Program fund the Agency's rent, utilities, and security. The Program also supports centralized administrative activities and support services, including health and safety, environmental compliance and management, facilities maintenance and operations, space planning, sustainable facilities and energy conservation planning and support, property management, mail, and transportation services. Funding for such services is allocated among the major appropriations for the Agency.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility resiliency and sustainability to combat the effects of climate change and ensure a space footprint that accommodates a growing workforce. Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050. For FY 2024, EPA is requesting $509 thousand for rent in the LUST appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level. EPA also will continue working to increase sustainability and reduce carbon emissions through cost-effective solutions.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$27.0) This net program change reduces support for Agency facilities management and operations support. The reduction is offset by increases in rent and transit subsidy costs.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	$133,808	$137,857	$146,642	$8,785
Leaking Underground Storage Tanks	***$312***	***$341***	***$351***	***$10***
Inland Oil Spill Programs	$782	$675	$681	$6
Hazardous Substance Superfund	$16,562	$16,937	$17,364	$427
Total Budget Authority	$151,463	$155,810	$165,038	$9,228
Total Workyears	422.1	421.8	444.3	22.5

Program Project Description:

EPA's Sustainable and Healthy Communities (SHC) Research Program under the Leaking Underground Storage Tanks (LUST) appropriation assists EPA's Office of Underground Storage Tanks, regions, tribes, and states to assess the degradation of Underground Storage Tanks (USTs). This assessment identifies vulnerable tanks before leaks occur and helps develop the tools to track and monitor the status of existing and abandoned USTs and their impact on the community in a changing climate. Specifically, this research provides information and tools designed to enable decision-makers to protect America's land, groundwater resources, and drinking water supplies that could be impacted by the Nation's more than 550 thousand underground fuel storage tanks.[2]

SHC will assess the impacts of climate change on USTs and understand the impacts on communities, including disadvantaged populations and those most vulnerable (*e.g.*, tribes). SHC will develop tools and data to address issues related to USTs to protect public health and the environment based on the best available science.

Recent Accomplishments of the SHC Research Program include:

National Database on Underground Storage Tank Infrastructure (April 2022 and January 2023):[3] In FY 2022, EPA's Office of Research and Development (ORD) continued a training program started in FY 2021 for the National Database on Underground Storage Tank Infrastructure (UST Finder) to describe the capabilities and functions of the model to our federal and state partners and their identified communities. In FY 2022 this training was extended to tribes to provide geospatial data on facilities and tanks in association with drinking water sources, critical data on the aging infrastructure, and facilities that may be impacted by flooding and

[2] For more information, please see: https://www.epa.gov/ust.
[3] For more information, please see: https://www.epa.gov/emergency-response-research/underground-storage-tanks-preparing-and-responding-extreme-events, https://mediaspace.nau.edu/media/t/1_qxjzc7vy, https://www.epa.gov/ust/ust-finder, and https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=c220c67462e14763a8e0c4df75550278.

wildfires. The training helps our partners assess facility risk and triage sites for cleanup and protection of drinking water sources. ORD continues to develop approaches to protect vulnerable populations from UST releases after extreme weather events. A public website is available and being updated to meet additional partner needs with version 2.0 planned by the end of FY 2023.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

Work in this Program will aim to characterize sites and contaminants released from LUSTs identified under the LUST Trust Fund with an emphasis on assisting the Agency, tribes, and states address the backlog of sites for remediation. SHC research will help communities remediate contaminated sites at an accelerated pace and lower costs, while reducing human health and ecological impacts. Resulting methodologies and tools will help localities, tribes, and states return properties to productive use, supporting the Agency's work to safeguard and revitalize communities.

In FY 2024, EPA research will continue to develop models, metrics, and spatial tools for EPA regions, tribes, and states to evaluate the vulnerability of groundwater to LUSTs, the impacts of climate change, and the subsequent human health risks that follow contamination, while considering environmental justice concerns. SHC will continue to focus on developing national datasets to better understand the potential vulnerabilities to LUSTs, such as flooding and drought, and vulnerabilities from LUSTs (*e.g.*, on ground water) to inform decisions to manage tanks. SHC will assist EPA's Underground Storage Tanks Program, tribes, and states by updating technical guidance manuals and evaluations of risk to underground storage tank systems.

Research Planning:

EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published their fourth generation of the StRAPs,[4] which will continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

ORD works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
    - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

[4] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.

- State Engagement
  - EPA's state engagement[5] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$41.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (-$31.0) This program change reflects a decrease to the Sustainable and Healthy Communities LUST research program in their ability to help assess the degradation of underground storage tanks.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Subtitle I of the Solid Waste Disposal Act.

[5] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Underground Storage Tanks (LUST/UST)

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$11,807	$12,021	$14,451	$2,430
Leaking Underground Storage Tanks	***$9,707***	***$9,991***	***$14,665***	***$4,674***
Total Budget Authority	$21,512	$22,012	$29,116	$7,104
Total Workyears	87.8	97.9	108.6	10.7

Program Project Description:

The Leaking Underground Storage Tank (LUST) resources in the LUST/Underground Storage Tank (UST) Program ensure that petroleum contamination is properly assessed and cleaned up. Potential adverse effects from chemicals such as benzene, methyl tertiary-butyl ether, alcohols, or lead scavengers in gasoline and the cost to clean up these contaminants underscore the importance of preventing UST releases and complying with UST requirements. Even a small amount of petroleum released from an UST can contaminate groundwater, the drinking water source for many Americans.

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. This program also supports the Administration's Justice 40 initiative, which seeks to ensure that 40 percent of the overall benefits of certain federal investments flows to communities that are marginalized, underserved, and overburdened by pollution.[6] As of July 2021, there were approximately 53 million people living within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.[7]

Under this program, EPA supports the oversight and implementation of LUST cleanup programs in the states,[8] and directly implements assessments and cleanups of petroleum contamination from

[6] For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[7] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: 1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and 2) population data from the 2015-2019 American Community Survey.
[8] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

USTs in Indian Country. EPA also provides technical assistance and training to states and tribes on how to conduct cleanups and improve the efficiency of state programs. As of September 2022, 59,890 LUST sites had not achieved cleanup completion.[9] In FY 2022, 6,536 LUST cleanups were completed nationally, including 13 in Indian Country. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases.

As the direct implementer of the Program in Indian Country, EPA oversees cleanups by responsible parties, conducts site assessments, remediates contaminated water and soil, and provides alternative sources of drinking water when needed. EPA's funding for Indian Country is the primary source of money for these activities. With few exceptions, tribes do not have independent program resources to pay for assessing and cleaning up UST releases, and in many cases there are no responsible parties available to pay for the cleanups at sites in Indian Country.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan.*

EPA requests an additional $4.5 million and 5.2 FTE to increase the protection of fenceline communities. Requested resources will be used to complete an estimated 11 Trust Fund-led cleanups and five potentially responsible party (PRP)-led cleanups in Indian Country.

Additionally, in FY 2024, EPA will continue to engage in the following activities:

- Work with states and tribes to implement strategies to reduce the number of sites that have not reached cleanup completion and to address new releases as they continue to be confirmed.

- Provide targeted training to states and tribes, such as remediation process optimization and rapid site assessment techniques.

- Continue developmental updates to the Tribal Underground Storage Tank Database (TrUSTD), which was launched in FY 2021. This database provides a central repository for Tribal UST/LUST data that will both improve data analysis on the tribal UST/LUST universe, as well as create a platform that will make it easier for EPA to obtain and share tribal UST/LUST data with the public.

- Monitor the soundness of financial mechanisms, particularly insurance and state cleanup funds that serve as financial assurance for LUST releases and ensure that money is available to pay for cleanups. In addition, EPA will continue to provide analysis and technical assistance to states to help them improve the environmental and financial performance of their cleanup funds.

- Provide support in Indian Country for site assessments, investigations, and remediation of

[9] For more information, please refer to: https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.

high priority sites; enforcement against responsible parties; cleanup of soil and groundwater; alternate water supplies; cost recovery against UST owners and operators; oversight of responsible party lead cleanups; and technical expertise and assistance to tribal governments.

- Provide resources and support to states and tribes to quickly address emergency responses from releases to the environment. Releases from USTs can result in imminent threats to public safety when petroleum or petroleum vapors reach explosive levels in sewers, utility corridors, underground parking structures, and basements near a LUST site. Emergency response incidents across the country show that reporting, initial abatement measures, and free product removal activities may need to be implemented immediately upon discovery of a release to protect human health and the environment.[10]

Performance Measure Targets:

Work under this program supports performance results in the LUST Cooperative Agreements Program under the LUST appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$131.0) This change to fixed and other costs is an increase due to the recalculation of base payroll costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$4,543.0 / +5.2 FTE) This program change is requested to support an additional 11 Trust Fund-led cleanups and five PRP-led cleanups in Indian Country. This investment includes $904.0 thousand for payroll.

Statutory Authority:

Resource Conservation and Recovery Act §§ 8001, 9001-9014.

[10] For more information, please refer to: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

LUST Prevention

Program Area: Underground Storage Tanks (LUST / UST)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Leaking Underground Storage Tanks	***$22,045***	***$25,780***	***$26,669***	***$889***
Total Budget Authority	$22,045	$25,780	$26,669	$889

Program Project Description:

The goal of the Leaking Underground Storage Tank (LUST) Prevention Program is to ensure that groundwater sources are protected from petroleum and associated chemicals leaking from underground storage tanks (USTs). This work supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality, as articulated in Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[11] As of July 2021, approximately 53 million people lived within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.[12]

The LUST Prevention Program provides funding to states[13] and tribes to prevent releases from the 537,706 active USTs by ensuring compliance with federal and state laws through inspections and other activities.[14] Preventing UST releases is more efficient and less costly than cleaning up releases after they occur. The Energy Policy Act (EPAct) of 2005 requires EPA or states to conduct inspections at each regulated UST once every three years. Funding for LUST Prevention grants is subject to an annual, formula-based allocation process.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan.*

[11] For additional information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

[12] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: 1) UST information as of late 2018 to mid-2019 depending on the state from ORD & OUST, UST Map, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and 2) population data from the 2015-2019 American Community Survey.

[13] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.

[14] For more information, please refer to: https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.

Due to the increased emphasis on inspections and release prevention requirements, the number of annual confirmed releases has decreased by 38 percent from FY 2008 to FY 20221 (from 7,364 to 4,568).[15]

EPA estimates that only two percent of the Nation's 125,000 retail fuel locations have the appropriate equipment to store higher blends of ethanol, which means that the remaining UST systems will need some level of upgrade before they can safely and legally store E15. This poses a greater risk of having an accidental oil release in nearby communities. EPA plans to continue the national program launched in FY 2023 to improve the compatibility of UST systems with E15 in fenceline communities. EPA will continue to support inspections to help ensure UST systems are compatible with E15 storage requirements and to triage sites that need more attention.

As of FY 2022, 51 states and territories have reported compliance with the UST Technical Compliance Rate (TCR) measure, which came about after the UST rule was revised in 2015.[16] The TCR includes new compliance measures for spill prevention and overfill requirements as well as additional leak detection requirements. The states that reported TCR in FY 2022 produced a TCR rate of 57 percent, which is consistent with the 58 percent rate from FY 2021 but incorporates several states reporting for the first time.

Major FY 2024 activities include core program priorities, such as inspecting UST facilities to meet the three-year inspection requirement and assisting states in adopting prevention measures (for example: delivery prohibition, secondary containment, and operator training). These activities emphasize bringing UST systems into compliance with release detection and release prevention requirements and minimizing future releases.

A lack of proper operation and maintenance for UST systems is one of the main causes of petroleum releases and was the main impetus for EPA to propose changes to the federal UST rule that was finalized in October 2015. By the end of FY 2024, EPA anticipates that all states that originally had state program approval (SPA) based on the 1998 UST regulation will be granted SPA renewal based on the 2015 UST regulation. In FY 2024, EPA will continue working with a small number of remaining states to reapply for SPA. In addition, in FY 2022, one state was approved for SPA for the first time, and EPA anticipates two more new states will apply and be approved for SPA for the first time by the end of FY 2024.

EPA is responsible for implementing the UST regulations in Indian Country, in partnership with the tribes. Resources will be used to provide support with all aspects of the tribal prevention programs, including the development of inspection capacity. This includes providing money to support training for tribal staff and educating owners and operators in Indian Country about UST compliance requirements and, in some cases, assisting tribal staff to receive federal inspector credentials to perform inspections on behalf of EPA.

[15] For more information, please refer to https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.
[16] Beginning in FY 2023, TCR will be the measure reported from the remainder of the states.

Performance Measure Targets:

(PM UST01) Number of confirmed releases at UST facilities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target					No Target Established	5,150	5,075	5,000	Releases
Actual	5,678	5,654	5,375	4,944	4,991	4,568			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$889.0) This program change requests grant funding to support fenceline communities by increasing state inspections that will focus on ensuring UST systems are compatible with E15.

Statutory Authority:

Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.

LUST Cooperative Agreements
Program Area: Underground Storage Tanks (LUST / UST)
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Leaking Underground Storage Tanks	***$50,294***	***$55,040***	***$65,040***	***$10,000***
Total Budget Authority	$50,294	$55,040	$65,040	$10,000

Program Project Description:

This funding is used to award cooperative agreements to states[17] to implement the Leaking Underground Storage Tank (LUST) Program. The LUST Program ensures that petroleum contamination is properly assessed and cleaned up by providing states with funding to address releases, including in groundwater, the primary drinking water source for many Americans.[18]

This program supports the Administration's priority of mitigating the negative environmental impacts to communities that are historically underserved, marginalized, and adversely affected by persistent poverty and inequality as articulated in Executive Order 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*.[19] This program also supports the Administration's Justice 40 initiative, which seeks to ensure that 40 percent of the overall benefits of certain federal investments flows to communities that are marginalized, underserved, and overburdened by pollution. As of July 2021, there were approximately 53 million people living within a quarter mile of an active UST facility, representing 16 percent of the total U.S. population. These communities tend to be more minority and lower income than the U.S. population as a whole.[20]

LUST funding supports states in managing, overseeing, and enforcing cleanups at LUST sites. At the end of FY 2022 there were 59,890 LUST sites nationally that had not reached cleanup completion. States are focusing on increasing the efficiency of LUST cleanups, leveraging private and state resources, and enabling community redevelopment. Cleaning up LUST sites protects people from exposure to contaminants and makes land available for reuse.

[17] States as referenced here also include the District of Columbia and five territories as described in the definition of state in the Solid Waste Disposal Act.
[18] Almost half of the Nation's overall population and 99 percent of the population in rural areas rely on groundwater for drinking water. (See *EPA 2000 Water Quality Inventory Report*, https://archive.epa.gov/water/archive/web/html/2000report_index.html).
[19] For more information, please refer to: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.
[20] U.S. EPA, Office of Land and Emergency Management 2021. Data collected includes: (1) UST information as of late-2018 to mid-2019 depending on the state from ORD & OUST, UST Map, https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc; and (2) population data from the 2015-2019 American Community Survey.

EPA's backlog study characterized the national inventory of sites that have not reached cleanup completion. The study found that almost half of the releases were 15 years old or older, and that groundwater was contaminated at 78 percent of these sites. Remediating groundwater contamination is often more technically complex, takes longer, and is more expensive than remediating soil contamination.[21] Potential adverse health effects from chemicals in gasoline such as benzene, methyl tertiary-butyl ether (MTBE), alcohols, or lead scavengers contribute to the importance of cleaning up these contaminants and increase the cost of cleaning up these sites.[22]

An EPA study published in 2018 determined the impact of high-profile UST releases on housing prices. The study found that high profile UST releases decrease nearby property values by two to six percent. Once a cleanup is completed, nearby property values rebound by a similar margin.[23]

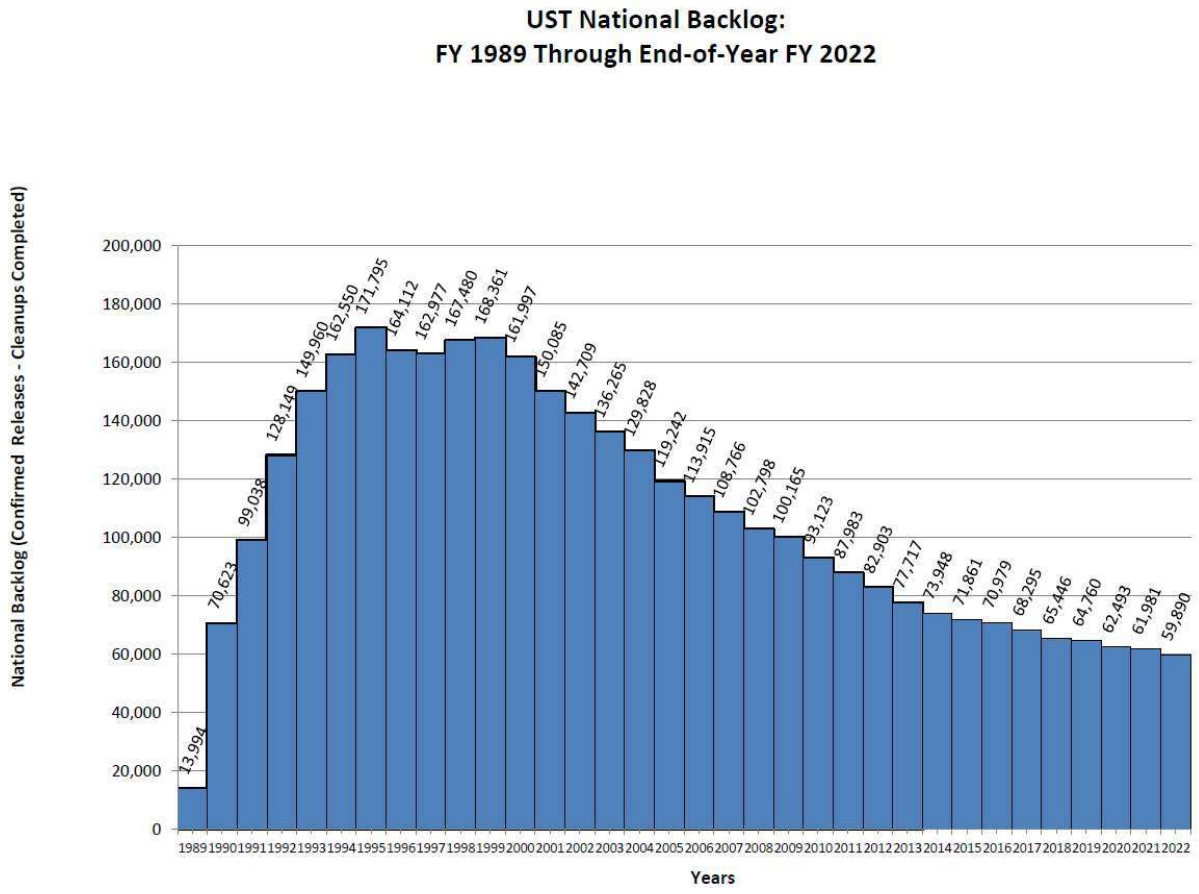
FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan.*

EPA requests an additional $10 million in extramural funding to reduce the size of the national backlog. Additional resources will be used to cleanup an additional 570 sites this year in communities across the country.

The table below shows the progress made on the UST national backlog. EPA will continue to collect and analyze information about the initiation and cleanup of UST releases.[24]

[21] Please refer to *The National LUST Cleanup Backlog: A Study Of Opportunities*, September 2011, http://www.epa.gov/ust/national-lust-cleanup-backlog-study-opportunities.
[22] Please see *Technologies for Treating MTBE and Other Fuel Oxygenates*, May 2004, pages 2-6 and 2-7, https://nepis.epa.gov/Exe/ZyPDF.cgi/10004E5P.PDF?Dockey=10004E5P.PDF
[23] Guignet, D., Jenkins, R., Ranson, M., & Walsh, P. J. (2018). Contamination and incomplete information: Bounding implicit prices using high-profile leaks. *Journal of environmental economics and management*, *88*, 259-282. https://doi.org/10.1016/j.jeem.2017.12.003.
[24] Data from Annual Report of UST Measures End of Fiscal Year 2022, https://www.epa.gov/system/files/documents/2022-11/ca-22-34.pdf.



In FY 2024, EPA will continue to engage in the following activities with base resources:

- Collaborate with states to develop and implement flexible, state-driven strategies to reduce the number of remaining LUST sites that have not reached cleanup completion and address new releases that are confirmed each year. Through the cooperative efforts between EPA and states, the backlog was reduced by approximately 42 percent between the end of 2008 and the end of 2022 (from 102,798 to 59,890).[25] This also includes providing resources to states to perform core cleanup work.

- Leverage funding by developing best practices and supporting management, guidance, and enforcement activities through LUST Cleanup Cooperative Agreements. LUST Cleanup Cooperative Agreements help achieve approximately 7,000 cleanups annually, whereas, if EPA were to apply the funding directly, only about 366 cleanups would occur annually (assuming an average cleanup cost of $150 thousand per site).[26]

- Provide resources and support to states to quickly address emergency responses from releases to the environment. Emergency response incidents across the country show that reporting, initial abatement measures, and free product removal activities need to be

[25] For more information, please refer to: http://www.epa.gov/ust/ust-performance-measures.
[26] Average cleanup cost per site based on ASTSWMO's 2019 Annual State Fund Survey Results at: http://astswmo.org/2019-annual-state-fund-survey/.

implemented immediately upon discovery of a release to protect human health and the environment.[27]

The Energy Policy Act (EPAct) of 2005 requires that states receiving LUST Cooperative Agreements funding meet certain release prevention requirements, such as inspecting every facility at least once every three years. In FY 2024, EPA will continue to factor state compliance with EPAct requirements into LUST Cleanup Cooperative Agreement decisions.

Performance Measure Targets:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	8,600	11,200	11,200	11,200	11,200	7,439	7,125	6,970	Cleanups
Actual	8,775	8,128	8,358	7,211	7,271	6,536			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10,000.0) This program change is requested to increase EPA's progress in addressing the national backlog. Additional extramural resources are estimated to result in cleanups at an additional 570 sites across the country.

Statutory Authority:

Resource Conservation and Recovery Act § 9003(h)(7).

[27] For more information, please refer to: http://astswmo.org/compendium-of-emergency-response-actions-at-underground-storage-tank-sites-version-2/.

Table of Contents – Inland Oil Spill Programs

Environmental Protection Agency
FY 2024 Annual Performance Plan and Congressional Justification

APPROPRIATION: Inland Oil Spill Programs
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Inland Oil Spill Programs				
Budget Authority	$21,709	$22,072	$27,551	$5,479
Total Workyears	76.9	85.8	99.8	14.0

Bill Language: Inland Oil Spill Programs

For expenses necessary to carry out the Environmental Protection Agency's responsibilities under the Oil Pollution Act of 1990, including hire, maintenance, and operation of aircraft, $27,551,000, to be derived from the Oil Spill Liability trust fund, to remain available until expended.

Program Projects in Inland Oil Spill Programs
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Compliance				
Compliance Monitoring	$278	$649	$2,152	$1,503
Underground Storage Tanks (LUST / UST)				
LUST / UST	-$1	$0	$0	$0
Enforcement				
Civil Enforcement	$2,660	$2,565	$2,665	$100
Oil				
Oil Spill: Prevention, Preparedness and Response	$17,136	$17,501	$21,412	$3,911
Operations and Administration				
Facilities Infrastructure and Operations	$854	$682	$641	-$41
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$782	$675	$681	$6
TOTAL Inland Oil Spill Programs	**$21,709**	**$22,072**	**$27,551**	**$5,479**

Compliance

Compliance Monitoring
Program Area: Compliance
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$108,996	$112,730	$162,105	$49,375
Inland Oil Spill Programs	***$278***	***$649***	***$2,152***	***$1,503***
Hazardous Substance Superfund	$1,278	$1,017	$1,032	$15
Total Budget Authority	$110,552	$114,396	$165,289	$50,893
Total Workyears	438.5	478.9	520.4	41.5

Program Project Description:

The Compliance Monitoring Program is a component of EPA's Office of Enforcement and Compliance Assurance Program (OECA) that allows the Agency to detect noncompliance and promotes compliance with the Nation's environmental laws. Under this program, EPA integrates the data from the Facility Response Plans (FRP) and Spill Prevention, Control, and Countermeasure (SPCC) systems into EPA's Integrated Compliance Information System (ICIS). Data related to compliance with FRP and SPCC requirements are made available to the public through EPA's Enforcement and Compliance History Online (ECHO) website.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Agency will continue accelerating efforts to modernize ICIS and support better integration with ECHO. EPA will continue to implement its comprehensive action plan for integrating Environmental Justice (EJ) and climate change considerations throughout all aspects of the Program, including a performance measure tracking the percentage of inspections affecting communities with potential EJ concerns. This effort answers the President's call to "strengthen enforcement of environmental violations with disproportionate impact on overburdened or underserved communities through the Office of Enforcement and Compliance Assurance" [*EO 14008, sec. 222(b)(i)*], and to "combat the climate crisis with bold, progressive action" (*EO 14008, sec. 201*). It also will improve the availability of FRP and SPCC compliance data to EPA, states, and the public.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$25.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$1,528.0) This program change increase will allow EPA to accelerate its efforts to modernize the Integrated Compliance Information System, support better integration with the Enforcement and Compliance History Online website, and enhance efforts to address compliance concerns in disadvantaged and other environmental justice communities.

Statutory Authority:

Oil Pollution Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Enforcement

Civil Enforcement
Program Area: Enforcement
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Hold Environmental Violators and Responsible Parties Accountable

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$179,062	$205,942	$242,585	$36,643
Leaking Underground Storage Tanks	$631	$661	$682	$21
Inland Oil Spill Programs	***$2,660***	***$2,565***	***$2,665***	***$100***
Total Budget Authority	$182,354	$209,168	$245,932	$36,764
Total Workyears	883.8	998.1	1,041.7	43.6

Program Project Description:

The Civil Enforcement Program's goal is to protect human health and the environment by ensuring compliance with the Nation's environmental laws. The Civil Enforcement Program collaborates with the Department of Justice (DOJ), state, local, and tribal governments to ensure consistent and fair enforcement of environmental laws and regulations. The Civil Enforcement Program develops, litigates, and settles administrative and civil judicial cases against violators of environmental laws.

The Civil Enforcement Program's enforcement of Section 311 of the Clean Water Act, as amended by the Oil Pollution Act of 1990, is designed to ensure compliance with the prohibition against oil and hazardous substance spills that violate the statute, as well as the oil spill prevention, response planning, and other regulatory requirements. The Civil Enforcement Program develops policies, issues administrative compliance and penalty orders, and refers civil judicial actions to the DOJ to address spills, violations of spill prevention regulations, response planning regulations and other violations (*e.g.*, improper dispersant use or noncompliance with orders). The Program also assists in the recovery of cleanup costs expended by the government and provides support for field investigations of spills; Facility Response Plans; Spill Prevention, Control, and Countermeasures; and other requirements.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.1, Hold Environmental Violators and Responsible Parties Accountable in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to streamline the Civil Enforcement Program, prioritize resources to achieve regulatory compliance, and address oil or hazardous substance spills and deter future spills. The Program will focus on facilities where enforcement will promote deterrence, tackle the climate crisis, integrate environmental justice considerations in EPA's work to protect overburdened and underserved communities that have borne a disproportionate burden of pollution, and to ensure that spills are prevented, cleaned up, and, where appropriate, mitigated.

The Civil Enforcement Program continues to coordinate with the Criminal Enforcement Program, as appropriate.

Performance Measure Targets:

Work under this program supports performance results in the Civil Enforcement Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$222.0) This net change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs. It also includes critical agencywide infrastructure support for Executive Order 14028 cybersecurity requirements, electronic discovery for FOIA and litigation support, and implementation of Trusted Vetting 2.0.

- (-$122.0) This program change is a slight reduction to enforcement efforts under the Oil Pollution Act.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute); Clean Water Act; Oil Pollution Act.

Oil

Oil Spill: Prevention, Preparedness and Response
Program Area: Oil
Goal: Safeguard and Revitalize Communities
Objective(s): Prepare for and Respond to Environmental Emergencies

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Inland Oil Spill Programs	***$17,136***	***$17,501***	***$21,412***	***$3,911***
Total Budget Authority	$17,136	$17,501	$21,412	$3,911
Total Workyears	63.7	71.6	85.6	14.0

Program Project Description:

The Oil Spill Prevention, Preparedness and Response Program protects the American people by preventing, preparing for, responding to, and monitoring inland oil spills. EPA is the driving force and primary federal responder for inland oil spills, which include but are not limited to transportation-related spills from pipelines, trucks, railcars, and other transportation systems. In addition, the Program may provide technical assistance, assets, and outreach to industry, states, and local communities as part of the Agency's effort to prevent, prepare for, and respond to oil incidents.[1]

There are approximately 550,400 Spill Prevention, Control, and Countermeasure (SPCC) facilities, including a subset of 3,821 Facility Response Plan (FRP) facilities identified as high risk due to their size and location. The Oil Pollution Act requires certain facilities that store and use oil to develop response plans that are reviewed by EPA, ensuring access and availability of response resources in the event a discharge to navigable waters or adjoining shorelines occurs.

To minimize the potential impact to human health and the environment, the Agency targets inspections at facilities that pose the highest risk. Inspections are essential to ensuring that facility staff are knowledgeable on prevention and response plans and can quickly put these plans into action. The Agency currently inspects approximately 0.07 percent of SPCC facilities per year. In FY 2022, EPA found 92.8 percent of SPCC facilities inspected to be out of compliance at the time of inspection.[2] The Agency currently inspects approximately 11.7 percent of FRP facilities per year. In FY 2022, EPA continued off-site compliance monitoring activities for 23 SPCC and 225 FRP facilities to further expand compliance evaluation tools available to inspectors during the COVID-19 pandemic.[3] EPA plans to continue to use off-site compliance monitoring to complement on-site inspections.[4]

[1] For more information, please refer to: https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations.
[2] Information from the EPA Oil database.
[3] In FY 2021, the Agency conducted 348 offsite compliance monitoring activities for SPCC and FRP.
[4] For more information, please refer to: https://www.epa.gov/sites/production/files/2020-07/documents/inspectioncommittments_0.pdf.

EPA receives spill notifications through the National Response Center. The Agency is responsible for ensuring all inland oil spills are promptly responded to by working closely with state, tribal, and local first responders on smaller spills and leading the response on larger spills. EPA accesses the Oil Spill Liability Trust Fund, administered by the U.S. Coast Guard, to obtain reimbursement funds for site-specific oil spill response activities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.3, Prepare for and Respond to Environmental Emergencies in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, the Oil Spill Prevention, Preparedness and Response Program will:

- Inspect oil facilities to ensure compliance with prevention and preparedness requirements. Inspections involve examining and evaluating the facility's prevention, preparedness, and response plans and discussing critical components of them with facility staff. EPA also will conduct unannounced exercises at FRP facilities to test the facility owner/operator's ability to execute preparedness and response plans. Finally, EPA will conduct off-site compliance monitoring activities for oil facilities to allow inspectors to determine compliance from remote locations as another tool to promote regulatory compliance.

- Focus inspections at high-risk facilities. High-risk facilities are identified using a number of factors including oil spill history; proximity to environmentally sensitive receptors or drinking water intakes; citizen complaints or federal, state, tribal or local agency referrals based on significant non-compliance; or the potential to cause substantial harm to the environment by discharging oil to navigable waters. The Program will increase inspections and compliance assistance at SPCC and FRP-regulated facilities, focusing on high-risk facilities located in communities with environmental justice concerns and communities with increased climate-related risks (*e.g.*, extreme weather, flooding, wildfires, etc.). These inspection activities are critical to ensuring regulatory compliance at facilities with aging oil storage infrastructure that could pose a higher risk of an oil spill, thereby substantially impacting downstream disadvantaged communities. The program expects to conduct an additional 150 inspections, compared to FY 2022, at SPCC and FRP-regulated facilities. The Program will develop additional compliance assistance materials, such as factsheets and facility guidance, reflecting the potential impacts of climate change and environmental justice.

- Maintain the National Contingency Plan's Subpart J product schedule, which highlights a list of products that may be used to mitigate oil spills.

- Target exercises to improve preparedness for communities with environmental justice concerns and increase incorporation of environmental justice into preparedness activities overall.

- Maintain the National Oil Database, which compiles data for the Program. The database assists in managing SPCC and FRP information obtained during inspections, as well as,

serving as a historical repository. The Oil Database provides more efficient access to regulated facility information, streamlining inspection activities and identifying regulatory applicability. In FY 2024, EPA will continue to upgrade the National Oil Database to allow easier data entry, retrieval, and analysis to improve program implementation.

- Deliver required annual oil spill inspector training to federal inspectors and oil spill response training to On-Scene Coordinators and provide outreach to federal/state partners and industry stakeholders to improve compliance with regulatory requirements. EPA will continue developing inspector training materials and methods for inspectors to best assess SPCC and FRP facilities' incorporation of risks from natural hazards and climate change into their oil spill prevention and response plans.

- Under the Clean Water Act (CWA) authority, Subpart J of the National Contingency Plan (NCP) sets forth regulatory requirements for the use of chemical agents as an oil spill mitigation technology. In FY 2023, the Agency expects to finalize amendments to Subpart J of the NCP that include revisions to the existing product listing, testing protocols, and authorization of use procedures to complement the new provisions for dispersant monitoring that were finalized in 2021. In FY 2024, the Agency will develop guidance for implementation of the new regulatory provisions.

Performance Measure Targets:

Work under this program directly supports performance results in the Superfund: EPA Emergency Preparedness Program under the Superfund appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$333.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$3,578.0 / +14.0 FTE) This program change is an increase to support Oil Spill Prevention, Preparedness, and Response activities in fenceline communities at risk from nearby oil facilities, including providing increased outreach/compliance assistance, improved inspector training, Oil Database improvements, regulatory updates, and inspections at regulated facilities to ensure facilities have measures in place to prevent oil accidents. In addition, resources will be used to develop inspector training materials and methods. This investment includes $2.5 million for payroll.

Statutory Authority:

The Clean Water Act Section 311 as amended by the Oil Pollution Act.

Operations and Administration

Facilities Infrastructure and Operations
Program Area: Operations and Administration
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$291,501	$283,330	$305,753	$22,423
Science & Technology	$68,347	$67,500	$72,043	$4,543
Building and Facilities	$24,681	$42,076	$105,009	$62,933
Leaking Underground Storage Tanks	$922	$754	$727	-$27
Inland Oil Spill Programs	***$854***	***$682***	***$641***	***-$41***
Hazardous Substance Superfund	$76,108	$65,634	$71,540	$5,906
Total Budget Authority	$462,412	$459,976	$555,713	$95,737
Total Workyears	310.6	321.8	330.4	8.6

Total work years in FY 2024 include 5.4 FTE to support Facilities Infrastructure and Operations working capital fund (WCF) services.

Program Project Description:

EPA's Facilities Infrastructure and Operations Program in the Inland Oil Spill Programs appropriation supports the Agency's rent, transit subsidy, and facility operations. Funding is allocated for such services among the major appropriations for the Agency.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA will continue reconfiguring EPA's workplaces with the goal of reducing long-term rent costs while increasing EPA facility sustainability to combat the effects of climate change and ensuring a space footprint that accommodates a growing workforce. Space reconfiguration enables EPA to reduce its footprint to create a more efficient, collaborative, and technologically sophisticated workplace. However, even if modifications are kept to a minimum, each move requires initial funding to achieve long-term cost avoidance and sustainability goals. These investments support sustainable federal infrastructure, a clean energy future, and goals to achieve net-zero emissions by 2050. For FY 2024, EPA is requesting $483 thousand for rent in the Inland Oil Spill Programs appropriation. EPA uses a standard methodology to ensure that rent charging appropriately reflects planned and enacted resources at the appropriation level. EPA also will continue working to increase sustainability and reduce carbon emissions through cost-effective solutions.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$41.0) This net program change reduces Agency facilities management and operations support. The reduction is offset by an increase in transit subsidy costs.

Statutory Authority:

Federal Property and Administration Services Act; Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).

Research: Sustainable Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology	$133,808	$137,857	$146,642	$8,785
Leaking Underground Storage Tanks	$312	$341	$351	$10
Inland Oil Spill Programs	***$782***	***$675***	***$681***	***$6***
Hazardous Substance Superfund	$16,562	$16,937	$17,364	$427
Total Budget Authority	$151,463	$155,810	$165,038	$9,228
Total Workyears	422.1	421.8	444.3	22.5

Program Project Description:

EPA is the lead federal on-scene coordinator for inland oil spills and provides technical assistance, when needed, for coastal spills.[4] EPA is responsible for oil spill preparedness, response, and associated research; as well as having the lead role to develop protocols for testing spill response products and agents, which is planned with the assistance of partner agencies including the United States Coast Guard, United States Department of the Interior, United States Department of Transportation, and United States Department of Commerce.

EPA's Sustainable and Healthy Communities (SHC) Research Program for inland oil spills, funded through the Oil Spill Liability Trust Fund,[5] provides federal, tribal, state, and community decision-makers with analysis and tools to protect human and ecosystem health from the negative impacts of oil spills. EPA assists communities, including economically, socially, and environmentally disadvantaged or impacted communities, by supporting local officials in their response to a spill. As a result of EPA's research, responders can make more informed decisions on approaches and methods to reduce the spread and impact of coastal and inland oil spills, including pipeline and railway spills. Additionally, EPA provides essential remediation expertise that assists communities in addressing potential impacts on their environmental resources associated with pipeline and railway oil spills.

The research performed also supports the Agency's National Contingency Plan (NCP) Product Schedule.[6] The NCP is used nationwide by emergency responders and federal agencies when responding to oil spills. EPA's role is to develop and evaluate response approaches that involve the use of bioremediation, dispersants, and other additives. EPA also assesses impacts to surface water and groundwater, especially if they affect drinking water supplies. The Agency relies on this research to provide testing procedures that inform cleanup decisions during an emergency spill response.

[4] For more information, please see: https://www.epa.gov/emergency-response/epas-scene-coordinators-oscs.
[5] For more information, please see: https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/About_NPFC/OSLTF/.
[6] For more information, please see: http://www.epa.gov/emergency-response/national-contingency-plan-subpart-j.

Recent Accomplishments of the SHC Research Program include:[7]

Improving efficiency of at-sea, in situ oil spill burns:[8] Researchers advanced EPA's and the nation's capabilities to respond to oil spills by providing insight into operational strategies that can be applied during at-sea oil spill response. The presence of waves at sea increases the challenge for *in situ* oil burns due to heat loss to the underlying water and encouraging flame extinction. EPA conducted research to enhance combustion by shortening the oil plume core thickness to allow greater air penetration and radiant heat feedback to the burning oil. Oil consumption, combustion efficiency, residue characterization, and emissions were studied to optimize performance of technologies to remediate potential future at-sea spills.

FY 2024 Activities and Performance Plan:

Work in this Program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022-2026 EPA Strategic Plan*.

In FY 2024, the oil spill program will conduct research to support regulatory activities and protocol development for EPA's programs and to support state-delegated programs. This Program will provide on-demand technical support at federal, tribal, or state-managed cleanup sites, as well as assistance during emergencies. The Program will continue to conduct health, environmental engineering, and ecological research, and prepare planning and analysis tools for localities nationwide that will facilitate regulatory compliance and improve environmental and health outcomes.

Specific activities in FY 2024 include:

- Developing a reference guide for the Subpart J decision rule, a surface washing agent effectiveness protocol in fresh and salt water, and screening for new National Contingency Plan (NCP) reference oils.

- Understanding the toxicity of oil-agent mixtures and potential exposure to marine biota, and the long-term fate of these materials in the environment including 1) determining the sensitivity of cold-water species to oils treated with Alternative Response Measures (both chemical agents and in situ burns); 2) assessing the ecological relevance of laboratory toxicity tests; 3) characterizing biodegradation of oil exposed to treating agents by high-latitude microbial cultures; and 4) evaluating Low Sulfur Fuel Oils.

Research Planning:
EPA research is built around six integrated and transdisciplinary research programs. Each of the six programs is guided by a Strategic Research Action Plan (StRAP) that reflects the research needs of Agency program and regional offices, states, and tribes, and is planned with their active involvement. Each research program has developed and published their fourth generation of the

[7] For a more complete view of accomplishments, please see: https://www.epa.gov/research/national-research-programs.
[8] For more information, please see: https://www.sciencedirect.com/science/article/pii/S0025326X2101050X.

StRAPs[9] which continue the practice of conducting innovative scientific research aimed at solving the problems encountered by the Agency and its stakeholders.

The Office of Research and Development (ORD) works with various groups, including communities, to ensure the integrity and value of its research through a variety of mechanisms that include:

- EPA's Board of Scientific Counselors (BOSC)
  - ORD meets regularly with this committee, which provides advice and recommendations to ORD on technical and management issues of its research programs.

- State Engagement
  - EPA's state engagement[10] is designed to inform states about their role within EPA and EPA's research programs, and to better understand the science needs of state environmental and health agencies.

- Tribal Partnerships
  - Key tribal partnerships are established through the Tribal Science Program which provides a forum for the interaction between tribal and Agency representatives. These interactions identify research of mutual benefit and lead to collaborations on important tribal environmental science issues.

Performance Measure Targets:

Work under this program supports performance results in the Research: Sustainable and Healthy Communities Program under the S&T appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$5.0) This change to fixed and other costs is a decrease due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$11.0) This program change reflects an increase to the Sustainable and Healthy Communities Oil Spills research program.

Statutory Authority:

Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98-80, 97 Stat. 485 (codified as Title 5 App.) (EPA's organic statute); Oil Pollution Act.

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[9] The StRAPs are available and located here: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026.
[10] For more information, please see: https://www.epa.gov/research/epa-research-solutions-states.

Table of Contents – State and Tribal Assistance Grants

APPROPRIATION: State and Tribal Assistance Grants
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants				
Budget Authority	$3,088,886	$4,493,728	$5,855,624	$1,361,896
Total Workyears	8.2	7.5	128.6	121.1

Bill Language: State and Tribal Assistance Grants

For environmental programs and infrastructure assistance, including capitalization grants for State revolving funds and performance partnership grants, $5,855,624,000, to remain available until expended, of which—

(1) $1,638,874,000 shall be for making capitalization grants for the Clean Water State Revolving Funds under title VI of the Federal Water Pollution Control Act; and of which $1,126,105,000 shall be for making capitalization grants for the Drinking Water State Revolving Funds under section 1452 of the Safe Drinking Water Act: Provided, That for fiscal year 2024, to the extent there are sufficient eligible project applications and projects are consistent with State Intended Use Plans, not less than 15 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants shall be used by the State for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities: Provided further, That for fiscal year 2024, funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants may, at the discretion of each State, be used for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities: Provided further, That the Administrator is authorized to use up to $1,500,000 of funds made available for the Clean Water State Revolving Funds under this heading under title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381) to conduct the Clean Watersheds Needs Survey: Provided further, That notwithstanding section 603(d)(7) of the Federal Water Pollution Control Act, the limitation on the amounts in a State water pollution control revolving fund that may be used by a State to administer the fund shall not apply to amounts included as principal in loans made by such fund in fiscal year 2024 and prior years where such amounts represent costs of administering the fund to the extent that such amounts are or were deemed reasonable by the Administrator, accounted for separately from other assets in the fund, and used for eligible purposes of the fund, including administration: Provided further, That for fiscal year 2024, notwithstanding the provisions of subsections (g)(1), (h), and (l) of section 201 of the Federal Water Pollution Control Act, grants made under title II of such Act for American Samoa, Guam, the Commonwealth of the Northern Marianas, the United States Virgin Islands, and the District of Columbia may also be made for the purpose of providing assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair,

or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments: Provided further, That for fiscal year 2024, notwithstanding the provisions of such subsections (g)(1), (h), and (l) of section 201 and section 518(c) of the Federal Water Pollution Control Act, funds reserved by the Administrator for grants under section 518(c) of the Federal Water Pollution Control Act may also be used to provide assistance: (1) solely for facility plans, design activities, or plans, specifications, and estimates for any proposed project for the construction of treatment works; and (2) for the construction, repair, or replacement of privately owned treatment works serving one or more principal residences or small commercial establishments: Provided further, That for fiscal year 2024, notwithstanding any provision of the Federal Water Pollution Control Act and regulations issued pursuant thereof, up to a total of $2,000,000 of the funds reserved by the Administrator for grants under section 518(c) of such Act may also be used for grants for training, technical assistance, and educational programs relating to the operation and management of the treatment works specified in section 518(c) of such Act: Provided further, That for fiscal year 2024, funds reserved under section 518(c) of such Act shall be available for grants only to Indian tribes, as defined in section 518(h) of such Act and former Indian reservations in Oklahoma (as determined by the Secretary of the Interior) and Native Villages as defined in Public Law 92–203: Provided further, That for fiscal year 2024, notwithstanding the limitation on amounts in section 518(c) of the Federal Water Pollution Control Act, up to a total of 2 percent of the funds appropriated, or $30,000,000, whichever is greater, and notwithstanding the limitation on amounts in section 1452(i) of the Safe Drinking Water Act, up to a total of 2 percent of the funds appropriated, or $20,000,000, whichever is greater, for State Revolving Funds under such Acts may be reserved by the Administrator for grants under section 518(c) and section 1452(i) of such Acts: Provided further, That for fiscal year 2024, notwithstanding the amounts specified in section 205(c) of the Federal Water Pollution Control Act, up to 1.5 percent of the aggregate funds appropriated for the Clean Water State Revolving Fund program under the Act less any sums reserved under section 518(c) of the Act, may be reserved by the Administrator for grants made under title II of the Federal Water Pollution Control Act for American Samoa, Guam, the Commonwealth of the Northern Marianas, and United States Virgin Islands: Provided further, That for fiscal year 2024, notwithstanding the limitations on amounts specified in section 1452(j) of the Safe Drinking Water Act, up to 1.5 percent of the funds appropriated for the Drinking Water State Revolving Fund programs under the Safe Drinking Water Act may be reserved by the Administrator for grants made under section 1452(j) of the Safe Drinking Water Act: Provided further, That 10 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and 14 percent of the funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants shall be used by the State to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these), and shall be so used by the State only where such funds are provided as initial financing for an eligible recipient or to buy, refinance, or restructure the debt obligations of eligible recipients only where such debt was incurred on or after the date of enactment of this Act, or where such debt was incurred prior to the date of enactment of this Act if the State, with concurrence from the Administrator, determines that such funds could be used to help address a threat to public health from heightened exposure to lead in drinking water or if a Federal or State emergency declaration has been issued due to a threat to public health from heightened exposure to lead in a municipal drinking water supply before the date of enactment of this Act: Provided further, That in a State in which such an emergency declaration has been issued, the State may use more than 14 percent of the funds made available under this title to the State for Drinking

Water State Revolving Fund capitalization grants to provide additional subsidy to eligible recipients: Provided further, That notwithstanding section 1452(o) of the Safe Drinking Water Act (42 U.S.C. 300j–12(o)), the Administrator shall reserve $12,000,000 of the amounts made available for fiscal year 2024 for making capitalization grants for the Drinking Water State Revolving Funds to pay the costs of monitoring for unregulated contaminants under section 1445(a)(2)(C) of such Act: Provided further, That no amounts may be rescinded from amounts that were designated by the Congress as an emergency requirement pursuant to a Concurrent Resolution on the Budget or the Balanced Budget and Emergency Deficit Control Act of 1985;

(2) $36,386,000 shall be for architectural, engineering, planning, design, construction and related activities in connection with the construction of high priority water and wastewater facilities in the area of the United States- Mexico Border, after consultation with the appropriate border commission: Provided, That no funds provided by this appropriations Act to address the water, wastewater and other critical infrastructure needs of the colonias in the United States along the United States-Mexico border shall be made available to a county or municipal government unless that government has established an enforceable local ordinance, or other zoning rule, which prevents in that jurisdiction the development or construction of any additional colonia areas, or the development within an existing colonia the construction of any new home, business, or other structure which lacks water, wastewater, or other necessary infrastructure;

(3) $40,000,000 shall be for grants to the State of Alaska to address drinking water and wastewater infrastructure needs of rural and Alaska Native Villages: Provided, That of these funds: (A) the State of Alaska shall provide a match of 25 percent; (B) no more than 5 percent of the funds may be used for administrative and overhead expenses; and (C) the State of Alaska shall make awards consistent with the Statewide priority list established in conjunction with the Agency and the U.S. Department of Agriculture for all water, sewer, waste disposal, and similar projects carried out by the State of Alaska that are funded under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301) or the Consolidated Farm and Rural Development Act (7 U.S.C. 1921 et seq.) which shall allocate not less than 25 percent of the funds provided for projects in regional hub communities;

(4) $130,982,000 shall be to carry out section 104(k) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), including grants, interagency agreements, and associated program support costs: Provided, That at least 10 percent shall be allocated for assistance in persistent poverty counties;

(5) $150,000,000 shall be for grants under title VII, subtitle G of the Energy Policy Act of 2005;

(6) $69,927,000 shall be for targeted airshed grants in accordance with the terms and conditions in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act);

(7) $80,005,000 shall be for grants under subsections (a) through (j) of section 1459A of the Safe Drinking Water Act (42 U.S.C. 300j–19a);

(8) $36,500,000 shall be for grants under section 1464(d) of the Safe Drinking Water Act (42 U.S.C. 300j–24(d));

(9) $182,004,000 shall be for grants under section 1459B of the Safe Drinking Water Act (42 U.S.C. 300j–19b);

(10) $25,000,000 shall be for grants under section 1459A(l) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(l));

(11) $18,000,000 shall be for grants under section 104(b)(8) of the Federal Water Pollution Control Act (33 U.S.C. 1254(b)(8));

(12) $280,011,000 shall be for grants under section 221 of the Federal Water Pollution Control Act (33 U.S.C. 1301);

(13) $17,711,000 shall be for grants under section 4304(b) of the America's Water Infrastructure Act of 2018 (Public Law 115–270);

(14) $10,000,000 shall be for carrying out section 302(a) of the Save Our Seas 2.0 Act (33 U.S.C. 4283(a)), of which not more than 5 percent shall be for administrative costs to carry out such section: Provided, That not-withstanding section 302(a) of such Act, the Administrator may also provide grants pursuant to such authority to intertribal consortia consistent with the requirements in 40 CFR 35.504(a), to former Indian reservations in Oklahoma (as determined by the Secretary of the Interior), and Alaska Native Villages as defined in Public Law 92–203;

(15) $1,416,906,000 shall be for grants, including associated program support costs, to States, federally recognized tribes, interstate agencies, tribal consortia, and air pollution control agencies for multi-media or single media pollution prevention, control and abatement, and related activities, including activities pursuant to the provisions set forth under this heading in Public Law 104–134, and for making grants under section 103 of the Clean Air Act for particulate matter monitoring and data collection activities subject to terms and conditions specified by the Administrator, and under section 2301 of the Water and Waste Act of 2016 to assist States in developing and implementing programs for control of coal combustion residuals, of which: $46,954,000 shall be for carrying out section 128 of CERCLA; $15,000,000 shall be for Environmental Information Exchange Net- work grants, including associated program support costs; $1,505,000 shall be for grants to States under section 2007(f)(2) of the Solid Waste Disposal Act, which shall be in addition to funds appropriated under the heading "Leaking Under- ground Storage Tank Trust Fund Program" to carry out the provisions of the Solid Waste Disposal Act specified in section 9508(c) of the Internal Revenue Code other than section 9003(h) of the Solid Waste Disposal Act; $26,515,000 of the funds available for grants under section 106 of the Federal Water Pollution Control Act shall be for State participation in national- and State-level statistical surveys of water resources and enhancements to State monitoring programs; and $10,200,000 shall be for multipurpose grants, including interagency agreements, in accordance with the terms and conditions described in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act);

(16) $50,022,000 shall be for grants under section 1442(b) of the Safe Drinking Water Act (42 U.S.C. 300j–1(b)), of which $15,000,000 shall be for emergency situations affecting small public water systems;

(17) $5,000,000 shall be for grants under section 1454(c) of the Safe Drinking Water Act (42 U.S.C. 300j–14(c));

(18) $20,004,000 shall be for grants under section 1459A(m) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(m));

(19) $50,030,000 shall be for grants under section 1459A(n) of the Safe Drinking Water Act (42 U.S.C. 300j–19a(n));

(20) $50,019,000 shall be for grants under section 1459E of the Safe Drinking Water Act (42 U.S.C. 300j–19f);

(21) $50,022,000 shall be for grants under section 1459F of the Safe Drinking Water Act (42 U.S.C. 300j–19g);

(22) $50,017,000 shall be for carrying out section 2001 of the America's Water Infrastructure Act of 2018 (Public Law 115–270, 42 U.S.C. 300j–3c note): Provided, that the Administrator may award grants and enter into contracts with tribes, intertribal consortia, public or private agencies, institutions, organizations, and individuals, without regard to section 3324(a) and (b) of title 31 and section 6101 of title 41, United States Code, and enter into interagency agreements as appropriate;

(23) $10,000,000 shall be for grants under section 1459G(b) of the Safe Drinking Water Act (42 U.S.C. 300j–19h(b));

(24) $75,033,000, in addition to amounts otherwise available, shall be for grants under sections 104(b)(3), 104(b)(8), and 104(g) of the Federal Water Pollution Control Act (33 U.S.C. 1254(b)(3), 1254(b)(8), and 1254(g));

(25) $20,004,000 shall be for grants under section 222 of the Federal Water Pollution Control Act (33 U.S.C. 1302);

(26) $25,011,000 shall be for grants under section 223 of the Federal Water Pollution Control Act (33 U.S.C. 1302a);

(27) $10,000,000 shall be for grants under section 224 of the Federal Water Pollution Control Act (33 U.S.C. 1302b);

(28) $50,022,000 shall be for grants under section 226 of the Federal Water Pollution Control Act (33 U.S.C. 1302d);

(29) $40,020,000 shall be for grants under section 227 of the Federal Water Pollution Control Act (33 U.S.C. 1302e);

(30) $15,000,000 shall be for grants under section 50213 of the Infrastructure Investment and Jobs Act (42 U.S.C. 10361 note; Public Law 117–58);

(31) $5,000,000 shall be for grants under section 50217(b) of the Infrastructure Investment and Jobs Act (33 U.S.C. 1302f(b); Public Law 117–58);

(32) $10,000,000 shall be for grants under section 50217(c) of the Infrastructure Investment and Jobs Act (33 U.S.C. 1302f(c); Public Law 117–58);

(33) $25,009,000 shall be for grants under section 220 of the Federal Water Pollution Control Act (33 U.S.C. 1300);

(34) $5,000,000 shall be for grants under section 124 of the Federal Water Pollution Control Act (33 U.S.C. 1276); and

(35) $25,000,000, in addition to amounts otherwise available, shall be for competitive grants to meet cybersecurity infrastructure needs within the water sector.

(36) $7,000,000 shall be for grants under section 103(b)(3) of the Clean Air Act for wildfire smoke preparedness grants in accordance with the terms and conditions in the explanatory statement described in section 4 (in the matter preceding division A of this consolidated Act): Provided, That not more than 3 percent shall be for administrative costs to carry out such section.

Provided, That up to 5 percent of the funds appropriated under this heading in each of paragraphs (16) through (34) may be reserved for salaries, expenses, and administration, and may be transferred to the "Environmental Programs and Management" account or the "Science and Technology" account as needed.

Program Projects in STAG
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	$39,605	$39,686	$40,000	$314
Brownfields Projects	$83,758	$100,000	$130,982	$30,982
Infrastructure Assistance: Clean Water SRF	$1,018,013	$1,638,861	$1,638,874	$13
Infrastructure Assistance: Drinking Water SRF	$638,343	$1,126,101	$1,126,105	$4
Infrastructure Assistance: Mexico Border	$28,711	$36,386	$36,386	$0
Diesel Emissions Reduction Grant Program	$48,628	$100,000	$150,000	$50,000
Targeted Airshed Grants	$59,000	$69,927	$69,927	$0
San Juan Watershed Monitoring	$1,578	$0	$0	$0

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Safe Water for Small & Disadvantaged Communities	$23,173	$30,158	$80,005	$49,847
Reducing Lead in Drinking Water	$387	$25,011	$182,004	$156,993
Lead Testing in Schools	$14,431	$30,500	$36,500	$6,000
Drinking Water Infrastructure Resilience and Sustainability	$0	$7,000	$25,000	$18,000
Technical Assistance for Wastewater Treatment Works	$12,000	$27,000	$18,000	-$9,000
Sewer Overflow and Stormwater Reuse Grants	$44,935	$50,000	$280,011	$230,011
Water Infrastructure Workforce Investment	$3,322	$6,000	$17,711	$11,711
Technical Assistance and Grants for Emergencies (SDWA)	$0	$0	$35,022	$35,022
Technical Assistance and Grants for Emergencies, Small Systems	$0	$0	$15,000	$15,000
Source Water Petition Program	$0	$0	$5,000	$5,000
Voluntary Connections to Public Water Systems	$0	$0	$20,004	$20,004
Underserved Communities Grant to Meet SDWA Requirements	$0	$0	$50,030	$50,030
Small System Water Loss Identification and Prevention	$0	$0	$50,019	$50,019
Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability	$0	$5,000	$50,022	$45,022
Indian Reservation Drinking Water Program	$0	$4,000	$50,017	$46,017
Advanced Drinking Water Technologies	$0	$0	$10,000	$10,000
Clean Water Act Research, Investigations, Training, and Information	$0	$0	$75,033	$75,033
Wastewater Efficiency Grant Pilot Program	$0	$0	$20,004	$20,004
Clean Water Infrastructure Resiliency and Sustainability Program	$0	$0	$25,011	$25,011
Small and Medium Publicly Owned Treatment Works Circuit Rider Program	$0	$0	$10,000	$10,000
Grants for Low and Moderate income Household Decentralized Wastewater Systems	$0	$0	$50,022	$50,022
Connection to Publicly Owned Treatment Works	$0	$0	$40,020	$40,020
Water Data Sharing Pilot Program	$0	$0	$15,000	$15,000
Stormwater Infrastructure Technology	$0	$3,000	$5,000	$2,000
Stormwater Control Infrastructure Project Grants	$0	$0	$10,000	$10,000
Alternative Water Sources Grants Pilot Program	$0	$0	$25,009	$25,009
Enhanced Aquifer Use and Recharge	$0	$4,000	$5,000	$1,000
Water Sector Cybersecurity	$0	$0	$25,000	$25,000
Subtotal, State and Tribal Assistance Grants (STAG)	$2,015,882	$3,302,630	$4,421,718	$1,119,088
Categorical Grants				

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Categorical Grant: Nonpoint Source (Sec. 319)	$169,189	$182,000	$188,999	$6,999
Categorical Grant: Public Water System Supervision (PWSS)	$110,742	$121,500	$132,566	$11,066
Categorical Grant: State and Local Air Quality Management	$226,481	$249,038	$400,198	$151,160
Categorical Grant: Radon	$8,007	$10,995	$12,487	$1,492
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	$18,585	$18,512	$26,515	$8,003
Categorical Grant: Pollution Control (Sec. 106) (other activities)	$206,719	$218,488	$252,925	$34,437
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	$225,304	$237,000	$279,440	$42,440
Categorical Grant: Wetlands Program Development	$17,353	$14,692	$15,079	$387
Categorical Grant: Underground Injection Control (UIC)	$11,825	$13,164	$11,387	-$1,777
Categorical Grant: Pesticides Program Implementation	$14,102	$14,027	$14,027	$0
Categorical Grant: Lead	$14,813	$16,326	$24,639	$8,313
Resource Recovery and Hazardous Waste Grants	$98,146	$105,000	$108,247	$3,247
Categorical Grant: Pesticides Enforcement	$23,091	$25,580	$25,580	$0
Categorical Grant: Pollution Prevention	$2,757	$4,973	$5,775	$802
Categorical Grant: Toxics Substances Compliance	$4,768	$5,010	$6,877	$1,867
Categorical Grant: Tribal General Assistance Program	$67,520	$74,750	$85,009	$10,259
Categorical Grant: Underground Storage Tanks	$1,475	$1,505	$1,505	$0
Categorical Grant: Tribal Air Quality Management	$14,543	$16,415	$23,126	$6,711
Categorical Grant: Environmental Information	$3,586	$10,836	$15,000	$4,164
Categorical Grant: Beaches Protection	$9,368	$10,619	$9,811	-$808
Categorical Grant: Brownfields	$47,278	$47,195	$46,954	-$241
Categorical Grant: Multipurpose Grants	$2,509	$0	$10,200	$10,200
Subtotal, Categorical Grants	$1,072,856	$1,160,625	$1,416,906	$256,281
Clean and Safe Water Technical Assistance Grants				
Congressionally Mandated Projects	$148	$16,973	$0	-$16,973
TOTAL STAG	**$3,088,886**	**$4,480,228**	**$5,838,624**	**$1,358,396**

Categorical Grants

Categorical Grant: Beaches Protection
Program Area: Categorical Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$9,368***	***$10,619***	***$9,811***	***-$808***
Total Budget Authority	$9,368	$10,619	$9,811	-$808

Program Project Description:

EPA's Beaches Protection Grant Program awards grants to eligible coastal and Great Lakes states, territories, and tribes to improve water quality monitoring at beaches and to notify the public of beach advisories and closings. The Beaches Grant Program is a collaborative effort between EPA, states, territories, local governments, and tribes to help ensure that coastal and Great Lakes recreational waters are safe for swimming. Congress created the program with the passage of the Beaches Environmental Assessment and Coastal Health Act (BEACH Act) with the goal of reducing risk to the public of waterborne disease related to the use of recreational water.

EPA awards grants to eligible states, territories, and tribes using an allocation formula developed in consultation with states and other organizations. The allocation takes into consideration beach season length, beach miles, and beach use.[1]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Eligible states, territories, tribes, and localities will receive grant funding to continue to:

- Administer the grant program;
- Implement monitoring and notification programs consistent with EPA guidance; and
- Submit monitoring and advisory data to EPA for production of an annual report in a timely manner.[2]

[1] For more information, please see: www.epa.gov/beach-tech/beach-grants. See EPA's Beach Advisory and Closing On-line Notification (BEACON) system (https://watersgeo.epa.gov/beacon2/Beacon.html) for water quality and notification data that grant recipients provide to EPA.
[2] For more information, please see: https://www.epa.gov/beach-tech/annual-beach-swimming-season-reports.

Performance Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$808.0) This program change redirects funding to other administration priorities.

Statutory Authority:

Clean Water Act, BEACH Act of 2000.

Categorical Grant: Brownfields
Program Area: Categorical Grants
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$47,278***	***$47,195***	***$46,954***	***-$241***
Total Budget Authority	$47,278	$47,195	$46,954	-$241

Program Project Description:

EPA's Brownfields Program is a successful model of the Agency working cooperatively with states, tribes, local governments, and other agencies to help communities oversee, plan, assess, and cleanup brownfields properties. State and Tribal Response Programs address contaminated sites that do not require federal action but need assessment and/or cleanup before they can be considered ready for reuse. The Program allocates funding to states and tribes to establish core capabilities, enhance their response programs, and conduct site assessments and cleanups.

Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[3] Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of March 2022, the State and Tribal Response Programs have leveraged more than 15,474 jobs and $2.7 billion in other funding. State and Tribal funding spent on site-specific brownfields work has contributed to 3,868 sites assessed, 518 sites cleaned up, and 1,667 sites made ready for anticipated reuse (RAU). Sites receiving these funds are 1.5 times more likely to become RAU than sites receiving brownfields competitive grant funding alone. In 2022, EPA provided funding to 165 states, tribes, territories, and the District of Columbia.[4]

This funding is a critical source for state and tribal partners to establish and grow their brownfields programs. Over 100 tribes have received brownfields funding to build their programs, and cumulatively these programs have cleaned up over 3,600 properties and made over 110,000 acres ready for reuse. Addressing brownfields on tribal lands also has leveraged over 1,020 jobs and $150 million.[5]

In addition, the Infrastructure Investment and Jobs Act (IIJA) invests $300 million to support State and Tribal Response programs from FY 2022 through FY 2026. IIJA can provide necessary funds to states and territories and over 100 tribes to grow their brownfields programs.

[3] U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: 1) Superfund, Brownfield, and RCRA CA site information as of the end of FY 2019; 2) UST/LUST information as of late2018 to mid-2019 depending on the state; and 3) 2015-2018 American Community Survey (ACS) Census data.
[4] Data from U.S. EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES).
[5] Data from U.S. EPA ACRES.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan*.

States and tribes may use categorical grant funding provided under this program in the following ways:

- Conducting site-specific activities, such as assessments and cleanups at brownfields sites;[6]
- Developing mechanisms and resources to provide meaningful opportunities for public participation;
- Developing mechanisms for approval of cleanup plans and verification and certification that cleanup efforts are complete;
- Creating an inventory of brownfields sites;
- Capitalizing a Revolving Loan Fund for brownfields-related work;
- Developing a public record;
- Developing oversight and enforcement authorities, or other mechanisms and resources;
- Purchasing environmental insurance;
- Developing state and tribal tracking and management systems for land use and institutional and engineering controls; and
- Conducting public education and outreach efforts to ensure that tribal communities are informed and able to participate in environmental decision-making.

Performance Measure Targets:

Work under this program supports performance results in the Brownfields Projects Program under the STAG appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$241.0) This program change reduces financial and technical assistance resources to state and tribal response programs.

[6] For more information, please refer to: https://www.epa.gov/brownfields/state-and-tribal-response-program-grants.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128(a).

Categorical Grant: Environmental Information

Program Area: Categorical Grants
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$3,586***	***$10,836***	***$15,000***	***$4,164***
Total Budget Authority	$3,586	$10,836	$15,000	$4,164

Program Project Description:

The funds provided under this categorical grant support the Environmental Information Exchange Network (EN), which is a critical component of the Agency's Data Strategy and supports Executive Order (EO) 13985: *Advancing Racial Equality and Support for Underserved Communities through the Federal Government*. The EN is a standards-based, secure approach for EPA and its tribal, state, and territorial partners to exchange and share environmental data over the internet. The EN offers its partners tremendous potential for managing, accessing, and analyzing environmental data more effectively and efficiently.

The Exchange Network Grant Program provides funding to federally recognized tribes and tribal consortia, states, and territories. These assistance agreements support participation in the EN through integration and development of tools leveraging EN technology, data standards, open-source software, shared services, and reusable components. EN partners acquire and develop the hardware, software, and data infrastructure needed to collect, report, and access environmental data with greater efficiency and integrate information across programs. The EN is the standard approach to share data across tribes, states, territories, and EPA. The EN Grant Program also plays a critical role in evolving the EN technology to support the vision of the Digital Strategy.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Environmental Information Programs and activities will continue to focus on environmental justice (EJ) for tribal, state, and territorial partnerships in support of EO 13985: *Advancing Racial Equality and Support for Underserved Communities through the Federal Government.*[7] The EN Program plays a critical role in supporting the Administration's comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality. Tribes are often understaffed and under resourced and lack the capacity to take on the development of data and Information Technology (IT) management related environmental media.

[7] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

Outreach, training, and targeted data and IT capacity building funding opportunities within the EN Grant Program Solicitation Notice have resulted in tribes receiving 24 percent of grant resources awarded in FY 2022.

In FY 2024, the EN Grant Program will prioritize increasing the Data and IT management capacity of the tribal and territorial partners to increase their participation in the EN. A key funding area within the FY 2024 EN Grant Solicitation Notice will continue to be capacity building for tribes and territories with the inclusion of mentoring resources for first time tribal and territorial applicants. EPA annually awards over $2.5 million of overall grant program resources to tribal recipients. To increase the support for tribal and territorial partners, EPA's request includes an additional $4.1 million in FY 2024 to establish a minimum funding level within the overall EN Grant program funding exclusively dedicated to tribal and territorial grantees to build capacity with funding assistance and mentoring. EPA will improve the use of grant resources that sustain tribal Data and IT management activities.

Through its Tribal Cooperative Agreement, the EN Grant Program will support multiple Data Academy sessions which emphasize basic data management skills critical for effective environmental program management. The annual Tribal EN Conference, held by the Agency's cooperative agreement partner, will continue to focus on Data and IT management training and include information transfer sessions based on topics identified by over 130 tribes. Topics were identified in a baseline assessment conducted by a Tribal EN Group supported by the cooperative agreement partner as well as input from tribes to the Office of Mission Support - Environmental Information (OMS-EI) Tribal Five-Year Strategic Plan, which was completed in FY 2022. Outreach activities such as webinars and story maps outlining tribal EN Grant Program awards success stories also will continue to be prioritized to expand tribal knowledge about the benefits of applying for EN grants.

Tribal engagement and participation in EN efforts has significantly increased over the past few years. As a result, tribes have requested greater EN program administration support, comparable to what states receive. Given the continuing growth in tribal participation in the EN and the expansion of rural broadband through the American Broadband Initiative,[8] EPA anticipates many more tribes will engage in data management and electronic reporting and, consequently, there will be expanded interest in tribal participation in the EN. In response to this need, EPA will dedicate resources for program administration support to increase tribal engagement in the EN. These resources will support strategic planning and implementation approaches for tribes to participate in the EN, build data management and technical capacity, and enable the EN Grant Program to measure the effectiveness of these approaches to meet this goal. This will support EO 13985 and strengthen EJ to revitalize underserved communities.

In FY 2024, EPA will continue to support the EN through a cooperative agreement with an organization that represents the interests of state environmental programs under the associated program support cost authority (Public Law 113-76).[9] This includes support to governance, which represents a cross-section of EPA, state, and tribal organizations.

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[8] For additional information, please see: https://www.ntia.doc.gov/blog/2019/american-broadband-initiative-expand-connectivity-all-americans.

[9] For additional information, please see: https://www.gpo.gov/fdsys/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf.

Under this strategy of state, local, and tribal partnerships, the Agency will continue to advance its business processes, data management, and systems to reduce reporting burden on states and regulated facilities, as well as improve the effectiveness and efficiency of environmental protection programs for all partners. Currently, 50 state, 274 tribal, and six territorial partners qualify for EN grants projects. In FY 2024, at the requested resource level, EPA anticipates awarding between 35 and 45 grants with 15 to 20 of these grants being awarded to tribes. The grant awards will assist states, tribes, and territories in implementing activities that align with the three areas outlined in the EN Solicitation Notice. These are:

- Increased Data Access and Innovative Business Processes: These activities support the partners' ability to share cross-state, cross-tribal or state-tribal data. The emphasis is on activities which create services and tools that make data available and sharable on-demand through portals, web services, and application programming interfaces. EN partners are encouraged to implement innovative approaches to collecting, publishing, and sharing data that reduce costs associated with capturing data in the field while making it more accessible to stakeholders.

- Eliminate paper submittals and expand e-reporting: Grant projects will support developing and implementing EN air, water, and land data flows that enable automated reporting to EPA systems.

- Augment the Information Management Capacity of EN Partners: Some existing and potential tribal and territorial EN partners have limited experience with electronic data collection and management. Tribal and territorial governments can use grants to conduct coordinated efforts and leverage the EN services given their unique regulatory responsibilities and data needs.

The "National Environmental Information Exchange Network Grant Program Solicitation Notice" sets forth the process for awarding grant funding to states, tribes, and territories.[10] It is an annual guidance document that describes eligibility requirements, the process for application preparation and submission, evaluation criteria, award administration information, and post-award monitoring procedures.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$4,164.0) This program change proposes to increase the funding available for tribal & territorial grant applicants to build capacity with funding assistance and mentoring. This investment also supports Executive Order 13985: Advancing Racial Equality and Support for Underserved Communities through the Federal Government.

[10] For additional information, please see: https://www.epa.gov/exchangenetwork/exchange-network-grant-program.

Statutory Authority:

Consolidated Appropriations Act, 2023 (Pub. L. 117-328).

Resource Recovery and Hazardous Waste Grants
Program Area: Categorical Grants
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$98,146***	***$105,000***	***$108,247***	***$3,247***
Total Budget Authority	$98,146	$105,000	$108,247	$3,247

Program Project Description:

The Resource Recovery and Hazardous Waste Grants Program helps states implement the Resource Conservation and Recovery Act (RCRA). Through RCRA, EPA and states protect human health and the environment by minimizing waste generation, preventing the release of millions of tons of hazardous wastes, and cleaning up land and water. Authorized states conduct the direct implementation of permitting, corrective action, and enforcement components of the RCRA Hazardous Waste Management Program.

This grant funding supports all 50 states and six territories. Currently, 48 states and two territories are authorized to implement the RCRA Program. EPA directly implements the RCRA Program in the states of Iowa and Alaska and in Indian Country. EPA also provides project-specific small grants to tribes selected through a competitive process. To ensure statutory requirements are successful, EPA partners with state and local governments, as well as American businesses and non-governmental organizations, to significantly improve waste and material management practices. In FY 2024, EPA will continue a multi-year transition to an updated allocation formula to distribute Hazardous Waste Financial Assistance Grants to the states and start work on updating the data used within the formula. The Agency believes that using the most recent data will better align cooperative agreement funding to states' needs and maximize the environmental benefits and program performance of this funding. EPA worked in close consultation with the states during the development of the updated allocation formula and began implementation in FY 2021.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA grant programs will continue to maintain state and territorial hazardous waste permitting programs and provide support to our state and territorial partners in their efforts to minimize waste generation and prevent its release into communities. In FY 2024, the Agency (and authorized states) will continue to:

- Issue and renew permits to a portion of the 1,300 permitted hazardous waste treatment, storage, and disposal facilities. This includes working with industry, the public, and states to address issues related to management of hazardous waste through development and application of standards, permits, guidance, and training. In FY 2022, EPA and its state partners achieved 107 permit renewals issued at hazardous waste facilities and expect to meet the target of 113 permit renewals in FY 2023.

- Process permit modifications to keep pace with evolving business practices, technology, market conditions, and cleanup decisions.

- Update controls to encourage facilities to modernize technological systems, expand waste management capability, improve hazardous waste management practices, and make timely cleanup decisions.

- Inspect facilities to ensure compliance and safety.

- Oversee cleanups at hazardous waste management facilities and focus on completing cleanup of the 3,983 priority contaminated facilities (the Corrective Action Progress Track), which include highly contaminated and technically challenging sites.

- Oversee cleanups at high priority contaminated hazardous waste management facilities and return cleaned up property to productive use. This includes working with state partners to ensure that responsible parties conduct effective and efficient cleanups that are protective of human health and the environment and reduce the burden on taxpayers.

- Draft implementation documents such as permits and orders, review site assessment plans and results, review remedy selection documents, oversee remedy implementation, oversee public participation, and track progress of cleanups.

- Work with tribes to develop tribal hazardous waste management plans; implement hazardous and universal waste tribal programs; and develop and implement program enforcement policies and procedures for tribes through the Tribal Hazardous Waste Grant Program.

- Continue to improve cleanup approaches, share best practices and cleanup innovations,[11] and address issues of emerging science.

- Distribute grant funds to assist states in adopting new permit programs for the management of coal combustion residuals.

- Make progress in updating permits to reflect current standards, technologies, and practices. This includes progress towards meeting the Agency's goal of increasing the percentage of permits that are kept up to date. EPA continues to assess and respond to permitting program needs, which states and regions can adopt for greater permitting program efficiency.

[11] For more information, please refer to: https://www.epa.gov/hw/toolbox-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy.

Performance Measure Targets:

Work under this program supports performance results in the RCRA Corrective Action Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$3,247.0) This program increase provides support for implementation of state and territorial programs with an investment to further assist EPA's partners in achieving progress on the ground.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Consolidated Appropriations Act, 2018, Pub. L. 115-141.

Categorical Grant: Lead
Program Area: Categorical Grants
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$14,813***	***$16,326***	***$24,639***	***$8,313***
Total Budget Authority	$14,813	$16,326	$24,639	$8,313

Program Project Description:

Lead is highly toxic, especially to young children. Exposure to lead is associated with decreased intelligence, impaired neurobehavioral development, decreased stature and growth, and impaired hearing acuity. According to the Centers for Disease Control and Prevention, no safe blood lead level in children has been identified, and effects of lead exposure cannot be corrected.[12,13] Reducing exposure to lead-based paint (LBP) in old housing continues to offer the potential to significantly decrease blood lead levels in the largest number of children. Housing units constructed before 1950 are most likely to contain LBP. The most recent national survey estimated that 34.6 million homes in the U.S. have LBP, and 29 million homes have significant LBP hazards.[14] Children living at or below the poverty line who live in older housing are at greatest risk. Additionally, children of some racial and ethnic groups and those living in older housing are disproportionately affected.[15] Accordingly, the Lead Categorical Grants Program and related Lead Risk Reduction Program represent strategic opportunities to advance EPA's environmental justice (EJ) goals.

Because of these historic and persistent disproportional vulnerabilities of certain racial, ethnic, and low-income communities to LBP, this program has the potential to create significant EJ gains. EPA's Lead Program contributes to the goal of reducing lead exposure and works toward addressing historic and persistent disproportional vulnerabilities of certain racial, ethnic and low-income communities.[16] This program will play an important role in achieving the Administration's goals to enhance EJ and equity, by:

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[12] Centers for Disease Control and Prevention, Blood Lead Levels in Children, found at: http://www.cdc.gov/nceh/lead/prevention/blood-lead-levels.htm.

[13] Among children ages 1 to 5 years in families with incomes below poverty level, the 95th percentile blood lead was 3.0 µg/dL, and among those in families at or above the poverty level, it was 2.1 µg/dL, a difference that was statistically significant. The 95th percentile blood lead level among all children ages 1 to 5 years was 2.5 µg/dL. The 95th percentile blood lead level in Black non-Hispanic children ages 1 to 5 years was 3.0 µg/dL, compared with 2.4 µg/dL for White non-Hispanic children, 1.8 µg/dL for Mexican-American children, and 2.7 µg/dL for children of "All Other Races/Ethnicities."[13] The differences in 95th percentile blood lead levels between race/ethnicity groups were all statistically significant, after accounting for differences by age, sex, and income. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[14] HUD. (2011).*American Healthy Homes Survey II Lead Findings,* . https://www.hud.gov/sites/dfiles/HH/documents/AHHS_II_Lead_Findings_Report_Final_29oct21.pdf.

[15] *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[16] Childhood blood lead levels (BLL) have declined substantially since the 1970s, due largely to the phasing out of lead in gasoline and to the reduction in the number of homes with lead-based paint hazards. The median concentration of lead in the

- Implementing standards governing lead hazard identification and abatement practices;

- Identifying and providing access to a national pool of certified firms and individuals trained to carry out lead hazard identification and abatement practices and/or renovation, repair, and painting projects while adhering to the lead-safe work practice standards and minimizing lead dust hazards created in such projects; and

- Providing information and outreach to housing occupants and the public so they can make informed decisions and take actions about lead hazards in their homes.

The Lead Categorical Grant Program contributes to the Lead Risk Reduction Program's goals by providing support to authorized state and tribal programs that administer training and certification programs for lead professionals and renovation contractors.[17] Ensuring that those who undertake LBP activities are properly trained and certified is a critical aspect of federal efforts to reduce lead exposure and work towards addressing the historic and persistent disproportional vulnerabilities of certain racial groups and low-income communities. Low-income, minority children are disproportionally vulnerable to lead exposure and therefore this program, as well as others that focus on reducing environmental lead levels, have the potential to create significant EJ gains.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

In FY 2024, the Lead Categorical Grants Program will continue to provide assistance to states, territories, the District of Columbia, and tribes to develop and to implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs. EPA directly implements these programs in all areas of the country that are not authorized to do so and will continue to operate the Federal Lead-based Paint Program Database (FLPP) of trained and certified lead-based paint professionals.[18] Activities conducted as part of this Program include accrediting training programs, certifying individuals and firms, and providing education and compliance assistance to those subject to the abatement and RRP regulations and the Public in support of the Administration's goals to enhance EJ and advance racial equity.

As of January 2023, 39 states and territories, four tribes, the District of Columbia, and Puerto Rico have been authorized to run the LBP abatement program. In addition, 15 states and one tribe are authorized to administer the RRP program. As of October 2023, there were 299 accredited RRP providers and almost 56,000 certified renovation firms. In FY 2024, EPA will continue providing assistance to existing authorized state and tribal lead programs.

In FY 2024, EPA will complete its work to modernize the FLPP database. The current iteration of the FLPP database was developed nearly 15 years ago and is need of an update. Taking the age of

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blood of children aged 1 to 5 years dropped from 15 micrograms per deciliter in 1976–1980 to 0.7 micrograms per deciliter in 2013–2014, a decrease of 95%. *See*, *America's Children and the Environment* (EPA, 2019), found at: https://www.epa.gov/americaschildrenenvironment.

[17] Please visit http://www.epa.gov/lead for additional information.

[18] Please visit https://cfpub.epa.gov/flpp/pub/index.cfm?do=main.firmSearch for additional information.

the FLPP database into consideration, EPA will both modernize and update the database by taking advantage of up-to-date programming and design tools. Some elements of the current system rely on programming tools that are out of date and require expertise from system programmers that are no longer commonly available. In the past, these updates have been done on a piecemeal basis. The comprehensive system wide FLPP database update will result in: decreased cost of system maintenance, increased system reliability, and an improved user experience.

As part of its implementation activities, EPA conducts outreach to the regulated community and the public to increase demand for RRP-certified firms and individuals as well as their actual number. EPA will continue to expand its outreach efforts with the goal of increasing the number of renovations being performed by trained and certified individuals and firms following lead-safe work practices, reducing exposure to lead. EPA will produce outreach materials and will conducts training in English and Spanish aimed at reaching contractors and the public, emphasizing the critical role contractors play in preventing lead exposure during RRP activities and the importance of using certified contractors for renovations. EPA also will expand its outreach to include older homeowners, a fast-growing number of whom are renovating their homes for the purposes of aging in place. This messaging will focus on the importance of hiring certified contractors when renovating pre-1978 homes, for the safety of residents and of those who visit their homes, including children.

The Agency will further its work in reaching contractors and the public in underserved communities through the "Enhancing Lead-Safe Work Practices through Education and Outreach" (ELSWPEO) initiative. To communicate more effectively in these communities, EPA will work directly with local environmental justice and public health organizations that are well-positioned to amplify and expand its reach in the identified communities.

Performance Measure Targets:

Work under this program supports performance results in the Toxic Substances: Lead Risk Reduction Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$8,313.0) This program change supports additional assistance to states, territories, the District of Columbia, and tribes to develop and implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs.

Statutory Authority:

Toxic Substances Control Act (TSCA), §§ 401-412.

Categorical Grant: Multipurpose Grants
Program Area: Categorical Grants
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$2,509***	***$0***	***$10,200***	***$10,200***
Total Budget Authority	$2,509	$0	$10,200	$10,200

Program Project Description:

EPA and its partners have made enormous progress in protecting air, water, and land resources. The Multipurpose Grants Program supports states, tribes, and territories in the implementation of environmental programs, which are mandatory statutory duties delegated by EPA under pertinent environmental laws. Recognizing that environmental challenges differ across tribes, states, and territories, including climate change factors and environmental justice considerations, the Program provides EPA's partners with flexibility to target funds to their highest priority efforts to protect human health and the environment.

FY 2024 Activities and Performance Plan:

Work in this program provides Cross-Agency Mission and Science Support and is allocated across strategic goals and objectives in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, these funds will support the President's and Administrator's priorities as well as implementation of environmental programs delegated by EPA under pertinent environmental laws. Tribes, states, and territories have the flexibility to apply the funds toward activities required in a broad array of environmental statutes, depending on local needs and priorities. Results are tracked as required by the Environmental Results Order and support critical work across multiple environmental programs.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10,200.0) This program increase provides EPA's states, tribes, and territories with additional resources to target funds to their highest priorities and to address key environmental challenges in their communities.

Statutory Authority:

Indian Environmental General Assistance Program Act (GAP); Pollution Prevention Act (PPA); Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); Clean Air Act (CAA); Toxic Substances Control Act (TSCA); National Environmental Policy Act (NEPA); Clean Water Act (CWA); Safe Drinking Water Act (SDWA); Resource Conservation and Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Marine Protection Research and Sanctuaries Act (MPRSA); and Indoor Radon Abatement Act.

Categorical Grant: Nonpoint Source (Sec. 319)
Program Area: Categorical Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$169,189***	***$182,000***	***$188,999***	***$6,999***
Total Budget Authority	$169,189	$182,000	$188,999	$6,999

Program Project Description:

The Nonpoint Source Section 319 of the Clean Water Act (CWA) broadly authorizes states, territories, and tribes to use a range of tools to implement their Nonpoint Source Programs, including: regulatory and non-regulatory programs, technical assistance, financial assistance, education, training, technology transfers, and demonstration projects.[19] Nonpoint Source Pollution (NPS), caused by runoff that carries excess nutrients, toxics, and other contaminants to waterbodies, is the greatest remaining threat to surface and groundwater quality impairments in the United States. Climate change is increasing this form of pollution by causing more frequent and intense rain and storm events. As of FY 2023, the current number of impaired waters is 143,778. Nonpoint source pollution is the primary cause of water quality problems in the Nation.[20]

Grants under Section 319 are provided to states, territories, and tribes to help them implement their EPA-approved NPS Management Programs by remediating past nonpoint source pollution and preventing or minimizing new nonpoint source pollution. Implementation of watershed-based plans helps states achieve load reductions contained in Total Maximum Daily Loads to achieve water quality standards.

Since 2006, Section 319 implementation projects have allowed states to remediate over one thousand nonpoint source water quality impairments so that waterbodies now meet water quality standards or have documented progress towards standards. EPA oversees implementation of these program enhancements and provides technical assistance to support state and tribal nonpoint source programs. To further accelerate the reduction of nonpoint source pollution, EPA and the U.S. Department of Agriculture (USDA) continue to coordinate to achieve improvements in water quality via the National Water Quality Initiative. The Initiative targets resources and helps landowners implement practices to control nutrient, pathogen, and sediment pollution in more than 300 small watersheds nationwide.

[19] For more information, please visit: https://sam.gov/fal/7798fced15e14aa6bf9f67d6d10b95e0/view.
[20] "Of all the waterbodies across the Nation that have been assessed and a possible source of impairment identified, 85 percent of rivers and streams and 80 percent of lakes and reservoirs are polluted by nonpoint sources." (USEPA, 2016) https://www.epa.gov/sites/default/files/2016-10/documents/nps_program_highlights_report-508.pdf.

The pervasiveness and widely distributed nature of nonpoint source pollution requires cooperation and involvement from a wide range of stakeholders to address it, including EPA, other federal agencies, states, tribes, local governments, nonprofit organizations, conservation districts, and private landowners. EPA works closely with and supports the many efforts of states, interstate agencies, tribes, local governments and communities, watershed groups, USDA, the Department of Homeland Security's Federal Emergency Management Agency (FEMA), and other federal agencies to develop and implement programs and local watershed projects to restore surface water and groundwater nationwide. EPA provides grant funds to states and more than two hundred tribes under Section 319 to implement programs to control nonpoint pollution, including reduction of nitrogen, phosphorus, and sediment loadings. In 2021, Section 319 grants eliminated 9.05 million pounds of nitrogen, 2.0 million pounds of phosphorus, and 1.05 million tons of sediment from waters.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, the Program will continue to work with states and tribes to strengthen and enhance their nonpoint source programs. The Section 319 grants will continue to focus on implementing watershed projects and maintaining current Nonpoint Source Management Programs to restore impaired waterbodies to meet water quality standards and protect unimpaired waters. In FY 2022, over 12 thousand square miles of watersheds that were previously impaired due to nutrients now meet standards. Achieving water quality results requires targeting the primary sources of nonpoint source pollution in a watershed in the right places with the right practices. Watershed-based plans enable this targeting by:

- providing an analysis of sources and relative significance of pollutants of concern;
- identifying cost-effective techniques to address those sources;
- assessing the availability of needed resources, authorities, and community involvement to affect change; and
- enabling monitoring to evaluate nonpoint sources and flows.

Taken together, this information enables states, tribes, and local communities to track progress and make changes over time to meet their water quality goals.

EPA will continue to forge and strengthen strategic partnerships with other federal agency programs. The Agency will focus on its partnership with the USDA Natural Resources Conservation Service (NRCS), which implements Farm Bill conservation programs that can help control nonpoint source pollution. Agricultural sources of pollution in the form of animal waste, fertilizer, and sediments have a particularly profound effect on water quality. In FY 2024, EPA will continue the National Water Quality Initiative partnership with USDA to focus federal resources on agricultural sources of pollution in select watersheds in every state. EPA will encourage states to

increase their use of Clean Water Act State Revolving Loan Funds to support projects that reduce nonpoint source pollution.

To address urban and suburban sources of nonpoint source pollution, EPA will continue to work closely with a broad set of partners to promote the implementation of low-impact development practices (also called green infrastructure). Low-impact development practices, such as rain gardens and permeable pavement, improve climate resiliency and reduce harm to water quality by reducing peak flows during storms, filtering pollutants, and recharging groundwater. Low-impact development practices also may produce co-benefits by mitigating the impacts of natural hazards, including flood and drought. EPA will continue to promote low-impact development practices by working with states, cities, developers, watershed associations, and FEMA. From FY 2017-2019, EPA funded a series of pilot projects across nine EPA regions that explored how water quality programs may collaborate with FEMA partners to integrate low-impact development in state and local FEMA Hazard Mitigation Plans. EPA also has developed a set of training materials that provide technical, programmatic, and funding guidance for water quality programs interested in engaging in the Hazard Mitigation planning process. In FY 2024, EPA intends to synthesize lessons learned from the pilot projects to include in a training curriculum that can be shared broadly.

In FY 2024, the Section 319 Program will build on efforts to ensure that the benefits of cleaner water provided by the Program reach disadvantaged communities. In FY 2022, EPA led a robust engagement effort with state, territory, and tribal Section 319 grantees and local communities and organizations working to address nonpoint source challenges and to identify and discuss opportunities to advance equity and environmental justice (EJ) in the Section 319 Program. Based on input received during this engagement, in FY 2023 EPA released a memo that sets new expectations for state actions to integrate equity within their NPS programs and implements programmatic changes to better support tribal NPS programs. In FY 2024, EPA will continue to refine program actions to support EJ, including issuing updated Section 319 grant guidelines that reflect national priorities to integrate EJ and climate change in program efforts.

Under a One Water/One Community approach, EPA will coordinate CWA and Safe Drinking Water Act resources toward historically underserved and overburdened communities that are facing greater climate and water equity challenges to achieve greater resilience, access to clean and safe water, and an improved quality of life. This program will provide holistic support to communities as they respond to the climate crisis by increasing funding for planning and implementation actions across the country. Additionally, EPA will work with tribes to meet the unique needs of their communities.

Performance Measure Targets:

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						8,000	8,000	17,100	Square Miles
Actual						20,511			

(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2,100	1,400	1,400	Square Miles
Actual						12,833			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$6,999.0) This increase of resources is for state nonpoint source programs, including implementation of nonpoint source projects and statewide nonpoint source protection activities.

Statutory Authority:

Clean Water Act, § 319.

Categorical Grant: Pesticides Enforcement

Program Area: Categorical Grants
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$23,091***	***$25,580***	***$25,580***	***$0***
Total Budget Authority	$23,091	$25,580	$25,580	$0

Program Project Description:

The Pesticides Compliance Monitoring and Enforcement Cooperative Agreement Program supports pesticide product and user compliance with provisions of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through cooperative agreements with states and tribes.[21]

The cooperative agreements: support state and tribal compliance and enforcement activities under FIFRA; provide resources to rebuild programmatic capabilities between EPA and partner agencies; provide vital training programs to EPA, state, territory, and tribal partners; and help address environmental justice concerns in overburdened and vulnerable communities. Enforcement and pesticides program cooperative agreement guidance is issued to focus regional, state, and tribal efforts on the highest priorities. EPA's support to state and tribal pesticide programs emphasizes reducing chemical risks by ensuring compliance with worker protection standards, pesticide applicator certification and training requirements, pesticide use requirements designed to protect water quality, pesticide product integrity, and border compliance. [22]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to support state and tribal partners through the Pesticides Compliance Monitoring and Enforcement Cooperative Agreement Grants Program. In addition to maintaining a basic level of pesticide program implementation, compliance assistance, and enforcement to ensure a viable pesticide regulatory and enforcement Program, there are five compliance and enforcement focus areas in the *FY 2022 - 2025 co-regulator cooperative agreement* guidance including: (1) improving protections for agriculture workers through the Worker Protection Standard; (2) pesticide applicator certifications; (3) reducing pesticides in water; (4) product integrity; and (5) ensuring pesticides meet US requirements. In FY 2024, EPA

[21] For additional information, please refer to: https://www.epa.gov/compliance/federal-insecticide-fungicide-and-rodenticide-act-state-and-tribal-assistance-grant.
[22] For additional information, please refer to: https://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

will prioritize and award state and tribal pesticides cooperative agreements for implementing the compliance monitoring and enforcement provisions of FIFRA.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) §23(a)(1); Consolidated Appropriations Act, 2023, Pub. L. 117-328.

Categorical Grant: Pesticides Program Implementation

Program Area: Categorical Grants
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Ensure Chemical and Pesticide Safety

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$14,102***	***$14,027***	***$14,027***	***$0***
Total Budget Authority	$14,102	$14,027	$14,027	$0

Program Project Description:

The purpose of EPA's Pesticide Program Implementation Grants Program is to translate pesticide regulatory decisions made at the national level into results at the local level. Under the pesticide statutes, responsibility for ensuring proper pesticide use is in large part delegated to states, territories, and tribes. Grant resources allow EPA's co-regulators to be more effective regulatory partners, serving all populations and enabling EPA's partners to prioritize incorporating environmental justice into their pesticide programs.

EPA's mission, as related to pesticides, is to protect human health and the environment from pesticide risk and to realize the value of pesticide availability by considering the economic, social, and environmental costs and benefits of pesticide use.[23] The Agency provides grants to states, tribes, and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, and environmental groups, to assist in strengthening and implementing EPA pesticide programs. This grant program also focuses on environmental justice (EJ) issues such as: worker safety activities, including protection of farmworkers;[24] outreach and education in tribal communities about pesticide risks; pesticide safety education in vulnerable communities with limited English language proficiency; and certification and training of pesticide applicators.[25] The Program also focuses on protecting endangered species,[26] protecting water resources from pesticides, protecting pollinators, and promoting environmental stewardship and Integrated Pest Management (IPM)-related activities in community settings, such as preschools in vulnerable communities and tribal schools, which are traditionally underserved and typically have EJ concerns.

EPA supports implementation of tribal pesticide programs through cooperative agreements that help tribes protect human health by reducing pesticidal risks in tribal communities. Many tribal communities are small and located in remote areas with few resources to address EJ issues. The

[23] Federal Insecticide, Fungicide and Rodenticide Act, as amended. Section 3(a), Requirement of Registration (7 U.S.C. 136a). Available online at: https://www.epa.gov/laws-regulations/summary-federal-insecticide-fungicide-and-rodenticide-act.
[24] A large portion of these stakeholders also may be members of communities with EJ concerns.
[25] A large portion of these stakeholders also may be members of communities with EJ concerns.
[26] The Endangered Species Act of 1973 sections 7(a)1 and 7(a)2; Federal Agency Actions and Consultations, as amended (16 U.S.C. 1536(a)). Available at the U.S. Fish and Wildlife Service's Endangered Species Act of 1973 (ESA) internet site: https://www.fws.gov/service/section-7-consultations.

Program is implemented in a manner that recognizes that tribes have unique needs as an underserved population, and that certain aspects of Native American lifestyles, such as subsistence fishing or consumption of plants that were not grown as food and possibly exposed to pesticides, may increase exposure to some chemicals or create unique chemical exposure scenarios.[27] These cooperative agreements with EPA's co-regulators also can provide pesticide safety education to migrant farmworkers and their families and communities.

To further these efforts, EPA funds a multi-year cooperative agreement with Colorado State University called the Pesticide Regulatory Education Program (PREP), which provides targeted training to states, tribes, and territories. This program is specifically requested by EPA's pesticide co-regulators and governed by a PREP Steering Committee, which includes the Association of American Pesticide Control Officials (AAPCO) Board of Directors and EPA. The PREP Steering Committee metin October 2022 to identify ways to be more inclusive of vulnerable communities and address more EJ issues in 2023.

The Agency also funds a multiyear grant in support of the State Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Issues Research and Evaluation Group (SFIREG). The grant ensures the close coordination of states and EPA on pesticide issues.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.1, Ensure Chemical and Pesticide Safety in the *FY 2022 – 2026 EPA Strategic Plan*.

In FY 2024, EPA will work with states, tribes and territories to incorporate EJ principles into their programs as much as possible. In FY 2024, EPA will continue to implement the following programs:

Agricultural Worker Protection Standard and Certification and Training Program

Through the Certification and Training Program and the Agricultural Worker Protection Standard, EPA protects workers, pesticide applicators and handlers, employers, and the public from the potential risks of pesticides at their work. This effort protects farmworkers, their families, and their communities, all of which are often located in areas with many EJ concerns. EPA will continue to provide assistance and grants to implement these programs, and to address their respective federal regulatory changes. In FY 2020, states, territories, and tribes (certifying authorities) submitted their revised certification plans to EPA for review to address the 2017 revisions to the Certification of Pesticide Applicators rule. Since then, EPA has reviewed the proposed changes to the certification plans, working with these certifying authorities to refine and modify their proposed plans as needed. Plan approvals began in FY 2022 with most of the 68 certification plans to be approved in FY 2023. By FY 2024, EPA anticipates all plans to be finalized and will focus on supporting the implementation of the approved plans. Certifying authorities will be implementing approved plans according to the timelines outlined in the plans. Some certifying authorities began regulatory and program changes in FY 2021 and FY 2022 to start implementing their revised plans

[27] For additional information, please visit: http://www.epa.gov/pesticide-advisory-committees-and-regulatory-partners/tribal-pesticide-programs.

in advance of final approval. In FY 2024, states, territories, and tribes will continue to train their program and inspection staff on the 2015 final revisions to the Agricultural Worker Protection Standard, conduct outreach and compliance assistance for communities with environmental justice concerns, and enforce the rule.[28]

Endangered Species Protection Program

The Endangered Species Protection Program protects federally threatened and endangered animals and plants impacted by pesticide use.[29] The Endangered Species Act (ESA) mandates that federal actions will not jeopardize the continued existence of ESA-listed species or destroy or adversely modify their designated critical habitat. EPA also will provide grants to states and tribes, as described above, for projects supporting endangered species protection. Program implementation includes outreach, communication, education related to pesticide use limitations, review and distribution of endangered species protection bulletins, evaluating potential risks to ESA-listed species from pesticides, and initiating ESA consultation with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) (aka "The Services") when appropriate. In FY 2024, these activities will continue to support the Agency's mission to protect the environment from pesticide risk and comply with the ESA for FIFRA actions.

Protection of Water Sources from Pesticide Exposure

Protecting the Nation's water sources from possible pesticide contamination is an important component of EPA's environmental protection efforts. In FY 2024, EPA will continue to provide funding, through cooperative agreements, to states, tribes, and other partners to investigate and respond as needed to address pesticide contamination of water resources, particularly in vulnerable communities with EJ concerns. Stakeholders and partners, including states and tribes, are expected to evaluate local pesticide uses that could contaminate water resources and take steps to prevent or reduce contamination where pesticide concentrations approach or exceed levels of concern. In FY 2024, EPA will work with co-regulators to determine the best methods for identifying and addressing possible pesticide contamination in vulnerable and underserved communities.

Integrated Pest Management (IPM)

EPA will continue to support risk reduction by promoting the use of safer alternatives to traditional chemical pesticides, including through IPM techniques.[30] EPA supports the development and evaluation of new pest management technologies that contribute to reducing both human health and environmental risks from pesticide use. For FY 2024, the Program's National Program Guidance will continue to require all regions to implement at least one IPM project with an EJ focus.[31] In addition, the Program will be reviewing the FIFRA Cooperative Agreement Guidance to identify program areas that can be expanded to include more EJ work. Examples of this include pollinator habitat protection on tribal lands and overburdened and underserved communities, and bed bug education in underserved populations and communities with EJ concerns.

[28] For additional information, please visit: https://www.epa.gov/pesticide-worker-safety/how-epa-protects-workers-pesticide-risk.
[29] For additional information, please visit: https://www.epa.gov/endangered-species/about-endangered-species-protection-program.
[30] For additional information, please visit: http://www.epa.gov/pesp/.
[31] Most regional programs are already implementing their own EJ efforts, which incorporate pesticide safety.

The Pesticide Environmental Stewardship Program (PESP) is an EPA partnership program that works with the Nation's pesticide-user community to promote IPM practices. PESP is guided by the principle that partnership programs complement the standards and decisions established by regulatory and registration actions. In FY 2024, resources will be focused on funding projects across the country that promote IPM and reduce the impacts of pesticide use in agricultural settings. Selected projects could address pesticide use in rural areas or on tribal lands, promoting IPM practices that reduce risk and that benefit these and other overburdened and disadvantaged communities.

Pollinator Health

EPA will continue to work with state and tribal agencies to develop and implement local plans to help improve pollinator health. State pollinator protection plans in several states have been an effective communication and collaboration mechanism between stakeholders at the local level that can lead to reduced pesticide exposure and protection of honeybees, while maintaining the flexibility needed by growers to use pesticides. EPA believes that these plans, developed through a robust stakeholder engagement process at the local level, serve as good models for enhanced local communication and can help accomplish the Agency's goal of mitigating exposure of bees to acutely toxic pesticides. In FY 2024, EPA will continue to engage with the Tribal Pesticide Program Council (TPPC) Pollinator Protection Workgroup to better understand specific pollinator protection challenges for tribes, a traditionally underserved population with many EJ concerns.[32] In addition, EPA regions will assist their states, tribes, and territories with their pollinator protection plans and efforts as needed.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) § 23(a)(1); Federal Food, Drug and Cosmetic Act (FFDCA); Food Quality Protection Act (FQPA) of 1996; Endangered Species Act (ESA).

[32] Tribal concerns include, but are not limited to, potential impacts to pollinator habitat from climate change.

Categorical Grant: Pollution Control (Sec. 106)
Program Area: Categorical Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$225,304***	***$237,000***	***$279,440***	***$42,440***
Total Budget Authority	$225,304	$237,000	$279,440	$42,440

Program Project Description:

Section 106 of the Clean Water Act (CWA) authorizes EPA to provide federal assistance to states, territories, the District of Columbia, tribes, and interstate agencies to establish and maintain adequate programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources.[33] Activities supported through these grants include: conducting ambient water quality monitoring; assessing and listing impaired waters; developing water quality standards and Total Maximum Daily Loads (TMDLs); and issuing and enforcing National Pollutant Discharge Elimination System (NPDES) permits.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA's Section 106 Program funds will continue to support the base state, interstate, and tribal water pollution control and is a critical funding source to establish, expand, and implement water quality programs to protect and restore water resources, including rivers, streams, lakes, wetlands, and groundwater. In FY 2024, EPA requests an increase of $42.4 million to support states and interstates and tribes to advance environmental justice and community work through identifying and taking actions to assess and mitigate PFAS in the environment. States, interstates, and tribes will use the CWA Section 106 funding to conduct monitoring and assessment of PFAS in surface water, develop fish advisories, and revise state and tribal water quality standards to include criteria for PFAS. The increase in funds also will support permitting authorities that provide compliance assistance to Publicly Owned Treatment Works where PFAS are expected or suspected to be present in wastewater and stormwater discharges.

Out of the $42.0 million increase for this grant, $8.0 million is focused on increasing funding for the Monitoring Initiative which will provide resources needed to continue and enhance state and tribal participation in the National Aquatic Resource Surveys (NARS), support expanded, long-term PFAS monitoring in fish tissue across the country, and support enhancements to state and tribal monitoring and assessment programs, including investigating cost-effective monitoring protocols for PFAS and

[33] The District of Columbia is eligible for 106 funds. A tribe must be eligible under Section 518(e) in the CWA.

other emerging contaminants in fish tissue and other media. Funding also will support state and tribal efforts to understand and mitigate climate change and environmental justice. States, interstate programs, and tribes will continue to restore lost capacity through hiring and training of water quality staff, expanding program activities such as ambient water quality monitoring and assessment, water quality standards (WQS) and TMDL implementation, permitting and enforcement, and protecting water resources.

Monitoring and Assessment

EPA is working with states and tribes to provide monitoring and assessment information to support multiple CWA programs in a cost-efficient and effective manner. The result will be scientifically defensible monitoring data that are needed to address priority problems at state, tribal, national, and local levels.

In FY 2024, EPA will continue working with states and tribes to support base monitoring activities and enhance their water quality monitoring programs. Monitoring Initiative funds for states (including the District of Columbia and trust territories), eligible interstates, and eligible tribes will support enhancement of monitoring programs and participation in the National Aquatic Resource Surveys (NARS).[34] NARS are statistical surveys that assess the quality of the Nation's waters. Using sampling sites selected at random and standardized field and lab methods, NARS can compare results from different parts of the country and between years.[35] The Monitoring Initiative will support enhancements in NARS and in monitoring programs consistent with priorities in monitoring strategies, which include expanding monitoring of PFAS in surface waters and fish tissue to support actions to assess and mitigate PFAS in the environment. In FY 2024, the Monitoring Initiative will be funded at approximately $26.5 million.

Through the Monitoring and Assessment Partnership, EPA will continue working with states and tribes to develop and apply monitoring tools and techniques to provide high-quality data to support priority CWA program needs. EPA will continue working with states and tribes to support their water quality assessment programs, including helping to assure timely and well-supported submission of tribal assessment reports, state Integrated Reports, and 303(d) lists. These lists help inform progress on restoring water quality. EPA will continue to work with states and tribes to support electronic reporting, including annual reporting of water quality data through the Water Quality Exchange and submission of Integrated Reports through the ATTAINS.

Reviewing and Updating Water Quality Standards

EPA will work with states and authorized tribes as they review and update their water quality standards periodically as required by CWA and EPA regulations in 40 CFR Part 131. EPA will work with tribes that want to establish water quality standards. EPA will review and work to formally act upon all state and tribal submissions of new and revised water quality standards in accordance with the Agency's statutory obligations and timeline. The Agency also will continue

[34] For more information, please see: https://www.epa.gov/water-pollution-control-section-106-grants/monitoring-initiative-grants-under-section-106-clean.
[35] For more information, please see: https://www.epa.gov/national-aquatic-resource-surveys.

to track progress by states and authorized tribes as they complete triennial reviews of applicable standards on time as required by CWA.

Developing TMDLs

EPA will work with states, territories, and authorized tribes to develop and implement Total Maximum Daily Loads (TMDLs for CWA Section 303(d) listed impaired waterbodies. TMDLs identify the sources of water pollution. EPA and states then use permit requirements, watershed plans, and nonpoint source funds to improve impaired waters. EPA will continue to work with states to facilitate accurate, comprehensive, and geo-referenced water quality assessment decisions made available to the public via ATTAINS. EPA, through a new "bridge metric," continues to track state progress in completing TMDLs, other restoration approaches, or protection approaches with the goal of approximately 19 thousand square miles of addressed bridge metric waters by the end of FY 2024. As of December 2022, over four thousand square miles of state bridge metric waters were addressed by a TMDL, other restoration approach, or protection approach. Following the conclusion of this bridge metric, EPA's plan is that states will continue to set priorities every two years under a long-term Vision metric.

Issuing Permits

The NPDES program is managed by EPA and the states. On average, the program issues over 10 thousand permits a year to address discharges from among the approximately 15 thousand wastewater treatment facilities, more than 60 categories of industries, and almost 300 thousand stormwater facilities. The NPDES program requires point source dischargers of pollutants to waters of the United States to be permitted and pretreatment programs be put in place to control discharges from industrial and other facilities to the Nation's wastewater treatment plants. EPA is working with the states to identify opportunities to enhance the integrity and timely issuance of NPDES permits, [36] while addressing contaminants of emerging concern such as PFAS. In December 2022, EPA published a memorandum titled *Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs*,[37] which includes detailed instructions regarding how permitting authorities would address PFAS discharges in NPDES permits. EPA encourages permitting authorities to propose monitoring requirements at facilities where PFAS are expected or suspected to be present in wastewater and stormwater discharges, utilizing EPA's recently published analytical method 1633, which addresses 40 unique PFAS.

EPA also provides training and technical assistance to permit writers, promotes innovative green infrastructure, and suggests integrated planning approaches to affordably address wet weather challenges. In FY 2024, EPA will continue to collaborate with permit writers where appropriate and identify environmental justice and climate change factors that could inform the development of effective approaches within the authority of the NPDES program. After program improvements, between March 2018 and the end of September 2022, the backlog of EPA-issued new and existing NPDES permits decreased from 106 to 20 and 547 to 229, respectively. States are expected to

[36] Currently no tribes have authority to implement the NPDES program.
[37] For more information, please see: https://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf

ensure that NPDES permits are reissued on a timely basis and include clear and enforceable requirements to ensure permit quality. Permitting authorities should continue to implement significant actions identified during regional reviews and Permit Quality Reviews to assure effective management of the permit program and to adopt efficiencies to improve environmental results.

Conducting Compliance Monitoring and Enforcement

EPA will work with NPDES-authorized states to implement the 2014 CWA NPDES Compliance Monitoring Strategy (CMS).[38] The NPDES CMS establishes national standards for allocation of inspection resources across all NPDES regulated entities to best protect water quality.

EPA works with states on advanced technologies, such as remote water monitoring sensors, to collect discharge data and identify problem areas more efficiently. The Smart Mobile Tools for Field Inspectors software suite provides a digital platform to support inspectors and managers through the entire inspection process – from scheduling an inspection to generating a draft inspection report for management review. The Agency expects that these technologies will improve the analytical capabilities of both EPA and the states and enhance the public's knowledge about the quality of their environment.

Currently, EPA and states are implementing the NPDES Electronic Reporting Rule (eRule). States have the option to build their own electronic reporting tools and data systems, or they can elect to utilize EPA's tools and systems. EPA and states implemented Phase 1 of the NPDES eRule in for the following two reports: 1) Discharge Monitoring Reports and 2) Federal Biosolids Annual Report, where EPA is the regulatory authority. Over 35,000 NPDES permittees in 24 states use EPA's electronic reporting tool, NetDMR, to submit their Discharge Monitoring Reports. EPA and states are implementing Phase 2 of the NPDES eRule for general permit reports and all remaining program reports. EPA will continue to work collaboratively with states in FY 2024 to ensure a smooth transition to electronic reporting for the NPDES program. Implementing the NPDES eRule will help improve transparency and ensure permittees submit more accurate, timely, complete, and consistent information.

Working with Tribal Water Pollution Control Programs

In FY 2024, EPA will work with tribal programs to implement the revised CWA Section 106 Tribal Guidance. Tribes will continue to implement and expand their water pollution control programs by conducting activities that address water quality and pollution problems on tribal lands pursuant to CWA Section 518(e). In addition, the FY 2024 increase in tribal funds will support expanding tribal programs capacity to monitor surface waters and fish tissue, assess and develop criteria for PFAS, and will support capacity to provide PFAS data and assessment decisions to Water Quality Exchange and ATTAINS.

[38] For more information, please see: https://www.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring.

Performance Measure Targets:

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						8,000	8,000	17,100	Square Miles
Actual						20,511			

(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2,100	1,400	1,400	Square Miles
Actual						12,833			

(PM TMDL-03) Square miles of priority areas covered by TMDLs, other restoration plans, or protection approaches.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target							7,940	19,280	Square miles
Actual									

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$42,440.0) This program change is an increase to provide additional grant funding to states and tribes to support actions to identify, assess, and mitigate PFAS in the environment. This funding also supports the establishment and maintenance of programs for the prevention and control of surface and groundwater pollution from point and nonpoint sources.

Statutory Authority:

CWA § 106.

Categorical Grant: Pollution Prevention
Program Area: Categorical Grants
Goal: Ensure Safety of Chemicals for People and the Environment
Objective(s): Promote Pollution Prevention

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$2,757***	***$4,973***	***$5,775***	***$802***
Total Budget Authority	$2,757	$4,973	$5,775	$802

Program Project Description:

The Pollution Prevention (P2) Categorical Grants Program provides financial support to states, state entities (*i.e.*, colleges and universities), federally recognized tribes and inter-tribal consortia in implementing the Pollution Prevention Act (PPA) of 1990.

The P2 Program is one of EPA's tools for advancing environmental stewardship and sustainability for federal, state, tribal governments, businesses, communities, and individuals. The P2 Categorical Grants Program seeks to alleviate environmental problems by helping businesses with the development and implementation of source reduction practices before pollution is created. As a result of these preventive approaches, the P2 Program protects the environment by conserving and protecting natural resources while strengthening economic growth through cost reductions and increased market opportunities. P2 approaches include, but are not limited to, any of the following: reducing hazardous releases to air, water, and land; the use of hazardous materials; the generation of greenhouse gases; and the use of water. The P2 Program's efforts advance the Agency's priorities to pursue sustainability; to act on climate change; to make a visible difference in communities, including advancing environmental justice (EJ) in vulnerable communities; and to ensure chemical safety.[39]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 7/Objective 7.2, Promote Pollution Prevention in the *FY 2022 – 2026 EPA Strategic Plan*. In FY 2024, the P2 Categorical Grants[40] Program will continue supporting states, state entities, federally recognized tribes and inter-tribal consortia to provide technical assistance to businesses, particularly small- and medium-sized firms, to help them identify, develop, and implement cost-effective approaches for reducing or eliminating pollution at the source. Because it is often cheaper to prevent pollution from being created at the source rather than cleaning it up afterwards or to pay for control, treatment, and disposal of waste products, P2 approaches often result in significant long-term savings for businesses. Documenting

[39] For additional information about EPA's P2 program, please visit: http://www.epa.gov/p2/**Error! Main Document Only.**.
[40] For additional information about the grants themselves, please visit: https://www.epa.gov/p2/grant-programs-pollution-prevention. Categorical Grants fund core P2 technical assistance and are complementary to the P2 Source Reduction Assistance Grants. In FY 2021 there are 42 active P2 Categorical Grants and 11 active P2 Source Reduction Assistance Grants, for a total of 53 grants.

best practices and developing case studies and training materials are foundational assets for amplifying and replicating environmental stewardship, P2, and sustainability successes resulting from the grant programs. These approaches also may help stakeholders prepare for limitations in the use of TSCA High Priority Substances subject to risk management efforts by EPA. In addition to regular appropriations, the Infrastructure Investment and Jobs Act (Public Law 117-58) includes $20 million for this program in FY 2024.

Through competitive grants to states and tribes, U.S. businesses can access a range of P2-enabling tools, information, and support programs. In FY 2022, EPA awarded 32 grants funded through the regular P2 STAG appropriation and an additional 39 P2 grants funded through the IIJA. Of the P2 grants awarded in FY2022, six were awarded to federally recognized tribes.

With respect to the funding provided through regular ongoing and IIJA appropriations, the P2 Grant Program emphasizes the importance of grantees documenting, reporting, and sharing information on P2 best practices. This allows other businesses to replicate the P2 approaches implemented through the grants. Furthermore, the expansion of the P2 grant program provided by IIJA provides an opportunity to significantly increase the results described above and increase the generation of information on P2 approaches that businesses can replicate.

In FY 2023, EPA will issue two new P2 Grant opportunities that will initiate grantee work in FY 2024 and will focus more intensively on advancing EJ priorities and addressing climate impacts by:

- Focusing P2 technical assistance to businesses to improve human health and the environment in vulnerable communities.

- Providing P2 technical assistance to businesses to improve human health and the environment in vulnerable communities by increasing the supply, demand and/or use of safer and more sustainable products, such as those that are certified by EPA's Safer Choice label or those that conform to EPA's Recommendations for Specifications, Standards and Ecolabels for Federal Purchasing (EPA Recommendations).

The grant opportunities will result in increased capacity to provide P2 technical assistance to businesses, particularly in vulnerable communities, and increased assistance to help businesses develop and adopt source reduction practices in their operations, including conformance with and access to EPA Recommended Standards and Ecolabels and the EPA Safer Choice Standard. Between 2011 and 2021, EPA's P2 Program issued 504 assistance grants for $54.1 million, which helped American businesses identify, develop, and adopt approaches resulting in the following benefits: 917 million pounds of hazardous materials reduced, 49 billion gallons of water saved, 19.8 million metric tons of greenhouse gases reduced, and $2.2 billion dollars in savings for business.[41]

One approach EPA takes to pursue program efficiencies and economies of scale is to use sector focused P2 National Emphasis Areas (NEAs). For P2 grants awarded in FY 2022 and commenced in FY 2023, grant applicants will continue to be required to focus on one or more National

[41] Calculated over a 4-year rolling period to account for the reoccurring benefits the P2 actions provide.

Emphasis Areas,[42] which were selected based on an analysis of data to identify industry sectors that had high environmental impact, high economic importance, and high P2 opportunity; pursued opportunities to promote environmental justice; addressed climate change; and were of local concern to potential grantees. This approach will be continued in the award of FY 2024 funds. The FY 2023 grants described earlier will not use sector focused NEAs in order to allow greater flexibility in addressing environmental justice.

Performance Measure Targets:

Work under this program supports performance results in the Pollution Prevention Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$802.0) This program change supports technical assistance to businesses to improve human health and the environment in disadvantaged communities by increasing the supply, demand, and/or use of safer and more sustainable products.

Statutory Authority:

Pollution Prevention Act of 1990; Toxic Substances Control Act.

[42] The P2 National Emphasis Areas include automobile manufacturing and maintenance, aerospace manufacturing and maintenance, chemical manufacturing and processing, metal manufacturing and fabrication, food and beverage manufacturing or processing, and/or supporting pollution prevention in Indian Country and for Alaska Native Villages.

Categorical Grant: Public Water System Supervision (PWSS)

Program Area: Categorical Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$110,742***	***$121,500***	***$132,566***	***$11,066***
Total Budget Authority	$110,742	$121,500	$132,566	$11,066

Program Project Description:

The Public Water System Supervision (PWSS) Program provides grants to states and tribes with primary enforcement authority (primacy) to implement and enforce the National Primary Drinking Water Regulations (NPDWRs) under the Safe Drinking Water Act (SDWA). The NPDWRs set forth health-based standards, monitoring, reporting, sanitary surveys, and enforcement elements to ensure that the Nation's drinking water supplies do not pose health risks. Funds allocated to states and tribes without primacy are used to support direct implementation activities by EPA.

PWSS Program grants support the safety of the Nation's drinking water resources and protect public health and the environment. Rural, small, and disadvantaged communities significantly benefit from support and technical assistance provided by primacy agencies through this vital funding. These systems often struggle to hire and retain qualified operators. Qualified operators are essential to ensure these systems can provide safe water for their customers. PWSS Program grants support the training and certification operators needed to continue to protect public health.

Primacy agencies use these grants to fund drinking water program personnel who:

- Provide training and technical assistance to owners and operators of public water systems;
- Conduct sanitary surveys (*i.e.,* reviews to determine and support a utility's capacity to deliver safe drinking water) and address significant deficiencies that may compromise the quality of the finished water;
- Train and certify public water system operators;
- Manage public water system data, facilitate electronic reporting of compliance monitoring data, and submit compliance data to the database of record, the Safe Drinking Water Information System;
- Ensure that public water systems conduct the required public notifications to consumers; and

- Respond to violations and issue enforcement actions.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The Program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities.

In FY 2024, EPA will provide funds to support state efforts to assist the most vulnerable water systems in:

- Meeting drinking water regulations;
- Implementing the new Revised Lead and Copper Rule;
- Developing lead service line inventories that will support lead service line replacement (LSLR) priorities;
- Building the financial and managerial capacity needed to achieve and maintain long-term sustainability and compliance with national safe drinking water regulations;
- Assisting public water systems with addressing Per- and Polyfluoroalkyl Substances (PFAS) and other contaminants of emerging concern as they carry out their PWSS programs; and
- Benefitting from federal investments that address aging or inadequate infrastructure (*e.g.,* pipe replacement to prevent failures in distribution systems, installation of treatment to remove drinking water contaminants).

EPA's efforts under this program will help deliver clean drinking water, improve public health, and support environmental justice for overburdened and underserved communities, including rural and tribal communities.

In FY 2024, funding will help states and tribes with primary enforcement authority implement and enforce NPDWRs under the SDWA. Funds allocated to states and tribes without primacy are used to support direct implementation activities by EPA. These funds will assist all communities across the country in the provision of safe drinking water.

EPA's PWSS Program is working with states to reduce the number of systems that have health-based non-compliance events, with a goal of decreasing the number of community water systems out of compliance with health-based standards. As of January 2023, 2,988 of the 3,508 systems with health-based violations on September 30, 2017, have been returned to compliance (*i.e.,* 520 systems are still in violation). The PWSS Program helps to facilitate this effort by supporting state drinking water programs and technical assistance providers in achieving and maintaining compliance at drinking water systems, amplifying best practices, strengthening state capacity, and certifying drinking water operators.

EPA also is strengthening its oversight of the state drinking water programs by improving the scope and consistency of the annual PWSS Program review for each primacy agency that is required by SDWA. Information from these reviews helps ensure that federal drinking water regulations are implemented consistently across the country and reinforces Agency evidence-building activities. The review includes an analysis of the completion of sanitary surveys by the primacy agency, an evaluation of whether the primacy agency is implementing the state program in accordance with SDWA, a review of state use of the funds and associated impacts, and alignment of the program with national enforcement and compliance priorities. The annual program review directly supports the work of the states and EPA to reduce the number of community water systems out of compliance with health-based standards. In addition, EPA conducts periodic file reviews of state programs. These file reviews help EPA ensure states are accurately reporting compliance information to the Agency so issues can be identified and addressed.

Performance Measure Targets:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target					875	640	450	400	CWSs
Actual	3,508	1,718	1,128	1,048	654	537			

(PM DW-07) Number of drinking water and wastewater systems, state and tribal officials, and water sector partners provided with security, emergency preparedness, and climate resilience training and technical assistance.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						2,000	3,500	3,500	Systems and Partners
Actual						3,939			

(PM DWT-02) Number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						100	55	35	CWSs
Actual						74			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$11,066.0) This increase of resources supports grant funding to help states and tribes with primary enforcement authority to implement and enforce NPDWRs under the SDWA. In addition, this increase supports states, territories, and tribes in complying with drinking water regulations, conducting sanitary surveys of public water systems, and providing technical assistance to managers and operators of public water systems.

Statutory Authority:

SDWA § 1443.

Categorical Grant: Radon
Program Area: Categorical Grants
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Reduce Exposure to Radiation and Improve Indoor Air

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$8,007***	***$10,995***	***$12,487***	***$1,492***
Total Budget Authority	$8,007	$10,995	$12,487	$1,492

Program Project Description:

Title III of the Toxic Substances Control Act (TSCA) authorizes EPA to take a variety of actions to address the public health risks posed by exposures to indoor radon. Under the statute, EPA assists states and tribes through the State Indoor Radon Grants (SIRG) program, which provides categorical grants to develop, implement, and enhance programs that assess and mitigate radon risk. EPA provides guidance to states and tribes to promote and spread effective strategies for reducing indoor radon public health risks. EPA also works with states and tribes to support targeting SIRG funding to reduce risks for low-income populations that lack resources to mitigate radon risk on their own.

Radon is the second leading cause of lung cancer in the United States – and the leading cause of lung cancer mortality among non-smokers – accounting for about 21,000 deaths per year.[43] EPA's non-regulatory Indoor Air - Radon Program, which includes the SIRG grants program, promotes actions to reduce the public's health risk from indoor radon. EPA and the Surgeon General recommend that all homes be tested for radon and if radon levels above EPA's guidelines are confirmed, elevated levels should be reduced by home mitigation using proven, straightforward techniques. EPA also recommends that new homes be built using radon-resistant features in areas where there is elevated radon. Nationally, risks from radon have been reduced in millions of homes, but millions of homes are still in need of mitigation. This voluntary program promotes partnerships between national organizations, the private sector, and more than 50 state, local, tribal and territory governmental programs to reduce radon risk.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA will administer the SIRG Program, in collaboration with state and tribal partners. Work in this program directly supports the President's priority of advancing environmental justice. In implementing the SIRG program in FY 2024, EPA will work with states and tribes to build capacity and address environmental justice concerns by assisting grant recipients to address radon

[43] For additional information, please see: https://www.epa.gov/radon.

risk reduction in underserved, low-income communities, for example through building code adoption. These interventions serve to institutionalize and embed risk reduction into standard building practices and thus provide equity for underserved communities.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,492.0) This program change is an increase to support state and tribal partners through the radon grants program.

Statutory Authority:

Title III of the Toxic Substances Control Act (TSCA).

Categorical Grant: State and Local Air Quality Management

Program Area: Categorical Grants
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$226,481***	***$249,038***	***$400,198***	***$151,160***
Total Budget Authority	$226,481	$249,038	$400,198	$151,160

Program Project Description:

This Program provides funding for state air programs, as implemented by state, multi-state, and local air agencies. Section 103 of the Clean Air Act (CAA) provides EPA with the authority to award grants to air pollution control agencies, other public or nonprofit private agencies, institutions, and organizations, to conduct and promote certain types of research, investigations, experiments, demonstrations, surveys, studies, and training related to air pollution. Section 105 of the CAA provides EPA with the authority to award grants to state and local air pollution control agencies to develop and implement continuing environmental and public health programs for the prevention and control of air pollution, implementation of National Ambient Air Quality Standards (NAAQS) and improvement of visibility in our national parks and wilderness areas (Class I areas). The continuing activities funded under Section 105 include: analysis and planning for attainment and maintenance of NAAQS; emission reduction measures; development and operation of air quality monitoring networks, and other air program activities. Section 106 of the CAA provides EPA with the authority to fund interstate air pollution transport commissions to develop or carry out plans for designated air quality control regions.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

Funding requested for FY 2024 includes an additional $151 million that will help expand the efforts of air pollution control agencies to implement their programs and help accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as expanding deployment of renewable energy sources and energy efficiency programs; ensuring safe and effective oil and gas well pollution management and prevention; developing policies and programs to facilitate build-out of electric vehicle (EV) charging station infrastructure; increasing air quality monitoring in communities with environmental justice concerns; and supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities. The increase also will enhance the resiliency, capacity, and capability of air monitoring systems for NAAQS and local-scale monitoring.

States are responsible for State Implementation Plans (SIPs), which provide a blueprint for the programs and activities that states carry out to attain and maintain the NAAQS and comply with visibility improvement obligations. In FY 2024, SIP activity will be ongoing regarding attainment SIPs for areas reclassified to "Moderate" for the 2015 ozone NAAQS and those reclassified to "Severe" for the 2008 ozone NAAQS in FY 2023, and for areas designated nonattainment effective April 30, 2021, for the 2010 sulfur dioxide (SO_2) NAAQS. States also will continue implementing the 2008 and 2015 8-hour ozone NAAQS, the 2008 lead NAAQS, the 2010 1-hour nitrogen dioxide (NO_2) NAAQS, and the 2010 1-hour SO_2 NAAQS. As applicable, states also will continue implementing the previous $PM_{2.5}$ and ozone NAAQS, including the 1997 annual and 24-hour $PM_{2.5}$ NAAQS, the 2006 24-hour $PM_{2.5}$ NAAQS, the 2012 annual $PM_{2.5}$ NAAQS, the revoked 1997 8-hour ozone NAAQS and the revoked 1-hour ozone NAAQS.

States and EPA also may have ongoing SIP obligations and/or Federal Implementation Plan (FIP) obligations associated with visibility improvement requirements, among other requirements identified in the CAA. In FY 2024, EPA will work with states to prioritize activities needed to meet obligations for SIP development and plan implementation for attaining and maintaining the NAAQS, achieving regional haze goals and identifying streamlining options. EPA will maximize use of its web-based State Planning Electronic Collaboration System (SPeCS) to review draft SIPs from state air agencies, and to track and process state submittals.

To the extent that any ongoing NAAQS reviews result in a change to the standards, activities related to air quality designations for the changed standard(s) would be required, as well as any additional implementation related activities. The timing of such activities would depend on when the final NAAQS are promulgated. Additionally, EPA may be engaged in redesignation actions – making determinations that nonattainment areas may now be redesignated to attainment, or that currently designated attainment areas are no longer meeting the NAAQS and taking action to redesignate, as appropriate.

Air Monitoring Networks

The Nation's ambient air quality monitoring network, an essential element of the Agency's environmental infrastructure, serves as the foundation for the air quality management and control programs. States will continue to operate and maintain their ambient air monitoring networks with technical assistance and program support from EPA. A significant and essential part of a state's overall air program includes the collection, analysis, quality assurance, and submittal of ambient air quality data.

In FY 2024, EPA will continue to lead and is requesting additional funding for a nationwide effort to ensure and enhance the resiliency, capacity, and capability of air monitoring systems for NAAQS and local-scale monitoring implemented by state, local, and tribal organizations through: system modernization (e.g., infrastructure improvements and, enhanced network automation); expanded functionality (*e.g.*, increased use of continuous monitoring equipment); and local-scale monitoring to characterize air toxics and better address air quality burdens in communities with environmental justice concerns.

Key to the success of these efforts will be close, meaningful collaboration with our state, local and tribal air partners, as well as disadvantaged and overburdened communities. The COVID-19 pandemic exposed the vulnerabilities of our aging monitoring infrastructure and the need for modernization in the Nation's ambient air monitoring network. In addition, the Government Accountability Office identified in a 2020 report the need for EPA to develop an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public. EPA will continue to work closely with our partners to address the GAO recommendations.

Air Permitting Programs

In FY 2024, states with approved or delegated air permitting programs will implement these programs and EPA will provide technical assistance, as needed.

Emissions Inventories

The development of a complete quality assured emission inventory is an important step in an air quality management process. These inventories are used to help determine significant sources of air pollutants and establish emission trends over time, target regulatory actions, and estimate air quality through dispersion and photochemical modeling. An emission inventory includes estimates of the emissions from various pollution sources in a specific geographical area. In FY 2024, EPA will complete and release the 2021 emissions data for modeling and prepare the 2022 emissions data for modeling. In FY 2024, states will collect and prepare 2023 emissions data in anticipation of submitting it to EPA for the next release of the National Emissions Inventory (NEI). EPA plans to release the 2023 NEI early in calendar year 2026.

Air Quality Forecasts

The Program supports state and local air agency capabilities to forecast air quality for ozone and $PM_{2.5}$ to provide the public with information they can use to make daily lifestyle decisions to protect their health. This information allows people to take precautionary measures to avoid or limit their exposure to unhealthy levels of air quality, including during extreme events like wildfires. EPA will work with state, tribal, and local air quality agencies to continue improving the fire and smoke map at www.airnow.gov that provides important air quality information during wildfire season.

State and Local Air Toxics Efforts

The program also supports state and local efforts to characterize air toxics problems and take measures to reduce health risks from air toxics. This funding also supports characterization work that includes collection and analysis of emissions data and monitoring of ambient air toxics. In FY 2024, funds will support the National Air Toxics Trends Stations (NATTS), consisting of 26 air toxics monitoring sites, including the associated quality assurance, data analysis, and methods support.

Visibility Improvement

In FY 2024, EPA will be engaged in reviewing draft and final state plans intended to meet the requirements of the regional haze program for the second planning period, as well as developing FIPs, if needed and as appropriate. EPA also may be continuing to finalize remaining first planning period obligations. EPA will review regional haze SIPs for the second planning period to ensure that states are making reasonable progress towards their visibility improvement goals, consistent with statutory and regulatory obligations. The first state plans for improving visibility in our national parks and wilderness areas were due in December 2007. Under the Regional Haze Rule, states were required to submit plans for the second planning period on July 31, 2021, to demonstrate how they have and will continue to make progress towards achieving their visibility improvement goals. EPA also may be engaged in regulatory updates to the Regional Haze Rule to identify obligations for future planning periods.

Air Quality Training

To fulfill statutory obligations under section 103 of the Clean Air Act in FY 2024, states and multi-jurisdictional organizations will advance and maintain training priorities for air quality-related subjects; develop new and update existing air quality-related training materials; and provide classroom and other types of training for air quality professionals. These training programs are essential for building and maintaining expertise and administrative capacity among our co-regulator agencies, enabling them to continue playing a vibrant role in administering CAA protections and programs. In FY 2022, in-person delivery of training restarted and the delivery of 50 virtual instructor-led trainings was supported, resulting in 1323 student completions. In addition, through the newly rebranded *AirKnowledge* and modernized Learning Management System, there were 10,308 self-instructional completed trainings.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$151,160.0) This program change is an increase in grant resources that will help expand the efforts of air pollution control agencies to implement their programs and accelerate immediate on-the-ground efforts to reduce greenhouse gases. The increase also will enhance the resiliency, capacity, and capability of air monitoring systems for NAAQS and local-scale monitoring and will support additional air quality monitoring in disadvantaged communities suffering from disproportionate exposure to traffic emissions.

Statutory Authority:

Clean Air Act §§ 103, 105, 106.

Categorical Grant: Toxics Substances Compliance
Program Area: Categorical Grants
Goal: Enforce Environmental Laws and Ensure Compliance
Objective(s): Detect Violations and Promote Compliance

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$4,768***	***$5,010***	***$6,877***	***$1,867***
Total Budget Authority	$4,768	$5,010	$6,877	$1,867

Program Project Description:

The Toxic Substances Control Act (TSCA) Compliance Monitoring Program builds partnerships with states, tribes, and territories to strengthen their ability to address environmental and public health threats from toxic substances. [44] This assistance is used to prevent or eliminate unreasonable risks to human health or the environment and to ensure compliance with toxic substance regulations. The grants support inspection programs associated with lead-based paint (§402(a), §406(b), and the Renovation, Repair, and Painting Rule (402c)), the Asbestos Hazard Emergency Response Act (AHERA), and Polychlorinated biphenyls (PCBs).

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 3/Objective 3.2, Detect Violations and Promote Compliance in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to focus on compliance monitoring programs to prevent or eliminate unreasonable risks to health or the environment associated with chemical substances such as asbestos, lead-based paint, and PCBs, and to encourage states to establish their own compliance and enforcement programs for lead-based paint and asbestos. EPA may provide funding for compliance monitoring grants to states and tribes under TSCA to conduct inspections to ensure compliance with the Asbestos-in-Schools requirements, the Model Accreditation Plan (MAP), Asbestos Ban and Phase Out Rule, the TSCA Asbestos Worker Protection Rule, lead-based paint regulations, and PCB regulations.

For states with an asbestos waiver or lead-based paint programs, these grants also fund enforcement activities. In FY 2024, the Program will continue to award state and tribal assistance grants to aid in the implementation of compliance and enforcement provisions of TSCA. The weighted formula aligns the distribution of funding with the national program priorities including reducing risks from: (1) lead poisoning or elevated blood-lead levels; (2) exposure to asbestos; and (3) exposure to PCBs. The assistance grants will help rebuild programmatic capabilities between

[44] For additional information, please refer to: https://www.epa.gov/compliance/toxic-substances-compliance-monitoring-grant-guidance-fiscal-year-2022.

EPA and partner agencies and help address environmental justice concerns in overburdened or vulnerable communities.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,867.0) The change in program funding will support national priorities by reducing risks from lead poisoning or elevated blood-lead levels, exposure to asbestos, and exposure to PCBs.

Statutory Authority:

Toxic Substances Control Act.

Categorical Grant: Tribal Air Quality Management

Program Area: Categorical Grants
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$14,543***	***$16,415***	***$23,126***	***$6,711***
Total Budget Authority	$14,543	$16,415	$23,126	$6,711

Program Project Description:

American Indians and Alaskan Natives are disproportionately affected by air pollution and climate change. They have a higher rate of asthma, diabetes, heart disease and chronic obstructive pulmonary disease (COPD) than the general population. Wildfire season has consistently intensified over the past few years due to climate change and extreme weather conditions, which have led to an increase in ambient and indoor air pollution and exacerbated the health of tribal communities. Across the Nation, tribal air issues vary from permitting sources on-reservation, to monitoring for criteria air pollutants, to participating in local, state, regional, and national air quality work groups. In addition to performing emissions inventories and monitoring, other program tasks include addressing indoor air quality issues; implementing voluntary programs and education outreach efforts; and reviewing and commenting on federal air quality rules, policy, and permits issued by other agencies.

This program includes funding for tribes and tribal air pollution control agencies implementing projects and programs to address air pollution issues in Indian Country. Using Section 105 authority of the Clean Air Act (CAA), tribal agencies may develop and implement programs for the prevention and control of air pollution and implementation of primary and secondary National Ambient Air Quality Standards (NAAQS). Using Section 103 authority of the CAA, tribal agencies, colleges, universities, and multi-tribe jurisdictional air pollution control agencies may conduct and promote research, investigations, experiments, demonstrations, surveys, studies, and training related to ambient or indoor air pollution in Indian Country. EPA provides technical assistance and resources to help tribes build their program capacity and ensure successful project completion. Tribes use these resources to perform emissions inventories, monitor air quality and implement regulatory, voluntary and education and outreach programs for their citizens, who are among the most environmentally at-risk populations in the country. Currently, out of 574 Federally recognized tribes, 55 tribes have Section 105 grants, and 74 tribes have Section 103 grants.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan*.

Tribes will assess environmental and public health conditions in Indian Country by developing emission inventories and, where appropriate, siting and operating air quality monitors. Tribes will continue to develop and implement air pollution control programs for Indian Country to prevent and address air quality concerns, including combating the effects of climate change. EPA will continue to fund organizations for the purpose of providing technical support, tools, and training for tribes to build capacity to develop and implement programs.

Currently, there are 574 federally recognized tribes.[45] Of those, 71 tribes have treatment similar to that of a state or treatment as a state regarding implementing functions pertaining to the management and protection of air resources within reservation boundaries or other areas under the tribe's jurisdiction. In addition, EPA awards financial support under the CAA to help build tribal knowledge and increase tribes' capacity to manage air quality issues and encourages tribes to partner with EPA to carry out CAA protections within tribal lands and tribal communities, including those that have environmental justice concerns.

In FY 2024, a key activity is to work to reduce the number of days in violation of the NAAQS. This program supports the Agency's priority of building stronger partnerships with individual tribes and with the National Tribal Air Association, whose priorities include tribes' participation in the Agency's policy and rule development and the Tribal Air Monitoring Support (TAMS) Center. The TAMS Center provides professional assistance to support the tribes' ability to collect and provide monitoring data to protect the health of their tribal members and conducts training for tribal environmental professionals to implement their broader air quality program. EPA will continue working with tribes on tribal involvement in air quality issues such as: increasing the number of tribes with an up-to-date emissions inventory, increasing the number of tribes implementing voluntary programs, and increasing the number of tribes moving from project grants to program implementation grants. This will increase tribes' knowledge and ability to best protect their citizens. Tribes also will focus on implementation of nonregulatory and voluntary programs, as well as education and outreach programs. These will assist with pollution reduction while creating a more informed citizenry.

The Clean Air Status and Trends Network (CASTNET) has enhanced tribal monitoring capacity by supporting seven sites on tribal lands and training site operators. In FY 2024, the Agency will continue progress toward increasing monitoring capacity by working to identify new tribal partners that would benefit from joining a national air monitoring program. CASTNET monitors provide near real-time air quality data and the ability to assess ecological impacts from atmospheric deposition of air pollutants.

The funding for FY 2024 will support these important programs that tribes are focused on for the health of their people. Tribal air quality programs are an important part of the Nation's overall air quality efforts and help to accelerate immediate on-the-ground efforts to reduce greenhouse gases, such as: expanding deployment of renewable energy sources and energy efficiency programs into Indian Country; ensuring safe and effective oil and gas well pollution management and prevention; developing policies and programs to facilitate build-out of electric vehicle (EV) charging station infrastructure; increasing air quality monitoring in areas with environmental justice concerns; and

[45] Source: Department of Interior Bureau of Indian Affairs (www.bia.gov).

supporting programs to improve transportation options and reduce disproportionate exposure to traffic emissions in disadvantaged communities.

Performance Measure Targets:

Work under this program supports performance results in the Federal Support for Air Quality Management Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$6,711.0) This program change is an increase to help expand the efforts of tribes and tribal air quality control agencies to implement their programs and to accelerate immediate on-the-ground efforts to reduce greenhouse gases. The increase also will support additional air quality monitoring**.**

Statutory Authority:

Clean Air Act §§ 103, 105.

Categorical Grant: Tribal General Assistance Program

Program Area: Categorical Grants
Goal: Take Decisive Action to Advance Environmental Justice and Civil Rights
Objective(s): Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$67,520***	***$74,750***	***$85,009***	***$10,259***
Total Budget Authority	$67,520	$74,750	$85,009	$10,259

Program Project Description:

In 1992, Congress established the Indian Environmental General Assistance Program (GAP), a program that provides grants and technical assistance to tribes to plan, develop, and establish tribal environmental protection programs consistent with other applicable provisions of law administered by EPA. The Agency works collaboratively with tribal partners on mutually identified environmental and public health priorities to achieve these aims. Funding provided under the GAP is for the administrative, technical, legal, enforcement, communication, and outreach capacities tribes need to effectively administer environmental regulatory programs that EPA may delegate to tribes. GAP funds also may be used to assist in capacity building so that tribal governments may meaningfully participate in EPA programs, as well as the development and implementation of tribal solid and hazardous waste programs, including solid waste service delivery costs. Please see https://www.epa.gov/tribal/indian-environmental-general-assistance-program-gap for more information.

Some uses of GAP funds include:

- Assessing the status of a tribe's environmental conditions;
- developing appropriate environmental programs, codes, and ordinances;
- developing the capacity to administer environmental regulatory programs that EPA may delegate to a tribe;
- conducting public education and outreach efforts to ensure that tribal communities (including non-members residing in Indian country) are informed and prepared to participate in environmental decision-making; and
- establishing tribal programs' capacity to meaningfully participate with federal, tribal, state, and local government officials on environmental and public health actions and issues.

GAP supports tribal capacity development through financial assistance to approximately 525 tribal governments and intertribal consortia. To date, GAP has helped tribes receive 103 program delegations to administer a variety of programs across relevant EPA statutes, including the Clean Water Act, the Safe Drinking Water Act, and the Clean Air Act. Tribes also have developed capacity to assist EPA in implementing federal environmental programs in the absence of an EPA-approved tribal program through Direct Implementation Tribal Cooperative Agreements (DITCAs). As of FY 2023, there are over 20 active DITCAs supporting EPA's direct implementation activities. Furthermore, GAP funds have helped to train tribal government inspectors who are able to conduct compliance monitoring activities under tribal laws and may have EPA federal inspector credentials. In addition, GAP also supports tribes with the development of their waste management programs, with nearly 300 tribes having Integrated Waste Management Plans, and nine tribes have developed codes and ordinances since FY 2018 with GAP-funded training.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 2/Objective 2.1 Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels in the *FY 2022 - 2026 EPA Strategic Plan.*

GAP grants are fundamental to the development and growth of tribal environmental programs. GAP promotes tribal self-governance in a number of ways, including supporting tribal governments to assess local environmental conditions, develop long-range strategic plans to address their environmental challenges, and establish environmental programs tailored to their needs and aligned with their strategic planning goals. The overlap between tribal environmental capacity building goals and EPA program priorities, including the mutual responsibilities to achieve them, are captured in EPA / Tribal Environmental Plans, or ETEPs.

In FY 2024, the Agency will continue to implement GAP under a national framework set forth in program guidance and maintain an emphasis on training (internal and external) to support nationally consistent GAP guidance interpretation and implementation. In supporting a strong GAP management framework (as referenced under Tribal Capacity Program), EPA will continue to establish and refine tools to track the progress tribes achieve toward developing and implementing environmental protection programs in Indian Country. This work will occur under a new GAP national framework as defined in the new guidance made effective in FY 2023.

Additionally, EPA will interpret implementation activities under the solid and hazardous waste implementation authority provided to EPA in the GAP program to ensure the broadest application and flexibility for this authority.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10,259.0) This program increase provides support to federally recognized tribes and tribal consortia for planning, developing, and establishing environmental protection programs, and for developing and implementing solid and hazardous waste programs on tribal lands. The program will focus on advancing environmental justice, building tribal climate adaptive capacity, including climate resiliency in infrastructure decision-making, and addressing the priorities of federally recognized tribes for environmental capacity building.

Statutory Authority:

Indian Environmental General Assistance Program Act.

Categorical Grant: Underground Injection Control (UIC)

Program Area: Categorical Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$11,825***	***$13,164***	***$11,387***	***-$1,777***
Total Budget Authority	$11,825	$13,164	$11,387	-$1,777

Program Project Description:

EPA's Underground Injection Control (UIC) Grant Program was established by the Safe Drinking Water Act (SDWA) to protect groundwater that is a source of drinking water. The Program supports federal, state, and tribal government agencies that oversee underground injection activities to prevent contamination of underground sources of drinking water from fluid injection practices.

The UIC Program protects underground sources of drinking water by ensuring proper permitting, construction, operation, and closure of injection wells used to place fluids underground for storage, disposal, enhanced recovery of oil and gas, and mineral recovery. The grants are made to states and tribes that have primary enforcement authority (primacy) to implement and manage UIC programs and ensure safe injection well operations that prevent contamination of underground sources of drinking water. Eligible tribes that demonstrate an intent to achieve primacy also may receive grants for the initial development of UIC programs and be designated for "treatment as a state" if their programs are approved. Where a jurisdiction does not have primacy, EPA uses these funds for direct implementation of federal UIC requirements.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The Program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities.

The FY 2024 request will support implementation of the UIC Program, which manages approximately 766,403 injection wells across six well types to protect groundwater resources.[46] There are currently 71 jurisdictions across the Nation (federal, state, tribal, and territorial) that implement the UIC Program. EPA directly implements UIC programs in seven states and two territories and shares responsibility in eight states and with two tribes. EPA also administers the

[46]As represented in FY 2020 annual inventory.

UIC programs for all other tribes and for Class VI wells in all states but North Dakota and Wyoming.[47]

The UIC Program is improving efficiency and reducing the UIC permit application processing time and will continue implementing the recently developed UIC well permit review process. This effort includes applying identified permit review and processing efficiencies to all well classes, and modifying common definitions, as appropriate, to provide greater clarity for all well classes.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water Programs under the EPM appropriation and mitigation of climate change to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$1,777.0) This decrease of resources reduces the resources available for EPA's State and Tribal partners through the Underground Injection Control grants program.

Statutory Authority:

Safe Drinking Water Act § 1443.

[47] For more information, please visit: https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program-0.

Categorical Grant: Underground Storage Tanks

Program Area: Categorical Grants
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$1,475***	***$1,505***	***$1,505***	***$0***
Total Budget Authority	$1,475	$1,505	$1,505	$0

Program Project Description:

EPA's Underground Storage Tanks (UST) State and Tribal Assistance Grant (STAG) Program provides funding for grants to states under the Solid Waste Disposal Act to improve and enhance UST programs. STAG funds may be used for prevention activities that are not specifically spelled out in the Energy Policy Act (EPAct) of 2005 and are used by states that do not have sufficient state resources to fund these core programs.

STAG funds are used by states[48] to fund such activities as: applying for state program approval to operate the UST Program in lieu of the federal program, updating UST regulations, and providing compliance assistance.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan.*

Due to the increased emphasis on inspections and release prevention requirements, EPA has consistently met the yearly goal to minimize the number of confirmed releases. Between 2008 and 2022, the number of annual confirmed releases has decreased by 38 percent (from 7,364 to 4,568).[49]

As of the end of FY 2022, 51 states and territories have reported compliance with the UST Technical Compliance Rate (TCR) measure, which came about after the UST rule was revised in 2015.[50] The TCR includes new compliance measures for spill prevention and overfill requirements, as well as additional leak detection requirements. Of the states that report TCR, they produced a TCR rate of 57 percent in FY 2022, which is consistent with the 58 percent rate from FY 2021 but incorporates several states reporting for the first time.

[48] States as referenced here also include the District of Columbia and five territories as described in the definition of a state in the Solid Waste Disposal Act.
[49] For more information, please refer to https://www.epa.gov/system/files/documents/2021-11/ca-21-34.pdf.
[50] Beginning in FY 2023, TCR will be the measure reported from the remainder of the states.

By the end of FY 2024, EPA anticipates that all states that originally had state program approval (SPA) based on the 1988 UST regulation will be granted SPA renewal based on the 2015 UST regulation. In FY 2024, EPA will continue to work with a small number of remaining states to reapply for SPA. In addition, in FY 2022, one state was approved for SPA for the first time, and EPA anticipates two more new states will apply and be approved for SPA for the first time by the end of FY 2024.

Performance Measure Targets:

Work under this program supports performance results in the LUST Prevention Program under the LUST appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Solid Waste Disposal Act § 2007(f); Consolidated Appropriations Act, 2023, Pub. L. 117-328.

Categorical Grant: Wetlands Program Development

Program Area: Categorical Grants
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$17,353***	***$14,692***	***$15,079***	***$387***
Total Budget Authority	$17,353	$14,692	$15,079	$387

Program Project Description:

The Wetland Program Development grants assist states, tribes, and local governments with building or enhancing their wetland protection and restoration programs. Wetlands play a critical role absorbing and filtering pollutants from water. Accordingly, protecting and restoring the Nation's wetlands is key to climate resiliency because wetlands reduce flood risk, help manage runoff pollution, and serve as carbon sinks. Program grants are used to develop new or refine existing state and tribal wetland programs in one or more of the following areas: 1) monitoring and assessment; 2) voluntary restoration and protection; 3) regulatory programs, including Clean Water Act (CWA) Section 401 certification and Section 404 assumption;[51] and 4) wetland water quality standards.

States and tribes develop wetland programs based on their goals and resources. The Program provides grants to support the development of state and tribal wetland programs that further the goals of the CWA, improve water quality in watersheds throughout the country, address climate change and resilience, and provide benefits to disadvantaged communities. The grants are awarded on a competitive basis under the authority of Section 104(b)(3) of the CWA and the Program is a Justice40 covered program. The grant funding is split among EPA's 10 regional offices according to the number of states and territories per region. Each region is required, by regulation, to compete the award of these funds to states, tribes, local governments, interstate agencies, and inter-tribal consortia.[52] In addition, EPA sets aside 10 percent of the appropriation for a grant competition specifically for tribes and inter-tribal consortia. Finally, EPA sets aside approximately five percent of the appropriation for a grant competition specifically for nonprofits and interstate and inter-tribal consortia. This grant competition supports state and tribal wetland programs with projects that are nationwide in scope or affect two or more EPA regions. In addition, one of the eligible uses of the grant is training for local communities on restoration practices.

[51] State and tribal assumption of CWA Section 404 is an approach that can be useful in streamlining 404 permitting in coordination with other environmental regulations. When states or tribes assume administration of the federal regulatory program, Section 404 permit applicants seek permits from the state or tribe rather than the federal government. States and tribes are in many cases located closer to the proposed activities and are often more familiar with local resources, issues, and needs. Even when a state assumes permitting under Section 404, the United States Army Corps of Engineers retains jurisdiction for a certain portion of waters under the CWA as well as those waters subject to Section 10 of the Rivers and Harbors Act for permits.
[52] For more information, please see: http://water.epa.gov/grants_funding/wetlands/estp.cfm.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA will continue to assist states and tribes in their efforts to protect and manage wetlands through documenting stresses or improvements to wetland condition, developing tools for wetland restoration and the use of natural infrastructure to mitigate flooding and storm surge hazards, investigating and advancing opportunities to factor in climate change and environmental justice in decision-making, and implementing regulatory controls to avoid, minimize, and compensate for wetland impacts. The Agency also will review these activities to identify ways to increase benefits to disadvantaged communities and evaluate methods for sharing best practices.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$387.0) This increase of resources supports EPA's state and tribal partners through the Wetlands Program Development grants program.

Statutory Authority:

Clean Water Act § 104(b)(3).

State and Tribal Assistance Grants (STAG)

Diesel Emissions Reduction Grant Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Tackle the Climate Crisis
Objective(s): Reduce Emissions that Cause Climate Change

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$48,628***	***$100,000***	***$150,000***	***$50,000***
Total Budget Authority	$48,628	$100,000	$150,000	$50,000

Program Project Description:

The Diesel Emissions Reduction Act (DERA) Grant Program provides support for emission reductions from existing diesel engines through engine replacements, including zero emission replacements, retrofits, and rebuilds; switching to cleaner fuels; idling reduction; and other emission reduction strategies. The DERA Program was initially authorized in Sections 791-797 of the Energy Policy Act of 2005 and reauthorized by the Diesel Emission Reduction Act of 2010 and in the Consolidated Appropriations Act of 2021.

Diesel engines are the modern-day workhorse of the American economy (*e.g.*, goods movement, construction, public transportation). Diesel engines are extremely efficient and power nearly every major piece of equipment on farms, construction sites, in ports, and on highways. As the Agency's heavy-duty highway and nonroad diesel engines emissions standards came into effect, new cleaner diesel engines started to enter the Nation's fleet. However, there are millions of older engines in use that will continue to emit large amounts of nitrogen oxides and particulate matter, including black carbon.[53] DERA funding accelerates the pace at which dirty engines are retired or retrofitted. EPA's DERA Program promotes strategies to reduce these emissions and protect public health by working with air quality professionals, environmental and community organizations, manufacturers, fleet operators, tribes, and state and local officials. DERA funding provides both a public health and climate benefit and can be directed to areas with the greatest need. DERA funding is targeted to areas with air quality challenges and grants funding is prioritized for projects that benefit vulnerable communities.

Ports are places where large concentrations of diesel equipment often converge – including ships, trucks, rail, and nonroad machinery. The near-port communities that bear the brunt of air pollution from these diesel engines are often comprised of low-income populations and people of color. These residents can be exposed to air pollution associated with emissions from diesel engines at ports including particulate matter, nitrogen oxides, ozone, and air toxics. These pollutants can contribute to significant health problems, including premature mortality, increased hospital admissions for heart and lung disease, increased cancer risk, and increased respiratory symptoms, especially for children, the elderly, outdoor workers, and other sensitive populations. DERA prioritizes grant funding to ports and goods movement projects to benefit nearby communities.

[53] DERA Fifth Report to Congress. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1015S8Q.pdf

FY 2024 Activities and Performance Plan:

Work in this Program directly supports Goal 1/Objective 1.1, Reduce Emissions that Cause Climate Change in the *FY 2022 - 2026 EPA Strategic Plan*.

Since its inception, the DERA program has provided funding support for cutting-edge clean technologies that reduce emissions from diesel-powered mobile sources. The continuing innovation shown in this sector is now creating new opportunities to look to more zero emission options in source categories ranging from highway trucks to port cargo handling equipment. EPA is committed to look for ways to help expedite this transition as part of its DERA implementation effort. Taking into account the DERA Program's continuing role in advancing environmental justice and tackling the climate crisis, EPA will evaluate the DERA Program to identify the appropriate actions the Agency can take to support this policy objective in FY 2024, as outlined in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad.*

Work in this Program directly supports EO 14008 and its Justice 40 Initiative to target 40 percent of the benefits of climate investments to disadvantaged communities. The DERA Program is part of the Justice 40 pilot.

The DERA Grant Program will prioritize projects that provide health benefits to residents of communities near centers of goods movement like ports that receive a disproportionate quantity of air pollution from diesel fleets. Further priority is given to projects whose leaders engage and partner with affected communities with environmental justice concerns.

Using the formula outlined in the Energy Policy Act of 2005, eligible states and territories are offered 30 percent of the annual DERA appropriation to implement projects under the DERA State Grants Program. The remaining DERA funding is awarded as rebates and competitive grants. Through the DERA National Grants and the DERA Tribal and Insular Area Grants, the Agency will competitively award grants focusing on areas with poor air quality, especially those impacted most severely by emissions from ports and goods movement. Priority for funding also is given to projects benefitting vulnerable communities and projects which engage communities in the design and performance of the project. EPA will continue to track, assess, and report the results of DERA grants, such as numbers of engines, emissions benefits, and cost-benefit information.[54] Further, EPA will continue to provide diesel emission reduction technology verification and evaluation and provide that information to the public.[55]

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

[54] List of all grant awards under DERA can be found at https://www.epa.gov/cleandiesel/clean-diesel-national-grants.
[55] For more information, please visit: https://www.epa.gov/cleandiesel.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$50,000.0) This program change is an increase in the overall amount of DERA grant funding available for grants and rebates to reduce harmful diesel emissions and tackle the climate change crisis, with a focus on priority areas including school buses, ports, and vulnerable communities.

Statutory Authority:

The Diesel Emissions Reduction Program is authorized by Title VII, Subtitle G of the Energy Policy Act of 2005, 42 USC 16131, *et seq.*, as amended.

Brownfields Projects

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Safeguard and Revitalize Communities
Objective(s): Clean Up and Restore Land for Productive Uses and Healthy Communities

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$83,758***	***$100,000***	***$130,982***	***$30,982***
Total Budget Authority	$83,758	$100,000	$130,982	$30,982

Program Project Description:

The Brownfields Program awards grants and provides technical assistance to help states, tribes, local communities, and other stakeholders involved in environmental revitalization and economic redevelopment to work together to plan, inventory, assess, safely cleanup, and reuse brownfields, particularly in disadvantaged communities. Approximately 143 million people (roughly 44 percent of the U.S. population) live within three miles of a brownfields site that received EPA funding.[56] Similarly, within a half mile of a brownfields site receiving EPA funding, 21 percent of people live below the national poverty level, 17 percent have less than a high school education, 56 percent are people of color, and seven percent are linguistically isolated. This idle land drags down property values and can slow a local economy.

Brownfields redevelopment is a key to revitalizing main streets, neighborhoods, and rural communities; increasing property values and creating jobs, especially for those communities with persistent poverty and environmental justice (EJ) concerns that are often left out of economic and environmental revitalization. Important environmental impacts of brownfields cleanup and redevelopment include improved water quality associated with reduced runoff from stormwater and nonpoint pollutant sources, and improved air quality associated with reduced greenhouse gas emissions from vehicle travel.[57] The Brownfields Program leverages federal, state, and local resources to strengthen partnerships across all levels of government and with the private sector, allowing these partners to build on each other's successes.

Since its inception, the Brownfields Program has fostered a community-driven approach to the reuse of contaminated sites. As of February 2023, grants awarded by the Program have led to over 10,000 properties made ready for productive use and over 197,000 jobs and over $37.2 billion leveraged.[58] By awarding brownfields grants, EPA makes investments in communities so that they

[56] U.S. EPA, Office of Land and Emergency Management 2020. Data collected includes: 1) Superfund, Brownfield, and RCRA Corrective Action site information as of the end of FY 2019; 2) UST/LUST information as of late 2018 to mid-2019 depending on the state; and (3) 2015-2018 American Community Survey (ACS) Census data.
[57] For more information on Brownfields Program Environmental & Economic Benefits please refer to: https://www.epa.gov/brownfields/brownfields-program-environmental-and-economic-benefits.
[58] From EPA website: https://www.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits#:~:text=Enrolled%20over%2034%2C191%20properties%20annually,3%2C478%2C000%20acres%20ready%20for%20reuse.

can realize their own visions for land reuse, infrastructure development, economic growth, and job creation.

Under this program, EPA will focus on core activities, providing funding for: 1) assessment cooperative agreements and Targeted Brownfields Assessments (TBAs); 2) cleanup and multipurpose cooperative agreements; and 3) research, training, and technical assistance to communities for brownfields-related activities, including land revitalization assistance, environmental workforce development, and job training cooperative agreements.

A 2017 study found that housing property values increased five to 15.2 percent near brownfields sites when cleanup was completed.[59] Analysis of the data near 48 brownfields sites shows that an estimated $29 to $97 million in additional tax revenue was generated for local governments in a single year after cleanup. This is two to seven times more than the $12.4 million EPA contributed to the cleanup of those brownfields.[60] In addition, based on historical data provided by the Assessment Cleanup and Redevelopment Exchange System (ACRES) database, $1 of EPA's Brownfields funding leverages $20.43 in other public and private funding.[61]

In addition, the Infrastructure Investment and Jobs Act (IIJA) invests $1.2 billion to scale up community-led brownfields revitalization from FY 2022 through FY 2026. This work includes direct grants and technical assistance to assess and clean up brownfields sites, train and place people in environmental jobs, and assist hundreds of communities in identifying equitable reuse options to cultivate healthy, resilient, livable neighborhoods.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.1, Clean Up and Restore Land for Productive Uses and Healthy Communities in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA requests an investment of $30 million to advance EJ in tandem with climate work. This investment will align with the Administration's Justice40 initiative by stimulating economic opportunity and environmental revitalization in more than 400 historically overburdened communities. These resources will build on current work to revitalize communities across the country by providing financial and technical assistance to assess, conduct cleanup, and plan reuse at brownfields sites. The Brownfields Program will continue to foster federal, state, tribal, local, and public-private partnerships to return properties to productive economic use, including in historically disadvantaged communities and communities with EJ concerns. The activities described below will leverage approximately 13,400 jobs and $2.6 billion in other funding sources.[62]

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[59] Haninger, K., L. Ma, and C. Timmins. 2017. The Value of Brownfield Remediation. *Journal of the Association of Environmental and Resource Economists, 4(1): 197-241*, https://www.journals.uchicago.edu/doi/pdfplus/10.1086/689743.
[60] Sullivan, K. 2017. Brownfields Remediation: Impact on Local Residential Property Tax Revenue. *Journal of Environmental Assessment Policy and Management, 19(3),* http://dx.doi.org/10.1142/S1464333217500132.
[61] For more information, please visit www.epa.gov/brownfields.
[62] U.S. EPA, Office of Land and Emergency Management Estimate. All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via EPA's ACRES database.

- Funding will support at least 190 assessment cooperative agreements that recipients may use to inventory, assess, and conduct cleanup and reuse planning at brownfields sites. Approximately 1,700 site assessments will be completed under these agreements, including in communities affected by the retirement of coal-fired power plants.

- Funding will support at least 20 multipurpose cooperative agreements that recipients may use to assess, conduct cleanup, and conduct reuse planning at one or more brownfields sites. At least 20 reuse plans, 20 site assessments, and 20 site cleanups will be completed under these agreements.

- EPA will provide funding for TBAs in up to 200 communities without access to other assessment resources or those that lack the capacity to manage a brownfields assessment grant. There is special emphasis for small, rural, and disadvantaged communities to submit requests for this funding to ensure equal access to brownfields assessment resources. These assessments will be performed through contracts and interagency agreements.

- Funding will support 20 Environmental Workforce Development & Job Training cooperative agreements. This funding will provide environmental job training for citizens to take advantage of new jobs created as a result of brownfields assessment, cleanup, and revitalization in their communities. These awards will lead to approximately 980 people trained and 680 placed in jobs.

- Funding also will support training, research, technical assistance cooperative agreements, interagency agreements, and contracts to support states, tribes, and communities for both the Brownfields and Land Revitalization Programs and other assistance mechanisms, as authorized under Comprehensive Environmental Response, Compensation, and Liability Act 104(k)(7).

- Funding will be provided for technical assistance to an estimated 150 small and disadvantaged communities.

- Funding for Revolving Loan Fund (RLF) and Cleanup cooperative agreements will be provided with IIJA funds and are not requested as part of the Agency's FY 2024 request. IIJA waived the statutory cost share for RLF and cleanup cooperative agreements.

All estimates of outputs and outcomes are supported by the data that is entered by cooperative agreement recipients via the ACRES database and analyzed by EPA. Maintenance of ACRES focuses on the input of high-quality data, and robust analysis regarding program outcomes and performance will continue to be priorities during FY 2024.

Performance Measure Targets:

(PM B29) Number of brownfields properties assessed.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	1,400	1,300				1,400	1,650	1,650	Properties
Actual	1,419	1,919	1,693	1,772	1,682	1,637			

(PM B30) Number of brownfields sites made Ready for Anticipated Use.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	600	684	684	684	684	600	600	600	Sites
Actual	531	861	910	809	616	662			

(PM B32) Number of brownfields properties cleaned up.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target	130	130				130	160	160	Properties
Actual	137	143	190	183	168	173			

** = Indicates that this measure also is used to track progress in implementing the Bipartisan Infrastructure Law.*

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$30,982.0) This program increase will build on current work to revitalize communities across the country by providing financial and technical assistance to assess, conduct cleanup, and plan reuse at brownfields sites. $15 million is designated for quality cooperative agreements targeted at communities affected by the retirement of coal-fired power plants.

Statutory Authority:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§ 101(39) and 104(k).

Infrastructure Assistance: Alaska Native Villages
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$39,605***	***$39,686***	***$40,000***	***$314***
Total Budget Authority	$39,605	$39,686	$40,000	$314

Program Project Description:

The Alaska Rural and Native Village (ANV) Program provides critical basic drinking water and sanitation infrastructure (*e.g.*, flushing toilets and running water) in vulnerable rural and Native Alaskan communities that lack such services. Alaskan rural and native water and sewer systems face not only the typical challenges associated with small system size, but also challenging climate and geographic conditions, such as permafrost, shortened construction seasons, and extremely remote locations.

ANV communities look to EPA as a critical funding source of when they or the State of Alaska are not able to fully finance the needed water infrastructure improvements. The Program serves communities that often lack the debt capacity to apply for other funding sources, including EPA State Revolving Loan Funds. The Indian Health Service's (IHS) December 2022 analysis identified $200 million of need for water and wastewater infrastructure in Alaska in FY 2022.[63] Many communities on the prioritized list have not been able to advance their projects due to lack of funding.

Investments in wastewater and drinking water infrastructure in rural Alaskan communities contributed to an increase of access to water and sewer service from 69 percent in the late 1990s to 97 percent in 2022.[64] While the gains in the Program have been significant, ANV communities continue to trail behind the non-tribal/non-native population in the United States in access to water and sanitation. In Alaska, a significantly higher percentage of native and rural serviceable households live without complete indoor plumbing.

The ANV program also supports training, technical assistance, and educational programs to improve the financial management, operation, and maintenance of sanitation systems. The training also results in a trained workforce with transferable job skills. This is done through leveraging prioritization and implementation expertise from the State of Alaska with ANV program funds.[65]

[63] Feasible need as defined by the IHS.
[64] For more information please see: State of Alaska OMB Key Performance Indicators Department of Environmental Conservation https://omb.alaska.gov/html/performance/ABS/index_kpm.html
[65] The State of Alaska uses a risk-based prioritization process to fund projects that will have the greatest public health and environmental benefit. Further, the State delivers these services to ANV communities by coordinating across federal agencies and Programs.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. The Program also will support the Agency's Infrastructure Investment and Jobs Act (IIJA) implementation priorities.

The FY 2024 request of $40.0 million will fund water infrastructure in rural Alaskan homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards, given increased regulatory requirements on drinking water systems and the rate of construction of new homes in rural Alaska. The funding will be used to leverage funds provided to the IHS by Congress and particularly by the IIJA for the portion of the projects that are deemed 'ineligible' by IHS for IHS IIJA funding. Across all funding sources, the goal is to provide service to most of the remaining unserved homes over the course of the five years of the IIJA. Additionally, the request will continue to support training, technical assistance, and educational programs that protect existing federal investments in infrastructure by improving operation and maintenance of the systems. Improved operation and maintenance will improve system performance and extend the life of the asset.

In FY 2024, the Agency will continue to work with the State of Alaska to address sanitation conditions and maximize the value of the federal investment in rural Alaska. EPA will continue to implement the Alaska Rural and Native Village "Management Controls Policy," adopted in June 2007, to ensure efficient use of funds by allocating them to projects that are ready to proceed or progressing satisfactorily. The Agency has made great strides in implementing more focused and intensive oversight of the ANV grant program through cost analyses, post-award monitoring, and timely closeout of projects. These activities will help meet targets as part of the Justice40 pilot program.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$314.0) This program change is an increase to support water infrastructure in rural Alaskan homes and maintain the existing level of wastewater and drinking water infrastructure that meets public health standards, given increased regulatory requirements on drinking water systems and the rate of construction of new homes in rural Alaska. The change would fully fund the authorized level for the program in the Drinking Water and Wastewater Infrastructure Act (DWWIA).

Statutory Authority:

Safe Drinking Water Act Amendments of 1996 § 303; Clean Water Act § 1263a.

Infrastructure Assistance: Clean Water SRF
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$1,018,013***	***$1,638,861***	***$1,638,874***	***$13***
Total Budget Authority	$1,018,013	$1,638,861	$1,638,874	$13
Total Workyears	3.8	3.6	3.6	0.0

Program Project Description:

The Clean Water State Revolving Fund (CWSRF) Program capitalizes state revolving loan funds in all 50 states and Puerto Rico to finance infrastructure improvements for public wastewater systems and projects to improve water quality. In addition to capitalizing state revolving loan funds, the CWSRF appropriation includes a provision for set-aside funding for tribes to address serious wastewater infrastructure needs and associated health impacts. A portion of the CWSRF appropriation also provides direct grant funding for the District of Columbia and United States territories. These funds directly support the Agency's goal to ensure waters are clean through improved water infrastructure and sustainable management. The CWSRF Program also implements American Iron and Steel (AIS),[66] the Build America Buy America Act,[67] and other requirements, as required by law.

The CWSRF Program is the largest source of federal funds for states to provide low-interest loans and other forms of assistance for water quality projects including construction of wastewater treatment facilities, water and energy efficiency projects, green infrastructure projects, and agricultural Best Management Practices (BMPs). This federal investment is designed to be used in concert with other sources of funds to address water quality needs.[68] Other tools, such as additional subsidization, are available as part of the CWSRF Program to assist small, rural, and overburdened and underserved communities. The CWSRF Program is a key component of EPA's efforts to achieve innovative solutions to wastewater infrastructure needs and realize economic and environmental benefits that will continue to accrue in the future.

The revolving nature of the funds and substantial state match contributions have greatly multiplied the federal investment. EPA estimates that for every federal dollar contributed thus far, the Nation has received more than three dollars of investment in water infrastructure. As of June 2022, the CWSRF Programs has provided a total of over $163 billion from all funding sources in affordable

[66] For additional information, please see: https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement.
[67] For additional information, please see: https://www.epa.gov/cwsrf/build-america-buy-america-baba.
[68] For additional information, please see: http://www.epa.gov/cwsrf.

financing for a wide variety of wastewater infrastructure and other water quality projects.[69] In 2022, over 1,600 assistance agreements were made with communities of all sizes, funding $9.6 billion in projects aimed at treating wastewater, addressing stormwater runoff, tackling non-point source pollution, and addressing a myriad of other environmental issues.[70]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*. By September 30, 2023, and in support of this goal and objective, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances, which is an Agency Priority Goal for FY 2022 – 2023 to clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities.[71]

The federal investment in the CWSRF in FY 2024 will continue to support progress toward meeting the Nation's clean water needs and infrastructure priorities while creating good paying jobs. The infrastructure and other water management projects receiving low interest loans and additional subsidization from the CWSRF protect public health, strengthen the economy and local neighborhoods, and contribute to healthy ecosystems. Underserved communities can benefit from the program because its low-cost financing and additional subsidization make these needed investments more affordable.

EPA continues to work with states to meet several key objectives, such as:

- Linking projects to environmental results;
- Targeting funding and technical assistance to rural, small, and disadvantaged communities with limited ability to repay loans; and
- Ensuring the CWSRFs remain reliable sources of affordable funding.

In FY 2024, EPA is requesting $1.64 billion to provide funding for critical wastewater infrastructure through the CWSRF Program and nearly $2.8 billion for the Clean Water and Drinking Water State Revolving Funds (SRFs) combined. Funding requested in FY 2024 would complement the robust investments provided for the SRFs in the Infrastructure Investment and Jobs Act. The requested level supports several priority areas including improving resilience to natural hazards such as climate change; addressing environmental justice concerns by providing resources to remedy disproportionate levels of pollution in vulnerable communities; and creating good paying jobs. The program will encourage states to prioritize funding for projects focused on climate change resiliency. These funding levels advance infrastructure repair and replacement and would allow states, municipalities, and other eligible borrowers to continue to finance high-priority investments that improve water quality and protect human health. EPA will complete annual

[69] Clean Water State Revolving Fund National Information Management System. U.S. EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2022).
[70] Clean Water State Revolving Fund National Information Management System. U.S. EPA, Office of Water, National Information Management System Reports: Clean Water State Revolving Fund (CWSRF). Washington, DC (As of June 30, 2022).
[71] This Agency Priority Goal is implemented jointly with Goal 6.

reviews of each State CWSRF Program to help evaluate if states are effectively implementing the CWSRF program.

Elsewhere, EPA requests $80.4 million for the Water Infrastructure Finance and Innovation Act (WIFIA) Program. Through the WIFIA Program, EPA will make direct loans to regionally or nationally significant water infrastructure projects. The combined investments of the SRFs and WIFIA Program advance the Agency's ongoing commitment to infrastructure repair and replacement. These funds represent a major investment in water infrastructure and will create thousands of good paying jobs across the country.

To help drive progress, EPA has established a target to increase the cumulative amount of non-federal dollars leveraged by water infrastructure programs (CWSRF, DWSRF, and WIFIA), with a goal of $9.5 billion in FY 2024. In FY 2022, over $14.6 billion has been leveraged by these programs, increasing the funds available to improve, repair, and modernize the Nation's water infrastructure.

The FY 2024 capitalization of the CWSRF would supplement the more than $163 billion in total assistance provided over the life of the program. The assistance provided in 2022 from federal capitalization, state contributions, and repayments was $9.6 billion.

In addition to capitalizing the CWSRF Program, a portion of the appropriation also will provide grants to tribes, District of Columbia and four territories. Many of these communities are in need of assistance because they have lacked the resources to upgrade wastewater infrastructure, causing significant public health and environmental concerns. To ensure sufficient resources are directed toward these communities, EPA continues to request a tribal set-aside of two percent, or $30 million, whichever is greater, of the funds appropriated in FY 2024. EPA also continues to request a set-aside of 1.5 percent of the funds appropriated for the territories of American Samoa, Guam, the Commonwealth of Northern Marianas, and the United States Virgin Islands. These activities will help work toward meeting targets as part of the Justice40 pilot program.

EPA requests that up to $2 million of the tribal set-aside be used for training and technical assistance related to the operation and management of tribal wastewater treatment works. EPA also requests the ability to use the tribal and territorial set-asides to support:

- planning and design of treatment works; and

- the construction, repair, or replacement of privately-owned decentralized wastewater treatment systems serving one or more principal residences or small commercial establishments (*e.g.*, septic systems).

This authority is similar to those already available to states. Giving EPA the authority to provide expanded support for planning and design will protect the federal investment in wastewater infrastructure and ensure access to safe wastewater treatment for tribes and territories that face significant challenges with sanitation infrastructure. The ability for both the tribes and territories to construct, repair, or replace decentralized wastewater treatment systems will allow the flexibility

that these communities require to provide wastewater infrastructure that is appropriate for the unique circumstances of each community.

Funding future Clean Watershed Needs Surveys (CWNS) remains a priority.[72] The CWNS is a comprehensive assessment of the capital needed to meet the water quality goals of Sections 205(a) and 516 of the Clean Water Act. This assessment and documentation of future needs is critical in the effort to manage and fund our nation's wastewater infrastructure. A comprehensive CWNS is an important tool for identifying critical water quality needs in communities across the Nation, including rural, small, and disadvantaged communities. It also helps assess the scope of investments needed to reduce the vulnerability of water infrastructure to natural hazards, including climate change. The FY 2023 appropriation provided a $1.5 million set-aside from the CWSRF allowing EPA to continue to conduct the CWNS. The appropriation language needs to continue in FY 2024 and beyond in order to ensure sufficient resources for the next and future CWNS.

EPA will partner with states to ensure that the CWSRF Program continues to play an important role in promoting efficient system-wide planning; improvements in technical, financial, and managerial capacity; and the design, construction, and ongoing management of sustainable water infrastructure. To streamline data collection and reduce reporting burden, EPA in FY 2022 redesigned the databases used to collect performance information about the CWSRF and DWSRF Programs. The goal of this effort is to reduce reporting burden by eliminating redundancy and providing a more user-friendly interface for states to submit data. EPA completes annual reviews of each CWSRF to help assess effective implementation of the Clean Water Revolving Fund program.

Additionally, The Infrastructure Investment and Jobs Act (Public Law 117-58) includes $2.628 billion for this program in FY 2024.

Performance Measure Targets:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		8.0	8.0	8.0	8.0	9.0	9.5	9.5	Billions of Dollars
Actual	8.6	9.7	10.3	10.2	12.1	14.6			

(PM WWT-02) Number of American Indian and Alaska Native homes provided access to basic sanitation, in coordination with other agencies.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						6,098	6,098	6,098	Homes
Actual	5,318	6,398	3,561	9,114	4,007	Data Avail 3/2023			

[72] For additional information, please see: https://www.epa.gov/cwns

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$13.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Title VI of the Clean Water Act.

Infrastructure Assistance: Drinking Water SRF
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$638,343***	***$1,126,101***	***$1,126,105***	***$4***
Total Budget Authority	$638,343	$1,126,101	$1,126,105	$4
Total Workyears	1.1	1.4	1.4	0.0

Program Project Description:

EPA's Drinking Water State Revolving Fund (DWSRF) is designed to assist public water systems in financing the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements, protect public health, and support state and local efforts to protect and provide drinking water. These funds finance critical infrastructure necessary to ensure safe drinking water for all Americans while creating good paying jobs and upgrading and modernizing America's drinking water systems. The 2015 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) indicated a 20-year capital investment need of $472.6 billion for public water systems eligible to receive funding from state DWSRF Programs. The capital investment need covered 49,250 community water systems (CWS), 21,400 not-for-profit non-community water systems (NPNCWS), American Indian water systems, and Alaska Native Village (ANV) water systems. The 2015 DWINSA need reflected costs for repairs and replacement of leaking transmission pipes and deteriorated storage and treatment equipment, as well as new infrastructure and other projects, *e.g.*, replacing lead service lines, required to protect public health and ensure compliance with the SDWA.

To reduce public health risks and help ensure safe and reliable delivery of drinking water nationwide, EPA makes capitalization grants to states to provide low-cost loans and other assistance to eligible public water systems and maintain robust drinking water protection programs. In addition to maintaining the statutory focus on addressing the greatest public health risks first, states can help those most in need on a per household basis according to state affordability criteria and can utilize set-asides to assist small systems. To maintain a focus on communities most in need, states are required to provide a portion of their capitalization grant as additional subsidization to disadvantaged communities.

The DWSRF Program provides communities access to critical low-cost financing and offers a subsidy to help utilities address long-term needs associated with water infrastructure. Most DWSRF assistance is offered as loans which water utilities repay from the revenues they generate from the rates they charge their customers for service. Water utilities in many communities may need to evaluate the rate at which they invest in drinking water infrastructure repair and

replacement to keep pace with their aging infrastructure, many of which may be approaching the end of their lives.

EPA works with states to ensure that DWSRF infrastructure and technical assistance funds are available to water systems in disadvantaged communities that have the most significant drinking water challenges. EPA emphasizes assistance to projects which reduce lead, address emerging contaminants, and help water systems achieve resiliency to natural and manmade hazards, including climate change and cybersecurity.

This request complements the historic amount of funding provided in the Infrastructure and Investment Jobs Act (IIJA), (Public Law 117-58) which includes $6.203 billion for this program in FY 2024.

State Set-Asides

States have considerable flexibility to tailor their DWSRF program to their unique circumstances. This flexibility ensures that each state can carefully and strategically consider how best to achieve the maximum public health protection. To achieve this, states may set aside and award funds for targeted activities that can help them implement and expand their drinking water programs. The four DWSRF state set-asides are:[73]

- Small System Technical Assistance (up to two percent);
- Administrative and Technical Assistance (up to four percent, $400 thousand or one-fifth percent of the current valuation of the fund, whichever is greater);
- State Program Management (up to ten percent); and
- Local Assistance and Other State Programs (up to fifteen percent).

Taken together, approximately 31 percent of a state's DWSRF capitalization grant may be set aside for activities other than infrastructure construction. These set-asides enable states to improve water system operation and management, emphasizing institutional capacity as a means of achieving sustainable water system operations. Most recently, states have taken on average 22 percent of the available 31 percent for set-aside activities. States can utilize these set-aside funds to help drinking water systems, especially those in small and disadvantaged communities, increase their technical, managerial, and financial capacity and receive the planning and capacity building assistance they need to effectively manage the systems and plan for the future.

Non-Federal Funding Leveraging

The federal SRF investment is designed to be used with other sources of funds to address drinking water infrastructure needs. States are required to provide a 20 percent match for their capitalization grant from annual appropriations. Some states elect to leverage their capitalization grants through

[73] For more information, please see: https://www.epa.gov/drinkingwatersrf/how-drinking-water-state-revolving-fund-works#tab-5.

the public debt markets to enable the state to provide more assistance. These features, including state match leveraging and the revolving fund design of the Program, have enabled the states to provide assistance exceeding 218 percent of the federal capitalization since the Program's inception in 1997. For every dollar the federal government invests in this Program, the states, in total, have delivered over two dollars in assistance to water systems. In addition, the DWSRF's rate of funds utilized was 98 percent in 2022,[74] exceeding the funds utilization target of 96 percent.

The FY 2024 capitalization of the DWSRF would supplement more than $48.5 billion in total assistance provided over the life of the Program, from all funding sources. The assistance provided in FY 2022 from federal capitalization, state contributions, and repayments was $4.4 billion, a significant increase from previous years.

National Set-Asides

Prior to allotting funds to the states, EPA reserves certain national level set-asides.[75] The statute requires that $2 million be allocated to small systems to monitor for unregulated contaminants to facilitate their compliance with the monitoring and reporting requirements of the Unregulated Contaminant Monitoring Regulation (UCMR). In FY 2022, EPA requested and received authority to set aside $12 million to provide small systems with the resources needed to implement the new statutorily mandated expansion of the UCMR program. Section 2021 of the America's Water Infrastructure Act (AWIA) of 2018 requires, subject to availability of appropriations and adequate laboratory capacity, all Public Water Systems (PWSs) serving 3,300 to 10,000 persons to monitor under future UCMR cycles. It also requires EPA to ensure that a nationally representative sample of PWSs serving fewer than 3,300 persons monitor under future UCMR cycles. In FY 2024, EPA proposes to again set-aside $12 million for this new statutory mandate.

The 1996 SDWA established the current UCMR program. It includes statutory provisions that require EPA to coordinate and pay the monitoring costs for a representative selection of small water systems that serve fewer than 10,000 individuals. Historically under this emerging contaminant monitoring program, EPA would require sampling at 800 small water systems that would be selected to represent the over 60,000 small water systems throughout the United States. AWIA included statutory revisions amending SDWA and mandating (subject to the availability of appropriations) that EPA significantly expand the small water system monitoring program. Starting with UCMR 5 (FY 2022-2026), the total number of small systems monitored will increase by 7.5 times, from 800 to 6,000. This expansion will include all 5,200 public water systems that serve between 3,300 and 10,000 individuals and a representative selection of 800 systems serving fewer than 3,300 individuals.

EPA will direct up to two percent or $20 million, whichever is greater, of annually appropriated funds to tribes and ANVs. These funds are awarded either directly to tribes or, on behalf of tribes, to the Indian Health Service through interagency agreements. Additionally, EPA will continue to set aside up to 1.5 percent for territories.

[74] The cumulative dollar amount of loan agreements divided by cumulative funds available for projects.
[75] Safe Drinking Water Act Sections 1452(i)(1), 1452(i)(2), 1452(j), and 1452(o), as amended.

In addition, SDWA requires that no funds made available by a state DWSRF as authorized by SDWA Section 1452 (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system unless all of the iron and steel products used in the project are produced in the United States. The Administrator may retain up to 0.25 percent of the funds appropriated in this Act for the Clean Water State Revolving Fund (CWSRF) and the DWSRF for carrying out the provisions for management and oversight of the requirements of this section. Also, the Build America, Buy America Act, which was signed into law in 2021 under IIJA (Section 70911-17), requires that none of the funds made available for a Federal financial assistance program for infrastructure may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials are produced in the United States.

Additionally, EPA is requesting authority in the DWSRF to fund the Drinking Water Infrastructure Needs Survey and Assessment (DWINSA). Every four years, EPA works with states and community water systems to estimate the DWSRF eligible needs of system by state over the next 20 years. EPA uses this information as part of the formula for state allocations of the DWSRF. The 2021 DWINSA effort is currently moving to completion with final reviews of submissions from nearly 4,000 public water systems to soon be followed by extensive statistical analysis. Findings will not only include infrastructure needs but also information on lead service line replacement costs and current concerns for a sustainable certified operator workforce. The 2021 DWINSA's Report to Congress is due in FY 2023. The FY 2024 request includes up to $1.5 million set-aside from the DWSRF to ensure there are consistent and reliable resources to fund this important work in the future.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the FY 2022 - 2026 EPA Strategic Plan**.** By September 30, 2023, and in support of this goal and objective, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances, which is an Agency Priority Goal for FY 2022 – 2023 to Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities.[76]

In FY 2024, EPA will work to increase by $9.5 billion the cumulative amount of non-federal dollars leveraged by water infrastructure finance programs (CWSRF, DWSRF and Water Infrastructure Finance and Innovation Act (WIFIA)). For FY 2024, EPA requests $1.13 billion for the DWSRF to help finance critical infrastructure improvement projects to public drinking water systems. The funding will accelerate infrastructure replacements and investments. The investments support several priority areas including improving the resilience of water systems to natural hazards, including climate change, ensuring that every community in the Nation has access to clean, safe water, and creating good paying jobs. EPA will continue to provide practical tools, training, and technical assistance to increase resilience to extreme weather events (*e.g.*, drought, flooding, wildfires, hurricanes), malevolent acts (*e.g.*, cyberattacks), and climate change. In FY 2022, almost 4,000 drinking water and wastewater systems and water sector partners received training and technical assistance. In FY 2024, EPA requests nearly $2.8 billion for the Drinking

[76] This Agency Priority Goal is implemented jointly with Goal 6.

Water and Clean Water State Revolving Funds (SRFs). The SRF infrastructure budget, combined with the funding from the WIFIA Program, and EPA Community Grants, provides robust funding for critical drinking and wastewater infrastructure.

The requested funding level reflects documented needs for drinking water infrastructure and improvements to infrastructure in small and disadvantaged communities. EPA will continue to foster its strong partnership with the states to provide small system technical assistance with a focus on compliance with rules, operational efficiencies, and system sustainability and resiliency to ensure public health protection. In FY 2024, EPA also will continue to amplify information on available funding options for local utilities and state programs to meet critical infrastructure needs.

Furthermore, as a pilot program under Justice40, the Agency will leverage all available authorities, tools, and resources to meet key administration priorities in investments in overburdened and underserved communities. EPA will continue to work to target a significant portion of assistance from SRFs to small and overburdened and underserved communities with limited ability to repay loans. In FY 2024, EPA is requesting that 14 percent of the funds provided to the states be available for additional subsidy and allow states to go above that percentage if there is an emergency declared for lead.

In FY 2024, the DWSRF Program will continue to implement the Clean Water and Drinking Water Infrastructure Sustainability Policy. This policy focuses on promoting system-wide planning that helps water systems:

- Align water infrastructure system goals.
- Analyze infrastructure alternatives, including energy efficient alternatives; and
- Ensure they have the financial capacity and rate structures to construct, operate, maintain, and replace infrastructure over time.

In FY 2024, EPA is continuing to emphasize strengthening small system technical, managerial, and financial capability through the Capacity Development Program, the Operator Certification Program, the Public Water System Supervision State Grant Program, and the DWSRF. The Capacity Development Program establishes a framework for states and water systems to work together to help small systems achieve the SDWA's public health protection objectives. The state Capacity Development Programs are supported federally by the Public Water System Supervision state grant funds and the set-asides established in the DWSRF. In FY 2024, EPA will continue to work with states to review and update their capacity development strategies to include asset management as required by AWIA.

In addition, EPA will complete annual reviews of each State DWSRF Program to help evaluate if states are effectively implementing the DWSRF program effectively and implementing the Drinking Water Revolving Fund program to facilitate community water system compliance with the Safe Drinking Water Act (SDWA).

Performance Measure Targets:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target					875	640	450	400	CWSs
Actual	3,508	1,718	1,128	1,048	654	537			

(PM DWT-02) Number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target						100	55	35	CWSs
Actual						74			

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		8.0	8.0	8.0	8.0	9.0	9.5	9.5	Billions of Dollars
Actual	8.6	9.7	10.3	10.2	12.1	14.6			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$4.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

Statutory Authority:

Safe Drinking Water Act § 1452.

San Juan Watershed Monitoring
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$1,578***	***$0***	***$0***	***$0***
Total Budget Authority	$1,578	$0	$0	$0
Total Workyears	0.3	0.0	0.0	0.0

Project Description:

This program was established under Section 5004(d) of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). EPA and the states and tribes in the San Juan watershed—Arizona, Colorado, New Mexico, Utah, Navajo Nation, Ute Mountain Ute Tribe, and Southern Ute Indian Tribe—work together to monitor water quality and use the best available data and science to identify and implement pollution prevention and restoration projects to improve water quality.

FY 2024 Activities and Performance Plan:

Resources are proposed for elimination for this program in FY 2024.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, § 5004(d); Clean Water Act § 106.

Infrastructure Assistance: Mexico Border
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$28,711***	***$36,386***	***$36,386***	***$0***
Total Budget Authority	$28,711	$36,386	$36,386	$0

Program Project Description:

The U.S. and Mexico share more than two thousand miles of common border from the Gulf of Mexico to the Pacific Ocean and over 62 miles on either side of the international border. The border region is home to more than 15.2 million people with about 8 million living in the U.S. (U.S. Census Bureau 2017 estimates) and more than 7 million living in Mexico's Border Municipalities (Instituto Nacional de Estadística y Geografía-INEGI, 2015 estimate). Twenty-six U.S. federally recognized Native American tribes are in the U.S.-Mexico border region. Untreated sewage flowing north into the U.S. from Tijuana, Mexicali, and Nogales pollutes several rivers, such as the Tijuana and Santa Cruz rivers, and pollutes shared waters, such as the Rio Grande, the Pacific Ocean, and the Gulf of Mexico. The close proximity and intermingling of border communities that have poor quality drinking water and sanitation poses a serious risk of disease transmission.

EPA works collaboratively with United States (U.S.) federal, state, and local partners and the Mexican water agency - CONAGUA - through the U.S.-Mexico Border Water Infrastructure Program to fund planning, design, and construction of high-priority water and wastewater treatment facilities for underserved communities along the border. Investments in wastewater and drinking water infrastructure in communities on both sides of the U.S.-Mexico Border reduce disease and health care costs associated with exposure to raw sewage and drinking water contaminants causing acute and chronic illnesses. The U.S.-Mexico Border Water Infrastructure projects stimulate local economies through public health-related economic gains, job creation, and increased demand for goods and services.

To date, the program has funded 141 projects. More than nine million people are benefiting from 125 completed projects, and almost 1.5 million people will benefit from projects currently under construction. Since 2003, the Program has provided approximately 61,130 homes with first time access to safe drinking water and around 893,810 homes with first time access to wastewater collection/treatment.

EPA's Border Water Infrastructure Program is unique among federal funding programs. It funds projects on both sides of the border. Citizens of the U.S. benefit from all projects since all funded projects must demonstrate that they will provide a positive public health and/or environmental

benefit to the U.S., whether the project is located in the U.S. or Mexico. For example, a wastewater project in Mexico can only be funded if that sewage would otherwise contaminate a U.S. waterbody. Treating these waters after they have been contaminated and have crossed the border into the U.S. is neither technically feasible nor financially viable.

U.S.-Mexico Border communities are looking to EPA as a last-resort funding source when utilities, cities, or states are not able to fully finance needed infrastructure improvements. The program serves communities that often lack the debt capacity to apply for other funding sources, including EPA's State Revolving Funds. To improve opportunities for communities to request funding support for these critical investment needs, in FY 2017, EPA, in coordination with the North American Development Bank, modified the process to allow for applications to be submitted on a continuous basis through an on-line format available 24 hours a day/seven days per week. Since 2017, a total of 43 applications have been selected and are currently in development or construction. Those applications represent an estimated construction investment need of over $436 million. The program continues to receive new applications and evaluates these on, at least, a quarterly basis.

The Agency's investments in the Mexican side projects have represented only a third of the total project construction costs, while leveraging two thirds of the remaining total costs from the Mexican government and other funding sources. EPA's investment leverages Mexican funds that simultaneously benefit the U.S. and Mexico. If not for the Agency's investment, Mexican funds would likely be invested in other parts of Mexico that do not directly benefit the United States. Preventing raw sewage discharges to shared water resources is especially critical in a region that is already facing water scarcity challenges.

The U.S.-Mexico Border Program is one of the few federal programs that assists communities in the planning and design of water and sanitation infrastructure projects. Planning and design are essential to advance projects to a construction ready stage, create sustainable communities and access public and private funding. Twenty-three projects with construction costs estimated at over $257 million are currently in planning and design. More than 2.8 million border residents will benefit once all these projects are complete.

The close bi-national cooperation in this program has improved public health and water quality. Improving access to clean and safe water is a key focus of the *Border 2025 Plan*,[77] the bi-national agreement that guides efforts to improve environmental conditions in the U.S.-Mexico Border region. EPA investments in these wastewater projects are protecting public health from waterborne diseases and have been a key factor in significant water quality improvements in U.S. waterbodies, such as the Rio Grande (Texas and New Mexico), Santa Cruz River (Arizona), New River (California), and Tijuana River and Pacific Ocean (California). In both the New River and the middle Rio Grande, for example, fecal coliform levels have dropped by over 80 percent because of jointly funded wastewater treatment plants built in Mexicali and Ojinaga, Mexico, respectively. The Santa Cruz River now supports a healthy fish population where a few years ago only bloodworms thrived.

[77] For more information please visit: https://www.epa.gov/usmexicoborder/border-2025-framework.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

With the requested $36.4 million for FY 2024, the U.S.-Mexico Border Water Infrastructure Program will continue to fund high-priority water and wastewater infrastructure projects. Projects that receive funding have been evaluated and ranked using a risk-based prioritization system, which enables the program to direct grant funding to projects that demonstrate human health benefits, cost-effectiveness, institutional capacity, and sustainability. EPA coordinates at local, national, and bi-national levels to assess the environmental needs and make prioritized funding decisions. All program funding will be invested in projects that, whether located in the U.S. or Mexico, provide a positive public health and/or environmental benefit to the U.S. The U.S. benefits include improved quality of U.S. water bodies and shared waters and reduced health risk to the U.S. population. The demonstration of a U.S. benefit is one of the fundamental eligibility criteria for projects seeking program assistance.

The U.S.-Mexico Border Water Infrastructure Program works with the ten border states (four U.S. and six Mexican) and local communities to improve the region's water quality and public health. The U.S. and Mexican governments will collaborate on water infrastructure projects to reduce health risks to residents, including vulnerable populations of children and the elderly, many of whom currently lack access to safe drinking water and sanitation. Additionally, by providing homes with access to basic sanitation, EPA and its partners will reduce the discharge of untreated wastewater into surface water and groundwater. These activities will help meet targets as part of the Justice40 pilot program.

FY 2024 funding will be allocated to a portion of the construction of projects that have completed planning and design and are ready to move to construction. Final decisions on the use of FY 2023 funding will be based on balancing the construction needs of fully designed projects with the planning and design needs of prioritized projects.

Performance Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Treaty entitled "Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area, August 14, 1983."

Targeted Airshed Grants

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Healthy Air for All Communities
Objective(s): Improve Air Quality and Reduce Localized Pollution and Health Impacts

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$59,000***	***$69,927***	***$69,927***	***$0***
Total Budget Authority	$59,000	$69,927	$69,927	$0

Program Project Description:

The Targeted Airshed Grants Program awards competitive grant funding to reduce air pollution in nonattainment areas that were ranked as the top five most polluted areas relative to ozone, annual average fine particulate matter ($PM_{2.5}$), or 24-hour $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS). In FY 2022, approximately $61.9 million in competitive grant funds were allocated for this program. This program assists air pollution control agencies in conducting emission reduction activities in these nonattainment areas. The overall goal of the Targeted Airshed Grant Program is to reduce air pollution in the Nation's areas with the highest levels of ozone and $PM_{2.5}$ ambient air concentrations.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.1, Improve Air Quality and Reduce Localized Pollution and Health Impacts in the *FY 2022 - 2026 EPA Strategic Plan.*

Work in this program directly supports the President's priorities to tackle the climate crisis and advance environmental justice. The targeted airshed grant program provides funding to air pollution control agencies with responsibilities for the State Implementation Plan (SIP) or Tribal Implementation Plan (TIP) for the eligible nonattainment areas. This program can fund any activities that achieve documentable emission reductions to assist eligible nonattainment areas to meet the NAAQS.

Air pollution control agencies that have responsibilities for these areas will continue to implement projects that improve the air quality in the listed nonattainment areas. Expected projects include, but are not limited to:

- Replacing vehicles, engines, or equipment with cleaner alternatives;
- Replacing or retrofitting heat devices (e.g., wood burning stoves, fireplaces); and

- Other projects that achieve quantifiable emission reductions for the applicable pollutant(s), such as road paving or residential wood smoke reduction activities like providing dry seasoned wood.

Anticipated projects will achieve demonstrable reductions in air pollutants that contribute to the nonattainment status of the eligible areas, including reductions in direct $PM_{2.5}$, NO_x, volatile organic compounds (VOCs), SO_2, and/or ammonia. They will provide direct health and environmental benefits to communities. Priority funding for these grants goes to emission reduction projects that promote environmental justice in eligible nonattainment areas based on how well the projects will effectively address the disproportionate and adverse cumulative impacts (human health, environmental, climate-related and others) that have affected and/or currently affect people/communities of color, low income, tribal, and indigenous populations.

Over their lifetime, the twelve projects funded by the FY 2021 Targeted Airshed Grants are estimated to reduce total emissions of particulate matter by approximately 3,100 tons and ozone precursors by approximately 2,000 tons.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Consolidated Appropriations Act, 2023 (Public law 117-328).

Safe Water for Small & Disadvantaged Communities
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$23,173***	***$30,158***	***$80,005***	***$49,847***
Total Budget Authority	$23,173	$30,158	$80,005	$49,847
Total Workyears	1.2	1.0	1.0	0.0

Program Project Description:

EPA awards Small and Disadvantaged Communities Drinking Water Grants to states to assist public water systems in underserved, small, and disadvantaged communities. The grants are designed to assist communities that are unable to finance activities needed to comply with the National Drinking Water Regulations and to respond to drinking water contaminants.

Since the inception of the Program, the Program has awarded 43 states and tribal communities with over $97 million in project grants funding. These grants and the cost share requirement have contributed to over $90 million in project investments, impacting close to one million residents in small, underserved, and disadvantaged communities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

EPA is requesting $80 million in FY 2024 to assist small and disadvantaged communities with improving their drinking water resources. The request will provide additional grant funding and support to address lead and other contaminants in drinking water, especially in small and disadvantaged communities. Many of these communities are rural and have limited access to other sources of funding. These grants are awarded as non-competitive grants to states, with a separate tribal allotment. The grant program provides assistance to overburdened and underserved communities that either have no household drinking water or wastewater services or are served by a public water system that violates or exceeds any maximum containment level, treatment technique, or action level. Projects eligible for assistance include those designed to:

- Return a public water system to compliance;
- Benefit overburdened and underserved communities on a per household basis;

- Provide household water quality testing, including testing for unregulated contaminants;

- Fund activities necessary and appropriate for a state to respond to a contaminant;

- Purchase point-of-entry or point-of-use filters and filtration systems that are certified by a third-party using science-based test methods for the removal of contaminants of concern; and,

- Provide accurate and current information on the need for filtration and filter safety, including proper use and maintenance practices, and the options for replacing lead service lines (as defined in Safe Drinking Water Act section 1459B(a)) and removing other sources of lead in water.

With $80 million in grant funding, the program is estimating that over 100 projects would receive funding. With a federal cost share of 10 percent, EPA estimates these projects would total $110 million in project investment in small, disadvantaged, and underserved communities. The Infrastructure Investment and Jobs Act (Public Law 117-58) includes $1 billion for this program in FY 2024. The program will support the Agency's Infrastructure Investment and Jobs Act of 2021 (IIJA) implementation priorities.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$12.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$49,835.0) This program change is an increase to support the President's priority on addressing lead and other contaminants in drinking water, especially in small and disadvantaged communities.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2104; Further Consolidated Appropriations Act, 2023, Pub. L.117-328.

Reducing Lead in Drinking Water

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$387***	***$25,011***	***$182,004***	***$156,993***
Total Budget Authority	$387	$25,011	$182,004	$156,993
Total Workyears	1.2	1.0	1.0	0.0

Program Project Description:

The Reducing Lead in Drinking Water grant program was established in Section 2105 of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). The objectives of the grant program are to reduce the concentration of lead in drinking water by 1) replacing lead service lines (LSLs); 2) identifying and addressing conditions that contribute to increased concentration of lead in drinking water; and 3) providing assistance to low-income homeowners to replace LSLs. The grant program supports the Biden-Harris Administration's commitment to eliminating LSLs and the goal of ensuring clean and safe water for all by prioritizing applications from disadvantaged communities.[78] At the end of FY 2022, EPA had announced over $71.5 million in available funding and commenced making awards. The grants include 19 projects across the nation, including tribal communities, for LSL replacement, improvements in drinking water infrastructure, and lead remediation and replacement activities in schools and childcare facilities.

In FY 2023, the Agency plans to announce the next competition cycle for approximately $35 million in grant funding to continue to reduce lead exposure in drinking water in underserved and overburdened communities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Work in this program directly supports efforts related to the reduction of lead exposures and associated health impacts in disadvantaged communities. The program supports infrastructure and/or treatment improvements in public drinking water systems, as well as the remediation and/or replacement of drinking water infrastructure in schools and childcare facilities. The FY 2024 request includes $182 million for the Reducing Lead in Drinking Water grant program. This request fully funds the Infrastructure Investment and Jobs Act of 2021 (IIJA) authorized level of $100 million in FY 2024, for this program. In addition, $82 million is requested for LSL

[78] For more information please see: https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/16/fact-sheet-the-biden-harris-lead-pipe-and-paint-action-plan/.

replacement activities with a focus on underserved and overburdened communities. Such funds are intended to complement the IIJA funding provided for LSL replacements through the Drinking Water State Revolving Fund (DWSRF). Funding will be used to provide grants to eligible entities to fund LSL replacement and/or remediation projects that meaningfully reduce the concentration of lead in drinking water with a priority for disadvantaged communities. The prioritization will be based on the disadvantaged community criteria established by the applicable state. This funding will allow EPA to fund approximately 25 to 50 additional projects across the country in FY 2024. These activities will help work toward meeting targets as part of the Justice40 pilot program.

Performance Measure Targets:

Work under this program supports the Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$156,983.0) This program change is an increase to address lead in drinking water, especially in small and disadvantaged communities. Priority will be given to assisting underserved and overburdened communities, low-income homeowners, and landlords providing housing to low-income renters.

Statutory Authority:

Water Infrastructure Improvements for the Nation Act, Title IV, Section 2105; Consolidated Appropriations Act, 2023, Pub. L. 117-328.

Lead Testing in Schools

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$14,431***	***$30,500***	***$36,500***	***$6,000***
Total Budget Authority	$14,431	$30,500	$36,500	$6,000

Program Project Description:

The goals of the Voluntary Lead Testing in Schools Grant Program are to: 1) reduce children's exposure to lead in drinking water; 2) help states target funding to schools and childcare facilities unable to pay for testing; 3) use the Training, Testing, and Taking Action (3Ts) approach to establish best practices for a lead in drinking water prevention program; 4) foster sustainable partnerships at the state and local level to facilitate both exchange of information among experts in the education and health sectors and more efficient use of existing resources; and 5) enhance community, parent, and teacher cooperation and trust. In November 2021, the Infrastructure Investments and Jobs Act amended the grant statute to allow for funding to include remediation of lead in drinking water and replacement of lead service lines in schools and childcare facilities.

EPA allotted $26.5 million in FY 2021 grant funding for the program and announced the availability of $36.5 million in FY 2022 grant funding. Program participants include all 50 states, the District of Columbia, Puerto Rico, American Samoa, and the U.S. Virgin Islands.

To date, this program has supported testing for lead in drinking water in over 14 thousand schools and childcare facilities, directly impacting over two million children in disadvantaged communities. In FY 2022 alone, five thousand schools were tested. The Agency also continues to work with the seven tribal consortia that were awarded $4.3 million in grants to support lead testing in tribal schools and childcare programs.[79]

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

The Drinking Water and Wastewater Infrastructure Act of 2021 amended Safe Drinking Water Act Section 1464 (Lead Testing in Schools grant) to include remediation (termed "lead reduction") in the statutory language. This important amendment allows program grants to support both water testing and remediation of the sources of the lead in drinking water in schools and childcare

[79] For more information, please see: https://www.epa.gov/tribaldrinkingwater/wiin-act-section-2107-lead-testing-school-and-child-care-program-drinking-water.

facilities. In FY 2024, EPA is requesting $36.5 million to provide grants to support voluntary testing for lead contamination in drinking water at schools and childcare facilities and for remediation of sources of lead in the drinking water in those facilities. The FY 2024 funding will improve drinking water quality for vulnerable populations and help schools and childcare facilities better protect children in overburdened and underserved communities.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$6,000.0) This program change is an increase to further address lead in drinking water, especially in small and disadvantaged communities.

Statutory Authority:

SDWA § 1464(d), as amended by the America's Water Infrastructure Act, Pub. L. 115-270 § 2006.

Drinking Water Infrastructure Resilience and Sustainability
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$7,000***	***$25,000***	***$18,000***
Total Budget Authority	$0	$7,000	$25,000	$18,000

Program Project Description:

The Drinking Water Infrastructure Resilience and Sustainability Program assists public water systems serving small and underserved communities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards, including climate change. This Program focuses on increasing water infrastructure investment and improving drinking water and water quality, especially in underserved and overburdened communities across the country.

The Program has coordinated outreach and related activities to take place through Spring 2023 and up until the announcement of the initial competition of funding, anticipated in Summer 2023. These activities will support efforts to reach and prioritize focus on eligible communities of need, specifically underserved, small, or disadvantaged communities. Selections and awards are anticipated to be completed by the end of 2023.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting $25 million for the Drinking Water Infrastructure Resilience and Sustainability Grant Program. This Program supports the Administration's priority of assisting eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards, including climate change.

The FY 2024 request will allow EPA to fund projects across the country, accelerating the ability of public water systems to take action to improve their resilience, especially after natural hazard occurrences. The FY 2024 grants will support a wide range of locally relevant activities, including:

- Water conservation or the enhancement of water use efficiency;

- Modification or relocation of existing drinking water system infrastructure that is at risk of significant impairment by natural hazards, including risks to drinking water from climate change and flooding;

- Design or construction of desalination facilities to serve existing communities;

- Enhancement of water supply through watershed management and source water protection;

- Enhancement of energy efficiency or the use and generation of renewable energy in the conveyance or treatment of drinking water; or

- Development and implementation of activities to increase the resilience of the eligible entity to natural hazards.

These grants help ensure that water systems across the country, especially those serving disadvantaged, rural, and small communities, have the resources needed to reduce the vulnerability of their water infrastructure to natural hazards.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Categorical Grant: Public Water System Supervision Programs under the STAG appropriation and the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$18,000.0) This change is an increase that will fully fund the program under DWWIA at the authorized level. This increase of resources supports water infrastructure in communities, ensuring access to safe drinking water, and supports the President's priority of assisting eligible entities in the planning, design, construction, implementation, operation, or maintenance of a program or project that increases resilience to natural hazards.

Statutory Authority:

America's Water Infrastructure Act, P.L. 115-270, Section 2005.

Technical Assistance for Wastewater Treatment Works
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$12,000***	***$27,000***	***$18,000***	***-$9,000***
Total Budget Authority	$12,000	$27,000	$18,000	-$9,000

Program Project Description:

This Program provides grants to nonprofit organizations to help rural, small, and tribal municipalities to 1) obtain Clean Water State Revolving Fund (CWSRF) financing; 2) protect water quality and achieve and maintain compliance with the requirements of the Clean Water Act (CWA); and 3) disseminate planning, design, construction, and operation information for small publicly owned wastewater systems and decentralized wastewater treatment systems. Program funding also provides training to operators, staff, and managers on sustainable and effective management, financial, and operational wastewater utility treatment practices.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

The FY 2024 request of $18.0 million will continue funding for the Technical Assistance for Treatment Works Grant Program. The Program also supports environmental justice and work in underserved communities. Underserved communities are more likely to experience wastewater infrastructure challenges because of a lack of staff capacity and limited resources to pay for external expertise. In FY 2024, EPA will provide grants to nonprofit organizations to support training and technical assistance to help rural, small, and tribal municipalities obtain CWSRF financing, protect water quality and ensure CWA compliance, and share information on planning, design, construction, and operation of wastewater systems. These activities also will help achieve the goals of the Administration's Justice40 Initiative. As of FY 2022, EPA has awarded $12 million in grants from this program, helping communities obtain water infrastructure financing.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water Programs and Surface Water Protection Programs under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (-$9,000.0) This program change redirects funding to other administration priorities.

Statutory Authority:

America's Water Infrastructure Act, P.L. 115-270, Section 4103 and Clean Water Action Section 104(b)(8).

Sewer Overflow and Stormwater Reuse Grants
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$44,935***	***$50,000***	***$280,011***	***$230,011***
Total Budget Authority	$44,935	$50,000	$280,011	$230,011
Total Workyears	0.6	0.0	5.0	5.0

Program Project Description:

The Sewer Overflow and Stormwater Reuse Municipal Grant (OSG) Program provides grants to fund projects that mitigate the effect of extreme weather events. These events cause storm water issues and increase the incidence of combined and sanitary sewer overflows. The grants fund projects that include green as well as gray infrastructure. Many underserved and marginalized communities will benefit from the work funded by these grants. States will provide grants to municipalities to manage combined sewer overflows, sanitary sewer overflows, and stormwater flows.[80]

EPA awards grants using a formula that captures sewer overflow and stormwater infrastructure needs.[81] To the extent eligible projects exist, 20 percent of the appropriated funds must be for projects utilizing green infrastructure, water and energy efficiency improvements, or other environmentally innovative activities. Section 50204 of the Infrastructure Investment and Jobs Act amends the OSG program to include a minimum of 25 percent of each state's grant for eligible projects in rural or financially distressed communities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

The FY 2024 request includes $280 million for the OSG Program. These funds will be used to help local officials mitigate the impact of extreme weather events with an increased focus on rural and financially distressed communities. This investment supports the Administration's priority for environmental justice and will support reaching targets under the Administration's Justice40 Initiative. This grant program also advances the Administration's priority for ensuring climate resilient infrastructure by funding projects that manage stormwater levels from extreme wet-

[80] For more information please visit: https://www.federalregister.gov/documents/2021/02/24/2021-03756/state-formula-allocations-for-sewer-overflow-and-stormwater-reuse-grants.
[81] For more information please visit: https://www.epa.gov/cwsrf/sewer-overflow-and-stormwater-reuse-municipal-grants-program.

weather events. In the 2012 Clean Watersheds Needs Survey, states reported a forward-looking 20-year infrastructure need for combined sewer overflows, sanitary sewer overflows, and stormwater management in the amount of $99.8 billion. To date, the program has issued over $50 million in grants to 36 different state entities.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Act (WIFIA) Program under the WIFIA appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$45.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$229,966.0 / +5.0 FTE) This program change is an increase of resources and FTE to support the ever-growing need in America to improve the infrastructure and management of combined sewer overflows, sanitary sewer overflows, and stormwater issues and their effects on public health and the environment and matches the DWWIA authorized level.

Statutory Authority:

America's Water Infrastructure Act of 2018, P.L. 115-270, Section 4106, Infrastructure Investment and Jobs Act of 2021, P.L. 117-58, Section 50204, Sec 221 Clean Water Act (33 USC 1301).

Water Infrastructure Workforce Investment
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$3,322***	***$6,000***	***$17,711***	***$11,711***
Total Budget Authority	$3,322	$6,000	$17,711	$11,711

Program Project Description:

Drinking water and wastewater utilities provide stable, rewarding, and high-quality careers. As utilities make critical investments in infrastructure, drinking water and wastewater, utilities must also invest in the development of a strong local workforce to strengthen communities and ensure a strong pipeline of skilled and diverse workers for today and tomorrow.

This Program, created in consultation with the United States Department of Agriculture, provides competitive grants to be used to connect individuals to career opportunities at drinking water and wastewater utilities and increase public awareness of careers in this field. EPA selects experienced and qualified non-profit organizations, labor organizations, educational institutions, and public works departments that can work with a broad array of water utilities.

This Program supports efforts to increase representation from women, people of color, and tribes in this sector. Most jobs in this sector do not require college degrees, and apprenticeship and training programs can prepare people to have high-paying, meaningful professions that support the water sector and economic development in their communities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

The FY 2024 request of $17.7 million, for the innovative Water Infrastructure Workforce Development Investment Grant Program will: 1) assist in the development of innovative water workforce development and career opportunities in the drinking water and wastewater utility sector and 2) expand public awareness about drinking water and wastewater utilities and to connect individuals to careers in the drinking water and wastewater utility sector.[82] Program funding will support activities such as internship, pre-apprenticeship, apprenticeship, and post-secondary bridge programs; education programs for elementary, secondary, and higher education students;

[82]For more information, please see: https://www.epa.gov/sustainable-water-infrastructure/innovative-water-infrastructure-workforce-development-program

regional industry and workforce collaboratives; secondary integrated learning laboratories; and leadership development.

FY 2024 resources also will support nonprofit organizations and public works departments or agencies to align water and wastewater utility workforce recruitment efforts, training programs, retention efforts, and community resources with water and wastewater utilities.

Performance Measure Targets:

Work under this program supports performance results in the Drinking Water State Revolving Fund and Clean Water State Revolving Fund Programs under the STAG appropriation and the Water Infrastructure Finance and Innovation Program (WIFIA) under the WIFIA appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$11,711.0) This program change is an increase of resources to support nonprofit organizations and public works departments or agencies to align water and wastewater utility workforce recruitment efforts, training programs, retention efforts, and community resources with water and wastewater utilities. The program will expand the availability of workforce development programs and training opportunities to provide good jobs and ensure public health protections are maintained with a skilled workforce.

Statutory Authority:

42 U.S.C. 300j-19e, AWIA, P.L. 115-270, Section 4304.

Technical Assistance and Grants for Emergencies (SDWA)
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$35,022***	***$35,022***
Total Budget Authority	$0	$0	$35,022	$35,022
Total Workyears	0.0	0.0	10.2	10.2

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50101 of DWWIA authorizes EPA to make grants to states or publicly owned water systems to assist in responding to and alleviating any emergency situation (including cybersecurity events and heightened exposure to lead) when the Agency determines that there is a substantial danger to the public health.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$35,022.0 / +10.2 FTE) This program change will fully fund the creation of the new grant program, authorized under DWWIA, to make grants to states or publicly owned water systems to assist in responding to and alleviating any emergency situation.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50101.

Technical Assistance and Grants for Emergencies, Small Systems
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$15,000***	***$15,000***
Total Budget Authority	$0	$0	$15,000	$15,000
Total Workyears	0.0	0.0	2.2	2.2

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50101 of DWWIA authorizes EPA to make grants for states or publicly owned water systems to assist in responding to and alleviating any emergency situation at small systems (including cybersecurity events and heightened exposure to lead) when the Agency determines there is a substantial danger to the public health.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$15,000.0 / +2.2 FTE) This program change will fully fund the creation of the new grant program, authorized under DWWIA, to make grants for states or publicly owned water systems to assist in responding to and alleviating any emergency situation at small systems.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50101.

Source Water Petition Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$5,000***	***$5,000***
Total Budget Authority	$0	$0	$5,000	$5,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50103 of DWWIA authorizes EPA to make grants for states where public water system operators and community members have formed a voluntary partnership to prevent source water degradation.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$5,000.0 / +1.0 FTE) This program change will fully fund the creation of the new grant program, authorized under DWWIA, at the authorized level to make grants for states where

public water system operators and community members have formed a voluntary partnership to prevent source water degradation.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50103.

Voluntary Connections to Public Water Systems
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$20,004***	***$20,004***
Total Budget Authority	$0	$0	$20,004	$20,004
Total Workyears	0.0	0.0	4.0	4.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50104(b) of DWWIA authorizes EPA to establish a new competitive grant program for public water systems (or nonprofit entities on behalf of public water systems) to voluntarily connect individual households to public water systems.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$20,004.0 / +4.0 FTE) This program change will fully fund the creation of the new grant program, authorized under DWWIA, to establish a new competitive grant program for

public water systems (or nonprofit entities on behalf of public water systems) to voluntarily connect individual households to public water systems.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50104(b).

Underserved Communities Grant to Meet SDWA Requirements

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$50,030***	***$50,030***
Total Budget Authority	$0	$0	$50,030	$50,030
Total Workyears	0.0	0.0	14.0	14.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50104(c) of DWWIA authorizes EPA to create a new competitive grant program to assist states in helping underserved communities meet Safe Drinking Water Act (SDWA) requirements. Grants made will prioritize communities that do not have household drinking water or wastewater services.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in *the FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$50,030.0 / +14.0 FTE) This program change will fully fund the creation of the new grant program, authorized under DWWIA, to create a new competitive grant program to assist states in helping underserved communities meet SDWA requirements.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50104(c).

Small System Water Loss Identification and Prevention
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$50,019***	***$50,019***
Total Budget Authority	$0	$0	$50,019	$50,019
Total Workyears	0.0	0.0	9.0	9.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50106 of DWWIA authorizes EPA to create a new grant program for states, municipalities, water systems, tribes (or consortia), or nonprofit organizations, to assist public water systems that serve fewer than 10,000 people in order to promote operation sustainability. Grantees can use grants for activities such as inventorying or mapping system assets, deploying technology, increasing water reuse, or training staff.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$50,019.0 / +9.0 FTE) This program change will fully fund the creation of the new grant program, authorized under DWWIA, to assist public water systems that serve fewer than 10,000 people in order to promote operation sustainability.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50106.

Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$5,000***	***$50,022***	***$45,022***
Total Budget Authority	$0	$5,000	$50,022	$45,022
Total Workyears	0.0	0.0	10.0	10.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50107 of DWWIA authorizes EPA to create a new grant program for the resilience and sustainability of public water systems serving more than 10,000 people; including projects that increase resilience to natural hazards, cybersecurity vulnerabilities, or extreme weather events. Eligible activities include water conservation and efficiency, infrastructure modification or relocation, desalination, source water protection, energy efficiency, renewable energy, resiliency efforts, cybersecurity measures, or water conservation or reuse.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to fully fund this grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$75.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$44,947.0 / +10.0 FTE) This program change is an increase to support efforts to fully fund the creation of this grant program, authorized under DWWIA, to fund the resilience and sustainability of public water systems serving more than 10,000 people.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50107.

Indian Reservation Drinking Water Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$4,000***	***$50,017***	***$46,017***
Total Budget Authority	$0	$4,000	$50,017	$46,017
Total Workyears	0.0	0.0	8.0	8.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50111 of DWWIA broadens the Indian reservation drinking water grant program (which has not been appropriated to date) to extend to projects on Indian reservations that connect, expand, or repair existing public water systems, as well as to include Clean Water Act water quality or sanitation projects for treatment works.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to fully fund this grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$64.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$45,953.0 / +8.0 FTE) This program change is an increase to fully fund this grant program, authorized under DWWIA, to fund projects on Indian reservations that connect, expand, or repair existing public water systems.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50111.

Advanced Drinking Water Technologies

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$10,000***	***$10,000***
Total Budget Authority	$0	$0	$10,000	$10,000
Total Workyears	0.0	0.0	2.9	2.9

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50112 of DWWIA authorizes a new competitive Advanced Drinking Water Technology grant program. Eligible water systems must be smaller than 100,000 people served or must have inadequate drinking water systems and must be interested to identify and deploy new or emerging technologies (including cybersecurity).

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10,000.0 / +2.9 FTE) This program change is an increase that will fully fund the creation of the new grant program, authorized under DWWIA, to assist eligible water systems identify and deploy new or emerging technologies (including cybersecurity).

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50112.

Clean Water Act Research, Investigations, Training, and Information

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$75,033***	***$75,033***
Total Budget Authority	$0	$0	$75,033	$75,033
Total Workyears	0.0	0.0	15.0	15.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50201 of DWWIA amends the CWA grant program regarding Research, Investigations, Training, and Information. This program authorizes grants to state water pollution control agencies, interstate agencies, other public or nonprofit private agencies, institutions, organizations, and individuals to conduct and promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution. It also allows for grants to nonprofit organizations to provide technical and financial assistance to rural, small, and tribal communities for project planning; assist treatment systems to protect water quality; and provide information to these organizations regarding planning, design, construction, and operation of publicly owned treatment works and decentralized wastewater treatment systems.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

Work under this program supports performance results in the Surface Water Protection Program under the EPM appropriation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$75,033.0 / +15.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to provide technical assistance and information to rural, small, and tribal communities.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50201.

Wastewater Efficiency Grant Pilot Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$20,004***	***$20,004***
Total Budget Authority	$0	$0	$20,004	$20,004
Total Workyears	0.0	0.0	4.0	4.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50202 of DWWIA authorizes EPA to create a Wastewater Efficiency Grant Program that awards grants to owners or operators of publicly owned treatment works (POTWs) to carry out projects that create or improve waste-to-energy systems.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 – 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$20,004.0 / +4.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to owners or operators of POTWs to carry out projects that create or improve waste-to-energy systems.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50202.

Clean Water Infrastructure Resiliency and Sustainability Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$25,011***	***$25,011***
Total Budget Authority	$0	$0	$25,011	$25,011
Total Workyears	0.0	0.0	5.0	5.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50205 of DWWIA authorizes EPA to provide grants to municipality or an intermunicipal, interstate, or state agency for planning, designing, or constructing projects that increase the resilience of publicly owned treatment works (POTWs) to natural hazards or cybersecurity vulnerabilities.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$25,011.0 / +5.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to municipalities and agencies for planning,

designing, or constructing projects that increase the resilience of POTWs to natural hazards or cybersecurity vulnerabilities.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50205.

Small and Medium Publicly Owned Treatment Works Circuit Rider Program

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$10,000***	***$10,000***
Total Budget Authority	$0	$0	$10,000	$10,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50206 of DWWIA authorizes EPA to provide grants to qualified nonprofits to assist owners and operators of small and medium publicly owned treatment works (POTWs). Grants will prioritize nonprofits that service communities that are overburdened or underserved.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10,000.0 / +1.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to assist owners and operators of small and medium POTWs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50206.

Grants for Low and Moderate income Household Decentralized Wastewater Systems

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$50,022***	***$50,022***
Total Budget Authority	$0	$0	$50,022	$50,022
Total Workyears	0.0	0.0	10.0	10.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50208 of DWWIA authorizes EPA to provide grants to nonprofits that provide assistance to low- and moderate-income individuals for the construction, repair, or replacement of an individual household decentralized wastewater treatment system; or the installation of a larger decentralized wastewater system designed to provide treatment for two or more households.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$50,022.0 / +10.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to allow EPA to provide grants for the construction, repair, or replacement of an individual household decentralized wastewater

treatment system; or the installation of a larger decentralized wastewater system designed to provide treatment for two or more households.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50208.

Connection to Publicly Owned Treatment Works
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$40,020***	***$40,020***
Total Budget Authority	$0	$0	$40,020	$40,020
Total Workyears	0.0	0.0	9.0	9.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50209 of DWWIA authorizes EPA to provide grants to publicly owned treatment works (POTWs) or nonprofits that assist individuals with the costs of connecting their household to a publicly owned treatment work.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$40,020.0 / +9.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to POTWs or nonprofits that assist individuals with the costs of connecting their household to a publicly owned treatment work.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50209.

Water Data Sharing Pilot Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Protect and Restore Waterbodies and Watersheds

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$15,000***	***$15,000***
Total Budget Authority	$0	$0	$15,000	$15,000
Total Workyears	0.0	0.0	2.0	2.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50213 of DWWIA authorizes EPA to establish a competitive grant pilot program to build systems that improve the sharing of information concerning water quality, water infrastructure needs, and water technology (including cybersecurity) between states or among units of local government.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5/Objective 5.2, Protect and Restore Waterbodies and Watersheds in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$15,000.0 / +2.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to establish a competitive grant pilot program to

build systems that improve the sharing of information between states or units of local government.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50213.

Stormwater Infrastructure Technology

Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$3,000***	***$5,000***	***$2,000***
Total Budget Authority	$0	$3,000	$5,000	$2,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50217(b) of DWWIA authorizes EPA to establish a competitive grant program aimed at creating between three and five centers of excellence for new and emerging stormwater control infrastructure technologies.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to fully fund this grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$2,000.0 / +1.0 FTE) This program change will fully fund the creation of this grant program, at the authorized level in DWWIA, to create between three and five centers of excellence for new and emerging stormwater control infrastructure technologies.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50217(b).

Stormwater Control Infrastructure Project Grants
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$10,000***	***$10,000***
Total Budget Authority	$0	$0	$10,000	$10,000
Total Workyears	0.0	0.0	1.0	1.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50217(c) of DWWIA authorizes EPA to establish a competitive grant program for stormwater control infrastructure projects that incorporate new and emerging stormwater control technologies.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$10,000.0 / +1.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to establish a competitive grant program for stormwater control infrastructure projects.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50217(c).

Alternative Water Sources Grants Pilot Program
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$25,009***	***$25,009***
Total Budget Authority	$0	$0	$25,009	$25,009
Total Workyears	0.0	0.0	4.0	4.0

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50203 of DWWIA authorizes EPA to provide grants to a water authority in the area of a state that is experiencing critical water supply needs, and may be used for engineering, design, construction, and final testing of alternative water source projects to meet critical water supply needs.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to create this new grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$25,009.0 / +4.0 FTE) This program change will fully fund the creation of the new grant program, at the authorized level in DWWIA, to help water authorities to find alternative water source projects to meet critical water supply needs.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50203.

Enhanced Aquifer Use and Recharge
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$4,000***	***$5,000***	***$1,000***
Total Budget Authority	$0	$4,000	$5,000	$1,000
Total Workyears	0.0	0.0	1.3	1.3

Program Project Description:

The Drinking Water and Wastewater Infrastructure Act of 2021 (DWWIA) was enacted to help address numerous drinking water and wastewater issues across the country. Implementation of the Act will strengthen the federal government's ability to invest in water infrastructure in communities in every state, so that all Americans can continue to have access to safe drinking water and our Nation's waterways can remain clean and free from pollution. DWWIA strengthens many existing programs within EPA while creating new programs to upgrade aging infrastructure, address the threat of climate change, invest in new technologies, and provide assistance to underserved communities.

Section 50222 of DWWIA authorizes EPA to provide grants to carryout groundwater research of enhanced aquifer use and recharge in support of sole-source aquifers.

FY 2024 Activities and Performance Plan:

Funds are requested in FY 2024 to fully fund this grant program at EPA. Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$1,000.0 / +1.3 FTE) This program change will fully fund the creation of this grant program, at the authorized level in DWWIA, to carry out groundwater research of enhanced aquifer use and recharge in support of sole-source aquifers.

Statutory Authority:

Drinking Water and Wastewater Infrastructure Act, P.L. 117-58, Section 50222.

Water Sector Cybersecurity
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$0***	***$25,000***	***$25,000***
Total Budget Authority	$0	$0	$25,000	$25,000

Program Project Description:

Cybersecurity represents a substantial concern for the water sector, given the prevalence of state-sponsored and other malevolent attacks on the sector as well as the sector's inherent vulnerability and limited technical capacity to address cyber issues. The Nation's drinking water and wastewater systems possess limited or no technical capacity to address cybersecurity risks. This competitive grant will help systems establish and build the necessary cybersecurity infrastructure to address rising threats. The Program also will support the Agency's Infrastructure Investment and Jobs Act implementation priorities including preparing for and responding to cybersecurity challenges so that water systems are more resilient.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5, Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

In FY 2024, EPA is requesting $25 million for a new competitive Water Sector Cybersecurity Grant Program. This Program will provide grants for cybersecurity improvements to drinking water and wastewater systems. Specifically, grant money will be available to develop and implement programs to proactively mitigate the risk of cybersecurity attacks on drinking water and/or wastewater systems. This grant program would complement potential implementation of proposed amendments to the Safe Drinking Water Act (SDWA) requiring cybersecurity analysis and changes.

It is expected that eligible entities will include water systems serving small, medium, and large communities. Receiving grants could be contingent upon completion of an approved cybersecurity assessment. An approved cybersecurity assessment may include an EPA cybersecurity assessment or a Cybersecurity and Infrastructure Security Agency (CISA) assessment. This grant will complement cybersecurity work already underway at EPA.

Performance Measure Targets:

Work under this program supports Safe Drinking Water Act implementation and compliance performance results in the Drinking Water Programs under the EPM appropriation to support safe drinking water for the Nation.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$25,000.0) This program change will support a new competitive grant program to advance cybersecurity infrastructure capacity and protections within the water sector.

Statutory Authority:

SDWA.

Recycling Infrastructure
Program Area: State and Tribal Assistance Grants (STAG)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$6,500***	***$10,000***	***$3,500***
Total Budget Authority	$0	$6,500	$10,000	$3,500
Total Workyears	0.0	0.5	2.0	1.5

Program Project Description:

EPA's Recycling Infrastructure program provides a critical opportunity to fund a range of high-impact projects to increase recycling, reduce contamination, and promote a circular economy for sustainable materials management by making much-needed investments in solid waste management infrastructure while delivering overall benefits of climate, clean energy, affordable and sustainable housing, clean water, and other investments to disadvantaged communities.

The U.S. recycling industry provides approximately 680,000 jobs and $5.5 billion annually in tax revenues and there is opportunity for greater contribution to the economy and environmental protection, as recent data indicate materials worth as much as $9 billion are thrown away each year.[83] Recycling is an important part of a circular economy, which refers to a system of activities that is restorative to the environment, enables resources to maintain their highest values, and designs out waste. A circular economy approach provides direct, measurable reductions in greenhouse gas emissions, as natural resource extraction and processing make up approximately 50 percent of total global greenhouse gas (GHG) emissions.[84]

Federal investment continues to be needed in the U.S. recycling system. The U.S. solid waste management infrastructure is struggling to maintain pace with rapidly evolving waste streams, leading to inefficient use of domestic resources.

Working to build a circular economy supports President Biden's Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*. Improving and enhancing recycling infrastructure will reduce climate impacts from materials extraction and production, address disproportionate impacts of mismanagement of wastes on overburdened communities, create jobs, and provide feedstock for the manufacturing sector to produce essential products.

[83] For more information, please refer to: https://www.epa.gov/smm/recycling-economic-information-rei-report.
[84] U.N. Environment International Resource Panel, Global Resources Outlook, 2019, p. 8. https://www.resourcepanel.org/reports/global-resources-outlook.

The 10-year vision for the circular economy program is to build and transform solid waste infrastructure in the United States to equitably reduce waste and manage materials to achieve a circular economy, reduce GHG emissions, and create cleaner, healthier, and more resilient communities.[85]

In order to maintain pace with evolving waste streams and help build a circular economy, EPA utilized funding provided by the Infrastructure Investment and Jobs Act (IIJA) to design and launch the Solid Waste for Infrastructure for Recycling (SWIFR) grant program. EPA issued three types of funding opportunities within the SWIFR grant program, which are designed to fund a range of projects that will enable EPA to help states, territories, tribes, local governments, and communities improve their recycling and materials management infrastructure:

- **SWIFR Grants for States and Territories** provides states and territories with grants to support their long-term planning and data collection needs to demonstrate progress toward the National Recycling Goal of increasing the recycling rate from 32 percent to 50 percent by 2030, and the Food Loss and Waste Reduction Goal to reduce food loss and waste by 50 percent by 2030, while also advancing a circular economy for recycled materials. Territories will be able to utilize funds for equipment and construction related costs as part of their implementation of plans.

- **SWIFR Grants for Tribes and Intertribal Consortia** provides funds for tribes and intertribal consortia to develop or update plans focused on encouraging environmentally sound post-consumer materials management; establish, increase, or expand materials management infrastructure: and identify, establish, or improve end-markets for the use of recycled materials.

- **SWIFR Grants for Political Subdivisions** provides funds to establish, increase, expand, or optimize collection and improve materials management infrastructure; reduce contamination in the recycled materials stream; and identify, establish, or improve end-markets for the use of recycled materials.

Continuing to support the SWIFR grant program through annual appropriations is critical to ensuring ongoing support for solid waste management improvements into the future.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, funding will further assist EPA's partners to achieve progress on the ground with investments in solid waste management infrastructure and post-consumer materials management. The SWIFR Program will further help reduce waste, reduce greenhouse emissions, increase disadvantaged communities' access to recycling programs and services, and create jobs. In FY 2024, the Agency will:

[85] For more information, please refer to: https://www.epa.gov/system/files/documents/2022-09/EPA_Circular_Economy_Progress_Report_Sept_2022.pdf.

- Continue to distribute funds to states and territories made available in IIJA and work with recipients to implement their approved workplans focusing on planning, data collection, and implementation of materials management plans. All 56 eligible states and territories, as well as the District of Columbia, are participating in this funding opportunity.

- Continue to distribute funds made available in IIJA to tribes and intertribal consortia and begin to work with them on implementation of grants.

- Continue to distribute funds made available in IIJA to political subdivisions of states and tribes and begin to work with them on implementation of their grants.

- Continue working with other EPA program offices to scope, develop, and offer technical assistance through grants funded through the annual appropriation.

- Provide oversight and monitoring to ensure grant funds are spent appropriately.

- Announce availability of additional grant funds for eligible entities.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$3,500.0 / +1.5 FTE) This program change increases support for states, territories, tribes, intertribal consortia, and political subdivisions of states for technical assistance in managing SWIFR grants and to make additional grant funds available to eligible entities. This investment includes the addition of 1.5 FTE to the 0.5 FTE funded through the administrative set-aside in the FY 2023 Enacted Budget. The FTE will assist in the management of the technical assistance grant programs and oversight of SWIFR grants. EPA is including appropriations language to reflect the increase needed to the administrative set-aside. This investment includes $270.0 thousand for payroll.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Save our Seas 2.0, 2020, Pub. L. 116-224; Infrastructure Investment and Jobs Act, Pub. L. 117-58.

Wildfire Smoke Preparedness
Program Area: State and Tribal Assistance Grants (STAG)
Cross-Agency Mission and Science Support

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
State and Tribal Assistance Grants	***$0***	***$7,000***	***$7,000***	***$0***
Total Budget Authority	$0	$7,000	$7,000	$0

Program Project Description:

The Wildfire Smoke Preparedness Program, which was funded for the first time in the FY 2022 appropriations, awards competitive grant funding to better prepare community buildings for wildfire smoke. These grants are intended to be distributed on a competitive basis to States, Tribes, public pre-schools, local educational agencies, and non-profit organizations. No more than 25% of the available funding may go to recipients in any one State. There is a 10% cost-share requirement, which may be waived for projects involving facilities located in economically distressed communities. Eligible activities may include research, investigations, experiments, demonstrations, surveys, and studies intended for the assessment, prevention, control, or abatement of wildfire smoke hazards in community buildings (including schools) and related activities.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 4/Objective 4.2, Reduce Exposure to Radiation and Improve Indoor Air in the *FY 2022 - 2026 EPA Strategic Plan.*

Wildfire smoke is a significant public health problem, especially in the West and as climate change accelerates and intensifies fires. Over the past 20 years, the number of acres burned annually due to wildfires in the U.S. has doubled; in 2021, nearly 60,000 fires burned over 7 million acres. Smoke plumes can have impacts over a large portion of our population, and the health impacts of wildfire smoke are significant, ranging from eye and throat irritation to asthma attacks, cardiovascular events, and even premature death. Many communities in the U.S. experience smoke from wildfires for days, weeks, or even months in a given year and over multiple fire seasons.

Wildfire smoke can make the outdoor air unhealthy to breathe. Local officials often advise people to stay indoors during a smoke event. However, some of the smoke from outdoors can enter homes and buildings and make it unhealthy to breathe indoor air, too. Buildings are varied and do not all provide the same level of protection against smoke. Factors such as the type of heating, ventilation, and air conditioning (HVAC) system, HVAC filter ratings and fit, and building tightness and maintenance can all impact how much wildfire smoke enters a building.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Consolidated Appropriations Act, 2023 (Pub. L. 117-328).

Table of Contents – Water Infrastructure Finance and Innovation Fund

APPROPRIATION: Water Infrastructure Finance and Innovation Fund
Resource Summary Table

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Water Infrastructure Finance and Innovation Fund				
Budget Authority	$154,098	$75,640	$80,443	$4,803
Total Work years	30.8	38.4	40.0	1.6

Bill Language: Water Infrastructure Finance and Innovation Program Account

For the cost of direct loans and for the cost of guaranteed loans, as authorized by the Water Infrastructure Finance and Innovation Act of 2014, $71,899,000, to remain available until expended: Provided, That such costs, including the cost of modifying such loans, shall be as defined in section 502 of the Congressional Budget Act of 1974: Provided further, That these funds are available to subsidize gross obligations for the principal amount of direct loans, including capitalized interest, and total loan principal, including capitalized interest, any part of which is to be guaranteed, not to exceed $12,500,000,000: Provided further, That of the funds made available under this heading, up to $5,000,000 may be used for the cost of direct loans and for the cost of guaranteed loans for projects described in section 5026(9) of the Water Infrastructure Finance and Innovation Act of 2014 to State infrastructure financing authorities, as authorized by section 5033(e) of such Act: Provided further, That the use of direct loans or loan guarantee authority under this heading for direct loans or commitments to guarantee loans for any project shall be in accordance with the criteria published in the Federal Register on June 30, 2020 (85 FR 39189) pursuant to the fourth proviso under the heading "Water Infrastructure Finance and Innovation Program Account" in division D of the Further Consolidated Appropriations Act, 2020 (Public Law 116–94): Provided further, That none of the direct loans or loan guarantee authority made available under this heading shall be available for any project unless the Administrator and the Director of the Office of Management and Budget have certified in advance in writing that the direct loan or loan guarantee, as applicable, and the project comply with the criteria referenced in the previous proviso: Provided further, That, for the purposes of carrying out the Congressional Budget Act of 1974, the Director of the Congressional Budget Office may request, and the Administrator shall promptly provide, documentation and information relating to a project identified in a Letter of Interest submitted to the Administrator pursuant to a Notice of Funding Availability for applications for credit assistance under the Water Infrastructure Finance and Innovation Act Program, including with respect to a project that was initiated or completed before the date of enactment of this Act.

In addition, fees authorized to be collected pursuant to sections 5029 and 5030 of the Water Infrastructure Finance and Innovation Act of 2014 shall be deposited in this account, to remain available until expended.

In addition, for administrative expenses to carry out the direct and guaranteed loan programs, notwithstanding section 5033 of the Water Infrastructure Finance and Innovation Act of 2014, $8,544,000, to remain available until September 30, 2025.

Program Projects in WIFIA
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Ensure Clean Water				
Water Infrastructure Finance and Innovation	$31,620	$75,640	$80,443	$4,803
TOTAL WIFIA	**$31,620**	**$75,640**	**$80,443**	**$4,803**

Water Quality Protection

Water Infrastructure Finance and Innovation
Program Area: Ensure Clean Water
Goal: Ensure Clean and Safe Water for All Communities
Objective(s): Ensure Safe Drinking Water and Reliable Water Infrastructure

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Water Infrastructure Finance and Innovation Fund	***$31,620***	***$75,640***	***$80,443***	***$4,803***
Total Budget Authority	$31,620	$75,640	$80,443	$4,803
Total Work years	31.2	38.4	40.0	1.6

Program Project Description:

Communities across the country find it difficult to obtain affordable financing to update aging water infrastructure. Critical water infrastructure is vulnerable to flooding and other climate change-related weather events. Additionally, people of color, indigenous groups, and low-income communities often suffer disproportionately from lack of modern water infrastructure. Our nation's health and wellbeing are dependent on equitable access to drinking water, wastewater, and stormwater systems; however, thousands of communities nationwide are burdened by aging and inadequate systems that threaten public health and stifle economic growth. To help address these challenges, Congress enacted the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA).

Communities use WIFIA Program funds to leverage local dollars to maximize the impact of water infrastructure projects that protect public health and deliver environmental benefits while supporting local economies and creating jobs. As of February 2023, the Program has issued 100 loans to communities across the country totaling $17 billion in credit assistance to help finance more than $36 billion for water infrastructure projects. WIFIA loans for these projects have saved communities over $5 billion, which they can use to accelerate additional infrastructure investment and keep rates affordable for water system users. These WIFIA-financed projects are creating 120,000 jobs and improved water infrastructure to benefit over 50 million people. Additional projects in the WIFIA pipeline have been invited to apply for over $12 billion in WIFIA assistance, which will stimulate nearly $27 billion in additional infrastructure investments once fully committed through loan agreements. These outcomes demonstrate that WIFIA credit assistance is an effective tool to help communities nationwide address water infrastructure needs.

The WIFIA Program provides and services direct loans to cover up to 49 percent of eligible costs for water infrastructure projects of regional or national significance and up to 80 percent of eligible costs for small community borrowers. WIFIA provides financing for the rehabilitation and construction of water, wastewater, and stormwaters systems to address aging infrastructure, meet regulatory requirements, and help improve long-term strategic, financial, and climate resiliency

planning. The Program supports a broad borrower base, including underserved communities, private companies, and small towns.

Communities often use WIFIA Program funds to supplement State Revolving Fund financing, providing an additional source of low-cost capital to help meet the growing water infrastructure needs of the United States while minimizing the financial costs to residents.

To date, WIFIA borrowers have received interest rates as low as 0.83 percent, with an average interest rate of 2.09 percent. Terms include the option to bundle multiple projects under one loan and master credit agreements, capitalize interest, backload repayment, and methods that preserve senior debt capacity.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 5/Objective 5.1, Ensure Safe Drinking Water and Reliable Water Infrastructure in the *FY 2022 - 2026 EPA Strategic Plan*.

The FY 2024 request builds on the Program's success accelerating water infrastructure investment and enables the Program to continue to offer support for small, overburdened, and underserved communities. The requested $80.4 million, —including $71.9 million in credit subsidy, will enable EPA to provide up to $8 billion in direct credit assistance, which when combined with other funding sources could help sustain over $16 billion in total infrastructure investment.

Of the total $80.4 million request to implement the program, $8.5 million is for the WIFIA Program's administrative expenses, including staff salaries and contract support. For the past four fiscal years, the number of projects selected to receive a WIFIA loan has been at least triple the number selected in the Program's first year in FY 2017, and since the Program's first loan closing in 2018, the number of closed loans to monitor has already increased to nearly 100. The WIFIA Program's administrative expenses enable high quality underwriting and technical reviews that are required to allow the WIFIA Program to properly mitigate risk, and high-quality portfolio monitoring and management that is critical to oversee the Program's burgeoning $30 billion portfolio of projects and ensure the Program's long-term solvency. The Agency's request for a sufficient administrative appropriation ensures the WIFIA Program's ability to monitor its rapidly growing portfolio and make new loans lowering the risk to the government.

The FY 2024 budget request also includes authority to use fee revenue as outlined in the Water Resources Reform and Development Act, Sections 5029(a), 5030 (b), and 5030(c). Fee revenue is for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms. The fee expenditure authority for the Program is in addition to the $8.5 million requests for management and operations administrative expenses.

Performance Measure Targets:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units
Target		8.0	8.0	8.0	8.0	9.0	9.5	9.5	Billions of Dollars
Actual	8.6	9.7	10.3	10.2	12.1	14.6			

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- (+$318.0) This change to fixed and other costs is an increase due to the recalculation of base workforce costs for existing FTE due to annual payroll increases, adjustments to provide essential workforce support, and changes to benefits costs.

- (+$4,485.0 / +1.6 FTE) This program change is an increase to support the growing demand for WIFIA loans for communities. This investment includes $305.0 thousand for payroll.

Statutory Authority:

Water Infrastructure Finance and Innovation Act of 2014.

Table of Contents – Hazardous Waste Electronic Manifest System Fund

APPROPRIATION: Hazardous Waste Electronic Manifest System Fund
Resource Summary Table
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Hazardous Waste Electronic Manifest System Fund				
Budget Authority	$12,631	$0	$0	$0
Total Workyears	12.1	11.0	11.0	0.0

Bill Language: E-Manifest

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2024, to remain available until expended.

Note. — This language is proposed under the FY 2024 Administrative Provisions.

Program Projects in e-Manifest
(Dollars in Thousands)

Program Project	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	$12,482	$0	$0	$0
Operations and Administration				
Central Planning, Budgeting, and Finance	$149	$0	$0	$0
TOTAL e-Manifest	**$12,631**	**$0**	**$0**	**$0**

Resource Conservation and Recovery Act (RCRA)

RCRA: Waste Management
Program Area: Resource Conservation and Recovery Act (RCRA)
Goal: Safeguard and Revitalize Communities
Objective(s): Reduce Waste and Prevent Environmental Contamination

(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Environmental Programs & Management	$77,838	$75,958	$90,634	$14,676
Hazardous Waste Electronic Manifest System Fund	***$12,482***	***$0***	***$0***	***$0***
Total Budget Authority	$90,320	$75,958	$90,634	$14,676
Total Workyears	299.1	303.8	349.3	45.5

Total workyears in FY 2024 include 11.0 FTE funded by e-Manifest fees.
All actuals from the Hazardous Waste Electronic Manifest System Fund are funded by user fees.

Program Project Description:

The Resource Conservation and Recovery Act (RCRA) requires companies that ship hazardous waste to track and report the estimated two million shipments each year. On June 30, 2018, EPA launched a national system for tracking hazardous waste shipments electronically. The system, known as "e-Manifest," was developed per the Hazardous Waste Electronic Manifest Establishment Act (e-Manifest Act, Public Law 112-195), enacted on October 5, 2012. e-Manifest modernizes the Nation's cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states. Since system launch through February 2023, EPA has received approximately 8.3 million manifests and collected over $100 million in user fees.

EPA estimates the e-Manifest system will reduce the burden associated with paper manifests by between 175,000 and 425,000 hours, saving state and industry users more than $50 million annually, once electronic manifests are widely adopted.[1] Since the 2018 launch, e-Manifest has saved state programs $65 million dollars in processing, data entry, and storage costs. The e-Manifest system will provide better knowledge of waste generation and final disposition; enhanced access to manifest information; and greater transparency for the public about hazardous waste shipments.

In FY 2014, Congress established the "Hazardous Waste Electronic Manifest System Fund" to implement the e-Manifest Program, including system development, fee collection authority, rulemaking, and advisory committee establishment. In FY 2024, e-Manifest continues to be fully supported by user fees, which includes support for continuing the development and operation of the system and agency personnel that support its use and further its implementation.

[1] For more information, please refer to: https://www.epa.gov/e-manifest/learn-about-hazardous-waste-electronic-manifest-system-e-manifest.

FY 2024 Activities and Performance Plan:

Work in this program directly supports Goal 6/Objective 6.2, Reduce Waste and Prevent Environmental Contamination in the *FY 2022 - 2026 EPA Strategic Plan.*

In FY 2024, EPA will operate the e-Manifest system and will collect and deposit user fees into the Hazardous Waste Electronic Manifest System Fund (approximately $27.0 million is anticipated). The authority to collect and spend fees requires authorization from Congress in annual appropriations bills.

In FY 2024, EPA plans to perform the following key activities:

- Continue to implement and enhance electronic signature methods that will ease the logistical burdens of adopting greater use of the electronic and image plus data submission methods.
- Work with individual generators and generator-associated groups to increase their registration and use of the e-Manifest system, which will allow for greater fully electronic adoption.
- Continue to work on rulemaking to address hazardous waste export manifests and how to integrate e-Manifest into other hazardous waste manifest-related reporting requirements under the RCRA regulations.
- Continue regular outreach with users and stakeholders to identify new ways to improve the e-Manifest system. This includes regular webinars and targeted demonstrations on how to use the e-Manifest system.
- Operate appropriate accounting and financial reporting interfaces needed to collect and manage user fees, adjust fees as appropriate, and comply with the auditing requirements of the Hazardous Waste Electronic Manifest Establishment Act.
- Hold periodic meetings of the e-Manifest Advisory Board, consisting of state and industry stakeholders and Information Technology experts, to provide input on system operation and implementation of the user fee regulation.
- Develop and enhance the e-Manifest system software to expand developmental capabilities, increase ease of use, and improve program efficiencies.

Performance Measure Targets:

EPA's FY 2024 Annual Performance Plan does not include annual performance goals specific to this program.

FY 2024 Change from FY 2023 Enacted Budget (Dollars in Thousands):

- There is no change in program funding.

Statutory Authority:

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous Waste Electronic Manifest Establishment Act.

Table of Contents – FY 2024 Annual Evaluation and Other Evidence-Building Activities

EPA Evaluation and Evidence-Building for FY 2024

The Foundations for Evidence-Based Policymaking Act (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure Agency decisions are made using the best available evidence. EPA's FY 2024 Annual Evaluation Plan (AEP) describes significant program evaluations and other evidence-building activities the Agency plans to undertake in FY 2024. The Agency's FY 2024 AEP includes program evaluations that assess program outcomes, support program improvement, and aid decision making. Final program evaluation reports will be available at EPA's website: https://www.epa.gov/evaluate unless otherwise indicated.

FY 2024 Annual Evaluation Plan

Office of Chemical Safety and Pollution Prevention (OCSPP)

Title	EPA-Supported WPS Training of Farmworkers		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	October 2023	**Planned completion date**	September 2024

Purpose and brief Description: This study uses pre- and post-training assessments to gauge the effectiveness of this recurring training. EPA provides funding through a 5-year cooperative grant to train farmworkers in accordance with the Agricultural Worker Protection Standard (WPS) rule. WPS pesticide safety training is an annual requirement. This evaluation will track the number of individuals trained and the effectiveness of the training by assessing participant knowledge and understanding before and after the training.

Programmatic or policy decisions this activity will inform: Effectiveness and scope of the EPA-supported WPS training.

Question(s) this activity will address:

- How many farmworkers are receiving EPA-supported annual training required under the WPS rule, and what is their knowledge of the material at completion of the course?

Data, tools, method/analytical approach: Critical data sets include information provided by the grantee on number of individuals trained. The evaluation will include pre- and post-training. assessments of those trained. EPA can follow up with the grantee for assessment of factors leading to performance results against quarterly and annual targets.

Anticipated challenges and proposed solutions: The COVID-19 public health emergency may continue to influence the grantee's training reach. Social distancing and other in-person protection strategies means smaller training groups and fewer individuals trained. Remote training can present technical challenges for some workers. Additional COVID-related impacts experienced in FY 2022 include farmers and growers' refusal to let trainers onto farms to conduct training for fear of exposing workers to COVID, and decreased capacity within the grantee's national network of training organizations (hiring and retention challenges, loss of established relationships with the agricultural community). In-person training is a preferred method to engage with trainees; the

grantee and agricultural establishments will continue to implement strategies to address the pandemic-related obstacles while meeting the training needs. The grantee is currently aligning/redirecting resources to institutions with training capacity and will continue reaching out to their network and partnering organizations, including local agencies, nonprofit organizations, community leaders and agricultural employers, to better understand their capacity and increase efforts to return to in-person training.

Dissemination of findings: Evaluation results will be made publicly available in the Annual Reports on PRIA Implementation (https://www.epa.gov/pria-fees/annual-reports-pria-implementation).

Title	Effectiveness of OCSPP Pollution Prevention Activities		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.2: Promote Pollution Prevention		
Planned start date	Continuing from FY 2022	**Planned completion date**	September 2024

Purpose and brief Description: The Pollution Prevention (P2) Program seeks to alleviate environmental problems by leveraging business-relevant approaches to achieve significant reductions in the generation of hazardous releases to air, water, and land; reductions in the use of hazardous materials, which also advances EPA's chemical risk reduction and management goals under the Toxic Substances Control Act (TSCA); reductions in the generation of greenhouse gases; and reductions in the use of water. As a result of these preventative approaches, the P2 Program helps businesses and others reduce costs and access market opportunities.

Programmatic or policy decisions this activity will inform: Review will assess the degree of progress and outcomes of the P2 programs, as well as the utility of performance measures for the program.

Question(s) this activity will address: The overarching evaluation question the program intends to address is "What are the outcomes of EPA's P2 programs?" More specific questions will be aligned to individual programs and initiatives, such as the environmental justice aspects of implementation of the BIL and the climate aspects of implementation of the Inflation Reduction Act (IRA). Additionally, EPA intends to address questions about outcomes of the Safer Choice Program considering increased leadership interest and support for the program.

Data, tools, method/analytical approach: EPA will review a range of data assets to determine how the information and data collected as part of the P2 grant programs, the existing list of Safer Choice products, and other performance metric targets can be used for FY 2024 conduct of evaluation of effectiveness and outcomes, as well as for continuous improvements of day-to-day operations.

Anticipated challenges and proposed solutions: At this time, EPA does not anticipate any major challenges in gathering relevant data. This assessment may change pending the review of data assets and evaluation plans developed in FY 2023.

Dissemination of findings: EPA anticipates making evaluation findings public through EPA's website www.epa.gov/evaluate, as well as other program venues as appropriate.

Office of Enforcement and Compliance Assurance (OECA)

Title	Assessing the effectiveness of offsite compliance monitoring		
Lead National Program	Office of Enforcement and Compliance Assurance		
Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.2: Detect Violations and Promote Compliance		
start date	Continuing from FY 2022	**Planned completion date**	September 2024

Purpose and brief Description: This project is a part of OECA's Compliance Learning Agenda which collaborates with states, tribes, and academics to identify the most pressing programmatic questions, and create a venue for EPA, states, tribes, and territories to collaborate in the development of evidence-based enforcement tools and techniques that will ensure the biggest impact on environmental compliance. As EPA moves out of the pandemic that restricted our ability to do onsite inspections, it recognizes that a broader portfolio of Off-site Compliance Monitoring (OfCM) activities may provide the Agency with additional tools for our enforcement and compliance programs. To assess what EPA has learned from the extended use of the past two years and gain insight into the efficacy of OfCM tools relative to onsite inspections, the Agency is conducting an exploratory evaluation using readily available data and information to inform interim guidance and best practices. EPA will then use those results to guide a longer-term evaluation of OfCM and the best uses of these tools going forward. The Agency anticipates that the answers to these questions will involve multiple evaluation efforts given the range of programs and OfCM tools that will need to be assessed.

Programmatic or policy decisions this activity will inform: In addition to furthering the efforts of OECA's Compliance Learning Agenda, the results of this activity will inform future Agency policy and guidance related to Off-site Compliance Monitoring.

Question(s) this activity will address:

- How does the effectiveness of off-site compliance monitoring activities compare to onsite inspections?
- What outcomes does the Agency achieve from off-site compliance monitoring?
- What is the best use for OfCM? (Does it depend on the tool, the program, and on the compliance history of the facility?)
- Do OfCM tools support enforcement activities?

Data, tools, method/analytical approach: Data mining and analysis will use State/EPA inspection data, enforcement data, and State OfCM data from ICIS, other EPA data systems, and State associations. Some EPA regional OfCM data will be analyzed from a short questionnaire for

the short-term study. An algorithm may be used to establish links between OfCM inspection activities and enforcement actions. The Agency also plans to partner with academics to develop methodology for longer term evaluations.

Anticipated challenges and proposed solutions: There are potential significant data limitations associated with this activity. For example, because of the broad categories in ICIS, the definition of the OfCM activity performed in ICIS may not be indicative of the actual activity performed. To address this, EPA will use an array of different data sources to obtain as much specific, credible information as possible to minimize data irregularities. The Agency will develop and use algorithms to establish direct links and/or correlations between OfCM activities and enforcement actions. Longer term evaluations will require participation by our state and tribal partners to be successful. EPA has partnered with the E-Enterprise Leadership Council (EELC) and have invited the Environmental Council of States (ECOS), states, and tribes to participate in the workgroup to complete learning agenda projects.

Dissemination of findings: EPA anticipates making project findings public through EPA's website, www.epa.gov/evaluate, as well as other public venues as appropriate.

References and Relevant Sources

OECA Compliance Learning Agenda

EPA Offsite Compliance Monitoring Project

EPA OfCM Project Partnership Portal

Title	Identifying interventions that are effective at overcoming the impediments to municipal compliance		
Lead National Program	Office of Enforcement and Compliance Assurance		
Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.2: Detect Violations and Promote Compliance		
Planned start date	October 2023	**Planned completion date**	Through FY 2024

Purpose and brief Description: This project is a part of OECA's Compliance Learning Agenda (CLA) which collaborates with state, tribal, and territorial government environmental professionals, and academics, to identify the most pressing programmatic questions, and create a venue for EPA, states, tribes, and territories to collaborate in the development of evidence-based enforcement tools and techniques that will ensure the biggest impact on environmental compliance. EPA has heard about causes of noncompliance for small municipal water systems from many sources over some time. The Agency's goal is to identify the root causes that lead to noncompliance and that also render agency interventions (e.g., enforcement, technical assistance, etc.) unsuccessful at returning systems to compliance. EPA anticipates this project to involve multiple evaluation and research projects under both the National Pollutant Discharge Elimination System (NPDES) and Safe Drinking Water Act (SDWA) programs.

Programmatic or policy decisions this activity will inform: Project results will be used to improve Agency efforts and interventions to ensure that they are effective at returning systems to compliance.

Question(s) this activity will address:

- What are the root causes of municipal (wastewater treatment plants and drinking water systems) noncompliance that can render EPA and state enforcement and technical/financial assistance efforts unsuccessful?

- Considering the root causes of municipal noncompliance, what are the impediments to compliance that prevent technical assistance/financial assistance/enforcement tools from being effective in producing compliance?

- What alternate or supportive interventions are effective in producing compliance?

- What is the effectiveness of the application of various compliance tools to municipal noncompliance, e.g., enforcement actions, technical assistance, etc. in producing compliance – or improved compliance?

Data, tools, method/analytical approach: EPA expects to use a wide range of evaluation tools and methods to address priority questions., For example, EPA plans use data collected by state associations' surveys, as well as engaging with evaluation and other academic experts to learn about evaluation and research into the causes of municipal noncompliance. Data mining and analysis will use both NPDES data from the ICIS-NPDES data system (and possibly state-specific NPDES data systems) and drinking water data from SDWIS-Fed.

Anticipated challenges and proposed solutions:

- Effectiveness of enforcement (and other compliance tools) in producing compliance may vary state to state for various reasons. EPA will account for this variance in the study.

- There are multiple likely drivers of noncompliance and variations of the drivers of noncompliance between states. The Agency will likely need a large study dataset to analyze the associations between these drivers of noncompliance and the effectiveness of enforcement actions to become evident.

- There is uncertainty about ease of obtaining reliable information about the drivers of noncompliance for individual enforcement action. To help overcome this challenge, we have partnered with the EELC and have invited ECOS, states, and tribes to participate in the workgroup to complete learning agenda projects.

Dissemination of findings: EPA anticipates making project findings public through EPA's website, www.epa.gov/evaluate, as well as other public venues as appropriate.

Office of Water (OW)

Title	Progress Evaluation of the National Estuary Program		
Lead National Program	Office of Water/Office of Wetlands, Oceans and Watersheds		
Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds.		
Planned start date	October 2023	**Planned completion date**	September 2024

Purpose and brief Description: This program evaluation activity is focused on the National Estuary Program as described in Section 320 of the Clean Water Act. The primary purpose of the Progress Evaluation of the National Estuary Programs (NEPs) is to help EPA assess progress in achieving programmatic and environmental results through implementation of Comprehensive Conservation and Management Plans (CCMPs). The program evaluation process has proven to be an effective, interactive management process that ensures national program accountability and transparency, while incorporating local priorities and demonstrating the value of federal investment in estuarine and coastal watershed restoration and protection at the local and regional levels. The program evaluation process was revised and published in the 2021 NEP Program Evaluation Guidance This new guidance was distributed to the 28 NEP locations at the end of FY 2021.

The NEP program evaluation process also: transfers lessons learned among NEPs, EPA, and stakeholders through the sharing of case studies and transferable examples; documents the value added to environmental management by the national program and individual NEPs, including their role in convening stakeholders and interpreting science for management; demonstrates continued stakeholder commitment; and highlights achievements and successes of each NEP, as well as suggestions for continued program improvements.

Programmatic or policy decisions this activity will inform: Seven Program Evaluations will be conducted in FY 2024. The regular evaluation process for NEP locations informs the administration of the NEP program. It ensures the locations are delivering environmental results and are well-managed programs so that they can continue to receive annual grants from EPA which are matched 1:1 with non-federal dollars.

Question(s) this activity will address:

- Can NEP locations determine progress in achieving programmatic and environmental results?
- Can NEP locations document contributions to improving or reducing pressures on their coastal watersheds and enable NEPs to successfully serve as local implementation partners for EPA programs?
- Can NEP locations identify areas of improvement to assist NEPs in becoming stronger programs and achieving environmental results?

Progress, results, and interim findings (if applicable): The NEP program evaluation process runs on an annual cycle such that each location within the NEP is evaluated every five years. The

program evaluation process uses a two-category determination of Proficient and Progressing, as defined in the guidance. Proficient means an NEP is adequately meeting programmatic and environmental results. Progressing means there are missing criteria that need to be addressed before the next cycle and will catalyze a timeline to address those missing elements or opportunities for improvement before the next cycle. This determination is informed by the entire Program Evaluation (PE) package (narrative submission, NEPORT (NEP Online Reporting Tool) data, annual work plans, and EPA required annual end of year reports), on-site visit, and through discussions with the NEP under review.

Data, tools, method/analytical approach: Information for the evaluation process includes annual reports and work plans, data submitted to NEPORT, existing CCMPs, and other documentation of key decisions., In addition, any supplementary documents the NEP locations may have developed including communications plans, financial plans, monitoring plans, etc. are also reviewed. The NEP locations assemble these materials and make them available to the program evaluation team which include EPA staff from headquarters and applicable region along with a director from a different NEP.

Anticipated challenges and proposed solutions: The regular program evaluation process examines each NEP location on a variety of topics listed below. Each presents a potential challenge and can be addressed through the discussions between the program evaluation team and NEP locations. The results include recommendations for improvement based upon the following categories and are submitted to each program as a final program evaluation. letter:

- NEP Administration and Governance Structure
- Grant Obligations and Finance including budget summary
- Healthy Ecosystems (e.g., fish, shellfish, plant, eelgrass, and wildlife populations; habitat protection/restoration, natural resources, land use, hydrological and ecological restoration, invasive species)
- Community and Stakeholders Engagement
- Education and Outreach
- Monitoring and Assessment
- Clean Water Act Programs Relationship
- EPA Priorities (Nutrient pollution, water reuse and conservation, marine litter reduction, green infrastructure, environmental justice, climate change)

Dissemination of findings: Information about the Progress Evaluation of the National Estuary Program is posted on EPA's website at https://www.epa.gov/nep/progress-evaluation-national-estuary-program.

FY 2024 Evaluation and Evidence-Building Activities in Support of the Bipartisan Infrastructure Law and Inflation Reduction Act

In FY 2022 the Bipartisan Infrastructure Law (BIL) expanded EPA's historic role as a regulatory and scientific agency to be a large-scale funder of critical infrastructure and the Inflation Reduction Act (IRA) enables EPA to take aggressive action in tackling the climate crisis. In FY 2022 and FY 2023, in support of the new and expanded programs supported by BIL and IRA, EPA is identifying and implementing appropriate evaluation and evidence-building activities to assess results and support program implementation. In FY 2024, EPA will continue its efforts to use evaluation and evidence-building for BIL and IRA programs with the following goals in mind: executing programs efficiently and effectively; promoting transparency and building trust; maintaining accountability to taxpayers; and advancing equity priorities. EPA will share results and information in subsequent Annual Performance Reports found on www.epa.gov/planandbudget, in addition to posting related evaluation reports at www.epa.gov/evaluate

FY 2024 Evidence-Building Activities

The Foundations for Evidence-Based Policymaking Act (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure Agency decisions are made using the best available evidence. *EPA's FY 2024 Annual Plan for Evidence-Building Activities* describes Agency plans for significant evidence-building across a range of program areas. In this section EPA describes evidence-building activities other than program evaluations, such as data analysis, foundational fact finding, research, statistical analysis, continuous process improvement, and performance measurement. This document shares examples of evidence-building that supports EPA's decision-making in response to Administration priorities, Congressional mandates, and management priorities.

The first part of this document gives an overview of EPA's evidence-building activities in support of the Agency's Learning Agenda, which is part of the *FY 2022 – 2026 EPA Strategic Plan*. This part is organized by Learning Priority Area. The second part of this document, the Other Evidence-Building Activities, is organized by national program.

Evidence-Building Activities Supporting EPA's Learning Agenda

Expanding EPA's Toolkit of Air Benefits Assessment Methodologies and Practices

Title	Expanding EPA's Toolkit of Air Benefits Assessment Methodologies and Practices		
Lead National Program	Office of Air and Radiation		
Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts		
Planned start date	Subject to Funding	**Planned completion date**	Subject to Funding

Purpose and brief Description: EPA uses well-established methods for estimating the health benefits associated with reductions in some pollutants. However, as noted by scientific bodies

including the National Academy of Sciences (NAS) and Science Advisory Board (SAB)[1], there are areas where the science of air pollution effects continues to advance and there are benefits that EPA does not currently quantify and monetize.

Programmatic or policy decisions this activity will inform: This activity will improve EPA's ability to: (1) characterize the health benefits of improved air quality within Environmental Justice communities; (2) account for the role of air pollution in promoting the progression of chronic disease and subsequent death; (3) quantify the health benefits of reducing toxic air pollutants.

Question(s) this activity will address:

- What are the health benefits of reducing human exposures to air pollutants not currently quantified, particularly those related to hazardous air pollutants (HAPs)?
- What are the health benefits of reducing the risk of air pollution-related effects that are challenging to quantify but nonetheless important to the exposed populations?
- What are the benefits of health outcomes that cannot yet be valued using Willingness-to-Pay or other measures of economic value?
- How can EPA account for sequelae and the progression of disease when quantifying benefits?

Progress, results, and interim findings: In FY 2023 EPA anticipates hiring dedicated staff and initiating work on reports detailing methodological improvements and case studies applying those improvements. In addition, EPA plans to convene an NAS panel to advise the Agency and review the output of key reports/case studies.

Data, tools, method/analytical approach: Addressing the above questions will require access to economic and health datasets providing information on health effect incidence, health outcomes, and health care expenditures. EPA would apply these newly developed techniques using existing Agency tools, including the newly revised cloud-based version of the environmental Benefits Mapping and Analysis Program (BenMAP).

Anticipated challenges and proposed solutions: Addressing questions of the scope and complexity of those above will require significant contract resources and additional FTE (in particular, economists, biostatisticians, and air pollution epidemiologists).

Partnerships supporting this evidence-building effort: EPA anticipates working collaboratively with NAS in developing this project. EPA also anticipates consulting with industry, academia,

[1] National Research Council. 2002. *Estimating the Public Health Benefits of Proposed Air Pollution Regulations*. Washington, DC: The National Academies Press. https://doi.org/10.17226/10511. National Research Council. 2008. *Estimating Mortality Risk Reduction and Economic Benefits from Controlling Ozone Air Pollution*. Washington, DC: The National Academies Press. https://doi.org/10.17226/12198.

environmental organizations. The Agency will seek input and review of these parties in case studies and methodological proposals.

Dissemination of findings: Any NAS reports will be disseminated by the NAS, although EPA will provide links to those reports through EPA's website, www.epa.gov/evaluate, as appropriate. Information and any findings also will be shared with EPA staff and management through other venues (e.g., meetings, presentations, etc.).

Drinking Water Systems Out of Compliance

Title	Drinking Water Systems out of Compliance		
Lead National Program	Office of Enforcement and Compliance Assurance		
Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.2: Detect Violations and Promote Compliance		
Planned start date	Continuing from FY 2022	**Planned completion date**	Through 2026

Purpose and brief Description: Office of Enforcement and Compliance Assurance (OECA), Office of Water (OW), and the Drinking Water Systems Out of Compliance learning priority workgroup are assessing drinking water data reported to EPA to determine whether it accurately measures national compliance and substantiates EPA policy decisions; considering noncompliance root causes and corresponding technical/managerial/financial (TMF) factors; and testing efficacy of technical assistance, enforcement, and state oversight. The assessments, once complete, will identify key water system characteristics for which EPA and states should focus its policies and the most effective way to apply compliance assurance tools for increasing compliance in the drinking water program.

OECA anticipates FY 2024 funds will support continuation of evaluations and other empirical analyses for Question 3 (in the Agency Learning Agenda Learning Priority Area: Drinking Water Systems Out of Compliance) – efficacy of enforcement on compliance, and for Question 4 - identifying metrics for TMF, and initiation of work on question 5 – EPA oversight best practices. EPA plans to begin work on Question 4 in FY2023, using results from Question 2 – root cause of noncompliance, and EPA anticipates that work will continue into FY 2024.

Programmatic or policy decisions this activity will inform: Applying compliance assurance tools to effectively increase drinking water compliance rates.

Question(s) this activity will address:

- Does increased use of compliance assurance tools (inspections and enforcement) improve system compliance, and if so under what circumstances?
- How can EPA determine if a system has the TMF capacity to provide safe water on a continuous basis to its customers?
- What EPA oversight activities are effective at assessing and improving state programs' ability to drive compliance?

Progress, results, and interim findings: In FY2022, EPA made significant progress on Questions 2 due to existing work from which the Agency was able to learn water system characteristics most correlative to noncompliance. Specifically, predictive tools developed and tested in the State of California and EPA Regions 3 and 7 resulted in statistical data indicating that important system characteristics of a water system that relate to system success are: number of sources of water, financial factors, system size, history of violations, operator training level, complexity of treatment required, and management factors. The results align with professional observation of characteristics associated with noncompliance. The next phase will involve examining the potential for additional, original analysis to gain further insights into root causes of noncompliance and conducting such work. In FY2022, for Question 3, EPA worked with the General Services Administration's Office of Evaluation Sciences (OES) academic partners from Georgetown University to explore possible study designs for evaluating the effect of EPA inspections in the drinking water program (as compared to the current approach of only having state sanitary surveys of systems). Additionally, EPA has entered into an agreement with the University of Kansas to study if and under what conditions enforcement in the drinking water program improves compliance. EPA anticipate study work on Question 3 will begin in FY2023 and will continue in FY2024.

Data, tools, method/analytical approach:

- Question 2 Root Cause Analysis: Going forward, the analysis will review findings to date and determine if additional data sets can be accessed or created to do deeper analysis on certain characteristics (e.g., find specific aspects of management structure that correlate with ongoing compliance). If so, advanced statistical analytical methods may be applied to better understand underlying causes versus correlations to noncompliance. For Question 3 on Enforcement and Inspection Efficacy, the Agency hopes to empirically test the impact of increased use of compliance monitoring inspections and conduct surveys of public water system operators to evaluate effects of enforcement actions as compared to the status quo practice of heavily relying on other types of assistance. This priority question complements the Drinking Water National Compliance Initiative (NCI). Increased use of inspections could be planned such that those activities form the basis of a prospective study to inform the overall evaluation process. The results of the study could inform future compliance assurance strategies either as part of or beyond the NCI. Additionally, the use of OECA's Enforcement and Compliance History Online database will be used to do a retrospective analysis of enforcement activity.

- EPA will search for available data sets that provide technical, managerial, and financial information to base the Question 4 (TMF metrics) evaluation. The Agency anticipates needing to pull from various places such as federal databases at EPA (SDWIS), Department of Commerce Census Bureau, and USDA Rural Utilities Service (RUS) loan program data and information gleaned from the State Revolving Fund work, state Capacity Development annual reports, and sanitary survey checklists.

- EPA anticipates using several different tools for the evaluation of Questions 3 (efficacy of enforcement), 4 (TMF metrics), and 5 (EPA oversight) including statistical software,

survey instruments, literature reviews, data mining, and advanced statistical analysis such as machine learning and other regression approaches.

Anticipated challenges and proposed solutions: Data availability may slow-down and/or limit progress on the root-cause analysis, as well as other analytical activities that need to be carried out to conduct planned evaluations and other empirical studies. For example, the volume of compliance assurance work may be too low to support methodologies that use a randomization approach to Question 3 (efficacy of enforcement). States and water systems may not agree to participate in a survey study to identify attitudes on enforcement actions. Insufficient TMF data could limit our ability to identify effective metrics for TMF capacity.

Dissemination of findings: Final evaluation reports and other empirical analyses for this learning priority area will be made available through EPA's website www.epa.gov/evaluate.

Workforce

Title	**Workforce**		
Lead National Program	Office of Mission Support		
Strategic Goal and Objective supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity		
Planned start date	Continuing from FY 2023	**Planned completion date**	September 2024

Purpose and brief description: EPA identified Human Capital Management as an Enterprise Risk due to the high number of staff eligible for retirement and EPA's aging workforce, and the related concern of replacing departing employees' institutional knowledge and skills. The Workforce learning priority area in EPA's Learning Agenda will develop an evidence-based roadmap for how EPA can ensure it has employees with the competencies needed to achieve its mission now and in the future. It also will help determine the overall processes required to cultivate and manage the workforce, while anticipating internal and external changes, and continuously maximizing the efficiency and effectiveness of the Agency's Human Resources services.

Programmatic or policy decisions this activity will inform: Near- and long-term strategies to attract, recruit, train, and retain a diverse and effective workforce.

Question(s) this activity will address:

- Does EPA have access to the tools and strategies needed to analyze and understand the Agency's near- and long-term workforce and succession needs?
- What are the critical skills needed to support the Agency's mission, now and in the future?
- What are the best strategies to attract, recruit, train, and retain a diverse workforce? What makes people stay in the Agency long-term?
- What is the best way to ensure knowledge is transferred from outgoing to current and incoming staff to support succession planning?

Data, tools, method/analytical approach: EPA has various data sets and tools to capture employee demographic, hiring, and attrition data, but no current Agencywide data sets exist on current and future employee skills and competencies for leadership and other critical positions. To develop such data sets, EPA will compile information gathered from various internal and external stakeholders during its workforce planning and succession management activities. Stakeholders include but are not limited to: EPA employees and supervisors, the Human Resource Officer/Program Management Officer (HRO/PMO) community, First Line Supervisor Advisory Group (FLAG), senior leaders, and members of the external human resources academic and practitioner community. Surveys, literature reviews, focus groups, interviews, and other quantitative and qualitative methods will be used to obtain needed information. Cost-benefit analysis, benchmarking, and appropriate quantitative and qualitative analyses will be used along with other analytical approaches. Data will be managed consistent with security and privacy requirements.

Anticipated challenges and proposed solutions: Due to a general sense of "survey fatigue" within EPA, there is a risk of low participation among key internal stakeholders in the assessment and analysis of the four workforce priority questions. This possible challenge will be mitigated by enlisting the buy-in and support of senior leaders, the Human Resources Council, and other key stakeholders to help promote the process prior to its start and keeping in constant contact with those stakeholders during the evaluation and analysis process. Additionally, analytical approaches may be constrained by limitations due data security and privacy requirements; EPA will work carefully to identify appropriate alternatives.

Dissemination of findings: The identified workforce activities are considered key components of management's strategic decision-making process; findings will be shared consistent with requirements related to information that may be privileged or prohibited from disclosure. The Agency anticipates that relevant results will be shared with internal stakeholders, including senior leaders and EPA's Human Resource Officer/Program Management Officer community. Aggregate information on findings might be shared with other federal agencies and/or publicly.

Grant Commitments Met

Lead National Program	Office of the Administrator/Office of Congressional and Intergovernmental Relations		
Cross-Agency Strategy supported	Cross-Agency Strategy 4: Strengthen Tribal, State, and Local Partnerships and Enhance Engagement		
Planned start date	Continuing from FY 2021	**Planned completion date**	Through 2024

Purpose and brief Description: Historically, EPA has annually awarded over $4 billion in grants and other assistance agreements. With these grants, EPA helps to protect human health and the environment through the work of its grantees. The management and tracking of the individual awards are dispersed amongst thousands of staff throughout EPA's headquarters and ten regional offices, which makes tracking results at the national level challenging. This Learning Agenda priority area focuses on how to better understand how the EPA's grant programs track, report, and analyze its outputs and outcomes achieved to assess and communicate the environmental and health results accomplished.

The importance and visibility of this effort has increased with the additional funding provided by American Rescue Plan (ARP), IIJA, and, most recently, the IRA. The potential funding level for EPA's programs could reach over $100 billion, making it critical to have mechanisms in place to track, report and assess the Agency's progress in protecting human health and the environment through its grant programs.

This learning priority area outlines work to establish the baseline, assess the current state, and define the future state of grant result reporting. The effort spans multiple fiscal years, beginning in FY 2021. In FY 2021, the Grant Commitments Met Workgroup used a survey instrument to establish a baseline knowledge of grant results reporting practices at EPA. FY 2022 was focused on interviewing regional and headquarters National Program Manager (NPM) contacts to collect best practices. Efforts in FY 2023 and 2024 are focused on using the gathered data to implement grant program reviews and inform grant result tracking systems to better communicate and assess the environmental and health results achieved through EPA's grant programs.

Programmatic or policy decisions this activity will inform: Practices and tools to effectively track whether grantees are fulfilling their workplan grant commitments, including outputs and environmental outcomes.

Question(s) this activity will address:

- What data and information exists to provide a baseline assessment of the Agency's grant and tracking systems?
- Which criteria are used to assess the ability of programs to successfully monitor grantee performance?
- How are the Agency's grant programs meeting their intended purpose?

Progress, results, and interim findings: In Year 1, EPA surveyed all active EPA grant programs to determine the universe of existing grant reporting and tracking systems. The surveys provided the data and information needed to understand existing Agency approaches and processes for collecting, monitoring, reporting, and evaluating grant commitments. EPA learned that 99% of programs collect output data, but only 31% collect long-term outcomes. Word documents are the most common method of collecting grantee data. Common challenges to grantee data collection include labor intensity (i.e., the time and knowledge required for EPA staff and grantee staff to conduct data collection activities), poor communication with grantees, and capacity issues internal to grantees.

In Year 2, EPA used the Year 1 survey responses as a launching point to establish criteria for conducting the next set of interviews within EPA. Interview criteria included prioritizing programs receiving additional BIL or ARP funding, programs that reported best practices, and programs that addressed administration priorities. EPA has identified 31 Regional and NPM interviewees and has completed most of the interviews.

EPA is comparing the current state of grants management to an ideal future state, considering the programmatic and statutory requirements unique to each grant program, and available tools for

programmatic monitoring. A workgroup will develop criteria to assess the ability of programs to successfully monitor grantee performance, with a specific focus on tracking environmental outputs and outcomes. This activity will inform the next of phase (Learning Agenda Question 3), which will analyze the Agency's ability to review progress made in protecting human health and the environment through its grant programs and demonstrate how EPA's grants programs are achieving the intended environmental results.

Data, tools, method/analytical approach: The third phase of this project will address the question: Are the commitments established in grant agreements achieving the intended results? Using Year 1 Survey results and Year 2 interview responses, EPA will design an appropriate empirical study to answer this key question.

The effort will culminate in overall findings report including several recommendations with the goal of reaching actionable results that aid in the implementation of a new Agency-wide approach to collect and communicate environmental results.

Anticipated challenges and proposed solutions: Success depends on high stakeholder engagement and participation, including that of regional and NPM staff and management. EPA will address these challenges by relying on a group of regional and NPM points of contact and leveraging access to senior leadership calls. It will be challenging to keep up with the rapidly changing landscape regarding grant funding at EPA. Grant programs at EPA continue to expand in size and number. The high visibility of this additional funding further highlights the importance of accountability in grant reporting.

Partnerships supporting this evidence-building effort: EPA will continue to engage with and inform states and tribes of EPA efforts through ECOS, the e-Enterprise Leadership Council (EELC), and other appropriate fora.

Dissemination of findings*:* Final reports will be posted publicly on EPA's website www.epa.gov/evaluate; the Year 1 report has been posted at https://www.epa.gov/system/files/documents/2022-09/learning-agenda-grants-commitments-met.pdf.

Other EPA Evidence-Building Activities

Office of Air and Radiation (OAR)

Title	Title V Permitting Program Reviews		
Lead National Program	Office of Air and Radiation		
Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts		
Planned start date	October 2023	Planned completion date	September 2024

Purpose and description: EPA periodically assesses state and local permitting programs, including the sufficiency of fees collected, under Title V of the Clean Air Act as part of its responsibility to oversee delegated and approved air permitting programs.

Programmatic or policy decisions this activity will inform: In general, these analyses document areas needing improvement and inform how EPA can help the permitting agencies improve their performance.

Question(s) this activity will address:

- What are some good practices and areas of improvement in state and local permitting programs under Title V of the Clean Air Act?
- How can EPA help the permitting agencies improve their performance?

Data, tools, method/analytical approach: In general, EPA uses a questionnaire to gather preliminary information, reviews files maintained on permits, conducts site visits, and follows up with the permitting program to clarify information in conducting a Title V program assessment.

Anticipated challenges and proposed solutions: The Agency conducts these analyses annually and does not anticipate challenges.

Dissemination of findings*:* The Title V Permit analyses are posted on EPA's website. Information and any findings will also be shared with appropriate EPA staff and management.

Title	Our Nation's Air: Status and Trends Through 2023		
Lead National Program	Office of Air and Radiation		
Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts		
Planned start date	October 2023	Planned completion date	September 2024

Purpose and description: EPA is committed to protecting public health and the environment by improving air quality and reducing air pollution. This annual report presents the trends in the nation's air quality and summarizes the detailed information found at EPA's Air Trends website and other air quality and emissions data.

Programmatic or policy decisions this activity will inform: This activity provides an annual assessment of air quality in an accessible format, allowing EPA, states, and other stakeholders to understand how air quality is changing both in their local area and across the nation. Stakeholders can use this information to help inform their decisions in their air quality programs.

Question(s) this activity will address:

- Where are areas experiencing air quality above the national ambient air quality standards?
- Are these areas trending toward improving air quality?

Data, tools, method/analytical approach: Existing data is pulled from several sources to generate the report such as the National Emission Inventory (NEI) and Air Quality System (AQS).

Anticipated challenges and proposed solutions: The Agency produces this report annually and does not anticipate challenges. This activity is contingent upon air quality data availability from state, local, and tribal air pollution control agencies.

Dissemination of findings: This report is annually included on EPA's Air Trends website. Information and any findings will also be shared with appropriate EPA staff and management.

Office of the Chief Financial Officer (OCFO)

Title	Growing Capacity for Evidence Building		
Lead National Program	Office of the Chief Financial Officer		
Cross-Agency Strategy Supported	Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity		
Planned start date	Continuing from FY 2023	**Planned Completion Date**	Throughout 2024

Purpose and brief Description: EPA will engage in a variety of Evidence Act-related activities in FY 2024 that will support policy development and decision making. These activities reflect EPA's commitment to implement a framework that promotes a culture of evaluation and continuous learning and ensures Agency decisions are made using the best available evidence. For example, in FY 2023 EPA is engaging an Agency-wide effort to integrate evidence-building in the implementation of BIL and IRA by identifying evidence-building priorities for BIL and IRA-funded programs. In FY 2024, EPA will carry out plans across the board for evaluation and other empirical analyses.

EPA will lead a coordinated cross-agency process to support the design and execution of evaluations of BIL investments. EPA began this coordinated effort in FY 2023 and will continue to lead this effort in FY 2024.This effort will also include developing capacity for equity in evaluation by advancing approaches to conducting evaluations more equitably and be culturally responsive and/or develop new approaches reflecting EPA's unique understanding and role in advancing environmental justice.

Dissemination of findings: EPA will share the results of these efforts on EPA's website, www.epa.gov/evaluate.

Office of Chemical Safety and Pollution Prevention (OCSPP)

Title	Assessing IT modernization of EPA pesticide tracking systems		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	April 2019	**Planned completion date**	September 2024

Purpose and brief Description: In April 2019, EPA kicked off Phase 1 of a multi-year digital transformation to create a fully electronic workflow for EPA registration and reevaluation activities. In early 2020, in advance of the launch of the new system, EPA developed performance metrics and established baselines of performance using the current Agency systems for review of applications. These metrics will allow EPA to measure the effects of the digital transformation on meeting the targets and objectives described in the *FY 2022 - 2026 EPA Strategic Plan*. In FY 2020, a pilot of the new system went live and continues to be implemented in phases.

EPA has designed an ongoing assessment of the pilot focused on how the system meets performance metrics. Also, the pilot is designed to assess how effectively the use of predictive algorithms will help in determining skills gaps and hiring needs. The pilot is also designed to assess time savings and effects related to work-life balance. For example, OPP is tracking targeted Employee Viewpoint Survey (EVS) questions to track workload satisfaction. We believe digital transformation success will impact the results in a positive direction.

Programmatic or policy decisions this activity will inform: Results of this assessment will inform additional IT system development and facilitate enterprise resilience through strategic planning, proactive risk management, effective organizational change management and capacity planning, as well as emergent technologies.

Question(s) this activity will address:

- Does this pilot approach show the expected potential for mission transformation through digitalization?

- What is the effectiveness of predictive algorithms used in this pilot in determining where skills gaps lie, and how does this help with resources decisions intended to remove bottlenecks?

- Does this pilot show how EPA can assess time savings and as well as outcomes related to work-life balance?

Data, tools, method/analytical approach: Information from EPA's PRISM and OPPIN systems will allow EPA to establish baselines for how much time is spent at each stage of risk assessment and assess improvement in the overall review processes for registration and registration review cases. The Employee Engagement metric will be tracked by evaluating results to specific questions and focus areas on the EPA Employee Viewpoint Survey and comparing responses from OPP staff before and after implementation of the IT-modernization effort.

Anticipated challenges and proposed solutions: EPA is currently waiting for the award of the Mission Support IT Contract to continue work on the Digital Transformation. Current contracts supporting development and operations & maintenance of systems expire in November thereby making the award of the new contract urgent. Office of Acquisition Services (OAS) is currently projecting an award date of September 15, 2022.

Dissemination of findings: Process improvements relating to pesticide registration and registration review activities, as well as information technology improvements, are described annually in the PRIA annual report (https://www.epa.gov/pria-fees/annual-reports-pria-implementation).

Title	TSCA Risk Evaluation Review and Assessments		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	October 2023	**Planned completion date**	September 2024

Purpose and brief Description: These recurring reviews assess the degree of progress, timely completion of risk evaluations mandated under TSCA, and the utility and quality of program performance measures.

Programmatic or policy decisions this activity will inform: EPA will use information from these reviews to make decisions on whether any changes are needed to performance measures. Information also will be used to determine needed changes in the process for completion of chemical risk evaluations within TSCA statutory time frames or other time frames designated by the Agency.

Question(s) this activity will address:

- Do EPA's suite of performance measures and processes for developing TSCA risk evaluation warrant further revision?

Data, tools, method/analytical approach: Critical data sets include performance metric targets and results and any other data sets that could point to a need for operational improvements.

Anticipated challenges and proposed solutions: At this time, EPA does not anticipate any major challenges in gathering performance data; however, challenges in chemical risk evaluation data gathering can exist. Expert input will be brought to bear on any challenges and possibility that solutions will be needed.

Dissemination of findings: EPA intends to make performance results publicly available. through a variety of venues, including but not limited to, Agency performance reporting at https://www.epa.gov/planandbudget and other targeted stakeholder outreach and communications

Title	TSCA Risk Management Activities		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	October 2023	Planned completion date	September 2024

Purpose and brief Description: These recurring reviews will assess the degree of progress and timely completion of risk management actions taken by EPA under TSCA, and performance measures (APG, LTPG, internal operational metrics).

Current measures for this program include 1) Draft risk management rules anticipated to not be completed by statutory deadline; 2) Final risk management rules anticipated to not be completed by statutory deadline; and percent of existing chemical TSCA risk management actions initiated within 45 days of a final chemical risk evaluation. EPA anticipates proposing and finalizing some number of risk management actions in FY 2024 and will assess the evidence for these measures at that time. EPA will not have the ability to fully determine the effectiveness of these actions in FY 2024 given the anticipated finalization during that year.

Programmatic or policy decisions this activity will inform: Decisions on whether changes are needed in the measurement of, process for developing, or implementation of chemical risk management actions.

Question(s) this activity will address: Whether EPA's suite of performance measures and processes for developing TSCA risk management actions warrant further revision. EPA anticipates assessing the effectiveness of its risk management actions in future years following finalization of the actions.

Data, tools, method/analytical approach: Critical data sets include performance metric targets and results and any other data sets that could point to a need for operational improvements.

Anticipated challenges and proposed solutions: At this time, EPA does not anticipate any major challenges in gathering relevant performance data; however, chemical data and information to inform risk management quality can be limited in quantity or quality, or hard to obtain. Expert input will be brought to bear on any challenges and will address any possibility that solutions will be needed.

Dissemination of findings: Any risk management actions proposed or finalized will be a matter of public record. EPA intends to make performance results publicly available. through a variety of venues, including but not limited to, Agency performance reporting at https://www.epa.gov/planandbudget and other targeted stakeholder outreach and communications.

Title	TSCA New Chemicals Activities		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	October 2023	Planned completion date	September 2024

Purpose and brief Description: Under TSCA section 5, EPA may impose certain actions by issuing an order and/or significant new use rule (SNUR) that may contain risk mitigation requirements put in place to protect human health and the environment. EPA's Office of Pollution Prevention and Toxics (OPPT) will develop a process to review compliance with the requirements of past Orders and SNURs issued under TSCA section 5, looking back from October 2021. EPA will review compliance with restrictions in TSCA section 5 orders or SNURs by cross-walking action requirements with information reported to the 2020 Chemical Data Reporting (CDR) rule. This process would include any chemical with a TSCA section 5 order and/or SNUR that was also reported to CDR.

Programmatic or policy decisions this activity will inform: OPPT will use the information reported to CDR to check adherence with the terms of past TSCA section 5 orders or SNURs. Instances of potential non-compliance will be referred to EPA's Office of Enforcement and Compliance Assurance (OECA). This could trigger OECA follow-up actions, including an information request for records, subpoena for specific documents and answers to questions, virtual records auditing, on-site audits, issuance of compliance advisories or guidance, and modifications/updates to TSCA section 5 Consent Order, SNURs, or other applicable regulations, as appropriate.

Question(s) this activity will address: This activity will be the first time the New Chemicals Program has conducted a systematic review of information reported to EPA. Questions include

- Does the information reported to help ensure chemical manufactures and importers comply with regulations designed to protect workers, consumers, communities, and the environment?

- Does the process to review compliance with these TSCA requirements meet the needs of the Agency in identifying non-compliance?

Progress, results, and interim findings: The new chemicals program has started creating the datasets required to crosscheck new chemicals data with CDR data. Additionally, the program has developed methods to crosscheck new chemical actions with data reported to CDR.

Data, tools, method/analytical approach: Critical data sets include the 2020 dataset from Chemical Data Reporting rule and a dataset of the regulatory terms of all TSCA section 5 consent orders and SNURs.

Anticipated challenges and proposed solutions: At this time, EPA does not anticipate any major challenges in gathering relevant performance data; however, there can be challenges in cross-walking historic chemical data and information to more recent economic and enforcement information (e.g., current company status, ownership changes, location changes, etc.) Further, limitations in chemical data and information exist. Expert input will be brought to bear on any challenges and will address any possibility that solutions will be needed.

Dissemination of findings: EPA intends to make performance results publicly available through a variety of venues, including but not limited to, Agency performance reporting at https://www.epa.gov/planandbudget and other targeted stakeholder outreach and communications.

Title	Pesticide Registration Review		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	October 2023	Planned completion date	September 2024

Purpose and brief Description: These recurring reviews assess the degree of progress and timely completion of docket openings, draft risk assessments, and case completions for the second cycle of pesticide registration review.

Programmatic or policy decisions this activity will inform: Decisions on whether any changes are needed to pesticide registration review performance measures or the process for completion of pesticide registration review activities.

Question(s) this activity will address:

- Does OCSPP's suite of pesticide registration review performance measures and processes for meeting pesticide registration review statutory timeframes warrant further revision?

- Does the suite of pesticide registration review performance measures affect the quality of the draft risk assessments and risk management decisions?

Data, tools, method/analytical approach: Critical data sets include performance metric targets and results and any other data sets that could point to a need for operational improvements.

Anticipated challenges and proposed solutions: At this time, OCSPP does not anticipate any major challenges in gathering performance data. Expert input will be brought to bear on any challenges and possibility that solutions will be needed.

Dissemination of findings: EPA intends to make performance results publicly available. through a variety of venues, including but not limited to, Agency performance reporting at https://www.epa.gov/planandbudget and quarterly updates to the pesticide registration review schedule (https://www.epa.gov/pesticide-reevaluation/upcoming-registration-review-actions).

Title	ESA Effects Determinations for Listed Species		
Lead National Program	Office of Chemical Safety and Pollution Prevention		
Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety		
Planned start date	October 2023	Planned completion date	September 2024

Purpose and brief description: The Endangered Species Act (ESA) require that the actions of federal agencies do not jeopardize the continued existence of federally threatened or endangered species or destroy or adversely modify their critical habitat. EPA is developing a process to incorporate ESA determinations into its new active ingredient registration process and to work towards more routine considerations of ESA determinations for registration review decisions. EPA anticipates increasing ESA considerations into its registration and registration review decisions at

an increasing frequency over the next 5 years. In FY 2022, EPA posted the ESA workplan[2] to provide to the public the framework for ESA implementation into pesticide regulatory activities. Data collection for this activity occurs annually.

Programmatic or policy decisions this activity will inform: Decisions on whether any changes are needed to performance measures or the process for incorporating ESA effects determinations into OSCPP's risk assessments supporting registration and registration review activities. EPA is evaluating whether targets established at the time of the FY2022-2026 SP development are in alignment with the implementation schedule communicated in the EPA ESA workplan posted to the EPA webpage and has proposed adjusting annual targets appropriately. Stages of implementation are dependent on additional resources.

Question(s) this activity will address:

- Do processes for developing ESA effects determinations warrant further revision?
- Should EPA develop a new suite of performance measures to measure current or new processes, and if so, what are the options?

Data, tools, method/analytical approach: Critical data sets include EPA workflow tracking systems and stand-alone reports on ESA-related risk assessment activity and label mitigation. Tools and analytical methods listed above would not be needed for this exercise.

Anticipated challenges and proposed solutions: At this time, EPA does not anticipate any major challenges in gathering performance data. Expert input will be brought to bear on any challenges and possibility that solutions will be needed.

Dissemination of findings: EPA intends to make performance results publicly available through a variety of venues, including but not limited to, Agency performance reporting at https://www.epa.gov/planandbudget and other targeted stakeholder outreach and communications.

Office of Land and Emergency Management (OLEM)

Title	OLEM Population Analysis		
Lead National Program	Office of Land and Emergency Management		
Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Cleanup Up and Restore Land for Productive Uses and Healthy Communities		
Planned start date	March 2024	**Planned completion date**	July 2024

Purpose and brief Description: This is a bi-annual descriptive study. The purpose is to conduct a bi-annual analysis to support evidence-based descriptions of who benefits from EPA's cleanup and prevention work, by collecting data on the population living within three and one mile(s) of a Superfund site, Brownfields site, Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) site, Leaking Underground Storage Tank (LUST) site, and Underground Storage

[2] The ESA Workplan may be accessed at: https://www.epa.gov/system/files/documents/2022-04/balancing-wildlife-protection-and-responsible-pesticide-use_final.pdf.

Tank (UST) facility that exist in thousands of communities across the United States ranging from remote to large urban settings.

This analysis also supports EPA's *America's Children and the Environment Report*,[3] by estimating the number of children and their socioeconomic/demographic characteristics who live within one mile of a RCRA CA or Superfund site that may not have had all human health protective measures in place at the time of the analysis.

Programmatic or policy decisions this activity will inform: Aspects of these results are included in EPA's annual budget reviews and are included in the annual President's Budget submitted to Congress. Results also are used in general communications with press, other government agencies, and the public.

Question(s) this activity will address: This analysis estimates the population living within three and one mile(s) of a Superfund site, Brownfield site, RCRA CA site, removal site, LUST site and UST facility by:

- *Race*: people who self-identify as white, black, Asian, Native American, Hawaiian/pacific islander, or other.
- *Ethnicity*: people of all races who self-identify as Hispanic or non-Hispanic.
- *Minority*: all race and ethnicity combinations except "non-Hispanic whites."
- *Income*: below poverty level, and incomes twice or more above poverty level.
- *Education*: less than high school education.
- *Age*: Under 5, Under 18, over 64.
- *Linguistically isolated*: households where all members do not speak English as a first language or "very well."

Populations that are more minority, low income, linguistically isolated, or less likely to have a high school education than the U.S. population as a whole, may have fewer resources with which to address concerns about their health and environment. EPA includes these factors in population analyses to understand the potential for these vulnerabilities in relation to cleanup sites at the national level.

Data, tools, method/analytical approach:

- **Data**
  - Site location and status data from the Assessment, Cleanup and Redevelopment Exchange System (ACRES), Superfund Enterprise Management System (SEMS) and RCRA Info for Brownfields, Superfund and RCRA CA, respectively.
  - Site location and status data for LUST sites and UST facilities from ORD's state LUST/UST database
  - Population data from the most recent American Community Survey 5-Year Estimates

- **Methods/Analytical approach:**

[3] The Report may be accessed here: www.epa.gov/americaschildrenenvironment.www.epa.gov/americaschildrenenvironment.

- Latitude and longitude coordinates are used to map site locations. Then 1- and 3- mile buffers are drawn from the site location. Depending on data availability, the site location is either a point, a modeled circular site boundary based on site acreage around a point or the actual site boundaries.
- Using census block group centroids and the 1- and 3- mile buffers, the population and characteristics are estimated. If the census block centroid falls within the buffer, then the population of that census block is included in the estimation of the near site population.
- EPA compares the near site populations to the overall U.S. population to identify differences in the characteristics listed above.
- EPA follows the methods used in the America's Children and the Environment Report Indicators E10 and E11.[4]

- **Tools**
  - This spatial analysis is done using ArcGIS and R software suites

Anticipated challenges and proposed solutions: Geospatial data available to map site boundaries is limited. EPA continues to work to improve geospatial data on Superfund and RCRA Corrective Action site boundaries. The LUST/UST data used was obtained from the USTFinder. The *USTFinder* is a new web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. *USTFinder* was made possible by a large ORD data collection effort. Ability to update estimates for LUST/UST in the future depends on whether ORD updates data in the *USTFinder*.

Dissemination of findings*:* EPA will share the results of these analyses on EPA's OLEM program benefits website at https://www.epa.gov/aboutepa/office-land-and-emergency-management-olem-program-benefits and include the information in Agency documents that are available to the public.

Title	Redevelopment Economics at Remedial Sites (non-federal facility)		
Lead National Program	Office of Land and Emergency Management		
Strategic Goal and Objective supported	Strategic Goal 6: Safeguard and Revitalize Communities Objective 6.1: Cleanup Up and Restore Land for Productive Uses and Healthy Communities		
Planned start date	October 2023	**Planned completion date**	January 2024

Purpose and brief Description: Cleaning up contaminated sites can serve as a catalyst for economic growth and community revitalization. The Superfund Remedial Program facilitates the redevelopment of sites across the country while protecting human health and the environment. Collaborative efforts among state, local, and tribal partners, redevelopers, and other federal agency programs encourage restoration of sites. Since Superfund sites often encompass buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of Superfund sites. Each year, the data collected is made available on EPA's webpages as part of the Redevelopment Economics at Superfund Sites page and corresponding pages, as well as the

[4] For more details on the methods, see https://www.epa.gov/americaschildrenenvironment/ace-environments-and-contaminants-contaminated-lands#Methods.

Putting Sites to Work - How Superfund Redevelopment is Making a Difference in Communities Across the United States: Compendium of 2021 Economic Data. In addition, Regional Economic Profiles summarize economic data collected for Superfund sites within an EPA region. They also highlight successes and put them in the context of aggregated data within the state and EPA region. Economic data are updated annually; regions receive a full regional economic profile or a data supplement to update the prior year's full regional economic profile on alternate years.

Programmatic or policy decisions this activity will inform: Economic data are included in budget justifications to Congress and are used in general communication with key stakeholders and the public.

Question(s) this activity will address: The analysis will provide current, reliable business-related information for a subset of Superfund sites in reuse and continued use:

- What information can EPA provide about Superfund sites in reuse and continued use, including the variety of purposes that some innovative business owners and organizations reuse Superfund sites?

- To what extent and how do these uses help economically revitalize communities near Superfund sites?

Data, tools, method/analytical approach: The study estimates economic activity at Superfund sites in reuse from reputable sources based on methodology developed by EPA's Superfund Redevelopment Initiative and outlined on the public webpage: Redevelopment Economics at Superfund Sites. Information on the number of employees and sales volume for on-site businesses typically comes from Hoovers/Dun & Bradstreet, the *ReferenceUSA* and *Manta* databases.

Anticipated challenges and proposed solutions: Given that most sites with known economic activities have been included in the report in prior years and that relatively few Superfund sites are added to the NPL or become newly economically productive each year, the analysis does not typically reveal large changes year-to-year. In order to focus resources on the most salient analyses, the program alternates the development of Regional economic profiles every two years and may consider a similar effort with a national profile if needed in the future. In the meantime, the program has also increased a focus on Beneficial Economic Effect Case Studies which offer expanded insights into the economic data and highlight replicable strategies for productive reuse and redevelopment.

Dissemination of findings*:* The summary of the results will be shared on EPA's Superfund Redevelopment website.[5]

Title	Redevelopment Economics at Federal Facilities
Lead National Program	Office of Land and Emergency Management
Strategic Goal and Objective supported	Strategic Goal 6: Safeguard and Revitalize Communities Objective 6.1: Cleanup Up and Restore Land for Productive Uses and Healthy Communities
Program Project Title/	Federal Facilities Restoration and Reuse Office

[5] Found at: https://www.epa.gov/superfund-redevelopment/redevelopment-economics-superfund-sites.

Appropriations			
Planned start date	October 2023	**Planned completion date**	January 2024

Purpose and brief Description: Cleaning up contaminated sites at federal facilities can serve as a catalyst for economic growth and community revitalization. The Superfund Federal Facilities Program facilitates the redevelopment of federal facility sites across the country by assisting other federal agencies (OFAs) expedite activities related to CERCLA response actions, while protecting human health and the environment. Collaborative efforts among OFAs; developers; and state, local, and tribal partners encourage restoration of sites. Since federal facility Superfund sites often encompass thousands of acres with buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of federal facility Superfund sites which is outlined on the public webpage Redevelopment Economics at Federal Facilities.[6] This economic analysis is updated and expanded annually.

Programmatic or policy decisions this activity will inform: Economic data are included in budget justifications to Congress and are used in general communication with other Federal agencies and the public.

Question(s) this activity will address: The analysis will provide current, reliable business-related information for a subset of federal facility Superfund sites in reuse and continued use.

- What information can EPA provide about federal facility Superfund sites in reuse and continued use, including the variety of purposes that some innovative business owners and organizations reuse Superfund sites.

- To what extent and how do these uses help economically revitalize communities near Superfund sites?

Data, tools, method/analytical approach: The study estimates economic activity at federal facilities Superfund sites in reuse from reputable sources based on methodology developed by EPA's Superfund Redevelopment Initiative, which is outlined in more detail at Redevelopment Economics at Federal Facilities[7]. Information on the number of employees and sales volume for on-site businesses typically comes from Hoovers/Dun & Bradstreet, the *ReferenceUSA* and *Manta* databases.

Anticipated challenges and proposed solutions: The Economic Analysis commenced in 2016 and is updated/expanded annually. The Economic Analysis is an established activity that provides valuable metrics for the program and is expected to continue without challenges.

Dissemination of findings*:* The summary of the results will be shared on EPA's Federal Facilities website.[8]

[6] Found at: https://www.epa.gov/fedfac/redevelopment-federal-facilities.
[7] Found at: https://www.epa.gov/fedfac/redevelopment-federal-facilities
[8] See https://www.epa.gov/fedfac/redevelopment-federal-facilities.

Office of Research and Development (ORD)

Title	Climate Change Research		
Lead National Program	Office of Research and Development		
Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making		
Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts		
Planned start date	October 2023	**Planned completion date**	November 2026

Purpose and brief description: Climate change is impacting public health, air, and water quality today and will exacerbate environmental challenges in the future. Potential impacts from climate change include increases in scale and frequency of hurricanes, wildland fires, flooding and drought, and changes in transportation and energy usage. These changes impact air and water quality as well as the health of both humans and ecosystems. Coordinating research across the six National Research Programs (NRP), this research will improve understanding of these climate-driven changes, developing knowledge to support science-based decision making, and supporting climate induced disaster preparation, response and recovery, resiliency of ecosystems services, community resilience and sustainability, and management of human health and the environment.

Programmatic or policy decisions this activity will inform: ORD research efforts will be designed to strengthen the scientific foundation for actions at the Agency, state, tribal, local, territory, and community levels to address environmental and health inequalities in vulnerable populations, lifestages, and communities with environmental justice and equity concerns.

Question(s) this activity will address: This research area will assist EPA in addressing scientific questions related to environmental and health inequalities and is supported by multiple national research programs. EPA, state, tribal, local government, and communities need tools and data to predict how air quality, water quality, ecosystems, and human health will change because of the changing climate and the potential mitigation strategies that are adopted. ORD research will inform decisions, sustainable transitions, and efforts to decrease disproportionate impacts of climate change. The climate induced disasters need EPA response activities including public drinking water supply, drinking and wastewater infrastructure recovery, debris management, and environmental contamination cleanup (oil spill, pesticide, hazardous waste, mold, etc.). Many of these response activities benefit from capabilities developed from research supporting chemical, biological, and radiological incident response.

Data, tools, method/analytical approach: This research area will produce data, methods, and tools to advance the understanding of adverse health impacts among people, changes to air quality, changes to water quality and quantity, changes to contaminant loading in sediments and soils, and changes to ecosystem functions and services that are associated with changing climate. This research area will also produce methods and tools to improve community preparation for, response to, and recovery from climate induced disasters, as well as to improve the long-term resilience of communities to climatic change with respect to human health and welfare.

Anticipated challenges and proposed solutions: This research area will produce scientific deliverables which will require complex research planning, facilitation, review coordination, task prioritization, and regular interactions with the program partners (e.g., AO, OAR, OW, OLEM, Regional Offices) to ensure deliverables/products address partner's needs. In FY 2024, ORD will continue to develop more efficient methods of project implementation and tracking.

Dissemination of findings*:* Research area findings will take a variety of publicly available forms such as technical reports, journal publications, open-access web-based tools and models, data sets, webinars, and technical fact sheets aimed at promoting translation of results to inform solutions.

Title	Environmental Justice, Cumulative Impacts, and Vulnerable Populations		
Lead National Program	Office of Research and Development		
Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making		
Strategic Goal and Objective supported	Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective 2.1: Promote Environmental Justice Efforts at the Federal, Tribal, State, and Local Levels		
Planned start date	October 2023	**Planned completion date**	November 2026

Purpose and brief description: Environmental justice (EJ) is an integral part of EPA's mission to protect human health and the environment. EJ is achieved when all people are fully protected from environmental and health hazards and have equitable access to decision-making processes to maintain a healthy environment in which to live, learn, play, and work. Low-income, disadvantaged communities and indigenous peoples are often disproportionately vulnerable to environmental health challenges because they are faced with greater exposure to many sources of pollutants or contaminants (chemical stressors), disadvantaged due to long term environmental policies resulting in wealth and health inequities or disparities, and underserved in adaptive capacity to respond to and cope with emerging environmental stressors including those caused by climate change and catastrophic incidents. Similarly, cumulative health impacts from these chemical and nonchemical stressors vary with lifestages, as well as inherent sensitivities. Children, older persons, and people with disabilities or pre-existing health conditions may be most susceptible and vulnerable to climate changes and associated environmental stressors. Coordinating research across the six National Research Programs (NRP) will lead to a better understanding of how health disparities can arise from unequal environmental conditions, including impacts from climate change and exposures to pollution, and inequitable social and economic conditions.

Programmatic or policy decisions this activity will inform: ORD research efforts will be designed to strengthen the scientific foundation for actions at the Agency, state, tribal, local, territory, and community levels to address cumulative impacts and environmental and health inequalities in vulnerable populations, lifestages, and communities with environmental justice and equity concerns.

Question(s) this activity will address: ORD's research will address multiple questions such as:

- How can EPA address the challenge of expanding the state of scientific understanding for addressing environmental health disparities and shortening of lifespan related to exposure to chemical and nonchemical stressors in vulnerable populations and life stages?

- How can EPA address the challenge of investigating the intertwined social and environmental variables that affect community resilience and vulnerability to environmental contamination incidents including natural disasters?

- How can EPA address the challenge of characterizing and assessing disproportionate exposures, risks, and impacts, such as through cumulative impact assessment, while identifying, comparing, and evaluating evidence-based solutions to reduce these impacts in, and improve the health and wellbeing of, communities with EJ and equity concerns?

Data, tools, method/analytical approach: In this research area a large amount of data, as well as methods, and tools, will be developed that help support decision-making and empower EPA, states, tribes, local governments, and overburdened and disadvantaged communities to take action for revitalization, resilience, and sustainability. This research will enhance human health by supporting the development of new technologies, data, models, and tools as well as resources and trainings for risk communication and risk management, outreach, and community engagement. In January 2022, ORD published the external review draft white paper, *Cumulative Impacts: Recommendations for ORD Research* to guide development of ORD's FY 2023-2026 research portfolio and address critical science gaps.[9] ORD has developed scores of research products to address cumulative impacts. Over time, ORD will be able to assess progress towards addressing the research recommendations contained in the white paper.

Anticipated challenges and proposed solutions: This research area will produce scientific deliverables which will require complex research planning, facilitation, review coordination, task prioritization, and regular interactions with the program partners (e.g., OLEM, OEJ, OCHP, Regional Offices) to ensure deliverables/products address the partner needs. In FY 2024, ORD will continue to develop more efficient methods of project implementation and tracking.

Dissemination of findings*:* Research area findings will take a variety of publicly available forms including journal publications, open-access web-based tools and models, data sets, webinars, and technical fact sheets.

Office of Water (OW)

Title	Clean Water Infrastructure Revolving Fund State Reviews		
Lead National Program	Office of Water		
Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities. Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure.		
Planned start date	October FY 2023	**Planned completion date**	Throughout FY 2024

[9] Additional information may be found at: https://www.epa.gov/healthresearch/cumulative-impacts-research.

Purpose and brief Description: EPA completes annual reviews of each state's Clean Water State Revolving Fund (CWSRF) program.

Programmatic or policy decisions this activity will inform: These reviews will help assess if states are effectively implementing the CWSRF program by increasing the amount of non-federal dollars leveraged. The reviews will also be used to encourage states to direct funding to projects that address climate resiliency and equity.

Question(s) this activity will address:

- Are states effectively implementing the CWSRF program by leveraging non-federal funds?
- Are the states complying with EPA's State and Tribal Assistance Grant program requirements?
- What steps are the states taking to promote climate resiliency and equity through CWSRF funding?

Progress, results, and interim findings (if applicable): Results from the annual reviews are documented on EPA's Clean Water State Revolving Fund Report website [https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-reports]

Data, tools, method/analytical approach: Data are provided from each state CWSRF program review that is conducted by EPA Headquarters and the Regions.

Dissemination of findings*:* The findings from the annual state reviews are documented in Program Evaluation Reports, which are provided to EPA Headquarters by the Regional Offices. EPA Headquarters periodically updates the guidance based on these findings. Revised guidance is made available to states and stakeholders through EPA's CWSRF website.[10]

Title	Public Water System Supervision (PWSS) Program Reviews & Drinking Water Infrastructure Revolving Fund State Reviews		
Lead National Program	Office of Water		
Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities. Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure.		
Planned start date	October FY 2023	**Planned completion date**	Throughout FY 2024

Purpose and brief Description: EPA annually conducts reviews of agencies with Public Water System Supervision (PWSS) primacy (55 reviews) and reviews of each state's Drinking Water State Revolving Fund (DWSRF) program.

Programmatic or policy decisions this activity will inform: These reviews assess if primacy entities are effectively implementing the PWSS program to oversee community water system

[10] Additional information may be found at: https://www.epa.gov/cwsrf.

compliance with the Safe Drinking Water Act (SDWA) and assess if states are effectively implementing the DWSRF program to facilitate community water system compliance with the SDWA.

Question(s) this activity will address:

- Are primacy entities effectively implementing the range of activities in the PWSS program to oversee community water system compliance with the SDWA?

- Are states effectively implementing the DWSRF program to facilitate community water system compliance with the SDWA and complying with EPA's State and Tribal Assistance Grant program requirements?

Data, tools, method/analytical approach: Data is provided via program review reports by agencies with primacy for the PWSS program. The reports are reviewed by EPA, and include elements such as state use of the funds and the associated outcomes, compliance, and implementation of SDWA regulations, alignment of the program with national enforcement and compliance priorities, and public communication efforts.

DWSRF data is provided from each state DWSRF program review conducted by EPA Headquarters and the Regions.

Dissemination of findings: EPA's regional offices engage and share results with primacy agencies under their purview. EPA shares PWSS information on water system compliance rates across and within states. EPA makes publicly available an annual report on the status of the national DWSRF program. EPA also shares project and financial data at the national and state level. The most recent annual report, 2019 DWSRF annual report, is available here: https://www.epa.gov/sites/default/files/2020-10/documents/2019_annual_report_final_508compliant.pdf.

Title	Safe Drinking Water Information System (SDWIS) National Community Water System Non-Compliance Review		
Lead National Program	Office of Water		
Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities. Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure.		
Planned start date	October FY 2023	**Planned completion date**	Throughout 2024

Purpose and brief Description: EPA conducts a review quarterly of the Safe Drinking Water Information System (SDWIS) National Community Water System (CWS) health-based non-compliance data.

Programmatic or policy decisions this activity will inform: This review assesses the trends and causes of non-compliance to inform technical, managerial, and financial state and public water system capacity building training or future drinking water regulation needs, in support of regulatory drinking water compliance.

Question(s) this activity will address:

- What are the barriers and challenges of CWS systems maintaining compliance with health-based drinking water standards?

Data, tools, method/analytical approach: Data are provided from EPA's SDWIS database. There is a non-compliance review of CWS systems with health-based violations by regulation type, geographical distribution, and system source type.

Anticipated challenges and proposed solutions: There are no anticipated challenges.

Dissemination of findings*:* The findings from the program reviews will be publicly shared. Quarterly data reports are shared publicly via the SDWIS FED Data Warehouse[11].

[11] For additional information, please visit: https://ofmpub.epa.gov/apex/sfdw/f?p=108%3A200%3A%3A%3A%3A%3A%3A.

Environmental Protection Agency
2024 Annual Performance Plan and Congressional Justification

Table of Contents – Program Performance and Assessment

FY 2022 Annual Performance Report

Introduction

EPA's *FY 2022 Annual Performance Report* (APR) describes the first year of progress toward the strategic goals and objectives and cross-agency strategies in the *FY 2022-2026 EPA Strategic Plan*, available at https://www.epa.gov/planandbudget/strategicplan. This APR presents results—the reliability and completeness of which are attested to by the EPA Administrator—against the annual performance goals and targets in the Agency's *FY 2022 Annual Performance Plan (APP) and Congressional Justification (CJ)* as updated in the *FY 2023 APP and CJ*. Please also refer to EPA's *FY 2022 Agency Financial Report* (AFR), available at https://www.epa.gov/planandbudget/results, for information on financial performance results.

Organization of the FY 2022 APR

EPA's FY 2022 performance results and trend data are integrated throughout the FY 2024 APP and the CJ in the Budget Introduction, Cross-Agency Strategy and Goal Overviews, and Program Project Fact Sheets. The Program Performance and Assessment section (Tab 15) is the primary component of EPA's FY 2022 APR. This section also includes EPA's FY 2024 annual performance goal targets and any revisions to FY 2023 targets. EPA's FY 2022 performance results and trend data are organized by strategic goal and objective and cross-agency strategy. Results are presented in detailed multiyear tables with targets, actuals, graphs, and key takeaways for the Agency's annual performance goals. This section adopts the terminology and color coding used to measure progress under the EPA Continuous Improvement System, a set of practices and tools that supports Agency employees in identifying and solving problems for optimal performance results.

FY 2022 Highlights

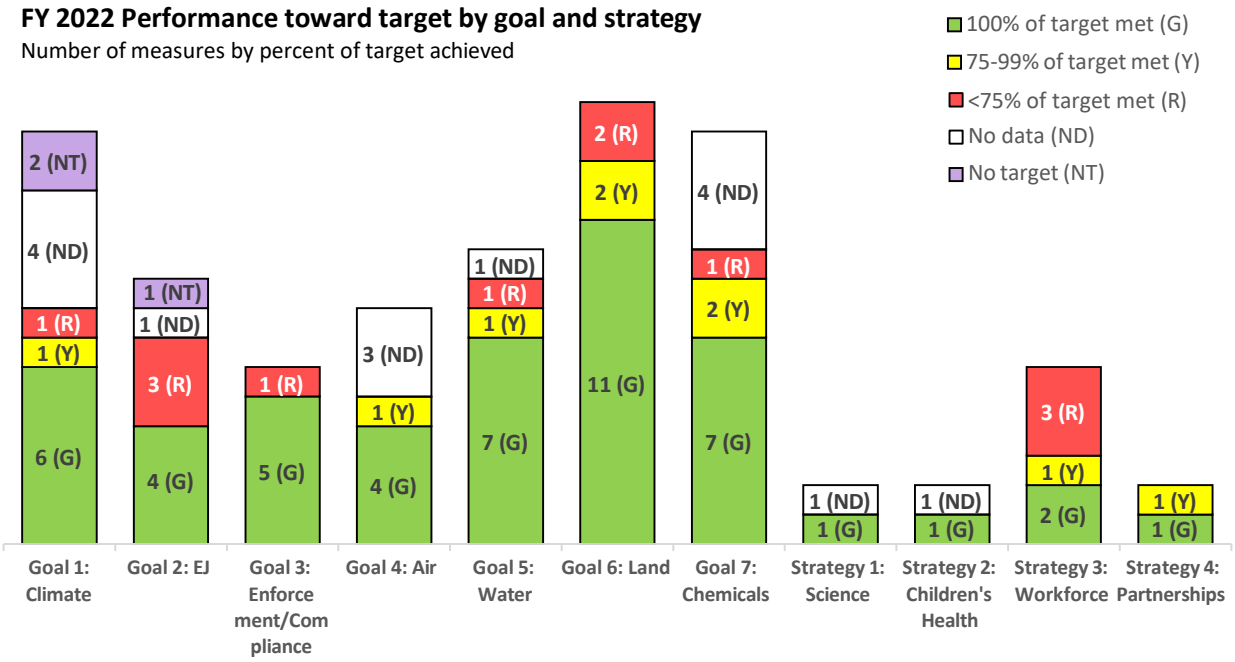
EPA took several steps in FY 2022 to enhance protection of human health and the environment.

- EPA launched a national program office dedicated to environmental justice and external civil rights. This new office elevates these critical issues to the highest levels of the Agency and solidifies the Agency's commitment to delivering justice and equity for all.
- EPA has taken unprecedented steps to partner with the Department of Justice to develop a comprehensive enforcement strategy that will leverage all available legal tools to secure protections for communities that have been overburdened by pollution and environmental injustices.
- EPA has taken key steps to tackle the climate crisis, such as issuing the most protective national greenhouse gas emissions standards for passenger cars and light trucks ever and a rule to phase down U.S. production and consumption of the highly potent climate chemicals known as hydrofluorocarbons.
- All EPA program offices and regions have developed climate adaptation plans, which include actions to assist communities to become more resilient as they face the impacts of climate change.

- EPA is building equity, climate mitigation and resilience into its implementation of the Bipartisan Infrastructure Law, which provides historic opportunities to strengthen the nation's drinking water, stormwater, and wastewater systems and scale up community-led brownfields revitalization.
- All EPA program offices and the regions have put in place targeted plans to implement EPA's scientific integrity policy, ensuring that every decision the Agency makes is based on a strong scientific foundation.

FY 2022 Annual Performance Goal Results

For FY 2022, EPA focused on a set of 88 annual performance goals, including annualized long-term performance goals to achieve ambitious targets set in the *FY 2022-2026 EPA Strategic Plan* and measures representing key work areas that support those long-term performance goals. EPA met or exceeded 70% of the targets in their entirety for annual performance goals with FY 2022 targets and data available (49 of 70). For nine of its annual performance goals with FY 2022 targets and data available (13%), the Agency achieved between 75-99% of the target (including five where the Agency achieved between 90-99% of the target). For 12 of its annual performance goals with FY 2022 targets and data available (17%), EPA achieved less than 75% of the target.



While EPA is making significant progress toward a broad range of outcomes, the Agency missed targets for 21 (of 70) annual performance goals that had FY 2022 targets and data available. Reasons for missed targets include the complexity of the environmental challenge, workload issues, resource/staffing challenges, and delays in program implementation. EPA will continue to make progress toward its performance targets by applying Lean management principles to improve the efficiency and cost effectiveness of its operations. More detail is available throughout the report.

No FY 2022 results are available for 15[1] of the Agency's annual performance goals as of February 2023. Reasons for missing data include reporting lags due to grant reporting cycles, additional time needed to collect and provide quality assurance of data from external sources, no actions to track in FY 2022, and measurement methods under development. As additional results data are received for FY 2022 annual performance goals, the Agency will include the results in future APRs. Finally, FY 2022 results are reported for three of the Agency's annual performance goals for which no targets were established.[2]

Fiscal Year 2021 Data Now Available

EPA received final results for one of the two annual performance goals with no results to report at the end of FY 2021. EPA neither met nor missed the target as it was a measure for which no target had been established for FY 2022.[3] The Agency has no data for the other annual performance goal because it had no data to track in FY 2021 and the measure was discontinued.[4]

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[1] (PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs), (PM CPP) Million metric tons of carbon dioxide equivalent reduced annually by EPA's climate partnership programs, (PM AD09) Cumulative number of federally recognized tribes assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change, (PM AD10) Cumulative number of states, territories, local governments, and communities (i.e., EPA partners) assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change, (RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local governments, and communities, (PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS, (PM NAAQS2) Percentage of people with low SES living in areas where the air quality meets the $PM_{2.5}$ NAAQS, (PM HCFC) Remaining U.S. consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, in ozone depletion potential (ODP)-weighted metric tons, (PM WWT-02) Number of American Indian and Alaskan Native homes provided access to basic sanitation, in coordination with other agencies, (PM TSCA5) Percentage of existing chemical TSCA risk management actions initiated within 45 days of the completion of a final existing chemical risk evaluation, (PM TSCA6a) Percentage of past TSCA new chemical substances decisions with risk management actions reviewed, (PM TSCA6b) Percentage of TSCA new chemical substances with risk management actions reported to the 2020 CDR reviewed for adherence/non-adherence with TSCA Section 5 risk management actions that are determined to adhere to those requirements, (PM P2mtc) Reduction in million metric tons of carbon dioxide equivalent ($MMTCO_2e$) released per year attributed to EPA pollution prevention grants, (PM RD5) Number of actions implemented for EPA scientific integrity objectives, and (PM CH01) Number of EPA actions that concern human health that include assessment and consideration of environmental health information and data for children at all life stages to the extent relevant data are available.

[2] (PM RUL) Number of final rules issued that will reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry, (PM AD12) Hours of appropriate subject matter expert time provided by EPA to help communities adapt to climate impacts, build long-term resilience, and support the most underserved and vulnerable communities after federally declared disasters, and (PM E21) Number of significant actions taken by EPA programs with direct implementation authority that will result in measurable improvements in Indian country.

[3] (PM P2mtc) Reductions in million metric tons of carbon dioxide equivalent (MMTCO2e) released per year attributed to EPA pollution prevention grants.

[4] (PM TSCA1) Number of final EPA-initiated TSCA risk evaluations completed within statutory timelines.

Verification/Validation of Performance Data

The Agency developed Data Quality Records (DQRs) for the long-term performance goals in the *FY 2022-2026 EPA Strategic Plan*. FY 2022 DQRs are available at https://www.epa.gov/planandbudget/results. EPA maintains the DQRs to ensure consistency and quality of data used for assessing and reporting progress for annual performance goals that support the long-term performance goals. The DQRs describe the results being measured; data sources and limitations; methods for calculating results; and controls to ensure good data quality.

FY 2022-2023 Agency Priority Goals

EPA met targets for one of the three FY 2022-2023 Agency Priority Goals (APGs) (Communities Technical Assistance) and missed targets for one of the three APGs (Environmental Justice/Civil Rights). FY 2022 data are not yet available for one of the three APGs (Reducing Hydrofluorocarbons).

- **Phase down the production and consumption of hydrofluorocarbons (HFCs).** *By September 30, 2023, annual U.S. consumption of HFCs will be 10% below the baseline of 303.9 million metric tons of carbon dioxide equivalent (MMTCO$_2$e) consistent with the HFC phasedown schedule in the American Innovation and Manufacturing (AIM) Act and codified in the implementing regulations. A 10% reduction would decrease the U.S. consumption limit to less than 273.5 MMTCO$_2$e in 2023.*

  No Data. While FY 2022 data are not yet available, EPA met its milestones for FY 2022 and is on track to meet the FY 2023 target. For example, EPA issued a final rule by the statutory 270-day deadline establishing the allowance allocation and trading program. The HFC Allocation Framework rule set production and consumption baseline levels from which reductions will be made, established an initial methodology for allocating and trading HFC allowances for 2022 and 2023, and created a robust, agile, and innovative compliance and enforcement system. EPA also held the inaugural meeting of the Interagency Task Force on Illegal Trade, which prevented illegal shipments equivalent to approximately 530,000 metric tons of CO_2 emissions, the same amount as the emissions from nearly 100,000 homes' electricity use in one year.

- **Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance**. *By September 30, 2023, EPA will develop and implement a cumulative impacts framework, issue guidance on external civil rights compliance, establish at least 10 indicators to assess EPA's performance in eliminating disparities in environmental and public health conditions, and train staff and partners on how to use these resources.*

  Missed FY 2022 target. Met 6 of 10 targeted milestones. For strategy 1, *develop and implement a cumulative impacts framework*, met 2 of 2 milestones. EPA has completed an iterative draft cumulative impacts framework and is implementing a learning agenda, developing standard operating procedures, conducting workshops with a variety of

regulatory partners and stakeholders, actively working on demonstration initiatives, and incorporating cumulative impacts in implementation planning as part of Goal 2 of the *FY 2022-2026 EPA Strategic Plan*.

For strategy 2, *issue guidance on external civil rights compliance,* met 1 of 2 milestones. Laid groundwork for completion of the draft guidance in FY 2023: 1) released Interim EPA Environmental Justice and Civil Rights in Permitting Frequently Asked Questions, which provides information to Agency, federal, tribal, state, and local environmental permitting programs on integrating environmental justice in permitting processes and provides information on the obligation of recipients of EPA financial assistance to comply with federal civil rights statutes, including Title VI of the Civil Rights Act of 1964, in their permitting processes; 2) made progress on two guidance documents, including a guidance on procedural safeguards and another on legal standards, including for "disparate impact" claims; and 3) completed the outline of the draft guidance on the legal standards. In FY 2023, EPA will hire additional staff to assist with this and other priorities.

For strategy 3, *establish at least 10 indicators to assess EPA's performance in eliminating disparities in environmental and public health condition*, met 3 of 6 planned milestones. Highlights of the work completed include establishing criteria to guide the identification of indicators, compiling an initial list of 30+ indicator ideas, developing a process to evaluate the indicator ideas, and creating a workplan for engagement. Several engagement sessions have been scheduled for early FY 2023, which will allow EPA to catch up on delayed milestones.

- **Clean up contaminated sites and invest in water infrastructure to enhance the livability and economic vitality of overburdened and underserved communities.** *By September 30, 2023, EPA will provide technical assistance to at least 10 communities to help achieve clean and safe water and reduced exposures to hazardous substances.*

  Met 2022 target. EPA's Office of Water (OW) and Office of Land and Emergency Management (OLEM) collaborated to take a "One EPA" approach to addressing water and waste challenges in pilot communities. EPA will provide technical assistance to these communities so they better understand opportunities available for funding, technical assistance, and other forms of community support that may be available to assist them in their environmental challenges. To help select the pilot communities, OW and OLEM staff developed a mapping tool that utilizes EPA's GeoPlatform to pull over 40 OW and OLEM datasets together in a discoverable and accessible way. EPA set minimum criteria for identifying communities. They must have both hazardous waste and water challenges and must meet or exceed the 80th percentile of the following demographic indices: low income; linguistically isolated; and less than high school education. Ten pilot communities have been selected, one in each EPA region. There were challenges using the mapping tool and requests for training on and clarification regarding how to use the tool. The Agency held informational meetings and training on the mapping tool with its regional offices to overcome these challenges.

Evidence and Evaluation

Summaries of FY 2022 program evaluations and contributions to EPA's portfolio of evidence are available at https://www.epa.gov/planandbudget/results. EPA uses program evaluations and other evidence to assess effectiveness of programs in meeting Agency goals, to identify ways to improve mission delivery, and to strengthen use of evidence in decision making. This is particularly important for fostering transparency and accountability. As one example, the Office of Enforcement and Compliance Assurance (OECA) initiated an assessment of offsite compliance monitoring to gather evidence on its effectiveness compared with onsite inspection, and the best ways to use it. The results of this assessment will be used to inform and shape enforcement and compliance strategies. Another example is the program evaluation process for the National Estuary Program (NEP). Every five years, each location within the NEP is evaluated for progress in achieving programmatic and environmental results, producing recommendations for improvement on areas including administration and governance, healthy ecosystems, and communication and stakeholder engagement.

American Rescue Plan and Bipartisan Infrastructure Law

The American Rescue Plan Act and the Bipartisan Infrastructure Law collectively provide EPA with more than $60 billion in supplemental funding for a wide range of programs. EPA is supporting the Administration's Justice40 initiative by prioritizing benefits to underserved communities in developing requests for grant applications and in making grant award decisions, to the extent permitted by law.

The Bipartisan Infrastructure Law represents the largest appropriation EPA has ever received. This law more than doubles the Agency's annual budget each year over the next five years to fund water infrastructure, environmental cleanups, and electric school buses. It also provides funding to improve recycling programs and prevent pollution. Most of the funding in this law is being implemented through existing programs such as the State Revolving Funds in the Office of Water and the Superfund Program in the Office of Land and Emergency Management.

The American Rescue Plan Act of 2021 provided EPA with $100 million dollars to address health outcome disparities from pollution and the COVID-19 pandemic, with which EPA is funding environmental justice initiatives and enhanced air quality monitoring.

Additional information including performance results to date is available at:

American Rescue Plan: https://www.epa.gov/arp
Bipartisan Infrastructure Law: https://www.epa.gov/infrastructure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

THE ADMINISTRATOR

Reliability of EPA's Performance Data

I attest to the reliability and completeness of the performance data presented in the U.S. Environmental Protection Agency's Fiscal Year 2022 Annual Performance Report. Because improvements in human health and the environment may not become immediately apparent, there might be delays between the actions we have taken and results we can measure. Additionally, we cannot provide results data for 15 (out of 88) of our performance measures for this reporting year. Reasons for missing data include reporting lags due to grant reporting sources, no actions to track in FY 2022 and measurement methods were under development. When possible, however, we have portrayed trend data to illustrate progress over time. We also report FY 2021 final performance results for one measure that became available in FY 2022.

Michael S. Regan

Michael S. Regan

MAR 10 2023

Date

Key to Multiyear Table Annual Performance Goal Data Presentation

(PM #) Annual performance goal language here.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target			No Target Established	13	13	12	11	9	Sites	Increase
Actual		12	11	13	10	9				

Targets by Fiscal Year (Line)

Actuals by Fiscal Year (Bars)

Gray = No Annual Performance Goal; No Data

White (past year) = No Annual Performance Goal; Data Available

Purple = Data and No Target

Green = 100% of Target Met

Yellow = 75-99% of Target Met

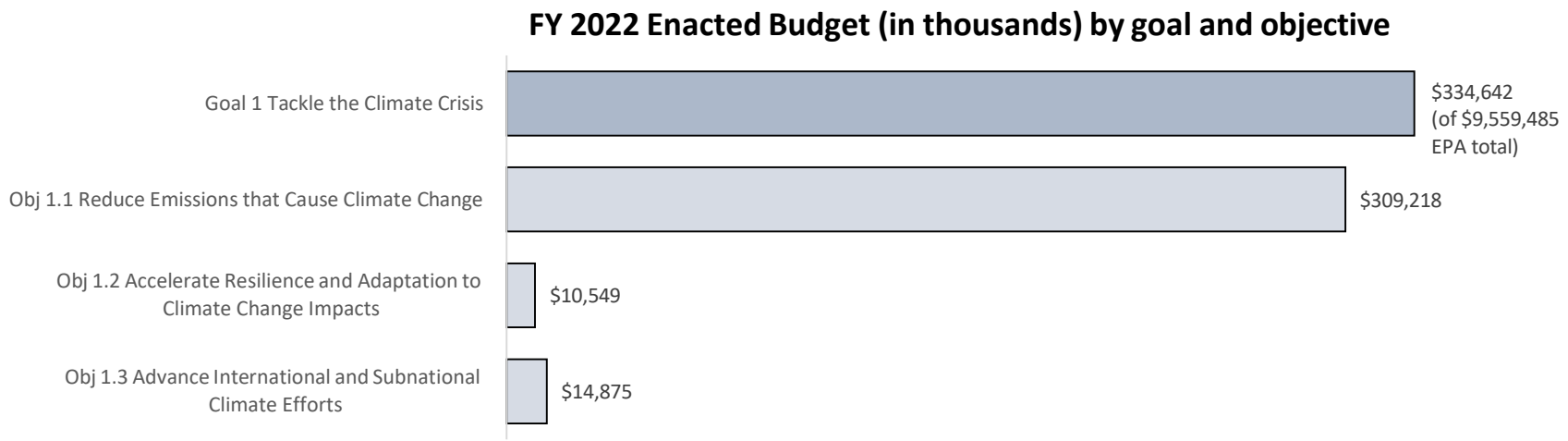
Red = <75% of Target Met

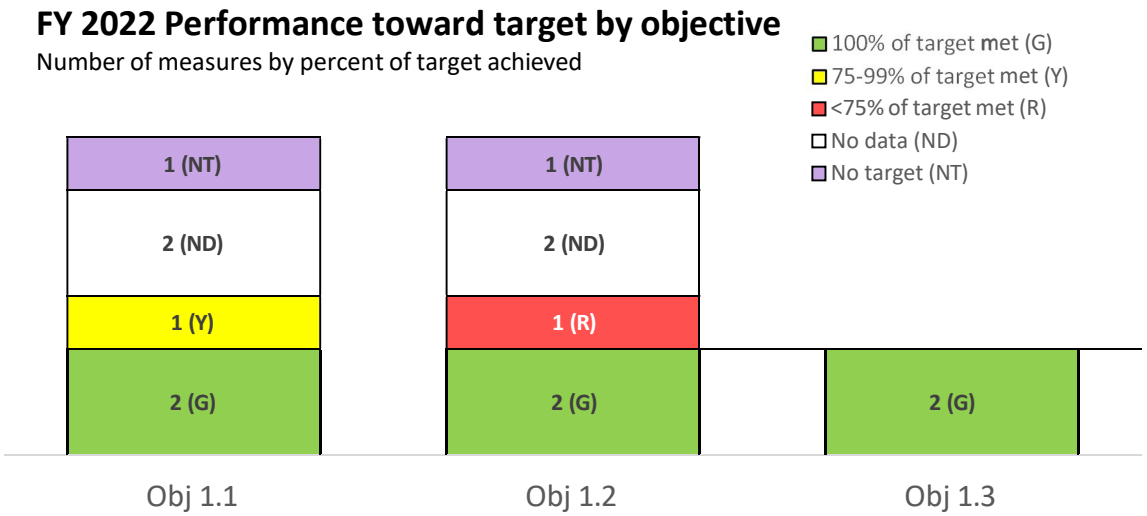
White (current or future year) = No Data

* This character indicates a measure also used to track progress in implementing the Bipartisan Infrastructure Law.

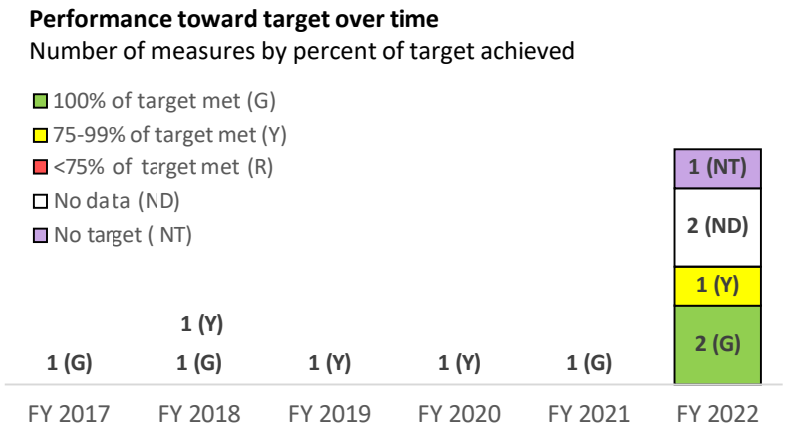
Goal 1 at a Glance

Tackle the Climate Crisis: Cut pollution that causes climate change and increase the adaptive capacity of Tribes, states, territories, and communities.





Objective 1.1 – Reduce Emissions that Cause Climate Change—*Aggressively reduce the emissions of greenhouse gases from all sectors while increasing energy and resource efficiency and the use of renewable energy.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- Began implementing final rule under the American Innovation and Manufacturing (AIM) Act to phase down U.S. production and consumption of hydrofluorocarbons (HFCs) 85% by 2036 which is estimated to cumulatively reduce greenhouse gas (GHG) emissions by 4,600 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) between 2022 and 2050.
- Helped save more than 520B kilowatt hours (kWh) of electricity and avoid $42B in energy costs through ENERGY STAR, resulting in emission reductions of ~400M metric tons of GHGs (~5 % of U.S. total GHG emissions) and ~440K tons of criteria air pollutants.
- The Natural Gas STAR Methane Challenge Partnership achieved approximately ~2.76 MMTCO2e of methane reductions in 2020 and an overall reduction of 10 MMTCO2e since its inception in 2016. Building on these U.S. successes, EPA also supported the launch of the Global Methane Pledge to reduce global methane emissions by at least 30% from 2020 levels by 2030.
- Continued work with the Green Power Partnership, which includes 700 EPA Green Power Partners who collectively use 70B kWh of green power annually and represent nearly 43% of the U.S. voluntary green power market.
- Published the *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2020*; showing GHG emissions in 2020 (after accounting for sequestration from the land sector) were 21% below 2005 levels (see: https://www.epa.gov/ghgemissions/inventory -us-greenhouse-gas-emissions-and-sinks-1990-2020).
- Issued the 2021 Automotive Trends Report, finding that for model year 2020, the average estimated real-world carbon dioxide (CO_2) emission rate for all new light-duty vehicles fell by 7 g/mi to 349 g/mi (lowest ever measured), and all 14 large light-duty vehicle manufacturers achieved compliance with GHG standards (see: https://www.epa.gov/automotive-trends).
- Met partner needs for 100% of climate-related research products.

Challenges:

- The AIM Act and the Executive Order on Strengthening American Leadership in Clean Cars and Trucks have rigorous schedules for actions to be taken to reduce emissions across sectors, including requiring multiple rules to be developed at the same time.
- Illegal HFC imports will undermine the environmental benefits and integrity of the HFC phasedown, and disadvantage companies complying with the requirements. It is important that EPA continues to support the HFC taskforce with U.S. Customs and Border Patrol.
- Limited resources for federal and state activities to support GHG emission reductions and other climate goals continue to pose program delivery challenges, but new opportunities may exist under the Inflation Reduction Act.

Annual performance goal:

(PM HFC) Remaining U.S. consumption of hydrofluorocarbons (HFCs).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						273.5	273.5	182.3	$MMTCO_2e$	Below Target	No Trend Data
Actual						Data Avail 11/2023					

Key Takeaways:

- FY 2020 results (most recent estimate) show the remaining U.S consumption of HFCs was 309 million metric tons of carbon dioxide equivalent ($MMTCO_2e$).
- By September 30, 2023, annual U.S. consumption of HFCs will be 10% below the baseline of 303.9 $MMTCO_2e$ consistent with the HFC phasedown schedule in the AIM Act and codified in the implementing regulations.

Metric Details: This measure tracks U.S. consumption of HFCs in $MMTCO_2e$. HFCs are potent greenhouse gases, many of which have global warming potentials hundreds to thousands of times that of carbon dioxide. The American Innovation and Manufacturing (AIM) Act of 2020 provides EPA the domestic authority to phase down production and consumption of HFCs. HFCs are commonly used in many sectors of the economy, including in refrigeration and air conditioning, aerosols, solvents, fire suppression, and as foam blowing agents. The AIM Act provides the legal framework to phase down HFC production and consumption consistent with the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer that was ratified on September 21, 2022. Phasing down HFCs globally is expected to avoid up to 0.5° Celsius of global warming by 2100. The baseline is 303.9 tons of $MMTCO_2e$. Estimates for years prior to the effective date of the regulations (i.e., data for years prior to FY 2022) are derived from a number of sources: EPA's Greenhouse Gas Reporting Program (40 CFR Part 98); import records provided to Customs and Border Protection through their Automated Commercial Environment database; responses from producers and importers to direct outreach from EPA; the proposed rule ("Phasedown of Hydrofluorocarbons: Establishing the Allowance Allocation and Trading Program Under the American Innovation and Manufacturing Act" (86 FR 27150; May 19, 2021)); and the Notice of Data Availability ("Notice of Data Availability Relevant To Petition Submissions Under the American Innovation and Manufacturing Act of 2020" (86 FR 28099; February 11, 2021)). Historic estimates for previous HFC consumption for FY 2017-2020 are "net supply," which means the quantities of bulk HFC produced + imported – exported – transformed – destroyed. "Net supply" is equivalent to the term "consumption," and historic estimates are as follows: FY 2017: 290; FY 2018: 306; FY 2019: 314; and FY 2020: 309. For more information, see: https://www.epa.gov/climate-hfcs-reduction. This measure tracks progress toward a FY 2022-2023 Agency Priority Goal (APG).

Long-Term Performance Goal - By September 30, 2026, promulgate final rules to reduce greenhouse gas (GHG) emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

Annual performance goal that supports this long-term performance goal:

(PM RUL) Number of final rules issued that will reduce GHG emissions from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						No Target Established	No Target Established	No Target Established	Rules	Above Target	No Trend Data
Actual						1					

Key Takeaways:

- In FY 2022, EPA finalized revised national GHG standards for passenger car and light trucks for model years 2023-2026.
- The final rule will result in approximately 3.1 billion tons of GHG emissions avoided through 2050, which is equivalent to more than half of the net total U.S. CO_2 emissions in 2019.

Metric Details: This measure tracks the number of final rules that will reduce GHG emissions published in the *Federal Register*. EPA will reduce emissions that cause climate change through regulations on GHG emissions including carbon dioxide (CO_2) and methane from light duty, medium-duty, and heavy-duty vehicles; electric utility generating units; and the oil and gas industry.

Long-Term Performance Goal - By September 30, 2026, EPA's climate partnership programs will reduce expected annual greenhouse gas (GHG) emissions by 545 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). EPA's climate partnership programs reduced 518.6 $MMTCO_2e$ of annual GHG emissions in 2019.

Annual performance goal that supports this long-term performance goal:

(PM CPP) Million metric tons of carbon dioxide equivalent reduced annually by EPA's climate partnership programs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						486.9	500.7	513.9	$MMTCO_2e$	Above Target	
Actual	442.2	505.6	518.4	529.6	Data Avail 11/2023	Data Avail 11/2024					

Key Takeaways:

- In FY 2020 (latest available data), EPA's climate partnership programs reduced 529.6 $MMTCO_2e$.
- EPA celebrated the 30th anniversary of its climate partnership programs, and the programs continued to deliver significant CO_2 and non-CO_2 emission reductions from diverse sectors including the commercial, residential, manufacturing, transportation, and power sectors.
- Over 30 years, EPA's climate partnership programs have helped Americans save more than $500 billion and achieve more than 6 billion metric tons of GHG emission reductions.

Metric Details: This measure tracks GHG reductions from EPA's climate partnership programs. The programs included are: ENERGY STAR Products, Residential, Commercial Buildings, and Industrial programs; Green Power Partnership; AgSTAR Program; Coalbed Methane Outreach Program; Landfill Methane Outreach Program; Natural Gas STAR / Methane Challenge Programs; SF6 Emission Reduction Partnerships for Electric Power Systems; Responsible Appliance Disposal; GreenChill; and SmartWay. These programs work hand-in-hand with the private sector and others to achieve more GHG reductions than would be possible through federal regulations alone. These programs seek out and overcome market barriers, drive policy at the state and local level, and capture and channel marketplace ingenuity towards climate action. For more information, see: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks.

Other Core Work

Annual performance goals:

(PM CRT) Number of certificates of conformity issued that demonstrate that the respective engine, vehicle, equipment, component, or system conforms to all applicable emission requirements and may be entered into commerce.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target		5,200	5,000	5,000	4,700	4,700	4,900	4,900	Certificates	Above Target
Actual	5,109	4,869	4,711	4,843	5,351	5,196				

Key Takeaways:

- The total number of certificates issued by EPA in FY 2022 was almost 500 more than the target.
- EPA continues to issue vehicle and engine certificates of conformity in a timely manner and on pace with the numbers of requests received.

Metric Details: This measure tracks the number of certificates of conformity issued in a given year. The Clean Air Act requires that engines, vehicles, equipment, components, or systems receive a certificate of conformity which demonstrates compliance with the applicable requirements prior to introduction into U.S. commerce. EPA reviews all submitted requests and issues certificates of conformity when the manufacturer demonstrates compliance with all applicable requirements. This measure illustrates EPA's annual certification workload. The number of certification requests is determined by the manufacturers' product planning and will fluctuate from year to year. EPA strives to issue vehicle and engine certificates of conformity in a timely manner and on pace with the numbers of requests received.

(PM REP) Percentage of Annual Greenhouse Gas Emission Reports verified by EPA before publication.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	95	65				98	98	98	Percent	Above Target
Actual	96	97	96	95	99	97				
Numerator	7,828	7,821	7,867	7,722	7,935	7,877			Reports	
Denominator	8,127	8,061	8,165	8,126	8,029	8,141				

Key Takeaways:

- EPA's Greenhouse Gas Reporting Program (GHGRP) has consistently maintained a high percentage of verified reports prior to annual publication. While EPA did not meet the ambitious target in FY 2022, the result is in line with program expectations and will help advance the Agency's understanding of GHG emissions.
- The quality of GHGRP data at time of submittal continues to improve due to GHGRP data system and verification process changes that have increased real-time data quality feedback to industry reporters over time.

Metric Details: The GHGRP, established in 2009, covers 41 sectors that account for more than 8,100 reports summarizing annual GHG emissions and supply. Both facilities and suppliers are required to report their data annually by March 31st. After submission of the data, EPA conducts a verification review that lasts approximately 150 days and includes a combination of electronic checks, staff review, and follow-up with facilities to identify potential reporting errors that are corrected before publication. The 150-day period includes 60 days for EPA to review reports and identify potential data quality issues, 75 days for reporters to resolve these issues, and 15 days for EPA to review responses or resubmitted reports. EPA typically publishes the data by early October each year. These data support federal and state-level policy development and allow EPA to share GHG emissions and supply data with industry stakeholders, state and local governments, academia, the research community, and the public in general. There are no targets in FYs 2019-2021 because this measure was not included in these Annual Performance Plans. For more information, see: www.epa.gov/ghgreporting.

(PM RD3) Percentage of ORD climate-related research products meeting partner needs.

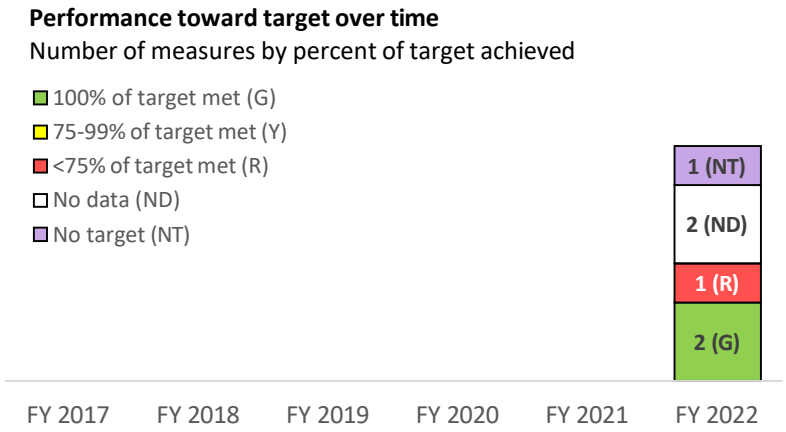
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						93	94	94	Percent	Above Target
Actual					100	100				
Numerator					5	7			Products	
Denominator					5	7				

Key Takeaways:

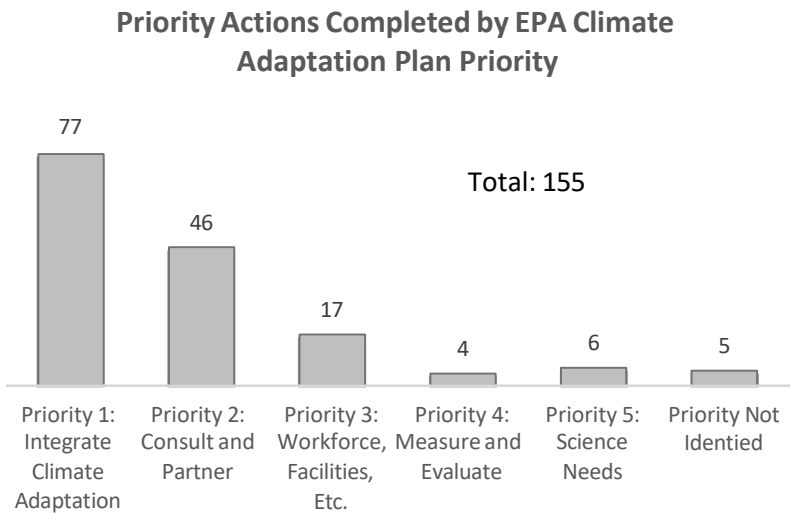
- All seven climate products assessed met customer needs. Five of these addressed a single research area: approaches for characterizing source emissions, air quality, exposure, and mitigation strategies. These products provide critical information to help inform programs that empower citizens and local governments to seek reductions in air pollution emissions and reduce exposures and health impacts.
- The number of climate products being assessed has increased from the previous fiscal year and will continue to do so as EPA's Office of Research and Development (ORD) implements the FY 2023-2026 Strategic Research Action Plan (see: https://www.epa.gov/research/strategic-research-action-plans-fiscal-years-2023-2026).

Metric Details: Partner satisfaction is assessed through a robust survey process. The annual survey engages key users of ORD products. Survey respondents assess the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. This measure assesses a subset of ORD's research products specifically related to climate.

Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts—*Deliver targeted assistance to increase the resilience of Tribes, states, territories, and communities to the impacts of climate change.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Released 20 Climate Adaptation Implementation Plans, developed by EPA national program offices and all 10 regional offices. Received input from tribes through a formal consultation and from state and local government officials through several engagement sessions. The Plans provide detailed information about the actions each program and regional office will take to address the five agencywide priority actions contained in EPA's 2021 Climate Adaptation Action Plan (CAP) (see: https://www.epa.gov/climate-adaptation/climate-adaptation-plan). They include over 500 commitments EPA will take over the next five years, with other federal agencies and partners, to protect health and the environment under future climate conditions.
- Completed over 150 of the commitments made to ensure EPA's programs are resilient even as the climate changes.
- Provided technical and financial assistance to increase the adaptive capacity and resilience of EPA's tribal, state, city, local government, and community partners (e.g., through the Bipartisan Infrastructure Law). Preliminary data indicates that EPA partners (41 tribal and 131 state, territorial, local government, and community partners) took over 150 actions to anticipate, prepare for, adapt to, and recover from the impacts of climate change after receiving EPA assistance.
- Modernized EPA's financial programs by integrating climate adaptation criteria into grants, cooperative agreements, loans, and contracts.
- Provided climate adaptation training, resources and guidance for staff and external partners to help integrate climate adaptation into business operations, investments, and decision-making. For example, EPA is developing new training on integrating climate adaptation into rulemaking processes.
- After federally declared disasters, EPA assists with the immediate response and long-term recovery. EPA regional offices provided approximately 10,000 hours of assistance to help communities recover and rebuild after a climate-related disaster.

Challenges:

- This is the first year of these performance measures for EPA. There has been significant work to develop systems for both doing the work and tracking progress. The Agency is learning and adjusting the new processes to better support outcomes.
- As a result of Congress's enacted FY 2022 budget, EPA received fewer than the requested resources to coordinate and manage cross-agency implementation of this objective. Although EPA's FY 2022 target was 100 priority actions, EPA programs identified over 250 actions important to climate adaptation and resiliency. In the end, EPA achieved 155 of them.

Long-Term Performance Goal: By September 30, 2026, implement all priority actions in EPA's Climate Adaptation Action Plan and the 20 National Program and Regional Climate Adaptation Implementation Plans to account for the impacts of the changing climate on human health and the environment.

Annual performance goals that support this long-term performance goal:

(PM AD07) Number of priority actions completed in EPA's Climate Adaptation Action Plan and Program and Regional Implementation Plans.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						100	100	100	Priority Actions	Above Target	
Actual						155					

Key Takeaways:

- EPA programs and regional offices are taking multiple actions to increase the adaptive capacity of the nation. For example, the Office of Water has committed to incorporate climate change considerations into infrastructure grant and loan guidance and programs; the Office of Land and Emergency Management is providing climate vulnerability assessments at Superfund sites; and the Office of Air and Radiation is working within EPA and with external stakeholders to review and revise information for citizens- especially at-risk populations- on the impact of climate change on ambient and indoor air quality.
- Limited resources hinders EPA's ability to implement all the actions necessary as the Agency works to meet its mission, even as the climate changes.

Metric Details: This measure tracks the number of priority actions implemented in support of EPA's October 2021 Climate Adaptation Action Plan through the 20 Program and Regional Implementation Plans. The Action Plan commits EPA to five Priority Actions per year by each of EPA's 10 national program offices and 10 regional offices. EPA will publish a report annually to share completed actions, accomplishments, and challenges. EPA expects 100 actions per year for a total of 500 actions by FY 2026. The Implementation Plans identify EPA's specific Priority Actions to: 1) integrate climate adaptation planning into EPA programs, policies and rulemaking processes; 2) consult and partner with tribes, states, territories, local governments, environmental justice organizations, community groups, businesses and other federal agencies to strengthen adaptive capacity and increase the resilience of the nation, with a particular focus on advancing environmental justice; 3) implement measures to protect the Agency's workforce, facilities, critical infrastructure, supply chains and procurement processes from the risks posed by climate change; and 4) modernize EPA financial assistance programs to encourage climate-resilient investments across the nation.

(PM AD08) Number of EPA national program offices that have developed adaptation training for programs and staff.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						4	10	12	Program Offices	Above Target	
Actual						4					

Key Takeaways:

- Program-specific training, tailored to specific job duties, is critical for EPA staff to engage in climate resiliency. Updated training developed in FY 2022 includes training for rule writers, a climate adaptation 101 course to ensure all staff have basic climate adaptation knowledge, and a climate adaptation and mitigation training tailored to EPA's land and emergency management staff, which more than 600 people attended.
- Future training will include each EPA program office and will focus on integrating climate adaptation considerations into grants, loans, technical assistance, and other program activities.

Metric Details: This measure tracks the development of training by EPA's national program offices on how current and future climate impacts should be considered in specific program activities, such as direct program implementation, regulation development, permitting, inspections, enforcement, partnerships, research, grants, loans, and technical assistance. EPA currently has a training developed for new employees. Offices with existing training will update their materials in 2022 and offices without existing training will create them for FY 2023 and FY 2024. Twelve total trainings reflect nine national program office trainings plus one general climate adaptation training offered by Office of Policy, one training for rule writers, and one training focused on children's health.

Long-Term Performance Goal: By September 30, 2026, assist at least 400 federally recognized Tribes to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

Annual performance goal that supports this long-term performance goal:

(PM AD09) Cumulative number of federally recognized tribes assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						100	150	200	Tribes	Above Target	No Trend Data
Actual						Data Avail 3/2023					

Key Takeaways:

- Preliminary data as of October 2022 show 41 tribal partners have taken action to increase their adaptive capacity and resilience to climate change after EPA assistance. Final data will be available in March 2023 when grants reports are received from partners. Examples of tribal partner actions include: 1) the Jamestown S'Klallam Tribe in Washington State used assistance from EPA's Puget Sound Program to build climate resilience by enhancing floodplain infrastructure which reduces impacts on water temperature, water quality, and water chemistry; and 2) The Saint Regis Mohawk Tribe in New York State has implemented a wide breadth of climate adaptation activities as part of their Performance Partnership Grant with EPA.
- Tribal partners are being severely impacted by climate change and need financial and technical resources to be able to effectively adapt.
- EPA continues to face challenges to implement this goal due to limited capacity among tribes and within the Agency itself.

Metric Details: This measure tracks the cumulative number of federally recognized tribes EPA provides with financial assistance, technical assistance, or training that then take action, starting in FY 2022, to anticipate, prepare for, adapt to, or recover from the impacts of climate change. Actions may include but are not limited to: developing a climate adaptation plan; identifying potential impacts; assessing vulnerability; planning; applying for additional funding; adoption of adaptation measures such as green infrastructure; improved coordination with other key organizations (e.g., a state or federal partner); estimation of financial impacts; or more effective remedy selection in a hazardous waste cleanup program.

Long-Term Performance Goal: By September 30, 2026, assist at least 450 states, territories, local governments, and communities, especially communities that are underserved and disproportionately at risk from climate change, to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

Annual performance goals that support this long-term performance goal:

(PM AD10) Cumulative number of states, territories, local governments, and communities (i.e., EPA partners) assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						250	300	350	Partners	Above Target	
Actual						Data Avail 3/2023					

Key Takeaways:

- Preliminary data show 131 state, territorial, local government, and community partners have taken action to increase their adaptive capacity and resilience to climate change after EPA assistance. Final data will be available in March 2023 when grantees' progress reports are received from partners. Examples of partner actions include: 1) The Lower Boise Watershed Council in Idaho received funding from EPA's Clean Water Act nonpoint source program to enhance water quality and create co-benefits for climate resilience; and 2) South Carolina received disaster relief funding through the Environmental Justice program to prepare for future climate impacts and conducted their first planning workshop in FY 2022.
- EPA has multiple programs, across various statutes, to support communities' increased adaptive capacity. Partner actions resulting from EPA grants and loans are easier to track than those achieved through technical assistance and training because grantees are required to submit regular progress reports.
- Some communities with environmental or climate justice concerns have been unable to engage with EPA due to limited capacity to effectively apply for and manage climate adaptation assistance.

Metric Details: This measure tracks the cumulative number of states, territories, local governments, and communities EPA provides with financial assistance, technical assistance, or training that then take action, starting in FY 2022, to anticipate, prepare for, adapt to, or recover from the impacts of climate change. Actions may include but are not limited to: developing a climate adaptation plan; identifying potential impacts; assessing vulnerability; planning; applying for additional funding; adoption of adaptation measures such as green infrastructure; improved coordination with other key organizations (e.g., a state or federal partner); estimation of financial impacts; or more effective remedy selection in a hazardous waste cleanup program.

(PM AD11) Number of tribal, state, regional, and/or territorial versions of the Climate Change Adaptation Resource Center (ARC-X) or similar systems developed by universities with EPA support.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						3	6	6	Versions	Above Target	
Actual						1					

Key Takeaways:

- There is strong national and international interest in the ARC-X tool based on the number of visitors to the web tool.

- As a result of Congress's enacted FY 2022 budget, EPA received fewer than the requested resources to implement this objective. Competing demands on staff time and financial resources limited EPA's ability to meet this goal.

Metric Details: This measure tracks the development of ARC-X or similar systems developed by universities to support tribal, state, regional, and/or territorial partners. ARC-X is an interactive EPA online resource designed to help local government officials in communities across the United States anticipate, prepare for, adapt to, and recover from the impacts of climate change. It also is a portal to all EPA tools and resources on climate adaptation. ARC-X provides users with an integrated package of information tailored specifically to their needs, based on where they live and the issues of concern to them. The system is available at: https://www.epa.gov/arc-x. A system has been developed when it is published by the university. These systems provide locally specific climate adaptation information and include local examples and case studies. The information provided in these resource centers will help communities understand and prepare for the impacts of climate change. In addition, regional or local systems may expand resources to encompass the full breadth of climate adaptation issues, even those beyond EPA's mission. These systems will eventually create a learning network of information that is accessible to communities of a variety of sizes and capabilities across the country, especially those with environmental justice concerns.

(PM AD12) Hours of appropriate subject matter expert time provided by EPA to help communities adapt to climate impacts, build long-term resilience, and support the most underserved and vulnerable communities after federally declared disasters.

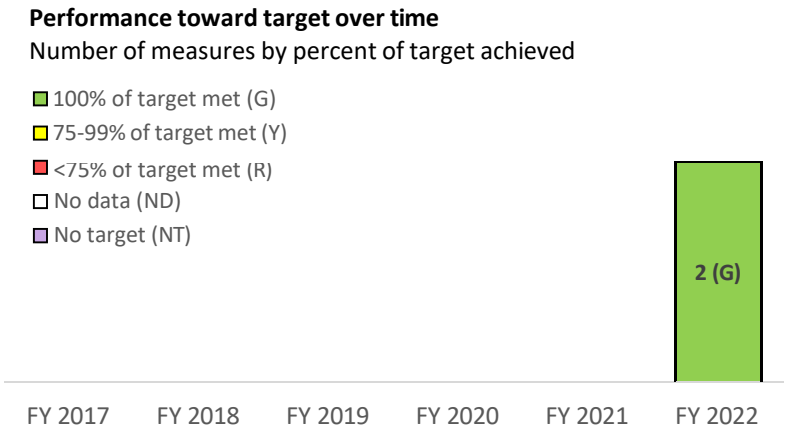
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						No Target Established	No Target Established	No Target Established	Hours	N/A	
Actual						9,763					

Key Takeaways:

- These results may understate hours provided due to the difficulty in tracking the work of multiple EPA offices engaged in disaster recovery.
- EPA's assistance for recovery and long-term resilience extends many years past the actual disaster event and is a significant investment on behalf of EPA.
- EPA has an important role in supporting the recovery and long-term resilience of communities post-disaster across all program areas.
- Most of the hours of assistance provided are concentrated in a few regional offices where they are supporting recovery from major disaster events.

Metric Details: This measure tracks EPA contributions to supporting local communities' efforts to rebuild in a manner that increases community resiliency and adaptive capacity as they recover from federally declared disasters. This does not include clean-up or immediate response activities, but rather supports communities to build back in ways that help anticipate, prepare for, and adapt to climate change. There are no targets for this measure as the number of federal declared disasters where EPA assistance is requested varies by year.

Objective 1.3: Advance International and Subnational Climate Efforts—*Collaborate with Tribal, state, local, and international partners and provide leadership on the global stage to address climate change.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- In March 2022, EPA Administrator Michael Regan led the U.S. Delegation to a meeting of environment ministers of the member countries of the Organization of Economic Cooperation and Development (OECD) in Paris, France, and chaired the climate plenary session on "Moving to Net Zero" (see: https://www.epa.gov/newsreleases/administrator-regan-leads-oecd-meeting-climate-environmental-justice-plastics).
- EPA led the Commission for Environmental Cooperation's (CEC) efforts to award funding to 15 *EJ4Climate* grants (five per North America country) to undertake work with underserved and vulnerable communities, and indigenous communities to prepare them for climate-related impacts (see: https://www.epa.gov/newsreleases/commission-environmental-cooperation-launches-second-round-2-million-environmental).
- In November 2021, EPA led efforts resulting in the U.S. and China issuing a joint declaration to boost cooperation on climate action, committing both sides to work together and with other parties to strengthen implementation of the Paris Agreement. The U.S. and China agreed to establish frameworks and Terms of References to address the climate crisis and advance the multilateral process on priorities, such as methane emission reductions, greenhouse gas emissions frameworks and environmental standards, and policies that encourage decarbonization and electrification of end-use sectors (see: https://www.state.gov/u-s-china-joint-glasgow-declaration-on-enhancing-climate-action-in-the-2020s/).
- At the November 2021 UN Climate Change Conference (COP26), EPA Administrator Michael Regan engaged with 12 countries, the European Union and the State of California resulting in an agreement on an action plan for 2022 to coordinate and accelerate the global transition to zero emission vehicles and ensure a sustainable supply chain for vehicle batteries. (see: https://unfccc.int/news/zero-emission-vehicle-pledges-made-at-cop26)

Challenges:

- EPA cannot control how countries use the assistance it provides. EPA targets engagement and technical assistance toward countries where the Agency expects to have the greatest potential impact.

Long-Term Performance Goal - By September 30, 2026, implement at least 40 international climate engagements that result in an individual partner commitment or action to reduce greenhouse gas (GHG) emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

Annual performance goal that supports this long-term performance goal:

(PM E13a) Number of climate engagements that result in an individual partner commitment or action to reduce GHG emissions, adapt to climate change, or improve resilience in a manner that promotes equity.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						8	10	10	Engage-ments	Above Target	
Actual						8					

Key Takeaways:

- Many countries and organizations have reached out to EPA to partner on climate activities, showing the strong interest internationally to work with the Biden Administration.
- EPA will continue to review the commitments made by partners with limited capacity to implement and monitor themselves, in particular those commitments made outside of a funded initiative.

Metric Details: This measure tracks the number of senior level EPA international actions implemented annually that result in the provision of tools that when utilized by partners can result in equitable GHG emissions reductions, adaptation to climate change, or improvements in resilience. Climate change is a global issue that has far-reaching human health, social, economic, and biodiversity impacts on our planet, with direct adverse effects in the United States. EPA represents the U.S. Government in climate-related multilateral meetings and treaty negotiations, such as Montreal Protocol, UNFCCC, G7 and G20 Environment Ministers meetings. EPA also works directly with other countries and stakeholders through bilateral agreements and work plans to share technical expertise, implement capacity building, and help countries address their climate gaps.

Other Core Work

Annual performance goal:

(PM E13b) Number of Border 2025 actions implemented in the U.S.-Mexico Border area to improve water quality, solid waste management and air quality including those that address climate change, and advance emergency response efforts.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						3	10	10	Actions	Above Target	
Actual						6					

Key Takeaways:

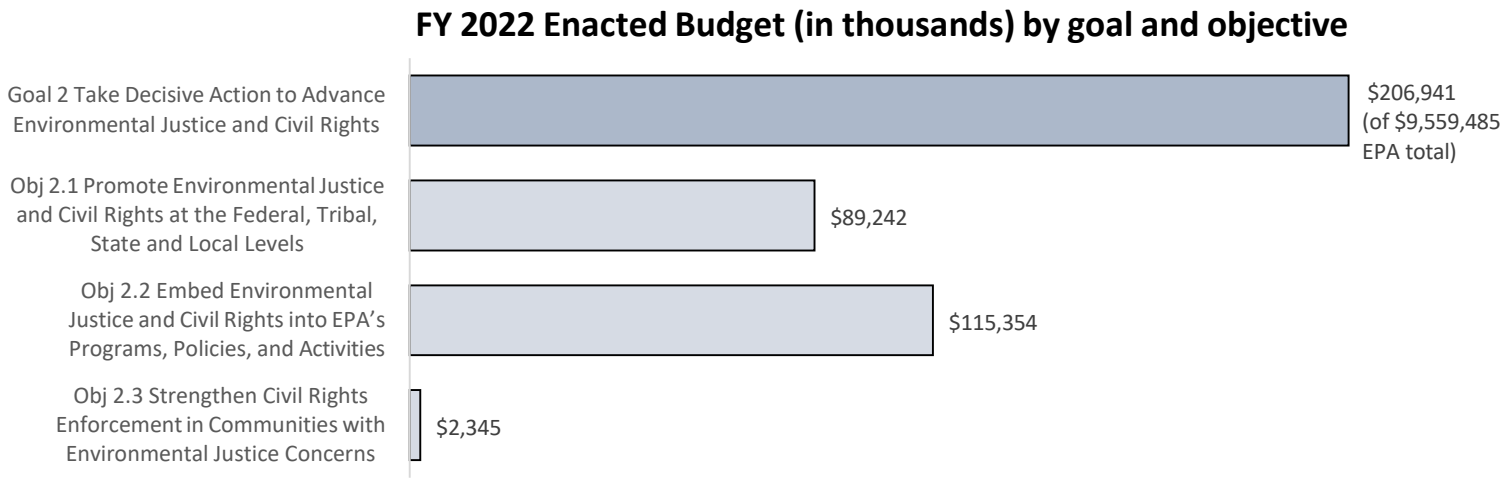
- The U.S.-Mexico border region residents/communities have benefited and will continue to benefit from capacity-building efforts that improve air and water quality, solid waste management, and emergency response by going beyond the expected target this year and increasing the targeted number of actions for the upcoming fiscal years. In 2022 two examples of the capacity building efforts are: 1) EPA's Border Office Staff discussed and advised on specifics of the Ciudad Juarez, Chihuahua Emergency Preparedness Drill Exercise/training at a Juarez Maquiladora Electrolux; and 2) EPA and the binational Joint Advisory Committee (JAC) discussed with community-based

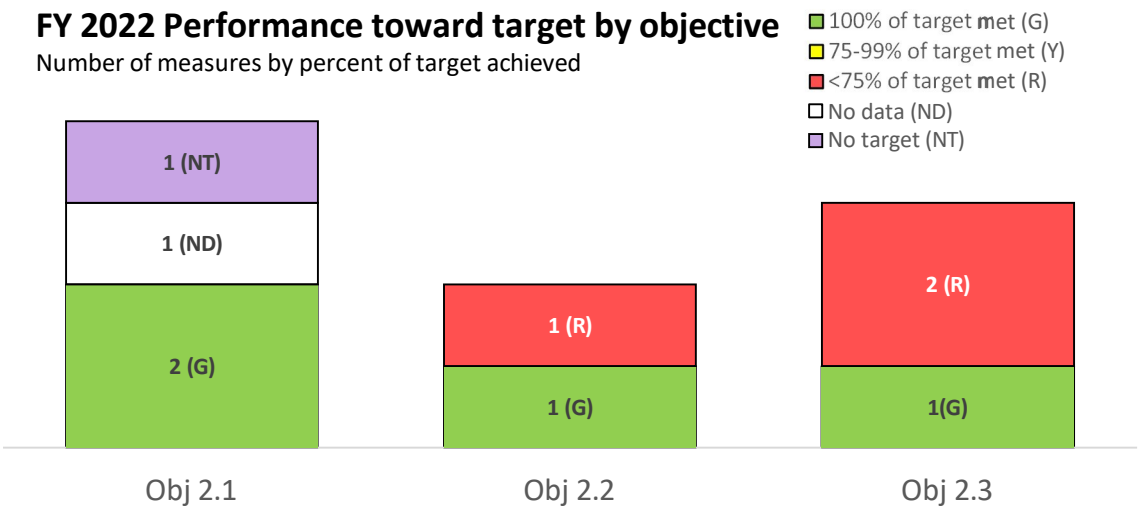
organizations "How to achieve cleaner air for the El Paso, TX – Doña Ana County, NM, and the Ciudad Juarez, Chihuahua air basin under the framework of the 1983 La Paz Agreement."

Metric Details: This measure tracks EPA actions to provide tools and capacity building activities that when utilized by partners can result in improved water quality, solid waste management and air quality. These include actions to address climate change and advance emergency response efforts along the two thousand mile border between the United States and Mexico.

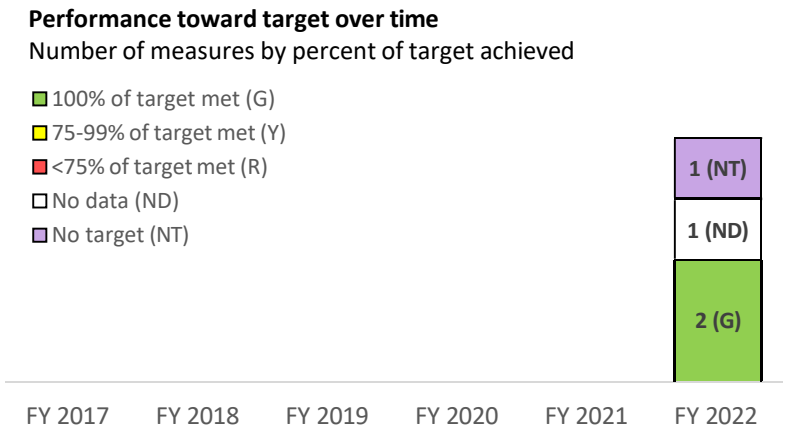
Goal 2 at a Glance

Take Decisive Action to Advance Environmental Justice and Civil Rights: Achieve tangible progress for historically overburdened and underserved communities and ensure the fair treatment and meaningful involvement of people regardless of race, color, national origin, or income in developing and implementing environmental laws, regulations and policies.





Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State and Local Levels—*Empower and build capacity of underserved and overburdened communities to protect human health and the environment.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- EPA is in the final stages of development of new technical assistance and grant programs that will provide broad support for communities to easily access support.
- One of these new grant programs will provide a cross-agency ability for EPA programs and regional offices to more directly and easily compensate community-based organizations and leaders involved in EPA activities.
- Developed direct implementation training and hosted sessions for approximately 700 EPA senior leaders, management, and staff. The training focused on EPA's direct implementation responsibilities for equitable implementation of federal environmental programs within Indian country.
- Advanced tribal climate change adaptation, including compiling an inventory of all federal agency tribal climate adaptation plan entries and organizing an EPA National Tribal Operations Committee meeting focused on highlighting tribal concerns and inputs on climate adaptation.
- Finalized new 2022 Indian General Assistance Program (GAP) guidance after several years of consultation and engagement with tribes and within the Agency.
- Determined the baseline of Office of Research and Development (ORD) activities related to environmental justice.

Challenges:

- Competing demands among multiple environmental justice initiatives, as well as Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) commitments.
- EPA needs to develop new tools to support process execution, stakeholder engagement, and coordination across EPA programs and regional offices.
- EPA's current GAP grant allocation process, developed three decades ago, is no longer meeting the needs of tribes and intertribal consortia. EPA is conducting outreach with regions and tribes to analyze input for a future decision.
- The Agency continues to explore the most efficient manner in which to make EPA direct implementation in Indian country regulatory data and information available to tribes and the public.

Long-Term Performance Goal: By September 30, 2026, all EPA programs that seek feedback and comment from the public will provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.

Annual performance goals that support this long-term performance goal:

(PM EJCR01) Percentage of EPA programs that seek feedback and comment from the public that provide capacity-building resources to communities with environmental justice concerns to support their ability to meaningfully engage and provide useful feedback to those programs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							25	50	Percent	Above Target	No Trend Data
Actual											
Numerator									Programs		
Denominator											

Metric Details: This measure tracks the percentage of EPA programs and regional offices providing capacity building resources (e.g., fact sheets, trainings, webinars, dedicated technical assistance, grants) to members of communities to support their ability to provide meaningful feedback to the program during engagement. Each program will determine how to provide this support. In FY 2023, resources will be provided to EPA programs that connect the principles of meaningful community engagement to the implementation of providing effective capacity building resources to communities. Tracking will consist of ensuring that each program provides effective support to communities.

(PM EJCR02) Percentage of EPA programs utilizing extramural vehicles to fund organizations and individuals providing environmental justice expertise and support to advance EPA priorities and activities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							50	75	Percent	Above Target	No Trend Data
Actual											
Numerator									Programs		
Denominator											

Metric Details: This measure tracks the percentage of EPA programs that provide financial resources to community-based non-profit organizations, other organizations, and individuals that provide environmental justice expertise in support of EPA's priorities and activities. As part of EPA's decision-making processes or other Agency work streams, EPA programs regularly rely upon the time, efforts, and expertise of community members, leaders, and organizations for a variety of activities/inputs. Examples of EPA activities that organizations or individuals could provide support for include organizing, educating, and engaging communities on environmental justice, climate justice, and other EPA priorities. EPA programs that rely on such community support will provide funding, as appropriate, to those community members/organizations for their time, efforts, and expertise just as they would if they needed the time, support, and expertise of a scientist or engineer. Providing funding can be achieved through use of financial assistance instruments such as grants and cooperative agreements, procurement vehicles, or interagency agreements, depending upon the principal purpose of the financial transaction. In FY 2023, resources will be available to EPA programs that regularly rely on the input and time of community leaders and organizations to facilitate their fair compensation.

(PM EJCR03) Percentage of environmental justice grantees whose funded projects result in a governmental response.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							No Target Established	No Target Established	Percent	Above Target	No Trend Data
Actual											
Numerator									Grantees		
Denominator											

Metric Details: This measure tracks the percentage of environmental justice grantees whose EPA-funded projects result in a governmental response (planned and/or actualized). The governmental response can range from on-the-ground response/activity to a policy change, and it may be at the local, state, tribal, or federal level. Tracking this measure will require incorporation of expectations for reporting into grant solicitations and agreements, and sufficient time post-award for results to materialize. EPA will establish reporting mechanisms for this measure in FY 2023. Grants awarded in FY 2023 will not be ready for reporting until sufficient time has passed, most likely in FY 2025.

Long-Term Performance Goal: By September 30, 2026, include commitments to address disproportionate impacts in all written agreements between EPA and Tribes and states (e.g., grant work plans) implementing delegated authorities.

Annual performance goals that support this long-term performance goal:

(PM EJCR04) Percentage of written agreements between EPA and tribes or states implementing delegated authorities that include commitments to address disproportionate impacts.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							5	25	Percent	Above Target	No Trend Data
Actual											
Numerator									Agreements		
Denominator											

Metric Details: This measure tracks the percentage of formal agreements between EPA and institutions that are authorized or hold delegated authorities that incorporate explicit terms and/or conditions for recipients to be accountable for addressing disproportionate impacts. In FY 2023, the scope of this measure will focus on grant work plans that are submitted by states and tribes to EPA programs and regional offices for the regular process of negotiating commitments. EPA will partner with stakeholders to determine what qualifies as a commitment to address disproportionate impacts.

(PM EJCR05) Percentage of state-issued permits reviewed by EPA that include terms and conditions that are responsive to environmental justice concerns and comply with civil rights obligations.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							10	25	Percent	Above Target	No Trend Data
Actual											
Numerator									Permits		
Denominator											

Metric Details: This measure tracks the percentage of state-issued permits reviewed by EPA that are explicitly responsive to environmental justice concerns and comply with civil rights obligations. Achievement of this measure will be pursued through the provision of clear guidance, training, and support by EPA programs to states and other partners. In FY 2023, EPA will develop the method and tracking mechanism necessary to track environmental justice and civil rights responsiveness in state-issued permits and what does or does not qualify for inclusion.

Long-Term Performance Goal: By September 30, 2026, EPA programs with direct implementation authority will take at least 100 significant actions that will result in measurable improvements in Indian country.

Annual performance goal that supports this long-term performance goal:

(PM E21) Number of significant actions taken by EPA programs with direct implementation authority that will result in measurable improvements in Indian country.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						No Target Established	25	20	Significant Actions	Above Target	No Trend Data
Actual						25					

Key Takeaways:

- Trained all EPA offices with direct implementation in Indian Country regulatory responsibilities.
- Initiated mapping of EPA direct implementation regulatory data and information pathways from EPA data systems into EJScreen.

Metric Details: This measure tracks number of significant actions by EPA direct implementation programs that will assist EPA in meeting federal trust responsibilities and provide for equitable program implementation in Indian country. Significant actions are those actions taken on an annualized basis by an EPA program to achieve four significant direct implementation program priorities: training on direct implementation for EPA staff; contributing to an Agency direct implementation report identifying barriers and making recommendations; making EPA direct implementation federal facility and entity data available on EPA's environmental justice mapping and screening tool EJScreen; and identifying actions taken to improve EPA direct implementation and progress made to remove direct implementation barriers.

Long-Term Performance Goal: By September 30, 2026, all state recipients of EPA financial assistance will have foundational civil rights programs in place.

Annual performance goals that support this long-term performance goal:

(PM EJCR06) Percentage of required civil rights procedural safeguard elements implemented by state permitting agencies that are recipients of EPA financial assistance.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						20	40	45	Percent	Above Target	No Trend Data
Actual						33					
Numerator						138			Elements		
Denominator						408					

Key Takeaways:

- The percentage of civil rights procedural safeguards elements came in above target for FY 2022 and thus the baseline coming into FY 2023 is higher as well, with data review indicating that several state agency recipients implemented procedural safeguards elements during the course of FY 2022. Accordingly, EPA has adjusted the targets for FY 2023 and 2024.
- Three state agency recipients showed implementation of all the procedural safeguards elements reviewed, with another five state agency recipients needing to implement only one more procedural safeguard element to have full implementation.

Metric Details: This measure tracks the percentage of civil rights procedural safeguards elements implemented by state recipients of EPA financial assistance, calculated in FY 2022 and 2023 as the percentage of required civil rights procedural safeguards elements (8) implemented by state permitting agencies that are recipients of EPA financial assistance (51) by using a denominator in FY 2022 and 2023 of 408 (51 x 8). The numerator is the total number of civil rights procedural safeguards elements implemented in aggregate by the state environmental permitting agencies. Beginning with FY 2024, EPA will introduce additional annual performance goals to assess other state agency recipients beyond the permitting agencies for their implementation of the elements; and in addition, EPA will assess other civil rights procedural safeguards elements, including the data collection requirement, which is a subject of upcoming EPA guidance for recipients.

(PM EJCR07) Percentage of EPA national program and regional offices that extend paid internships, fellowships, or clerkships to college students from diverse backgrounds.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							50	75	Percent	Above Target	No Trend Data
Actual											
Numerator									Programs and Regions		
Denominator											

Metric Details: This measure tracks the percentage of EPA national programs and regional offices that have dedicated funding to bring college students from diverse backgrounds into the Agency on paid internships, fellowships, or clerkships.

Long-Term Performance Goal: By September 30, 2026, increase by 40% the number of Office of Research and Development (ORD) activities related to environmental justice that involve or are applicable to Tribes, states, territories, local governments, and communities.

Annual performance goals that support this long-term performance goal:

(PM RD2) Number of ORD activities related to environmental justice that involve or are designed to be applicable to tribes, states, territories, local governments, and communities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						No Target Established	113	113	Activities	Above Target	No Trend Data
Actual						N/A					

Key Takeaways:

- Established FY 2019-2022 baseline and FY 2023-2026 targets.
- Published *Cumulative Impacts Research: Recommendations for EPA's Office of Research and Development* to show various research areas that can use this evolving concept. This research is essential to solving longstanding environmental health problems, including health disparities exacerbated by racial and social injustices (see: https://www.epa.gov/system/files/documents/2022-09/Cumulative%20Impacts%20Research%20Final%20Report_FINAL-EPA%20600-R-22-014a.pdf).
- Integrated environmental justice into EPA's FY 2023-2026 Strategic Research Action Plans, as one of six cross-cutting priorities during the research planning cycle.
- Completed Phase 1 of the EJ Video Challenge for Students with the goal of enhancing communities' capacity to address environmental and public health inequities using data and publicly available tools. Distributed a prize package of $45,000 to the Phase 1 winning teams.
- Sponsored seven webinars for Agency staff to advance equity and justice in EPA research and identify high priority environmental justice science needs through agencywide dialogue, and provide opportunities to build collaborations.

Metric Details: This measure tracks the number of environmental justice-related ORD activities that involved communities or are designed to be applicable to tribes, states, territories, local governments, and communities with environmental justice concerns. ORD activities are funded or conducted by ORD. An activity is considered to involve a tribe, state, territory, local government, or community if ORD engages with or consults the affected entity (or entities) on the specific activity. An activity is considered to be applicable to a tribe, state, territory, local government, or community if the activity may be used by the entity (or entities) for the benefit of a community (or communities) with environmental justice concerns. The FY 2019-2022 baseline is 324 EJ-focused ORD activities. The goal is a 40% increase, or 454 EJ-focused ORD activities over FY 2023-2026.

(PM RD4) Percentage of ORD environmental justice-related research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						93	94	94	Percent	Above Target	No Trend Data
Actual						100					
Numerator						1			Products		
Denominator						1					

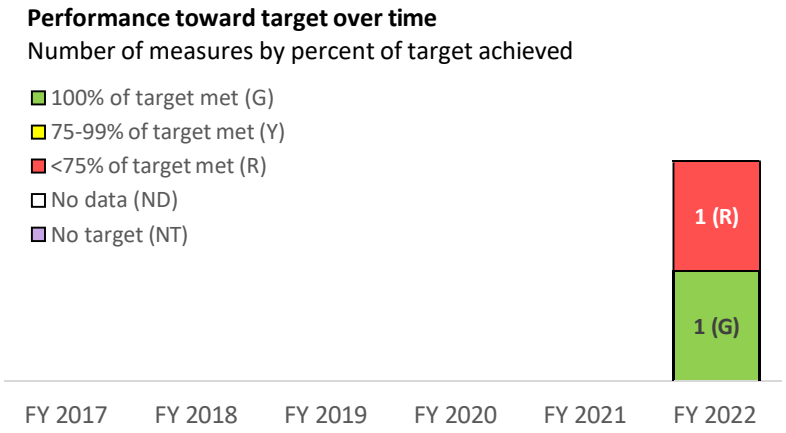
Key Takeaways:

- The usability of the environmental justice product scored significantly higher when compared to other ORD products that were assessed, likely due in part to the high degree of involvement the partner had during its development as stated by respondents in the survey.

- The environmental justice product was titled "*develop methods and tools to assess and manage inorganic soil contamination and quantify and understand contaminant bioavailability*." It provides the bio-accessibility data requested by EPA regional offices for arsenic and lead contaminated material near residential areas. This allows EPA to develop soil bioavailability methods, quantify inorganic soil contamination and bioavailability, and provide data for use in assessing and handling contaminated sites (research available at: https://pubs.acs.org/doi/pdf/10.1021/acs.jafc.9b06537 | https://pubs.acs.org/doi/pdf/10.1021/acs.est.0c06908 | https://www.sciencedirect.com/science/article/pii/S0883292720302493?ref=pdf_download&fr=RR-2&rr=76a9ce58ee6b6fb5).
- ORD will complete, and assess, higher numbers of environmental justice-related research products in future years.

Metric Details: Partner satisfaction is assessed through a robust survey process. The annual survey engages key users of ORD products. Survey respondents assess the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. This measure will assess a subset of ORD's research products specifically related to environmental justice

Objective 2.2: Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities—*Integrate environmental justice and civil rights in all the Agency's work to maximize benefits and minimize impacts to underserved and overburdened communities.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- Launched a national program office and for the first time issued a national program guidance dedicated to environmental justice and external civil rights.
- Identified a large pool of potential indicators for the at least ten indicators of disparity elimination. A workgroup is currently refining and focusing those ideas and is in position to begin stakeholder engagement.
- Initiated working groups related to rulemakings as the initial phase of ensuring environmental justice integration and civil rights compliance in significant EPA actions. Two tools (emerging best practices and an inventory of key characteristics of environmental justice analyses) have been internally released within EPA to support more consistent consideration of environmental justice and civil rights by rulemaking working groups.
- Established a holistic grant and technical assistance program to support community-based organizations, which will allow EPA to better align investments and efforts to better meet the needs of communities.
- For the first time, each EPA national program and regional office has developed an implementation plan to integrate environmental justice and civil rights requirements into its work. These plans cover a broad spectrum of policies and program implementation activities.

Challenges:

- EPA needs to develop new tools to support environmental justice process execution, stakeholder engagement, and coordination across EPA programs and regional offices.
- Managing environmental justice commitments across EPA programs and regional offices is complex, as is scoping the associated measures appropriately.

Long-Term Performance Goal: By September 30, 2026, reduce disparities in environmental and public health conditions represented by the indicators identified through the FY 2022-2023 Agency Priority Goal.

Annual performance goal that supports this long-term performance goal:

For FY 2022 and FY 2023, progress on this Long-Term Performance Goal will be tracked under the Agency Priority Goal "Deliver tools and metrics for EPA and its Tribal, state, local, and community partners to advance environmental justice and external civil rights compliance." FY 2024 measures and targets will be published in the FY 2025 Budget.

Long-Term Performance Goal: By September 30, 2026, 80% of significant EPA actions with environmental justice implications will clearly demonstrate how the action is responsive to environmental justice concerns and reduces or otherwise addresses disproportionate impacts.

Annual performance goals that support this long-term performance goal:

(PM EJCR08) Percentage of significant EPA actions with environmental justice implications that respond to environmental justice concerns and reduce or address disproportionate impacts.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							40	80	Percent	Above Target	No Trend Data
Actual											
Numerator									Actions		
Denominator											

Metric Details: This measure tracks the percentage of significant EPA actions with environmental justice implications that respond to environmental justice concerns and reduce or address disproportionate impacts. EPA will initially focus on significant rulemakings for this measure. In early FY 2023, EPA will establish what qualifies as "responsiveness to environmental justice" within the significant rulemaking and will develop a mechanism for tracking this measure within the EPA Action Management System (EAMS) database.

(PM EJCR09) Percentage of programs that have developed clear guidance on the use of justice and equity screening tools.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							50	75	Percent	Above Target	No Trend Data
Actual											
Numerator									Programs		
Denominator											

Metric Details: This measure tracks the percentage of EPA programs that have developed written guidance on how their programs use environmental justice screening tools. Guidance will be explicitly for use by staff of that program in headquarters offices and related regional divisions.

Long-Term Performance Goal: By September 30, 2026, all EPA programs that work in and with communities will do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.

Annual performance goals that support this long-term performance goal:

(PM EJCR10) Percentage of EPA programs and regions that work in and with communities that do so in ways that are community-driven, coordinated and collaborative, support equitable and resilient community development, and provide for meaningful involvement and fair treatment of communities with environmental justice concerns.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							25	50	Percent	Above Target	No Trend Data
Actual											
Numerator									Programs		
Denominator											

Metric Details: This measure tracks the percentage of EPA programs and regional offices that integrate key principles for community work (e.g., community-driven, coordinated, and collaborative) into core functions (e.g., regulatory development, permitting, enforcement). This approach will allow EPA to operate across programs to support projects based on community need rather than operating exclusively in programmatic silos. In early FY 2023, EPA will define what qualifies as working in alignment with this method.

(PM EJCR11) Number of established EJ collaborative partnerships utilizing key principles for community work (e.g., community-driven, coordinated, and collaborative).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							30	60	Partnerships	Above Target	No Trend Data
Actual											

Metric Details: This measure tracks the number of collaborative partnerships in communities supported and participated in by EPA, utilizing key principles for community work (e.g., community-driven, coordinated and collaborative). In early FY 2023, EPA's Office of Community Revitalization and Office of Environmental Justice and External Civil Rights will develop reporting criteria for the Agency on this measure.

Long-Term Performance Goal: By September 30, 2026, all EPA programs and regions will identify and implement areas and opportunities to integrate environmental justice considerations and achieve civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities.

Annual performance goals that support this long-term performance goal:

(PM EJCR12) Percentage of EPA programs and regions that have identified and implemented opportunities to integrate environmental justice considerations and strengthen civil rights compliance in their planning, guidance, policy directives, monitoring, and review activities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						15			Percent	Above Target	No Trend Data
Actual						100					
Numerator						18			Programs and Regions		
Denominator						18					

Key Takeaways:

- Eight out of eight FY 2023 – FY 2024 National Program Guidance documents (see: https://www.epa.gov/planandbudget/national-program-guidances-npgs) have multiple commitments to integrate environmental justice considerations into their work. Seven of eight also included commitments to strengthen external civil rights compliance.
- Each of the 10 EPA regional offices and 7 program offices (Office of Air and Radiation, Office of Chemical Safety and Pollution Prevention, Office of Enforcement and Compliance Assistance, Office of International and Tribal Affairs, Office of Land and Emergency Response, Office of Research and Development, and Office of Water) identified opportunities to integrate environmental justice considerations and strengthen civil rights compliance when developing FY 2023 Environmental Justice and Civil Rights Implementation Plans.

Metric Details: This measure tracks EPA's efforts to ensure that its national programs and regional offices are identifying opportunities to integrate environmental justice considerations and strengthen external civil rights compliance by recipients of EPA financial assistance, and then incorporating those opportunities and areas into strategic planning, guidance, policy directives, monitoring, and review activities. These opportunities might include regional office review of and recommendations on state permitting actions. This measure is retired after FY 2022, as each national program and regional office completed the task of identifying areas and opportunities for environmental justice considerations and civil rights compliance in their planning and policy directives.

(PM EJCR13) Percentage of EPA regions and national programs that have established clear implementation plans for Goal 2 commitments relative to their policies, programs, and activities and made such available to external partners.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							100	100	Percent	Above Target	No Trend Data
Actual											
Numerator									Regions and Programs		
Denominator											

Metric Details: This measure tracks the percentage of EPA national program and regional offices that publish clear written implementation plans or guidance on the concrete steps necessary to fully implement *FY 2022-2026 EPA Strategic Plan* Goal 2 commitments to integrate environmental justice and comply with civil rights throughout the implementation of their policies, programs, and activities. EPA program and regional offices will work from the Environmental Justice and External Civil Rights National Program

Guidance. In FY 2023, EPA programs and regional offices will begin implementing commitments from Goal 2 implementation plans that were drafted by the end of FY 2022. Each year, EPA national programs and regional offices will create updated implementation plans for Goal 2 commitments.

Long-Term Performance Goal: By September 30, 2026, all EPA programs and regions will implement program and region-specific language assistance plans.

Annual performance goal that supports this long-term performance goal:

(PM EJCR14) Percentage of EPA programs and regions that have implemented program and region-specific language assistance plans.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						30	35	60	Percent	Above Target	No Trend Data
Actual						0					
Numerator						0			Programs and Regions		
Denominator						23					

Key Takeaways:

- Drafted an initial guidance document for Limited English Proficiency (LEP) Plan development to be issued to EPA programs and regional offices when finalized.
- EPA is currently developing two model LEP plans, one for programs and one for regional offices, each of which can be used as an example when crafting their LEP plans.
- Added funding to the contract for programs and regional offices to use when providing language assistance services in planned activities.

Metric Details: This measure tracks the percentage of EPA national program and regional offices that develop and implement plans and procedures, consistent with EPA Order 1000.32, "Compliance with Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency." The Order outlines necessary steps the Agency will take to provide meaningful language access to persons with limited English proficiency. Program and regional office plans and procedures will ensure that every EPA community outreach and engagement activity considers the needs of community members with limited English proficiency and that EPA secures the language services necessary to provide "meaningful access" to EPA programs and activities for individuals with limited English proficiency. EPA Order 1000.32 is available at: https://www.epa.gov/sites/default/files/2017-03/documents/epa_order_1000.32_compliance_with_executive_order_13166_02.10.2017.pdf.

Long-Term Performance Goal: By September 30, 2026, all EPA programs and regions will implement program and region-specific disability access plans.

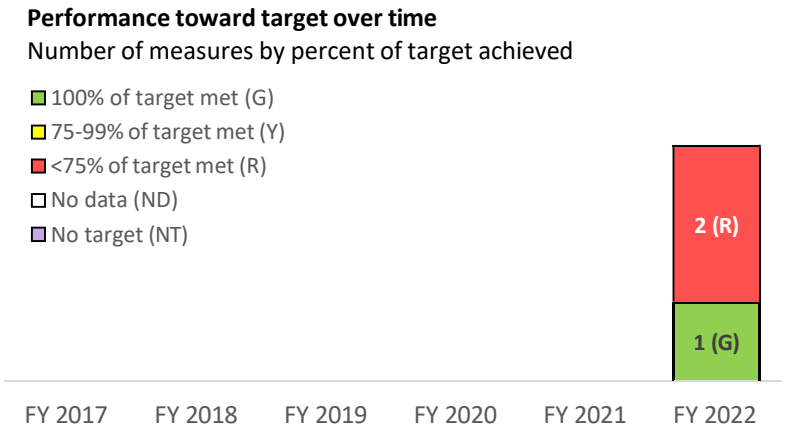
Annual performance goal that supports this long-term performance goal:

(PM EJCR15) Percentage of EPA programs and regions that have implemented program and region-specific disability access plans.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							No Target Established	25	Percent	Above Target	No Trend Data
Actual											
Numerator									Programs and Regions		
Denominator											

Metric Details: This measure tracks the percentage of EPA national program and regional offices that develop and implement plans and procedures, consistent with guidance and an EPA Order to be issued in FY 2023 to ensure meaningful access to EPA programs and activities for persons with disabilities. Program and regional office plans and procedures will ensure every EPA community outreach and engagement activity considers the needs of persons with disabilities and that EPA provides persons with disabilities reasonable accommodations and appropriate auxiliary aids and services where necessary so they may effectively participate in EPA program and activities.

Objective 2.3: Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns—*Strengthen enforcement of and compliance with civil rights laws to address the legacy of pollution in overburdened communities.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- Exceeded targets for information sharing sessions and outreach and technical assistance events held with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.
- Developed a Process for Prioritizing and Selecting Affirmative Compliance Reviews. EPA initiated one compliance review in FY 2022.

Challenges:

- Increased workload from the number of external civil rights complaints filed has delayed the initiation of additional compliance reviews.
- Due to sequencing challenges and workload issues EPA was delayed in initiating the revised Form 4700-4 review process, upon which the post-award audits of the Form submissions are contingent. As a result, audits are delayed until at least 2nd quarter FY 2023.

Long-Term Performance Goal: By September 30, 2026, initiate 45 proactive post-award civil rights compliance reviews to address discrimination issues in environmentally overburdened and underserved communities.

Annual performance goal that supports this long-term performance goal:

(PM EJCR16) Number of proactive post-award civil rights compliance reviews initiated to address discrimination issues in environmentally overburdened and underserved communities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						3	6	12	Compliance Reviews	Above Target
Actual			1	1	0	1				

Key Takeaways:

- Published the Process and Criteria for Prioritizing and Selecting Affirmative Compliance Reviews on January 6, 2022 (see: https://www.epa.gov/system/files/documents/2022-01/01-06-20-ecrco-process-for-prioritizing-and-selecting-affirmative-compliance-reviews.pdf).
- Initiated a compliance review pursuant to this process on March 18, 2022. EPA was unable to initiate additional audits in FY 2022 due to resource and workload challenges.

Metric Details: This measure tracks EPA's civil rights enforcement efforts through annual affirmative civil rights compliance reviews of EPA funding recipients targeting critical environmental health and quality of life impacts in overburdened communities.

Long-Term Performance Goal: By September 30, 2026, complete 305 audits to ensure EPA financial assistance recipients are complying with nondiscrimination program procedural requirements.

Annual performance goal that supports this long-term performance goal:

(PM EJCR17) Number of audits completed to ensure EPA financial assistance recipients are complying with federal civil rights laws.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						25	30	50	Audits	Above Target
Actual					0	0				

Key Takeaways:

- Sent notice to recipients of EPA financial assistance of EPA's revised Form 4700-4 pre-award compliance review process on July 1, 2022. The revised form is effective January 1, 2023.
- Due to sequencing challenges and workload issues, EPA was delayed in initiating the revised Form 4700-4 review process, upon which the post award audits of the Form submissions are contingent. As a result, audits are delayed until at least 2nd quarter FY 2023.

Metric Details: This measure tracks post-award audits of Form 4700-4 forms to ensure EPA financial assistance recipients have in place foundational nondiscrimination program requirements as required by federal law and EPA's nondiscrimination regulation.

Long-Term Performance Goal: By September 30, 2026, complete 84 information sharing sessions and outreach and technical assistance events with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.

Annual performance goal that supports this long-term performance goal:

(PM EJCR18) Number of information sharing sessions and outreach and technical assistance events held with overburdened and underserved communities and environmental justice advocacy groups on civil rights and environmental justice issues.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						8	90	100	Sessions and Events	Above Target
Actual					40	30				

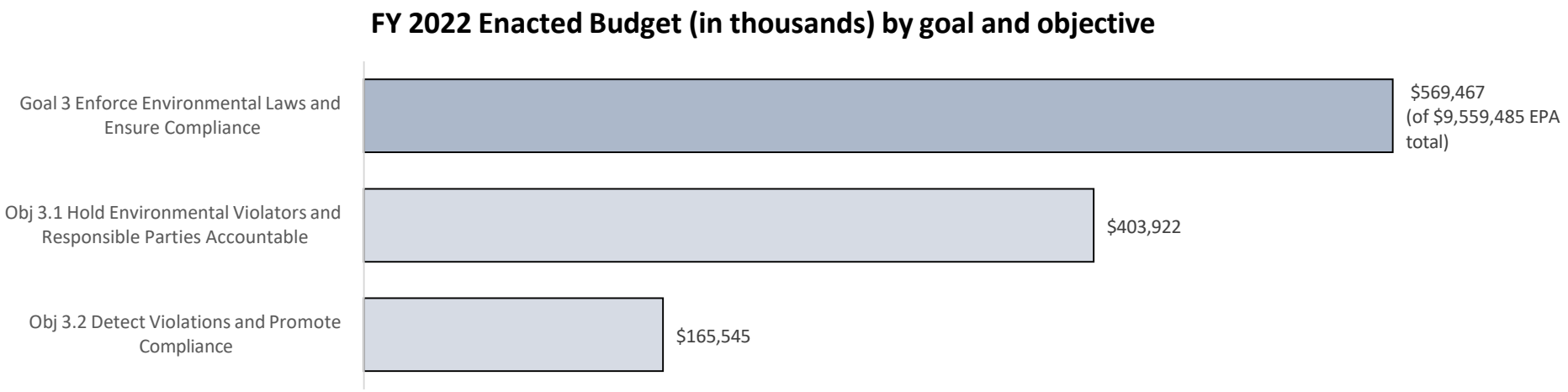
Key Takeaways:

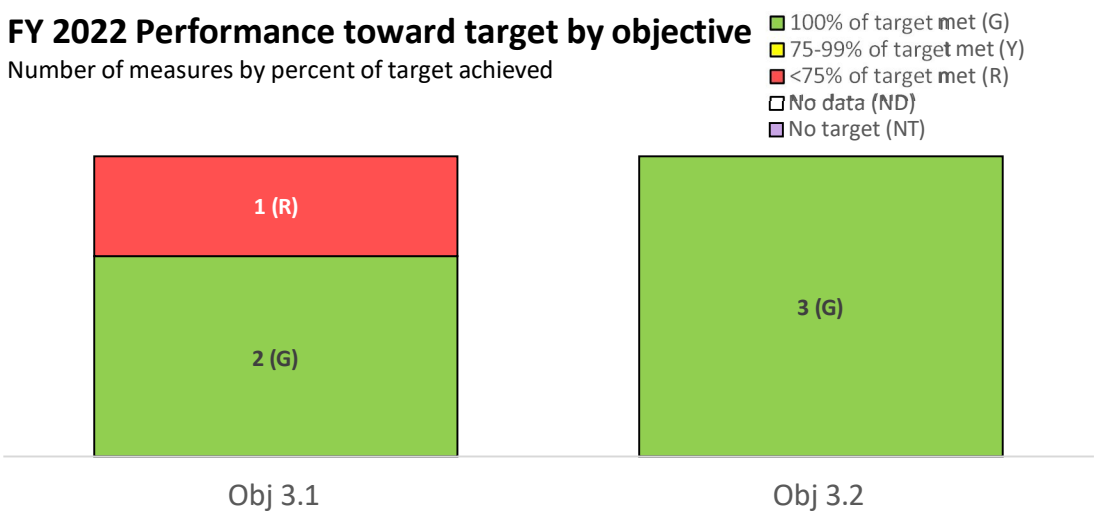
- Facilitated engagements with stakeholders and advocacy groups on strengthening external civil rights and carrying out EPA's commitments to implement environmental justice and civil rights under Goal 2 of the *FY 2022-2026 EPA Strategic Plan*.
- Facilitated nine community engagement calls to share information on a variety of Agency and federal initiatives that could be of benefit for communities with environmental justice concerns, and in many cases, to gather feedback and answer questions about these initiatives.
- Facilitated 16 educational sessions with communities and advocacy groups on topics such as environmental justice grants management, using EJScreen, EJ 101, EJ Academy modules, and environmental and public health topics such as air quality/air monitoring, clean drinking water, and using safe and effective cleaning products for COVID-19.

Metric Details: This measure tracks EPA's Office of Environmental Justice and External Civil Rights engagements with overburdened and underserved communities and environmental justice advocacy groups on civil rights and/or environmental justice issues with impacts on communities with environmental justice concerns. This outreach will help the Agency to better identify concerns and priorities for EPA's civil rights and environmental justice work. This also allows for increased capacity-building and meaningful involvement opportunities for communities with environmental justice concerns.

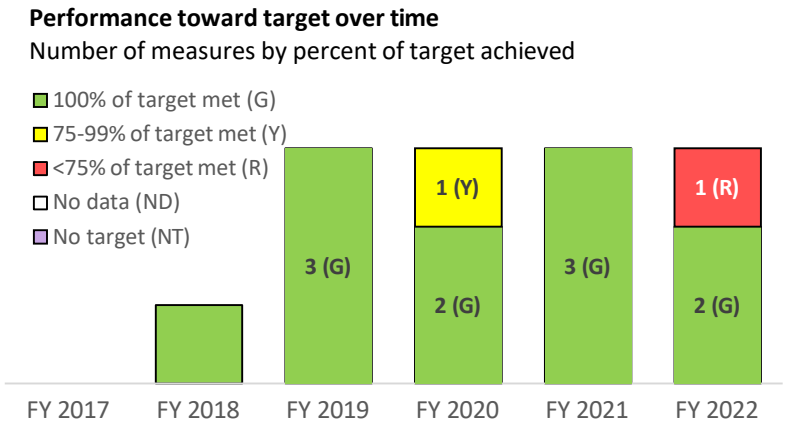
Goal 3 at a Glance

Enforce Environmental Laws and Ensure Compliance: Improve compliance with the nation's environmental laws and hold violators accountable.





Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable—*Use vigorous and targeted civil and criminal enforcement to ensure accountability for violations and to clean up contamination.*



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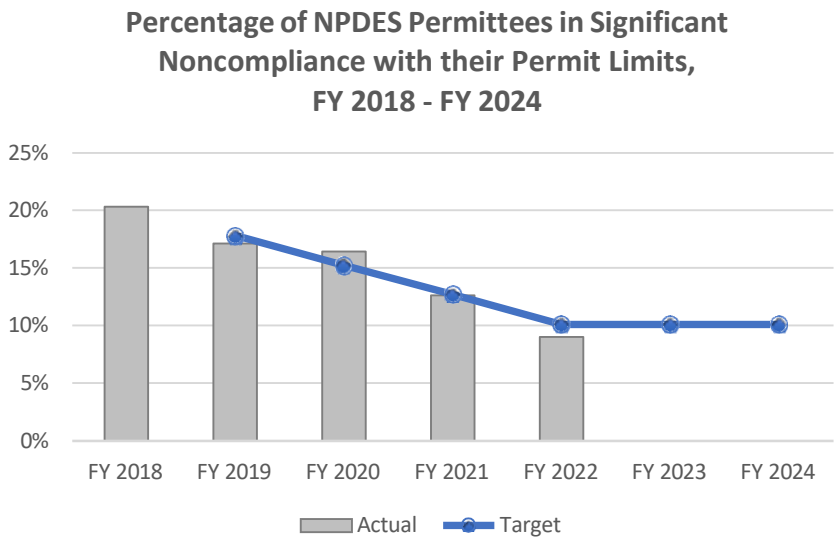


Summary of progress toward strategic objective:

Strengthened Enforcement to Advance Environmental Justice

- 86 drinking water orders to public water systems (15 were emergency orders).
- Informed >17M people across 10 communities about how to report violations and provided crime victim support on the "Nextdoor" social media platform, leading to a 51% increase in criminal leads from the same period in FY 2021.

Combatting Climate Change and integrating climate consideration in policies

- Formed hydrofluorocarbon (HFC) task force with Customs and Border Protection to interdict HFC imports, and issued 14 Notices of Violation to HFC importers that failed to comply with GHG Reporting Program obligations.
- Incorporated in settlement talks the impact of climate change on compliance. E.g., an evaluation showing increased frequency and magnitude of Combined Sewer Overflows, from increased rainfall and flooding, supported injunctive relief (IR) requirements during enforcement case negotiations.

Strong Enforcement Results

- Civil actions: $4.3B in IR, $154M in penalties, 195M lbs. of pollution reduced.
- Restored the ability to include Supplemental Environmental Projects in settlement agreements, in appropriate circumstances.
- Monitored open consent decrees of >$78B of environmental control obligations.
- Reduced Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance to 9.0%, surpassing target of 10.1%.
- Criminal cases: secured $149M in fines and restitution, ~$8M in court-ordered environmental projects and forfeited proceeds of $214M (including $203M against Fiat Chrysler for conspiracy to cheat emissions tests). Obtained 21 year of incarceration.
- Superfund response/cost recovery commitments of ~$575M (including $35M from redevelopers); oversaw 174 federal facility National Priorities List sites.

Challenges:

- Delays in promotions and new hire processing leave vacancies for long periods, reducing inspectors in the field and hindering knowledge transfer before departures.
- EPA cannot take enforcement action against facilities unless they are violating a law or present an imminent and substantial endangerment.
- No authority to address the cumulative impacts of facilities permitted and re-permitted in communities with environmental justice concerns.
- Complex cases (e.g. involving national companies or extremely complex facilities) often take longer to resolve.

Long-Term Performance Goal: By September 30, 2026, reduce to not more than 93 the number of open civil judicial cases more than 2.5 years old without a complaint filed.

Annual performance goals that support this long-term performance goal:

(PM 436) Number of open civil judicial cases more than 2.5 years old without a complaint filed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target			129	120	99	99	96	95	Cases	Below Target
Actual			94	74	66	65				

Key Takeaways:

- Ongoing, close cooperation among EPA headquarters, regional offices, and the Department of Justice (DOJ) continues to move the most challenging judicial cases toward resolution in a more timely manner, thereby returning violators to compliance more quickly and supporting increases in pounds of pollutants reduced and pounds of waste managed. EPA headquarters, regional offices, and DOJ are also collaborating on best practices to ensure timely conclusion of cases.

Metric Details: This measure tracks the number of all open civil judicial cases that are more than 2.5 years old without a complaint filed, excluding Superfund, bankruptcy, collection action, and access order cases. By measuring and highlighting the amount of time from referral of an enforcement case to DOJ to its conclusion, the Agency hopes to reduce the time by which violation(s) alleged in the case are corrected. Data are tracked in the Integrated Compliance Information System (ICIS). The average time from referral to complaint for a complaint filed between FY 2013 and FY 2017 was 2.5 years. The baseline for this measure is 129 cases that were more than 2.5 years old without a complaint filed as of June 30, 2018.

(PM 446) Quarterly percentage of Clean Water Act National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target			17.8	15.2	12.7	10.1	10.1	10.1	Percent	Below Target
Actual		20.3	17.1	16.4	12.6	9.0				
Numerator		8,310	7,015	6,941	5,330	3,942			Permittees	
Denominator		40,944	41,085	42,334	42,429	44,015				

Key Takeaways:

- Reduced the NPDES significant noncompliance (SNC) rate to 9% from the FY 2018 baseline of 20.3%, surpassing the target of 10.1% set under the *FY 2018-2022 EPA Strategic Plan*.
- Through the SNC National Compliance Initiative, EPA fully utilized its compliance toolbox. This included developing a new mechanism for prioritizing NPDES noncompliance to help EPA and states focus attention on the worst violators, and conducting quarterly meetings with all 47 NPDES authorized states focused on data sharing and ways to reduce SNC challenges.
- These results would not have been possible without the effective EPA-state partnership, and the commitment that states made to the SNC National Compliance Initiative. Furthermore, a close working partnership with the Association of Clean Water Administrators played a key role in obtaining input from the states to help plot a successful and collaborative path for the initiative.

Metric Details: This measure tracks the NPDES SNC/Category 1 noncompliance rate among individually permitted major and non-major (minor) NPDES permittees in the last quarter of the year. NPDES SNC/Category 1 noncompliance identifies a specific level of violation, based on duration, severity, and type of violation, and is assessed quarterly. The numerator counts major and minor permittees that were in SNC/Category 1 noncompliance in the last quarter of the fiscal year. The denominator includes all active individually-permitted NPDES permittees (except permittees for which there is insufficient permit data/compliance tracking status in ICIS-NPDES for the data system to evaluate SNC status). The FY 2018 baseline of 20.3% represents an average based on four quarters of data.

(PM 434) Millions of pounds of pollutants and waste reduced, treated, or eliminated through concluded enforcement actions.

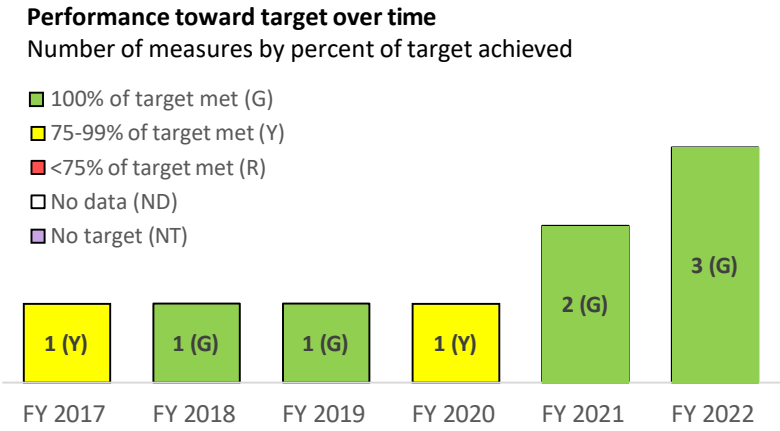
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target		325	325	325	325	325	325	325	Millions of Pounds	Above Target
Actual	461	810	347	2,058	7,864	195				

Key Takeaways:

- Results in any given year are dependent on actual case outcomes, which are variable and difficult to predict. Annual totals are often influenced by a few large cases (e.g., the US Magnesium case in FY 2021 accounted for 90% of the total pounds of pollutants reduced, treated, or eliminated that year). The FY 2022 results are lower than the target because there were few large pollution reduction cases settled this year.
- Targets for this measure are estimates based on cases in development and past results.

Metric Details: This measure combines estimated pounds of air, water, hazardous and non-hazardous waste, and toxics/pesticides pollutants reduced, treated, or eliminated through concluded enforcement actions.

Objective 3.2: Detect Violations and Promote Compliance—*Ensure high levels of compliance with federal environmental laws and regulations through effective compliance tools -- including inspections, other monitoring activities, and technical assistance supported by evidence and advanced technologies.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

Inspections

- Increased the number of inspections to ~5,900, an 84% increase over FY 2021.
- Conducted ~57% of inspections in communities with environmental justice concerns, up from 29% in FY 2021.
- Bolstered EPA's inspector cadre, focused on 12 priority areas including increased on-the-job training, employee recognition, equipment investment, and new promotion potential.

Community Engagement

- Released ECHO Notify, providing local communities with email alerts when a local facility has a violation or enforcement action. 1,700 subscribers received >132,000 alerts.
- Completed the Refinery Benzene Fenceline Dashboard allowing public users to identify high benzene readings in fenceline communities.

Compliance Assistance

- Compliance Advisors assisted and trained ~209 small Public Water Systems and 64 wastewater treatment facilities in areas with environmental justice concerns.
- Expedited return to compliance via Audit Policies; received 597 self-disclosures or new owner audit agreements covering 918 facilities.
- Issued five Compliance Advisories/Enforcement Alerts to assist with compliance, including potential noncompliance associated with source water changes at public water systems, often affecting overburdened communities (e.g., Flint, MI and Jackson, MS).

Evidence-Based Enforcement

- Developed Compliance Learning Agenda to identify evidence-based enforcement tools having the biggest impact through research partnership projects.
- Advanced EPA Learning Agenda priority area for reducing drinking water noncompliance by synthesizing existing tools that identify systems of concern and confirming key characteristics important to maintaining or improving compliance.

Challenges:

- Even with increased hiring, it takes time to train and bring new inspectors up to speed.
- Despite efforts, thousands of community water systems violate health-based standards each year, exposing millions to potential health risks. The extent of noncompliance is probably greater than reported. Many states and tribes lack capacity to address violations.
- EPA, tribes, states, and territories often face challenges in keeping up with emerging technologies. Advances in monitoring and information technology offer great opportunities for improving the ability to ensure compliance.

Long-Term Performance Goal: By September 30, 2026, send 75% of EPA inspection reports to facilities within 70 days of inspection.

Annual performance goal that supports this long-term performance goal:

(PM 444) Percentage of EPA inspection reports sent to the facility within 70 days of inspection.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target					75	75	75	75	Percent	Above Target	
Actual				83	85	83					
Numerator				4,177	1,940	4,362			Reports		
Denominator				5,037	2,287	5,237					

Key Takeaways:

- Ongoing cooperation between EPA headquarters and regional offices continues to ensure that the majority of inspection reports completed by EPA are sent to facilities within 70 calendar days of an inspection.
- As EPA inspectors have resumed a more active field presence post-pandemic and have conducted more on-site inspections, there was an expected decrease in the completion of inspection reports within the timeframe as compared with FY 2021 results; however, the results are still well above the target.

Metric Details: This measure tracks the percentage of inspection reports completed by EPA and sent to the facility within 70 calendar days of an inspection. Improving the timeliness of EPA inspection reports allows facilities to more quickly address compliance issues. The 75% goal recognizes that it may not always be possible or appropriate to provide an inspection report within 70 days because of the nature and complexity of the compliance and enforcement program.

Long-Term Performance Goal: By September 30, 2026, conduct 55% of annual EPA inspections at facilities that affect communities with potential environmental justice concerns.

Annual performance goal that supports this long-term performance goal:

(PM 450) Percentage of EPA inspections at facilities affecting communities with potential environmental justice concerns.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						45	50	50	Percent	Above Target	No Trend Data
Actual						57					
Numerator						3,333			Inspections		
Denominator						5,861					

Key Takeaways:

- EPA conducted 57% of all inspections at facilities affecting communities with potential environmental justice concerns, surpassing the target of 45%. For the first time, using the recently enhanced ICIS, EPA is able to track inspections in communities designated as having environmental justice concerns. ICIS and internal tools have been enhanced to make this inspection data easily accessible to all Agency staff and management, ensuring that communities most in need of environmental protection are receiving appropriate attention and review.

Metric Details: This measure tracks the percentage of EPA on-site inspections conducted by credentialed EPA inspectors at facilities affecting communities with potential environmental justice concerns. The total includes facilities with one environmental indicator triggered at the 80th percentile at the national level (80th percentile/one index trigger) on EPA's environmental justice mapping and screening tool EJScreen, and other areas flagged through an enhanced review. The baseline for this measure is 27% based on an average of FY 2017- FY 2019 results (pre-COVID levels).

Other Core Work

Annual performance goal:

(PM 409) Number of federal on-site compliance monitoring inspections and evaluations and off-site compliance monitoring activities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	14,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	Inspections & Evaluations	Above Target
Actual	11,800	10,600	10,300	8,500	10,800	13,900				

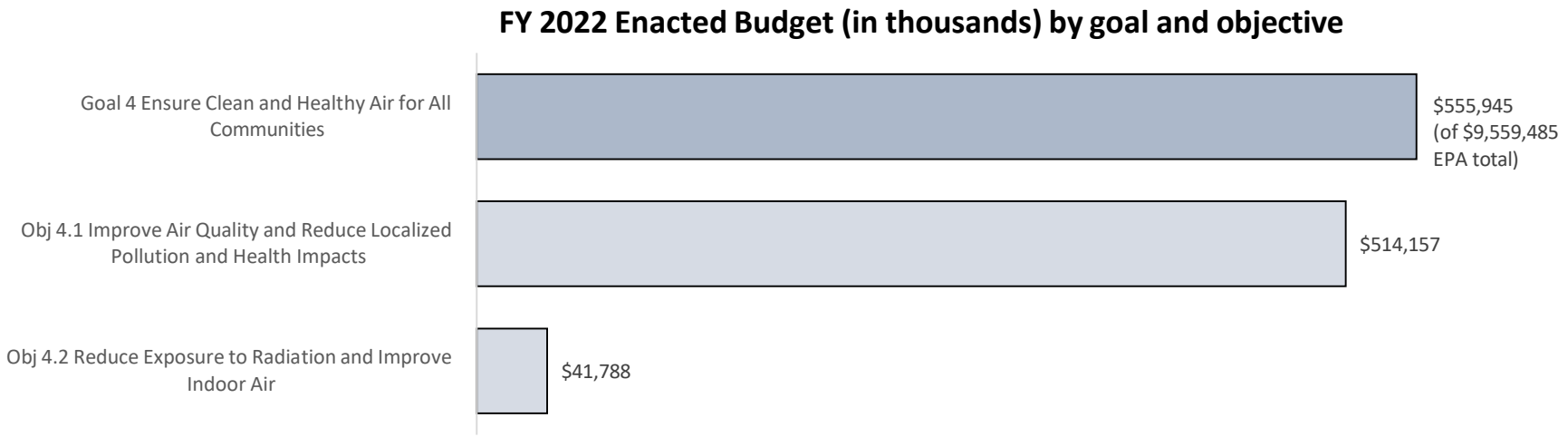
Key Takeaways:

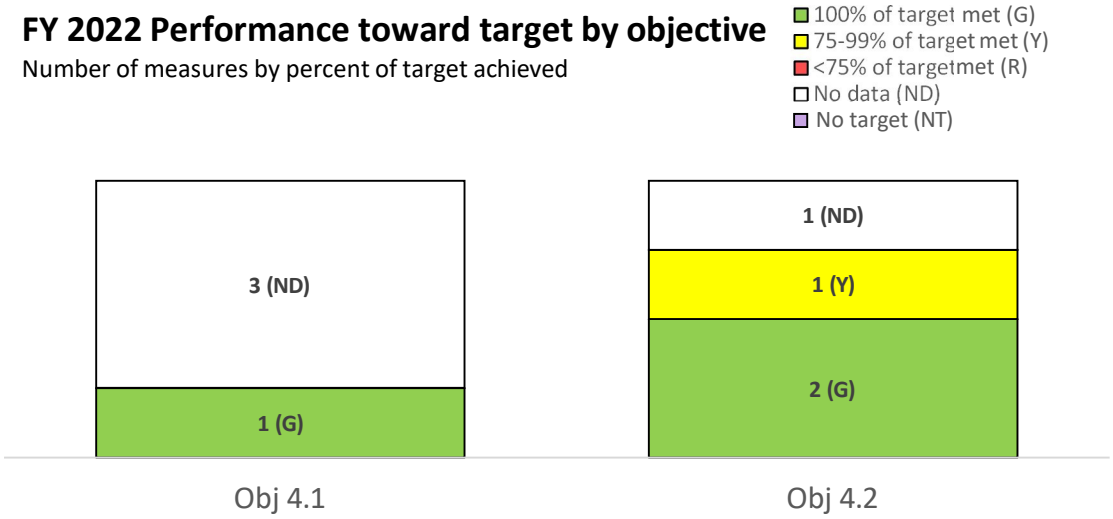
- EPA conducted approximately 5,900 on-site inspections (2,700 more than in FY 2021) and 8,000 off-site compliance monitoring activities.
- With the COVID-19 pandemic slowing, EPA was able to conduct more on-site inspections, while still utilizing off-site compliance monitoring activities where appropriate (for example: review of responses to information requests to assess compliance; review of facility monitoring reports and/or sampling data). The return to in-person visits on-site allowed the Agency to exceed the annual target and increase total compliance monitoring activities by more than 3,000 over the FY 2021 total.

Metric Details: This measure tracks EPA inspections and off-site compliance monitoring activities to determine whether a facility or group of facilities is in compliance with applicable law.

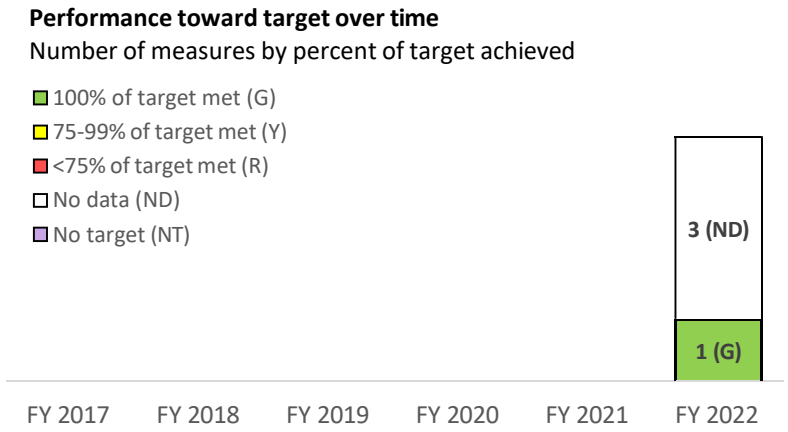
Goal 4 at a Glance

Ensure Clean and Healthy Air for All Communities: Protect human health and the environment from the harmful effects of air pollution.

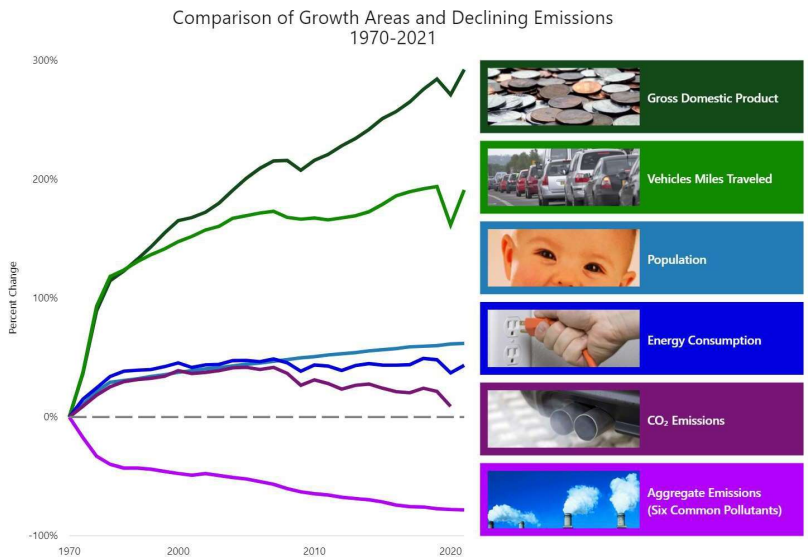




Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts—*Reduce air pollution on local, regional, and national scales to achieve healthy air quality for people and the environment.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Issued annual Air Trends Report showing combined emissions of six key pollutants dropped by 78%, while the U.S. economy nearly tripled between 1970-2021. The percentage of air quality improvement in counties not meeting current National Ambient Air Quality Standards (NAAQS) is 10%, from a 2016 baseline (based on 2021 data). The percentage of people with low socioeconomic status (SES) living in areas where the air quality meets the fine particulate matter ($PM_{2.5}$) NAAQS has improved from 43% (2006-2008 data) to 85% (2019-2021 data) (see: https://gispub.epa.gov/air/trendsreport/2022/#home).
- Released AirToxScreen (with 2017 and 2018 emissions data) – the Agency's new and improved air toxics risk screening tool, which is part of EPA's updated approach that provides updated data and risk analyses on an annual basis to allow communities to more readily identify existing and emerging air toxics issues (see: https://www.epa.gov/AirToxScreen).
- Made significant progress in reducing emissions from power plants through the Acid Rain Program (ARP) and Cross-State Air Pollution Rule (CSAPR). As of 2021, the programs have delivered a 94% reduction of sulfur dioxide (SO_2) and an 85% reduction in nitrogen oxide (NO_x) emissions from 1990 levels. For FY 2021, power plants achieved 100% compliance in the ARP and CSAPR allowance trading programs.
- Released new total nitrogen deposition maps showing significant reductions in oxidized nitrogen deposition, consistent with NO_x emissions reductions, showing a ~40% increase in reduced forms of nitrogen from 2000-2020 (see: https://www.epa.gov/report-environment/ interactive-maps).
- Continued to make progress toward U.S. commitments as a Party to the Montreal Protocol, whereby the U.S. must incrementally decrease hydrochlorofluorocarbons (HCFC) consumption and production, culminating in a complete HCFC phaseout in 2030.
- Established the Diesel Emissions Reduction Act (DERA) and Bipartisan Infrastructure Law (BIL) Clean School Bus programs as Justice40 covered programs, engaging with Agency efforts to develop guidance, best practices, and report on benefits going to disadvantaged communities.

Challenges:

- Insufficient resources for federal implementation of the NAAQS and other Clean Air Act (CAA) requirements at the headquarters and regional level continues to pose program delivery challenges such as timely processing of State Implementation Plans (SIPs).
- Retirements and normal attrition of experienced staff, many with specialized technical expertise, along with insufficient contract dollars pose ongoing challenges.

Long-Term Performance Goal: By September 30, 2026, reduce ozone season emissions of nitrogen oxides (NO_x) from electric power generation sources by 21% from the 2019 baseline of 390,354 tons.

Annual performance goal that supports this long-term performance goal:

(PM NOX) Tons of ozone season NO_x emissions from electric power generation sources.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						355,000	344,000	332,000	Tons	Below Target
Actual	464,999	443,764	389,170	341,082	359,124	326,722				

Key Takeaways:

- Over the last two decades, ozone season NO_x emissions have declined dramatically under the Acid Rain Program (ARP), NO_x Budget Trading Program (NBP), Clean Air Interstate Rule (CAIR), and Cross-State Air Pollution Rule (CSAPR) programs.
- Between the 2021 and 2022 ozone seasons, national ozone season NOx emissions decreased by 9% from 359 to 327 thousand tons, even with a small rebound (1%) in overall generation. Within the 12 state Revised CSAPR Update (RCU) region, in which the rule required additional emissions reductions of NO_x from power plants, ozone season NO_x emissions decreased by 21% from 114 to 90 thousand tons.

Metric Details: This measure tracks the ozone season NO_x emissions from sources in four of EPA's nationwide and multi-state air pollution control programs: an annual NO_x trading program and two ozone season NO_x trading programs operated by EPA on behalf of 27 states in the eastern U.S. under Title I of the CAA, as well as a national NO_x emissions reduction program for the power sector operated by EPA under Title IV of the CAA, the Acid Rain Program. NO_x are precursors for fine particulate matter ($PM_{2.5}$) and ground-level ozone (O_3). Researchers have associated $PM_{2.5}$ and O_3 exposure with adverse health effects in toxicological, clinical, and epidemiological studies. Lowering exposure to $PM_{2.5}$ and O_3 contributes to significant human health benefits. The ozone season corresponds to the warm summer months when ozone formation is highest (May 1 – September 30). Reductions in NO_x emissions during the ozone season help areas attain ambient ozone standards. For more information, see: https://www3.epa.gov/airmarkets/progress/reports/index.html.

Long-Term Performance Goal: By September 30, 2026, improve measured air quality in counties not meeting the current National Ambient Air Quality Standards (NAAQS) from the 2016 baseline by 10%.

Annual performance goal that supports this long-term performance goal:

(PM NAAQS) Percentage of air quality improvement in counties not meeting current NAAQS.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						7	8	9	Percent	Above Target
Actual	3	3	7	8	10	Data Avail 11/2023				

Key Takeaways:

- Measured air quality for criteria pollutants continues to show steady improvement. In FY 2021 (latest available data), the decline in measured aggregate air pollution levels was in large part due to the implementation of state control plans and federal measures. The biggest reductions between 2020 and 2021 were in levels of particulate matter (PM) and SO_2. As a result of improved air quality, 12 areas were redesignated from nonattainment to attainment in FY 2022.

- The number of days reaching *Unhealthy for Sensitive Groups* or above for the Air Quality Index (based on ozone and PM data for 35 U.S. cities) for the past two years has held steady at about half of what it was 10 years ago and about a quarter of what it was 20 years ago.
- The effects of wildfires are a significant challenge for meeting these targets. Smoke from wildfires contains harmful air pollutants and can have a notable impact on air quality trends. For example, 2020 was a large wildfire year in parts of the U.S. (e.g., the largest year in California history), and 2020 $PM_{2.5}$ and PM_{10} levels were noticeably higher compared to 2019 levels. On the other hand, in 2021, more than 2 million fewer acres were burned compared to 2020, and 2021 PM levels were noticeably lower compared to 2020 levels.

Metric Details: This measure shows progress in reducing pollutant concentrations in counties not meeting one or more current NAAQS relative to the 2016 calculated baseline. The CAA requires EPA to set the NAAQS for six "criteria" pollutants considered harmful to public health and the environment. These national standards form the foundation for air quality management. The measure is presented as the aggregate percentage change in design value concentrations – a statistic that describes the air quality status of a given location relative to the NAAQS – since the baseline year. The aggregate percentage change is weighted by the number of counties violating for each pollutant in the baseline year so more weight is given to pollutants with more violating counties. Four criteria pollutants (ozone, $PM_{2.5}$, PM_{10}, SO_2, and lead) are part of this measure. All counties met the NAAQS for carbon monoxide and nitrogen dioxide in 2016, so those two criteria pollutants are not considered in this measure.

Long-Term Performance Goal: By September 30, 2026, strive to ensure all people with low socio-economic status (SES) live in areas where the air quality meets the current fine particle pollution ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS).

Annual performance goal that supports this long-term performance goal:

(PM NAAQS2) Percentage of people with low SES living in areas where the air quality meets the $PM_{2.5}$ NAAQS.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						90	93	97	Percent	Above Target	
Actual	86	82	82	81	85	Data Avail 11/2023					
Numerator	54,121,495	52,044,172	51,560,102	48,678,558	50,304,779				People		
Denominator	62,631,596	63,150,683	62,687,368	60,053,454	59,241,268						

Key Takeaways:

- Measured air quality for $PM_{2.5}$ continues to show steady improvement. In FY 2021, the number of people with low SES living in areas with air quality that met the $PM_{2.5}$ NAAQS increased by almost 2 million, and the percentage of such people in these areas was 85%. This air quality improvement can be attributed to implementation of state control plans and federal measures.
- The effects of wildfires are a significant challenge for meeting these targets. Smoke from wildfires contains harmful air pollutants and can have a notable impact on air quality trends.
- Another challenge with trying to reach 100% is that certain $PM_{2.5}$ nonattainment areas have long-standing, very difficult air quality problems, such as Fairbanks, AK and the San Joaquin Valley in California. Bringing those areas into attainment will require additional, more aggressive control measures.

Metric Details: This measure tracks the percentage of people with low SES, defined as two times the poverty level, living in counties with monitors measuring concentrations of $PM_{2.5}$ that meet the 2012 annual and 2006 24-hour $PM_{2.5}$ NAAQS. Long- and short-term exposures to fine particles can harm people's health, leading to heart attacks, asthma attacks, and premature death. In the baseline period of 2006-2008, 43% of the low SES population lived in counties that met both $PM_{2.5}$ NAAQS. Changes since that time reflect the effectiveness of strategies designed to reduce fine particle pollution.

Long-Term Performance Goal: By September 30, 2026, ensure U.S. consumption of hydrochlorofluorocarbons (HCFCs) is less than 76.2 tons per year of ozone depletion potential.

Annual performance goal that supports this long-term performance goal:

(PM HCFC) Remaining U.S. consumption of hydrochlorofluorocarbons (HCFCs), chemicals that deplete the Earth's protective ozone layer, in ozone depletion potential (ODP)-weighted metric tons.

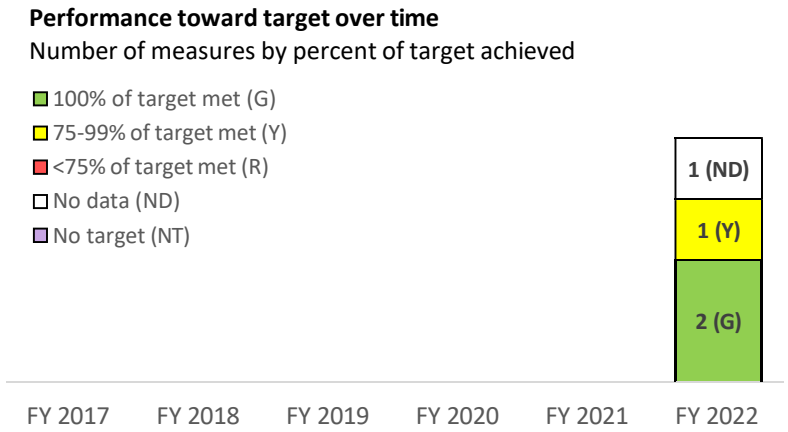
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						76.2	76.2	76.2	Metric Tons	Below Target
Actual	374.6	434.1	224.2	-110.8	20.8	Data Avail 11/2023				

Key Takeaways:

- The FY 2020 result is negative because exports and destruction together significantly exceeded production and imports in calendar year 2020.
- The measure demonstrates how the U.S. continues to meet its obligations as a Party to the Montreal Protocol.

Metric Details: This measure tracks the United States' annual consumption of HCFCs in ODP-weighted tons. Consumption means the amount of HCFC produced, plus imports, minus exports, minus destruction, and minus amounts produced or imported for transformation. As a Party to the Montreal Protocol, the U.S. must incrementally decrease HCFC consumption and production, culminating in a complete HCFC phaseout in 2030. The current annual consumption cap of the U.S. for all HCFCs is 76.2 ODP-weighted metric tons, down from the 2015-2019 target of 1,520 ODP-weighted metric tons per year. For more information, see: https://www.epa.gov/ods-phaseout/phaseout-class-ii-ozone-depleting-substances.

Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air—*Limit unnecessary radiation exposure and achieve healthier indoor air quality, especially for vulnerable populations.*



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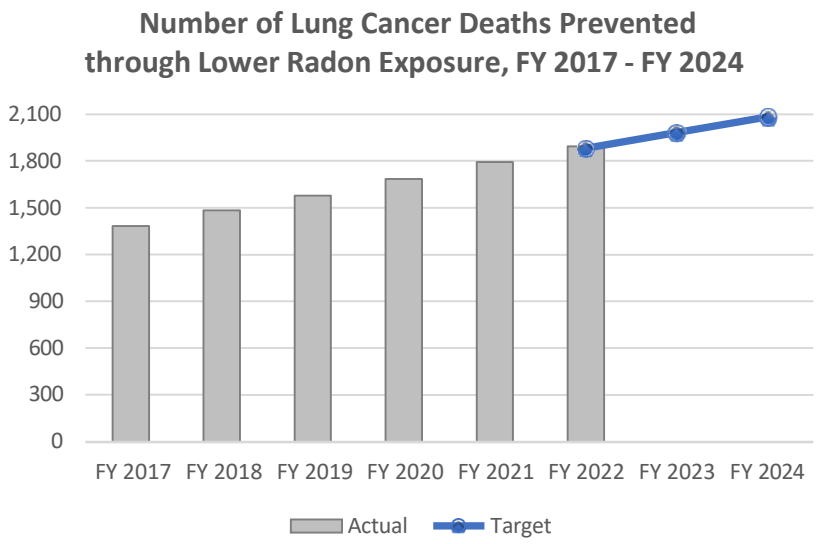


Summary of progress toward strategic objective:

- Released, with the American Lung Association, the *National Radon Action Plan 2021–2025: Eliminating Preventable Lung Cancer from Radon in the United States by Expanding Protections for All Communities and Buildings* (see: http://radonleaders.org/resources/nationalradonactionplan). This is the third installment of a strategy to increase action on radon and sets a goal for the U.S. to find, fix and prevent high indoor radon levels in 8M buildings by 2025 and prevent at least 3,500 lung cancer deaths per year. EPA exceeded this year's target by preventing 1,894 lung cancer deaths.
- Provided knowledge sharing and capacity building through technical assistance, resources, and events to support a network of more than 1,100 asthma programs.
- Continued to work toward improving adoption of cleaner cookstoves and heating technologies around the world through international and domestic partnerships and active technical assistance. As of FY 2022, 67 countries have included clean cooking goals in their Nationally Determined Contributions (NDC) to the Paris Agreement.
- Continued to demonstrate radiological emergency response readiness and delivered exposure rate measurement capability to 90 fixed RadNet monitors.
- Initiated contingency planning (for example, developing public communications materials for use by the U.S. government related to radiation contamination and public health and safety for U.S. citizens), coordinating closely with federal partners in light of the war in Ukraine and its potential for impacts on nuclear facilities.
- Participated in planning and execution of the 2022 Cobalt Magnet full-scale radiological emergency response exercise in Austin, TX. Exercised capabilities and plans by integrating with other federal departments and State of Texas agencies into a single incident response organization and executing their capabilities consistent with the federal government's National Response Preparedness Goal: Protection, Mitigation, Response, and Recovery.

Challenges:

- With the COVID-19 pandemic, there has been a surge in indoor air quality (IAQ) interest and action by the public, congressional, administration and other stakeholders, and EPA needed to provide further IAQ support which has strained available resources.
- Limited resources to address radiation monitoring (RadNet) information technology and radiochemistry lab modernization efforts and actions to improve security posture pursuant to Agency requirements as identified by past audits and inspections.
- EPA's critical suite of field radiological equipment and instrumentation needs updating/replacement in order to ensure the highest level of radiological emergency preparedness (2008 was last modernization effort).

Long-Term Performance Goal: By September 30, 2026, prevent 2,250 lung cancer deaths annually through lower radon exposure as compared to the FY 2020 baseline of 1,684 prevented lung cancer deaths.

Annual performance goal that supports this long-term performance goal:

(PM LCD) Number of lung cancer deaths prevented through lower radon exposure.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						1,881	1,981	2,083	Deaths Prevented	Above Target
Actual	1,383	1,482	1,578	1,684	1,795	1,894				

Key Takeaways:

- EPA exceeded its FY 2022 target and is making progress toward preventing 2,250 lung cancer deaths by 2026. This progress is the result of nationwide efforts to mitigate homes with elevated levels of radon and to build radon-resistant features into the construction of new homes.
- The 2021-2025 National Radon Action Plan (http://radonleaders.org/resources/nationalradonactionplan) will further support increased efforts to find, fix and prevent high indoor radon levels in homes and buildings and prevent annual lung cancer deaths.

Metric Details: This measure tracks lung cancer deaths prevented annually by reducing radon exposure, calculated using estimates of the number of homes in the U.S. with radon levels above the EPA action level of 4pCi/L (picocuries per liter) that have been mitigated and the number of new homes that have been built with radon resistant features. Lung cancer is the leading cause of cancer death among both men and women in the United States. Exposure to radon indoors is the second-leading cause of lung cancer in the United States. EPA estimates there are 12,000 avoidable lung cancer deaths annually attributable to indoor radon exposure and more than seven million homes in the U.S. are at or above the EPA radon action level. For more information, see https://nap.nationalacademies.org/catalog/5499/health-effects-of-exposure-to-radon-beir-vi; and https://www.epa.gov/sites/default/files/2015-05/documents/402-r-03-003.pdf.

Other Core Work

Annual performance goals:

(PM RAD2) Percentage of radiation emergency response program personnel and assets that meet functional readiness requirements necessary to support federal radiological emergency response and recovery operation.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						90	92	92	Percent	Above Target
Actual					92	88				
Numerator					128.24	122.78			Personnel and Assets	
Denominator					140	140				

Key Takeaways:

- EPA missed the FY 2022 target of 90%, scoring 87.7%. This is due to the loss of Public Information Officer and scientific personnel, and the Mobile Environmental Radiation Laboratory being out of commission due to loss of personnel and limited ability to fund modernization efforts. To address this shortfall, EPA is actively hiring to replace key personnel.

- EPA participated in key government exercises in FY 2022 and is actively engaged in contingency planning for supporting responses to any foreign radiological incidents stemming from active warfare in Ukraine.

Metric Details: This measure tracks percent readiness of EPA headquarters, laboratory and field support elements including assets and equipment, procedures and programs, licenses and accreditations, personnel, qualifications, exercise participation, and training. Percent readiness is calculated by the total score earned during an annual assessment of elements divided by the total points assigned to those elements.

(PM IA) Number of programs, annually, equipped to support the infrastructure, delivery and sustainability of comprehensive asthma care.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	600					1,800	2,855	3,005	Programs	Above Target
Actual	884	1,232	1,645	2,132	2,446	2,705				

Key Takeaways:

- EPA is working to ensure that all people with asthma have access to programs that deliver comprehensive asthma care and improve indoor air quality.
- EPA is providing technical assistance to equip all asthma stakeholders (e.g., individuals, state and community-based healthcare, housing and school systems) to carry out the straightforward and proven solutions that create healthier indoor environments.
- EPA's asthma community network has nearly 5,000 members supporting more than 1,100 asthma programs across the country.

Metric Details: This measure tracks EPA delivery of technical assistance, tools, and grant support to equip community-based programs and the organizations that support them to deliver evidence-based, comprehensive asthma care. Twenty-four million Americans, including 4.2 million children, have asthma. Low income and minority children suffer disproportionately. In-home environmental interventions reduce health care utilization and improve quality of life for people with asthma. No targets were established in FYs 2018-2021 because this measure was not included in EPA's Annual Performance Plan. For more information, see: cdc.gov/asthma.

(PM CS) Millions of demonstrably improved (field or lab tested) cookstoves sold.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						50	60	60	Millions of Cookstoves	Above Target	
Actual						50					

Key Takeaways:

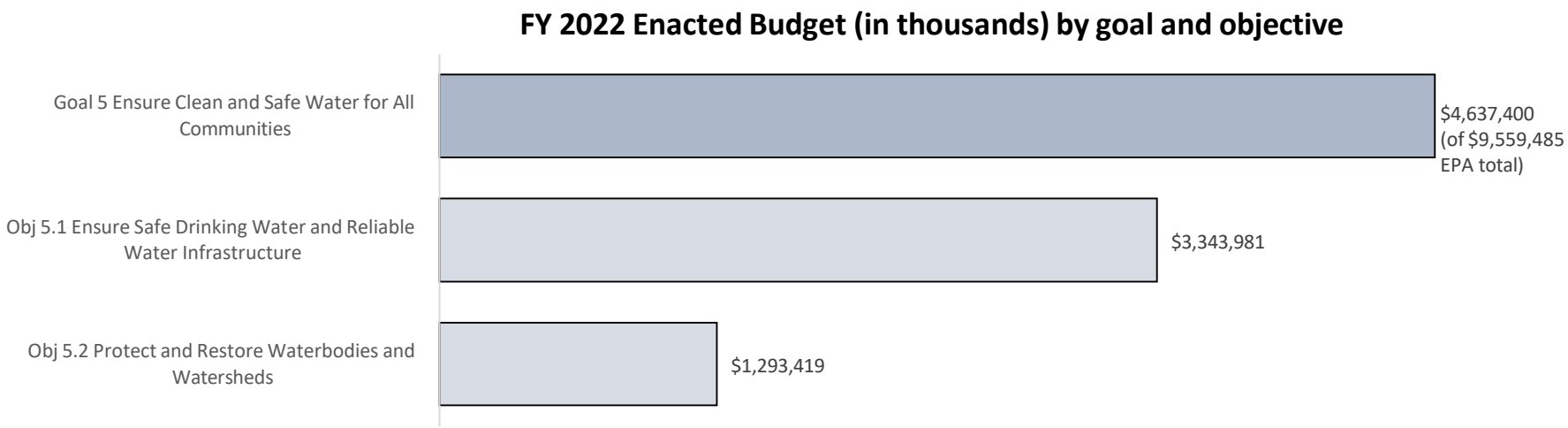
- EPA, in collaboration with the Clean Cooking Alliance, is working to ensure access to affordable, reliable, sustainable and modern energy for all.
- EPA provides ongoing training and engagement of Regional Stove Testing and Knowledge Centers and leads the development of standards for institutional stoves.
- Following the 2021 Leaders Summit on Climate, EPA co-hosted four Cleaning Cooking Consultations with the top three target countries (Ghana, Rwanda and Uganda) on household energy targets in Nationally Determined Contributions (NDC) to achieve Paris Agreement goals, continuing to work toward improving adoption of cleaner cookstoves and heating technologies around the world through international and domestic partnerships and active technical assistance.

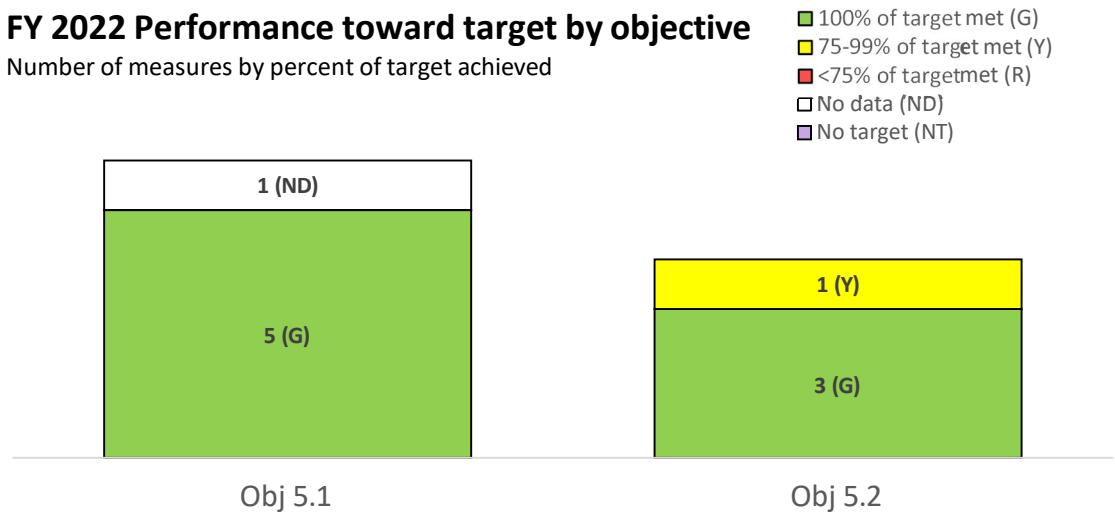
Metric Details: This measure tracks millions of demonstrably improved cookstoves sold worldwide. More than three billion low-income people around the world, including 600,000 low-income Americans, cook their food and/or heat their homes with open fires or rudimentary stoves. The resulting exposure to extraordinarily high levels of indoor air pollution causes 3.2 million premature deaths worldwide, primarily among women and girls. Emissions from household energy/cookstoves are the largest controllable source of the short-lived climate pollutant black carbon (>50%) and cookstove emissions also include methane and carbon dioxide (CO_2). EPA leads the development of cookstove standards

through the International Organization for Standardization (ISO) and works with partners to rapidly increase the sustained use of demonstrably clean and efficient cookstoves and fuels, with approximately 48 million improved stoves sold in 2019. For more information, see: https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health.

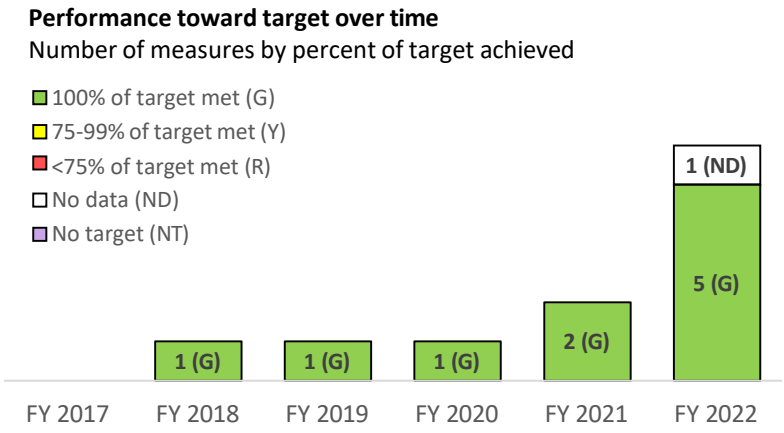
Goal 5 at a Glance

Ensure Clean and Safe Water for All Communities: Provide clean and safe water for all communities and protect our nation's waterbodies from degradation.





Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure—*Protect public health from the risk of exposure to regulated and emerging contaminants in drinking and source waters by improving the reliability, accessibility, and resilience of the nation's water infrastructure to reduce the impacts of climate change, structural deterioration, and cyber threats.*



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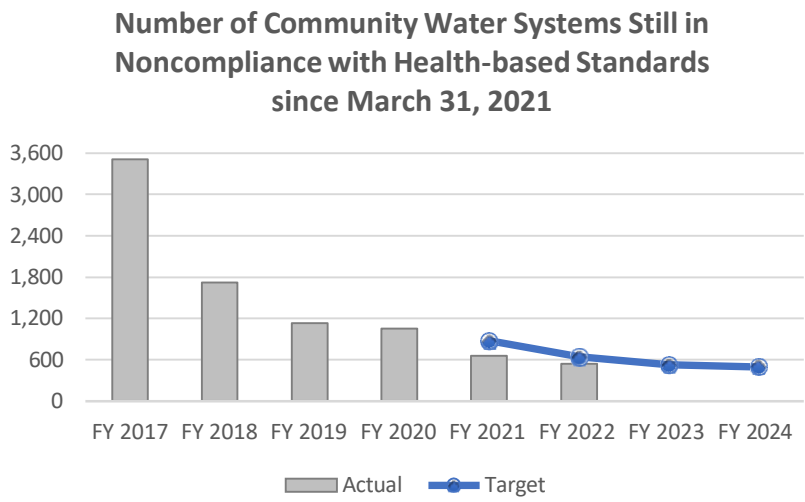


Summary of progress toward strategic objective:

- Announced $50 billion in Bipartisan Infrastructure Law (BIL) funding for drinking water and wastewater, including substantial investment in disadvantaged communities in alignment with Justice40. This funding will also help make rapid progress on lead service line replacement, and address per- and polyfluoroalkyl substances (PFAS) and emerging contaminants.
- Announced development of Lead and Copper Rule (LCR) Improvements regulation and published LCR Inventory Guidance to support water systems to develop inventories of service line materials and provide states with needed information for oversight and reporting to EPA (see; https://www.epa.gov/dwreginfo/lead-and-copper-rule).
- Published fifth Unregulated Contaminant Monitoring Rule which will require certain public water systems (PWSs) to collect national occurrence data for 29 PFAS and lithium (see: https://www.govinfo.gov/content/pkg/FR-2021-12-27/pdf/2021-27858.pdf).
- Ninety-three percent of the population served by community water systems (CWSs) received drinking water that meets all applicable health-based drinking water standards 2,971 (85%) of the original 3,508 CWSs with a compliance violation since 2017 have returned to compliance.
- The Water Infrastructure Finance and Innovation Act (WIFIA) Program closed 30 transactions totaling more than $3.8 billion in loans to help finance over $8 billion for water infrastructure projects and create over 30,000 jobs.

Challenges:

- Advances in research, sensing, and measurements for PFAS and other emerging contaminants create new challenges for developing toxicity data and risk assessments.
- Over 80% of CWSs serve fewer than 3,300 persons. These systems are often challenged to maintain the technical, managerial, and financial capacity needed to operate a water system and address increasing cybersecurity issues.
- EPA estimates 6-10 million households are connected to a water system through a lead pipe/service line.
- Evolving intelligence indicates the Russian Government is exploring options for potential cyberattacks to critical U.S. infrastructure including drinking water and wastewater treatment systems.

Long-Term Performance Goal: By September 30, 2026, reduce the number of community water systems still in noncompliance with health-based standards since March 31, 2021, from 752 to 500.

Annual performance goal that supports this long-term performance goal:

(PM DW-02) Number of community water systems still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target					875	640	450	400	CWSs	Below Target
Actual	3,508	1,718	1,128	1,048	654	537				

Key Takeaways:

- Exceeded the target by reducing to 537 the CWSs that remained in non-compliance with health-based standards from the original 3,508. To help address violations, EPA sends quarterly updates on CWSs with violations to EPA Regional drinking water programs and enforcement programs so that they can work with state programs on actions to bring those systems back into compliance. EPA also sends quarterly reports on CWSs with violations to United States Department of Agriculture for their awareness of systems in their purview.
- Ninety-three percent of the population served by CWSs received drinking water that meets all applicable health-based drinking water standards.
- Drinking water systems, especially small systems, often have limited technical expertise to address operational and increasing cybersecurity issues.
- A lack of technical, managerial, and financial capacity can lead to unaddressed deficiencies in the water system. This is the second largest cause of community water systems in violation.

Metric Details: This measure tracks the number of CWSs still in noncompliance with the health-based National Primary Drinking Water Regulations (maximum contaminant level or treatment technique) during any part of the year, relative to the group in noncompliance as of September 30, 2017. A CWS is a public water system that supplies water to the same population year-round. There are approximately 50,000 CWSs in the U.S. The total includes CWSs in Indian country. As of September 30, 2021, 654 of the original 3,508 systems were still in non-compliance with health-based standards. Data are derived from the Safe Drinking Water Information System Federal Data Warehouse (SDWIS-FED), which contains information about violations by public water systems as reported to EPA by the primacy agencies (tribes and states with EPA-delegated enforcement responsibility). Technical assistance provided focuses on non-compliant water systems in underserved communities. EPA expects progress on this measure to decelerate because many of the remaining systems have complex compliance issues or may require capital infrastructure improvements to help address non-compliance.

Long-Term Performance Goal: By September 30, 2026, reduce the number of community water systems in Indian country still in noncompliance with health-based standards since March 31, 2021, from 110 to 70.

Annual performance goal that supports this long-term performance goal:

(PM DWT-02) Number of community water systems in Indian Country still in noncompliance with health-based standards since March 31, 2021.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						100	55	35	CWSs	Below Target	
Actual						74					

Key Takeaways:

- 74 CWSs remained in non-compliance with health-based standards in Indian Country. EPA regularly monitors CWSs with violations and works with partners on actions to bring those systems back into compliance. EPA works closely with Indian Health Service to target funding to tribal water systems with infrastructure needs to improve water quality and delivery.
- Eighty-five percent of the population in Indian Country served by CWSs received drinking water that meets all applicable health-based drinking water standards.

Metric Details: This measure tracks the number of tribal CWSs still in noncompliance with the health-based National Primary Drinking Water Regulations (Maximum Contaminant Level or treatment technique) during any part of the year, relative to the group in non-compliance on March 31, 2021. There are approximately 730 tribal CWSs. Data are derived from SDWIS-FED, which contains information about violations by public water systems as reported to EPA by the primacy agencies (EPA regional offices and tribes with EPA-delegated enforcement responsibility).

Long-Term Performance Goal: By September 30, 2026, leverage an additional $45 billion in non-federal dollars through EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

Annual performance goal that supports this long-term performance goal:

(PM INFRA-01) Billions of non-federal dollars leveraged by EPA's water infrastructure finance programs (CWSRF, DWSRF and WIFIA).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target		8.0	8.0	8.0	8.0	9.0	9.5	9.5	Billions of Dollars	Above Target
Actual	8.6	9.7	10.3	10.2	12.1	14.6				

Key Takeaways:

- In FY 2022, EPA's Clean Water State Revolving Fund (CWSRF), Drinking Water State Revolving Fund (DWSRF), and WIFIA programs exceeded the annual target by leveraging $14.6 billion in non-federal dollars for water infrastructure projects. This success was in part due to the ongoing effective state management and EPA oversight of the SRFs.

Metric Details: This measure tracks funds leveraged by the three primary water infrastructure programs. These programs represent the largest federal source of funds to address this critical component of our nation's drinking water and clean water infrastructure. Non-federal funds include loans made from recycled loan payments, bond proceeds, state match, interest earnings, and co-funding from non-SRF sources. EPA will increase the amount of non-federal funds leveraged by providing communities with tools, training, and resources to help plan for infrastructure improvements and identify funding opportunities. The Agency will ensure a focus on climate resiliency and equity by revising loan guidelines, program guidance and providing technical assistance. SRF data are tracked in the SRF Data System.

Long-Term Performance Goal: By September 30, 2026, in coordination with other federal agencies, provide access to basic sanitation for an additional 36,500 American Indian and Alaska Native homes.

Annual performance goal that supports this long-term performance goal:

(PM WWT-02) Number of American Indian and Alaska Native homes provided access to basic sanitation, in coordination with other agencies.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						6,098	6,098	6,098	Homes	Above Target
Actual	5,318	6,398	3,561	9,114	4,007	Data Avail 3/2023				

Key Takeaways:

- The cumulative number of American Indian and Alaska Native homes that are provided access to basic sanitation in coordination with other federal agencies continues to grow over time.
- Working with the Indian Health Service, EPA helps provide or restore access to wastewater infrastructure for tribal communities. The data source for this measure is the once annual data-freeze snapshots from the Project Data System in the Indian Health Service, Division of Sanitation Facility Construction Sanitation Tracking and Reporting System. As of February 16, 2023, the data for FY 2022 are not available.

Metric Details: This measure tracks American Indian and Alaska Native homes provided with wastewater treatment infrastructure through Congressionally appropriated funds, in coordination with other agencies. To show progress towards this measure, EPA will use the number of homes that received improved wastewater sanitation services as reported through the Indian Health Service (IHS) Sanitation Tracking and Reporting System (STARS). IHS housing information is collected once annually (typically in November) to capture the progress of the previous construction season. There were 378,211 American Indian and Alaska Native homes in the IHS database as of FY 2022 (most currently available data). For more information visit: https://www.epa.gov/small-and-rural-wastewater-systems/clean-water-indian-set-aside-program.) Targets are based on past years' performance, assumption of relatively constant future funding levels, and continued coordination with other federal agencies.

Long-Term Performance Goal: By September 30, 2026, provide 2,203 Tribal, small, rural, or underserved communities with technical, managerial, or financial assistance to improve operations of their drinking water or wastewater systems.

Annual performance goals that support this long-term performance goal:

(PM INFRA-06) Number of tribal, small, rural, or underserved communities provided with technical, managerial, or financial assistance to improve system operations.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						339	542	542	Communities	Above Target
Actual					187	1,668				

Key Takeaways:

- Funded one-to-one technical assistance to rural, small, Tribal, and underserved communities with technical, managerial, or financial assistance issues living in communities of less than 10,000 people: the Training and Technical Assistance to Improve Water Quality and Enable Small Public Water Systems to Provide Safe Drinking Water Grant

Program and the Training and Technical Assistance for Rural, Small, and Tribal Municipalities and Wastewater Treatment Systems for Clean Water Act Prevention, Reduction, and Elimination of Pollution Grant Program.

- Examples of assistance provided include: conducting well assessments; helping systems develop and implement asset management programs, adopt, and implement Risk and Resiliency Assessments (RRA), Vulnerability Assessments (VA), and/or Emergency Response Plans (ERP), and complete energy audits and rate analyses; helping systems address non-compliance issues; and conducting homeowner visits to collect private samples to test well water for harmful E. coli bacteria.
- One grantee was able to serve 14,363 people, of which an estimated 29% of the total were members of communities of color, and six percent were tribal members, Alaska Natives or Native Hawaiians.

Metric Details: This measure tracks the number of tribal, small, or rural communities, or communities with environmental justice concerns, provided with EPA technical, managerial, or financial assistance through on-site visits or training to effectively operate drinking water systems or wastewater treatment systems. Data are collected through grantee reports.

(PM DW-07) Number of drinking water and wastewater systems, tribal and state officials, and water sector partners provided with security, emergency preparedness, and climate resilience training and technical assistance.

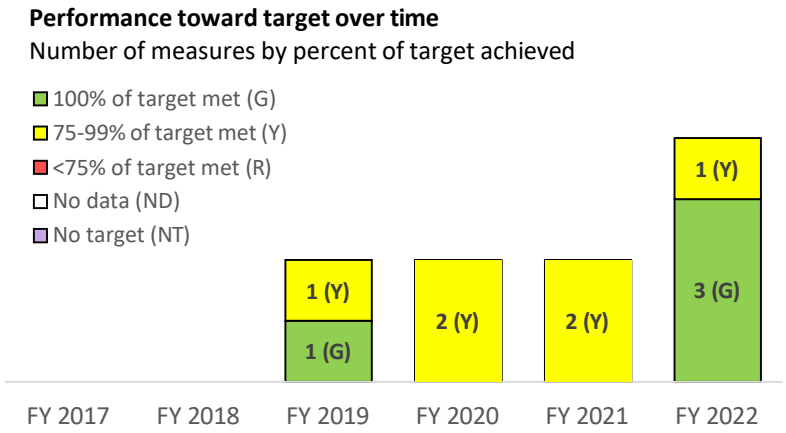
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						2,000	3,500	3,500	Systems and Partners	Above Target	
Actual						3,939					

Key Takeaways:

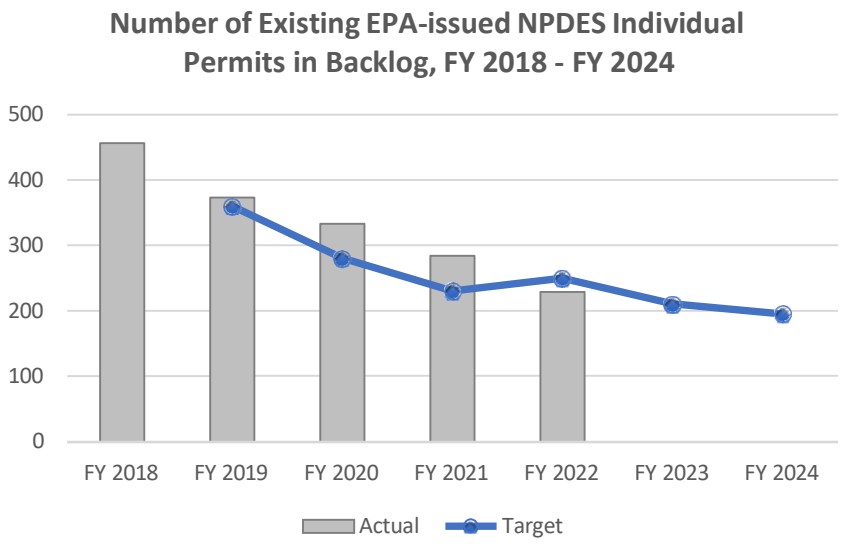
- Drinking water system operations are challenged due to degradation of sources of drinking water; pressures from extreme weather events, and accidental and intentional incidents.
- EPA has been conducting significant outreach and training for community water systems on compliance with America's Water Infrastructure Act (AWIA) Section 2013 requirements, a need critical to addressing these challenges. AWIA Section 2013 requires CWSs serving more than 3,300 people to develop or update RRAs and ERPs.

Metric Details: This measure tracks the number of drinking water, wastewater, and stormwater (water sector) utilities, tribal and state officials, and water sector partners provided by EPA with practical tools, training, and technical assistance needed to increase resilience to extreme weather events (e.g., drought, flooding, wildfires, hurricanes), malevolent acts (e.g., cyberattacks), and climate change. EPA assistance promotes a clear understanding of climate change and potential long-term adaptation options for decision-making related to water utility infrastructure operations and financing. Training and technical assistance will target participation of underserved communities.

Objective 5.2: Protect and Restore Waterbodies and Watersheds—*Address sources of water pollution and ensure water quality standards are protective of the health and needs of all people and ecosystems.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Submitted the Revised Definition of "Waters of the United States" (WOTUS) final rule to the Office of Management and Budget for Interagency review. Also proposed rulemakings on Human Health Water Quality Criteria in Washington State and Clean Water Act (CWA) Section 401 certification to revise and replace the Agency's 2020 regulatory requirements for water quality certification. Published a CWA Section 404(c) Proposed Determination to prohibit and restrict the use of certain waters in the Bristol Bay, AK watershed as disposal sites for the discharge of dredged or fill material associated with mining the Pebble deposit.
- Announced $132 million in Bipartisan Infrastructure Law (BIL) funding and guidance for the National Estuary Program. Also established a new $60 million grant program under BIL for implementing the Gulf Hypoxia Action Plan and made over $194 million in BIL funding available for Geographic Programs.
- Took action on 35 of 37 section 303(d) impaired waters lists that were submitted to EPA for the 2022 cycle (compared to 14 this time last cycle).
- Restored or improved 110 waters that were previously impaired due to nonpoint sources.
- States and territories have made over 78% progress towards submitting their long-term priority Total Maximum Daily Loadings (TMDLs), other restoration plans, and protection plans under the CWA Section 303(d) Program Vision. States and territories have made continuous progress throughout the entirety of this metric and came within 25% of the final target.
- Reduced the backlog of EPA's new National Pollution Discharge Elimination System (NPDES) permit applications by 79%, and the backlog of existing NPDES permits by 58% compared with the June 2018 baseline.

Challenges:

- A changing climate is affecting how water systems respond to pollution due to changes in temperature, flow, and sediment.
- Extreme natural events such as hurricanes and wildfires may increase nonpoint source pollution loading.
- Nutrient pollution affects upwards of 50% of lakes and streams. Total phosphorus levels are increasing in rivers, streams and lakes across the country. Excess nutrients contribute to harmful algal blooms (HABs), low oxygen "dead zones," and high levels of nitrates that contaminate waters while also damaging the economy. Impervious surfaces can generate increased flows of stormwater pollutants, degrading water quality and threatening public health. More information available at: https://www.epa.gov/nutrientpollution.

Long-Term Performance Goal: By September 30, 2026, increase by 41,000 square miles the area of watersheds with surface water meeting standards that previously did not meet standards.

Annual performance goals that support this long-term performance goal:

(PM SWP-01) Annual increase in square miles of watersheds with surface water meeting standards that previously did not meet standards.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						8,000	8,000	17,100	Square Miles	Above Target	
Actual						20,511					

Key Takeaways:

- Significantly exceeded the target due to increased number of CWA Section 303(d)/305(b) Integrated Reports (IRs) submitted. IRs are due on April 1 of even numbered years, but they usually come in slowly throughout the two-year period. However, due to a years-long push by EPA to get states to submit their IRs on time, many states submitted their 2022 IRs by April 1 or shortly thereafter.

Metric Details: This measure tracks improvements in impaired waters as reported on state CWA Section 303(d)/305(b) Integrated Reports. States report on their water quality assessments every two years. Water quality standards attainment means that: 1) the impairments have been effectively removed due to actions including water quality restoration efforts, more complete monitoring to better understand waterbody conditions, or appropriate changes in water quality standards; and 2) the waterbody now either fully supports the use or meets the water quality criterion for that particular pollutant or stressor for which it had been impaired. EPA will ensure watersheds will continue to meet the standards by assessing for equity and climate impacts. Data are tracked in EPA's Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS). As states continue to perform assessments, they continue to identify additional impaired waters. As of July 28, 2022, the baseline was 504,605 square miles of watersheds with surface water not meeting standards. This is an update to the draft baseline of 425,198 square miles that was included in the FY 2023 budget. This measure has transitioned from using the old National Hydrology Dataset Plus (NHDPlus) V2 catchments to the new a NHDPlus HR-VF-Gen catchment layer. Targets are based on receipt of IRs due to EPA every even year, with some reporting delayed to other years. Prior to this report, this measure tracked total square miles of watersheds meeting standards in waters previously identified as impaired.

(PM SWP-02) Annual increase in square miles of watersheds with previously impaired surface waters due to nutrients that now meet standards for nutrients.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						2,100	1,400	1,400	Square Miles	Above Target	
Actual						12,833					

Key Takeaways:

- Significantly exceeded the target due to increased number of CWA Section 303(d)/305(b) IRs submitted.

Metric Details: This measure tracks improvements in impaired waters due to nutrients as reported on state CWA Section 303(d)/305(b) IRs. As of July 28, 2022, the universe is 157,485 square miles of watershed area with surface water that are not meeting standards due to nutrients. This is an update to the draft universe of 157,485 square miles that was included in the FY 2023 budget. Prior to this report, this measure tracked total square miles of watersheds meeting standards due to nutrients in waters previously identified as impaired.

Other Core Work

Annual performance goals:

(PM NPDES-03) Number of existing EPA-issued NPDES individual permits in backlog.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target			360	280	230	250	210	195	Permits	Below Target
Actual		456	373	333	284	229				

Key Takeaways:

- Issued or terminated a total of 125 existing permits, which reduced the backlog of existing EPA-issued NPDES permits by 19% in FY 2022, and by 58% since March 2018.
- EPA headquarters and regions worked closely to identify challenges and develop solutions to complex permitting issues, such as those related to CWA Section 401 water quality certifications, WOTUS, CWA Section 316(b) cooling water intake mitigation, state legal authority, water quality-based effluent limitations for selenium, nutrients and other parameters, and emerging contaminants such as PFAS, to aid in the issuance of high-quality permits. These efforts will also help prevent future permits from becoming backlogged.

Metric Details: This measure tracks existing EPA-issued National Pollutant Discharge Elimination System (NPDES) individual permits that are administratively continued for 180 days or more. EPA modified the title of this measure to specify that only individual permits are being tracked and reported, which has been the case since the measure began in FY 2018. Between FY 2018 and FY 2021, EPA considered permits to be backlogged as soon as they passed their expiration date and were administratively continued. Beginning in FY 2022, the backlog is defined as permits that are administratively continued for 180 days or more. The change allows for prioritization of complex permits and resource efficiency. Permits are removed from the backlog as soon as the Agency issues, denies, or terminates a permit. The baseline for this measure is 547 as of March 2018. For FY 2023 and FY 2024, EPA expects the backlog to continue to decrease. Factors that could potentially impact permit backlog reduction in the next two years are a significantly larger number of permits set to expire during this time period, inability to promptly backfill permit writers and other critical staff due to competing priorities, technical and complex permit issues, and the addition of new Agency priorities such as implementation of BIL and IRA. EPA will continue to monitor progress on reducing the backlog and will reassess targets, as needed. Data are tracked in EPA's Integrated Compliance Information System (ICIS)-NPDES Database.

(PM TMDL-02) Percentage of priority TMDLs, alternative restoration plans, and protection approaches in place.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target			50	67	84	100			Percent	Above Target
Actual	14	33.3	51.2	63.5	74.1	78				
Numerator	14,045	33,194	48,544	59,470	61,718	65,137			Square Miles	
Denominator	99,424	99,415	94,806	93,653	83,308	83,999				

Key Takeaways:

- Due to shifting program priorities, staff turnover, or limited capacity many states are not able to complete all plans originally committed to several years ago. Due to the long-term nature of this work, states were unable to fully predict which plans would be completed and which waterbodies would be delisted over the 6-year-period. Therefore, achievement of 100 percent of plans in place was difficult. Despite this, states continued to increase the number of plans in place leading to a continuous improvement in the results throughout the year. For example, EPA approved more than 2,200 TMDLs submitted under CWA Section 303(d).

Metric Details: This measure tracks state priority waters with a TMDL, alternative restoration, or protection plan in place. EPA, tribes, and states cooperatively developed a Long-Term Vision for Assessment, Restoration and Protection under the CWA Section 303(d) Program(https://www.epa.gov/sites/default/files/2015-07/documents/vision_303d_program_dec_2013.pdf), which encourages focused attention on priority waters and acknowledges that states have flexibility in using available tools – TMDLs, Alternative Restoration Plans, and protection approaches – to restore and protect water quality. The calculation method provides 0.5 credit for plans under development and full credit when EPA approves a plan. The goal was to have 100 percent of priority waters with plans approved or accepted by FY 2022. The following measure (PM TMDL-03) will replace this one beginning in FY 2023.

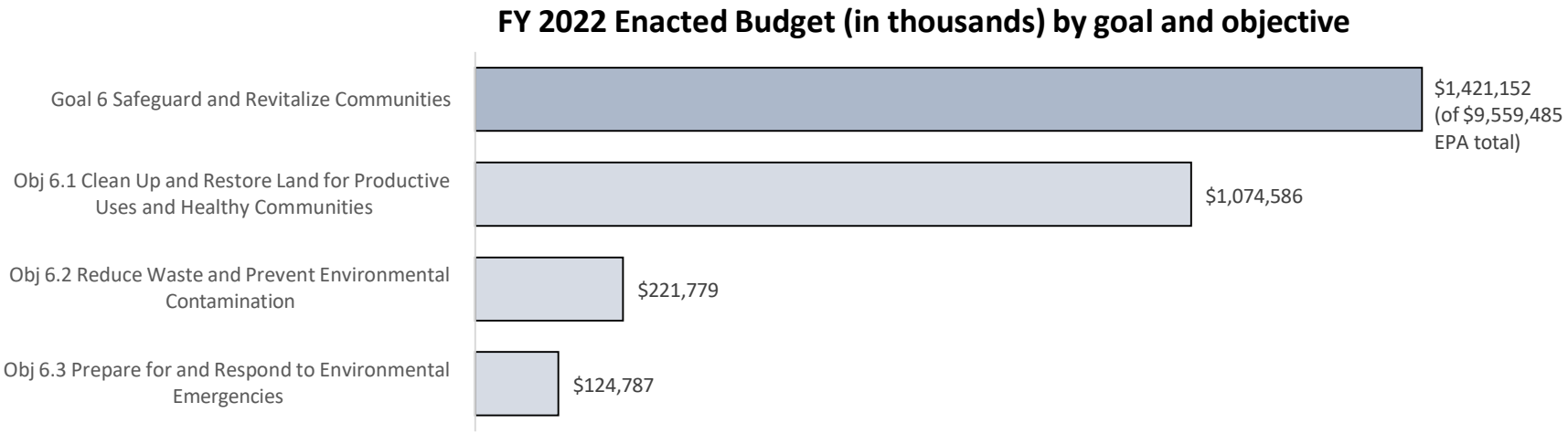
(PM TMDL-03) Square miles of priority areas covered by TMDLs, other restoration plans, or protection approaches.

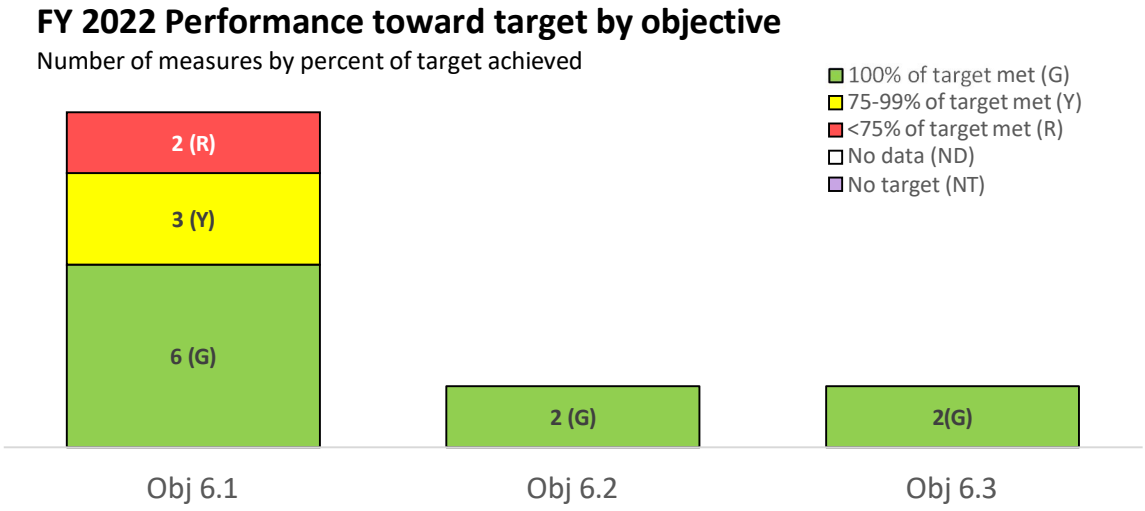
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target							7,940	19,280	Square Miles	Above Target	
Actual											

Metric Details: This measure tracks square miles of priority areas covered by TMDLs, other restoration plans, or protection approaches included in state commitments submitted to EPA by September 30, 2022. The universe is 22,685 square miles. This measure does not require a final plan to be in place to count toward the result; states can choose whether each plan will be in place or in development at the end of the 2-year period. States will be able to meet targets with a mix of plans in development and plans in place depending on their initial commitments. EPA will continue to use a weighting factor of 0.5 for plans in development. Data are tracked in ATTAINS. This is a two-year bridge measure developed by EPA in collaboration with the Association of Clean Water Administrators (ACWA), to begin after completion of the current Section 303(d) Vision 1.0 measure (PM TMDL-02). After completion of this two-year measure, EPA will transition into a Vision 2.0 measure beginning in FY 2025. The bridge measure is a leading candidate for the Vision 2.0 measure. The Vision 2.0 measure will also include a longer-term planning component to align with the timeline of the Vision.

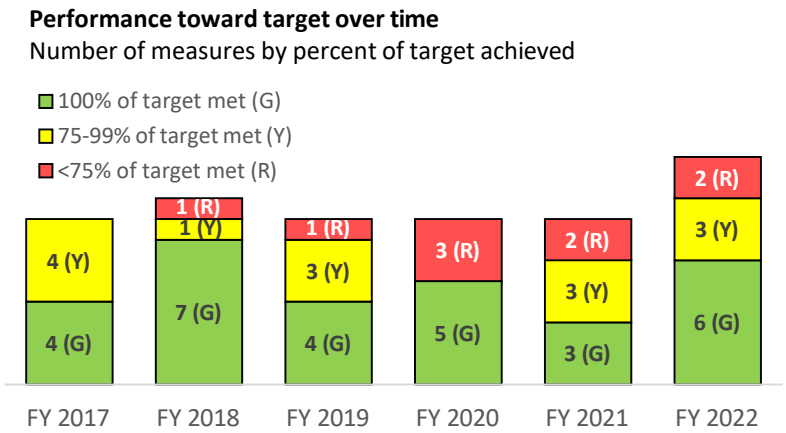
Goal 6 at a Glance

Safeguard and Revitalize Communities: Restore land to safe and productive uses to improve communities and protect public health.

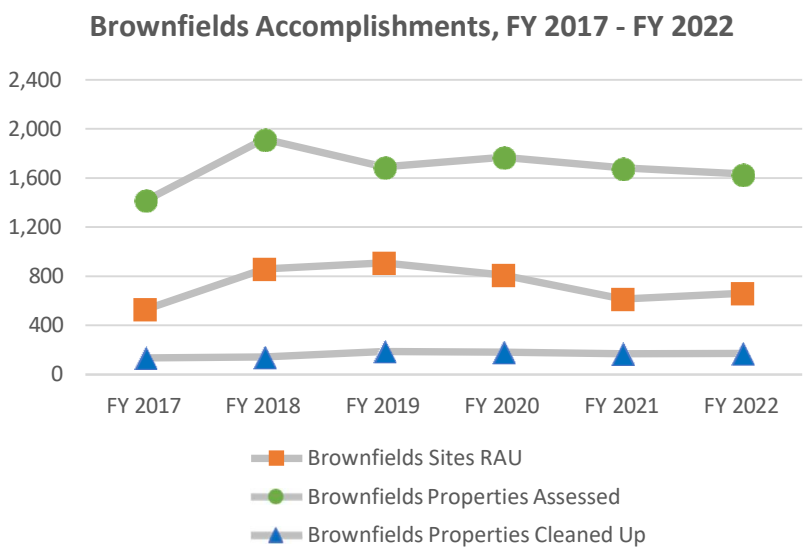




Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities—*Clean up and restore contaminated sites to protect human health and the environment and build vibrant communities, especially in underserved and overburdened areas.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



EPA, in consultation with the Office of Management and Budget, has determined that performance toward this objective is making noteworthy progress due to significant numbers of brownfield site assessments and cleanups.

Summary of progress toward strategic objective:

- Deployed more than $1 billion in Bipartisan Infrastructure Law (BIL) for cleanup activities at more than 100 Superfund sites and awarded $190 million for brownfields that are projected to result in over 880 site assessments, 78 sites cleaned-up, and 20,000 jobs leveraged in cleanup, construction, and redevelopment. This funding includes substantial investment in disadvantaged communities in alignment with Justice40.
- Added 12 Superfund sites with human exposures under control but retracted 26 sites (-14 net); made 16 additional sites ready for anticipated use, but similarly retracted 64 sites due to additional investigations; and completed 74 remedial actional projects.
- Cleaned up 173 brownfields, completed 1,637 site assessments, and made 662 sites ready for anticipated use, leveraging 14,170 jobs and $1.78B and revitalizing communities.
- Made 124 Resource Conservation and Recovery Act (RCRA) corrective action sites ready for anticipated use. The program has also completed construction on 55 final remedies at corrective action facilities and achieved designated performance standards at 66 facilities.
- Completed 6,536 Leaking Underground Storage Tank (LUST) cleanups that meet risk-based standards.
- Completed 45 Superfund cleanup projects that address lead as a contaminant.
- Issued 42 Superfund federal facility decision documents; completed 26 remedial actions.

Challenges:

- EPA and the states face challenges such as technically difficult cleanups, lack of viable responsible parties and cleanup funding, legislative limitations on liability, variations in cleanup standards and adoption of risk-based corrective action.
- COVID-19 continues to hamper site access and state staff availability to oversee cleanups. Owners and operators are hesitant to expend resources to move cleanups forward and, in some cases, are impeded by the availability of cleanup contractors and equipment.
- The remaining sites across all programs are increasingly complicated, requiring more personnel, funds, and expertise to complete cleanup actions.
- EPA will award approximately $300 million in additional BIL funding for brownfields, creating increased oversight and reporting responsibilities.
- There is the potential for higher cost Superfund actions due to increased costs for lead (Pb) and per- and polyfluoroalkyl substances (PFAS) removals.

Long-Term Performance Goal: By September 30, 2026, bring human exposures under control at additional 60 Superfund sites.

Annual performance goals that support this long-term performance goal:

(PM 151) Number of Superfund sites with human exposures brought under control.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	9	8	12	10	10	12	12	12	Sites	Above Target
Actual	24	32	17	20	13	-14				

Key Takeaways:

- Brought human exposures under control at an additional 12 Superfund sites, but these accomplishments were offset by a significant number of retractions.
- Of the 26 total retractions in FY 2022, 22 were changed due to insufficient data status. Only four went to not under control status. Retractions were primarily due to additional sampling for PFAS concentrations in drinking water and new vapor intrusion pathway investigations.

Metric Details: This measure documents progress achieved in controlling unacceptable human exposures to contamination at both private and federal facility Superfund sites and denotes a site-wide accomplishment. The human exposure determination at a site can change over time as conditions across portions (operable units) of a site change. EPA regional offices enter human exposure determinations and supporting data into the Superfund Enterprise Management System (SEMS). Results reflect a net accomplishment as sites can shift between human exposure under control to human exposure not under control or human exposure insufficient data. The status change often occurs when a previously unknown exposure pathway (e.g., vapor intrusion) or contaminant is discovered, and a reasonable expectation exists that people could be exposed or that there is insufficient data to make such a determination until further investigation takes place. As of FY October 2022, there were 1,535 Superfund sites with human exposures under control out of a total of 1,842 sites where human exposure is tracked.

(PM S10) Number of Superfund sites made ready for anticipated use site-wide.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	45	51	51	51	51	25	15	10	Sites	Above Target
Actual	43	51	48	34	26	-48				

Key Takeaways:

- An additional 16 sites were made ready for anticipated use, but these accomplishments were offset by a significant number of retractions (64).
- The retractions resulted from a rigorous review which identified sites which no longer met protectiveness requirements due to detection of PFAS and other emerging contaminants, aging remedies, and new exposure pathways requiring new institutional controls.
- As most eligible sites have already achieved sitewide ready for anticipated use (SWRAU) status, the remaining sites might require more resources and potentially face more significant obstacles to SWRAU achievement. Several sites retracted from SWRAU in FY 2022 have re-entered the potential universe of SWRAU sites and are likely to regain status in coming years.
- EPA plans to undertake several continuous improvement actions to eliminate process pain points and support achieving and maintaining SWRAU.

Metric Details: This measure tracks EPA's progress in cleaning up and preparing Superfund sites (both private and federal facility) for reuse site-wide, while ensuring human health and environmental protection. To be considered 'eligible' for SWRAU achievement, a site must be construction complete final and deleted from the Superfund National Priorities List (NPL) or a non-NPL Superfund Alternative Approach (SAA). The SWRAU target measures the number of construction complete final and deleted Superfund

National Priorities List (NPL) or non-NPL Superfund Alternative Approach (SAA) sites for which all: 1) remedy decision document (e.g., record of decision (ROD)) cleanup goals have been achieved for media that may affect a site's current and reasonably anticipated future land use, so that there are no unacceptable risks; and 2) institutional or other controls required in remedy decision document(s) have been put in place. EPA documents the SWRAU determination directly in SEMS once a site meets all required criteria and the appropriate EPA regional personnel have approved the determination. Since 2018, SWRAU accomplishments and the inventory of eligible sites have decreased. The number of SWRAU eligible sites is currently estimated at 236 sites following a 2022 SWRAU information collection effort in coordination with EPA regional offices. Of the 81 sites eligible in 2022, 16 achieved SWRAU in 2022, though a significant number of retractions (64) increased the eligible universe for FY 2023, as these sites pursue regained SWRAU status. Many of the remaining eligible sites face increasingly difficult challenges to achieve SWRAU, primarily related to institutional controls implementation and emerging contaminants. Cleaning up contaminated land reduces the environmental and health effects of exposure to contamination in communities, especially overburdened communities, and contributes toward the Administration's Justice40 goal.

(PM 170) Number of remedial action projects completed at Superfund sites.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	105	95	95	80	80	80	75	75	Projects	Above Target
Actual	97	87	89	91	75	74				

Key Takeaways:

- Completed 74 remedial action projects. Issues that contributed to missing the target include changed scope of work, addressing PFAS contamination, potentially responsible party (PRP) processing delays, remedy redesign, supply chain issues, and larger reports require increased review time. These issues and others routinely arise and will likely continue to be an impediment in reaching targets in FY 2023 and future years.

Metric Details: This measure tracks the number of remedial action projects completed at Superfund sites. Cleaning up contaminated land reduces the environmental and health effects of exposure to contamination in communities, especially overburdened communities, and contributes toward the Administration's Justice40 goal. By tracking the completion of a discrete scope of Superfund cleanup activities (for both private and federal facility sites), this measure documents incremental progress in reducing risk to human health and the environment. Multiple remedial action projects may be necessary to achieve sitewide construction completion. EPA captures this data in SEMS.

* This measure is also used to track progress in implementing the Bipartisan Infrastructure Law.

(PM 137) Number of Superfund removals completed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	275	175	175	141	141	183	183	183	Removals	Above Target
Actual	255	242	233	197	150	195				

Key Takeaways:

- Completed 195 removal completions, exceeding the target despite ongoing challenges from COVID-19.

Metric Details: This measure tracks Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal-related hazardous waste cleanups, known as Superfund removal actions, including those that are Superfund-lead and PRP-lead. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Data are tracked in SEMS.

Long-Term Performance Goal: By September 30, 2026, complete 225 Superfund cleanup projects that address lead as a contaminant.

Annual performance goal that supports this long-term performance goal:

(PM 155) Number of Superfund cleanup projects completed that address lead as a contaminant.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						45	45	45	Projects	Above Target
Actual					56	45				

Key Takeaways:

- Met target by completing 45 response action projects, consisting of 16 Removal and 29 Remedial projects.
- EPA headquarters and regional offices have increased coordination but the frequency of lead removal cleanups is unpredictable. In contrast to the time-critical and emergency nature of removals, remedial cleanups take multiple years to complete.

Metric Details: This measure documents progress to reduce exposure to lead and associated health impacts by reporting the completion of cleanup actions that include lead as a contaminant. Response action projects include removal and remedial actions that address lead as a contaminant. The universe of applicable remedial actions consists of those at all final and deleted NPL sites and sites with SAA agreements. There is no pre-established universe of removal sites, as removal actions take place after a release has occurred. Much of the data for this performance measure comes from PRPs and Federal Facilities and the government's program offices cannot control when it is submitted.

Long-Term Performance Goal: By September 30, 2026, clean up an additional 650 brownfields properties.

Annual performance goals that support this long-term performance goal:

(PM B32) Number of brownfields properties cleaned up.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	130	130				130	160	160	Properties	Above Target
Actual	137	143	190	183	168	173				

Key Takeaways:

- Exceeded the target, achieving 173 cleanups complete. EPA completed a significant data backlog clean-up effort, which resulted in significantly higher accomplishments from initial projections.
- Reusing brownfields enables communities to pursue economic growth without expanding their environmental footprint. Accommodating community growth on a revitalized brownfield site means existing infrastructure is reused, which reduces the need to expand impervious surfaces and vehicle miles traveled associated with new development. These reductions produce important environmental benefits, including improved water quality associated with reduced runoff from stormwater and nonpoint pollutant sources, and improved air quality associated with reduced greenhouse gas emissions from vehicle travel. This is an important approach for mitigating climate change.
- Updated the annual target setting process using a new, data-based accomplishment prediction model.

Metric Details: This measure tracks the number of properties that have been cleaned up to a regulatory risk-based standard using EPA brownfields funding, as reported by cooperative agreement recipients into the Assessment, Cleanup and Redevelopment Exchange System (ACRES) database. Cleaning up contaminated land reduces the environmental and health effects of exposure to contamination in communities, especially overburdened communities, and contributes toward the Administration's Justice40 goal.

The FY 2023 target is increased to align with increased reporting trends. There are no targets in FYs 2019-2021 because this measure was not included in those Annual Performance Plans.

* This measure is also used to track progress in implementing the Bipartisan Infrastructure Law.

(PM B30) Number of brownfields sites made ready for anticipated use.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	600	684	684	684	684	600	600	600	Sites	Above Target
Actual	531	861	910	809	616	662				

Key Takeaways:

- Exceeded the target, achieving 662 properties made ready for anticipated use (RAU). EPA completed a significant data backlog clean-up effort, which resulted in significantly higher accomplishments from initial projections. EPA regional offices worked closely with grantees on data entry in ACRES to ensure timely RAU reporting.

Metric Details: This measure tracks the number of properties/sites benefiting from EPA brownfields funding that have been assessed and determined not to require cleanup, or where cleanup has been completed and institutional controls are in place if required, as reported by cooperative agreement recipients. This activity results in additional sites available for productive reuse. Prior year targets and results reflect a data cleanup project to collect data on projects completed in previous years that had not been reported previously. This project is now complete.

* This measure is also used to track progress in implementing the Bipartisan Infrastructure Law.

(PM B29) Number of brownfields properties assessed.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	1,400	1,300				1,400	1,650	1,650	Properties	Above Target
Actual	1,419	1,919	1,693	1,772	1,682	1,637				

Key Takeaways:

- Exceeded the target, achieving 1,637 properties assessed. EPA completed a significant data backlog clean-up effort, which resulted in significantly higher accomplishments from initial projections.
- Updated the annual target setting process using a new, data-based accomplishment prediction model.

Metric Details: This measure tracks the number of properties that have been environmentally assessed for the first-time using EPA brownfields funding, as reported by cooperative agreement recipients. The FY 2023 target is increased to align with increased reporting trends. There are no targets in FYs 2019-2021 because this measure was not included in those Annual Performance Plans.

* This measure is also used to track progress in implementing the Bipartisan Infrastructure Law.

Long-Term Performance Goal: By September 30, 2026, make an additional 425 RCRA corrective action cleanups Ready for Anticipated Use.

Annual performance goals that support this long-term performance goal:

(PM RSRAU) Number of RCRA corrective action facilities made ready for anticipated use.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target		75	91	117	133	114	100	85	Facilities	Above Target
Actual	72	117	127	169	146	124				

Key Takeaways:

- Exceeded the target, making 124 RCRA corrective action facilities RAU.
- There is a decreasing universe of sites, and many of the remaining sites are complex and require significant resource contributions.

Metric Details: This measure tracks the number of RCRA corrective action facilities made ready for anticipated use (RAU). To be determined RAU, facilities must meet the following criteria: human exposure under control; final cleanup goals achieved for media that would affect the anticipated use; and if needed, controls in place to ensure long-term protectiveness. Information is entered into the RCRAInfo database by authorized states and/or EPA regional offices overseeing cleanups. There were 3,983 facilities subject to RCRA corrective action at the end of FY 2022, of which 2,061 had not yet been determined RAU.

(PM CA5RC) Number of RCRA corrective action facilities with final remedies constructed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target			98	98	73	55	55	52	Facilities	Above Target
Actual	67	70	80	64	57	55				

Key Takeaways:

- Met the target, constructing final remedies at 55 RCRA corrective action facilities.
- Several facilities experienced delays completing final remedies by the end of FY 2022. Many of these will be completed in FY 2023. In addition, the pipeline of available facilities is narrowing and the facilities remaining have complex issues such as groundwater or financial concerns.

Metric Details: This measure tracks the number of RCRA corrective action facilities that have final remedies constructed such as a groundwater treatment system, designed to achieve long-term protection of human health and the environment. This measure tracks a mid-term step in the progression toward completing facility cleanup. Targets are selected based on the number of sites in the pipeline with construction planned or underway.

Long-Term Performance Goal: By September 30, 2026, conduct an additional 35,000 cleanups at Leaking Underground Storage Tank facilities.

Annual performance goal that supports this long-term performance goal:

(PM 112) Number of LUST cleanups completed that meet risk-based standards for human exposure and groundwater migration.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target	8,600	11,200	11,200	11,200	11,200	7,439	7,125	6,970	Cleanups	Above Target
Actual	8,775	8,128	8,358	7,211	7,271	6,536				

Key Takeaways:

- Missed the target, completing 6,536 LUST cleanups that meet risk-based standards for human exposure and groundwater migration.
- As the backlog of remaining cleanups declines, confirmed releases also decline and state resources continue to be constrained, making cleanup completions increasingly challenging.

Metric Details: This measure tracks the number of completed cleanups of petroleum-contaminated confirmed releases, also known as LUST cleanups. The totals include cleanups reported by states as well as EPA cleanups in Indian country. Cleanups in Indian country represent approximately 0.2% of total cleanups completed. Data are tracked in the LUST4 database. Targets are ambitiously based on 12% of the prior year's estimated backlog of remaining cleanups. The backlog will continue to reduce over time so the targets will correspondingly reduce. Forecasted backlog reduction is based on five years of data trends through FY 2020. As of FY 2022, there were 568,981 cumulative confirmed releases, out of which there were 509,091 LUST cleanups completed.

Other Core Work

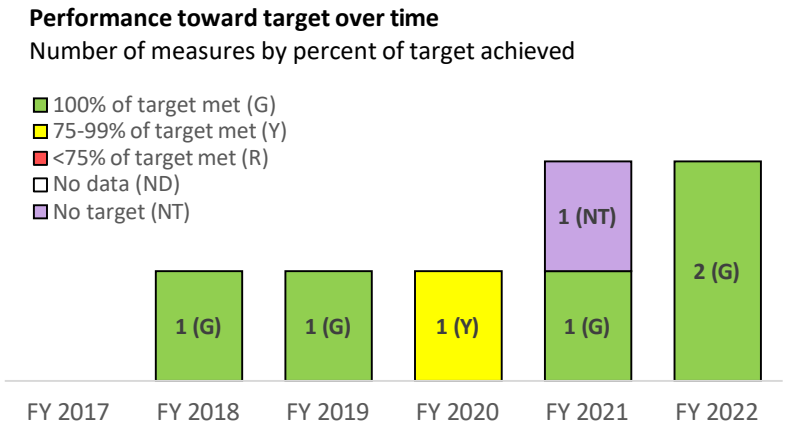
Annual performance goal:

(PM CO1) Percentage of technical assistance projects in support of environmentally sustainable and community-driven revitalization that support or expand upon previous or ongoing federal investments.

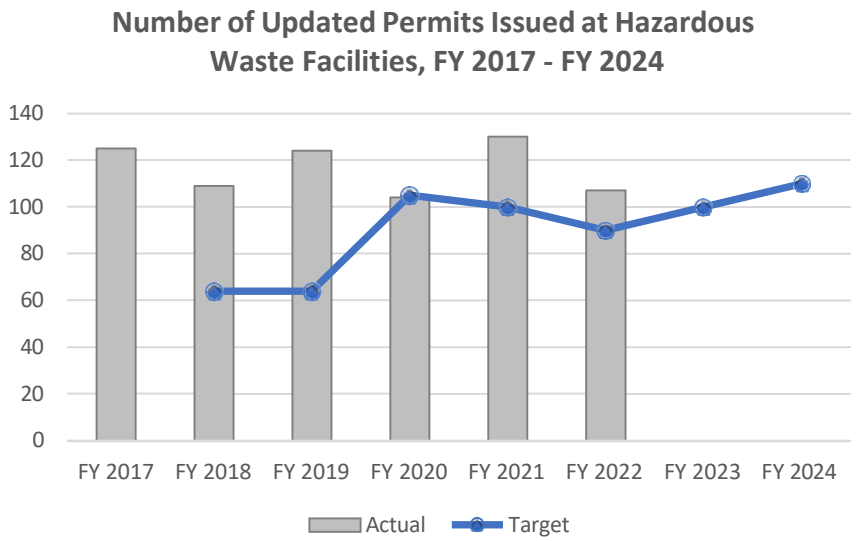
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							No Target Established	TBD	Percent	Above Target	No Trend Data
Actual											
Numerator									Projects		
Denominator											

Metric Details: This measure tracks the number of community revitalization technical assistance engagements with communities that have had programmatic or financial investments from federal programs within the past five years. These investments include those of EPA or other federal agencies. This subsequent technical assistance can help maximize the previous investment by supporting its implementation or expanding upon it by helping the community make related improvements. These efforts can help coordinate and align federal engagements and create connections that will spur ongoing utilization of smart growth tools and best practices toward environmental protection and economic development. A baseline will be established in FY 2023

Objective 6.2: Reduce Waste and Prevent Environmental Contamination—*Prevent environmental pollution by preventing releases, reducing waste, increasing materials recovery and recycling, and ensuring sustainable materials management practices.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Increased the percentage of updated permits at RCRA facilities to 73.9% from a starting point of 71.0%. 107 additional permits were renewed in FY 2022.
- Recorded the lowest number of confirmed releases at underground storage tank (UST) facilities (4,568) since the program began, indicating success of release prevention program.
- In November 2021, EPA released the National Recycling Strategy, which is the first in a series to dedicated to building a circular economy. The National Recycling Strategy outlines the actions needed to create a stronger, more resilient, and cost-effective domestic recycling system. Future circular economy strategies will focus on plastics, organics, electronics, the built environment, and textiles. In November 2022, the program announced new recycling grant funding opportunities, which were funded by the Bipartisan Infrastructure Law (BIL). These recycling grants will help communities in implementing the actions in the National Recycling Strategy.

Challenges:

- Risks of reduced resource capacity due to staff turnover and shifting prioritizations for federal, state, tribal and local environmental land and emergency management programs. These impacts potentially decrease EPA's ability meet projected targets due to training and recruitment time lags, as well as the potential loss of expert technical knowledge.
- Low/Reduced availability of private sector services and parts due to continued supply chain issues has significantly impeded compliance with UST regulations.

Long-Term Performance Goal: By September 30, 2026, increase the percentage of updated permits at RCRA facilities to 80% from the FY 2021 baseline of 72.7%.

Annual performance goals that support this long-term performance goal:

(PM HW5) Number of updated permits issued at hazardous waste facilities.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target		64	64	105	100	90	100	110	Permits	Above Target
Actual	125	109	124	104	130	107				

Key Takeaways:

- Exceeded the target, updating 107 permits.
- Raised the percentage of updated permits from 71% to 74%, putting the Agency on a path to achieve the 80% goal at the end of FY 2026. However, because there are many permits expiring before the end of FY 2026, EPA remains focused on attaining this challenging goal.
- These results are challenging to forecast since there are several factors that can be difficult to project, including permits renewed and permits expiring each year. The renewals increase the percentage if they are more than the new expirations. These factors do not affect the number of permitted facilities. However, newly proposed facilities with an initial permit issued that are added to the permitted list and facilities that are removed from the permitted list are factors making it harder to forecast.

Metric Details: This measure tracks the number of RCRA hazardous waste permit updates or clean-closures in the universe of permitted facilities using EPA's RCRAInfo system. This does not include all permit maintenance since permit modifications cannot be projected and are not included. The related Long-Term Performance Goal refers to the overall percentage of RCRA facilities with permits that are not past expiration and have been updated though a permit renewal (or are not past the permit term/expiration). Maintaining up-to-date permits ensures that permitted facilities have consistent and protective standards to prevent release. This will ensure permits reflect updated standards, remain protective under changing conditions due to climate change, and provide meaningful community involvement in the permitting process over time. Proper standards for waste management can protect human health, prevent land contamination/degradation and other releases, and avoid future cleanups and associated costs. EPA directly implements the RCRA Program in Iowa and Alaska and provides leadership, work-sharing, and support to the remaining states and territories authorized to implement the permitting program. There are about 1,300 permitted hazardous waste facilities in the workload as of October 2022.

(PM UST01) Number of confirmed releases at UST facilities.

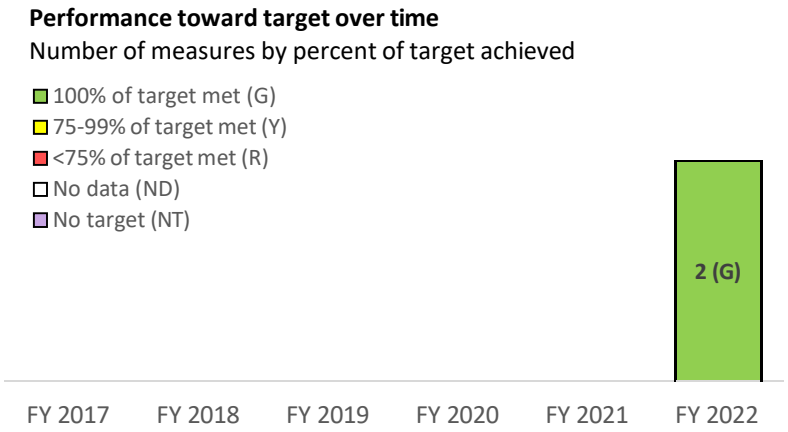
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target					No Target Established	5,150	5,075	5,000	Releases	Below Target
Actual	5,678	5,654	5,375	4,944	4,991	4,568				

Key Takeaways:

- Exceeded target for number of confirmed releases at UST facilities by confirming 4,568 with a target of no more than 5,150.
- Fewest number of annual confirmed releases in the history of the program. Continued implementation of the 2015 regulation changes and maintenance of three-year inspection cycle are leading factors in this reduction.

Metric Details: This measure tracks the number of confirmed releases discovered at UST facilities during the year. The number of confirmed releases is targeted to decline by 75 each year. The LUST Prevention Program provides funding to tribes and states to prevent releases from the 537,706 federally regulated USTs by ensuring compliance with federal and state laws through inspections and other activities (data as of FY 2022). Preventing UST releases is more efficient and less costly than cleaning up releases after they occur. The three-year inspection cycle is a requirement from the Energy Policy Act of 2005. The 2015 revisions strengthen the 1988 federal UST regulations by increasing emphasis on properly operating and maintaining UST equipment. This includes such items as sump and spill bucket testing, walkthrough inspections, and leak detection functionality testing. The revisions help prevent and detect UST releases, which are a leading source of groundwater contamination. The two facets of the program (every facility inspected every three years and new requirements) work in tandem to ensure that the number of confirmed releases continues to decline.

Objective 6.3: Prepare for and Respond to Environmental Emergencies—*Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with tribes, states, and local planning and response organizations.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- Increased the average percentage of emergency response and removal exercises incorporating Environmental Justice to 49% from an estimate baseline of 12.5% based on FY 2021 data. In FY 2022, 80 such exercises have been conducted and EPA has participated in 84 additional trainings.
- Performance exceeded expectations to the point where EPA increased the FY 2023 target from 21% to 30%.

Challenges:

- Residual disruptions related to the COVID-19 pandemic limit some programs' ability to conduct live training sessions. A significant proportion of the required training sessions must be held in person for successful completion.

Long-Term Performance Goal: By September 30, 2026, ensure that 40% of annual emergency response and removal exercises that EPA conducts or participates in incorporate environmental justice.

Annual performance goals that support this long-term performance goal:

(PM ER02) Percentage of emergency response and removal exercises that EPA conducts or participates in that incorporate environmental justice.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						14	30	40	Percent	Above Target	No Trend Data
Actual						49					
Numerator						80			Exercises		
Denominator						164					

Key Takeaways:

- Exceeded the target, achieving 49% of emergency response and removal exercises incorporating environmental justice.
- This accomplishment is largely due to EPA adapting work plans to this new Administration priority.

Metric Details: This measure tracks the number of emergency response and removal exercises that EPA conducts or participates in that incorporate solutions to or address environmental justice challenges. The following mechanisms will be used to incorporate solutions to or address environmental justice challenges in exercises: involving facilities in locations that impact communities with environmental justice concerns; including an entity with environmental justice concerns as a participating organization; including environmental justice concerns or communities in the exercise scenario; or including scenario injects that incorporate environmental justice concerns or entities. Incorporating solutions to or addressing environmental justice challenges includes addressing language, mobility, or financial barriers or engaging community-based leadership. The estimated baseline for this measure is 12.5%, based on FY 2021 data. The FY 2023 target is increased based on performance results in the initial year of this measure.

(PM ER01) Number of emergency response and removal exercises that EPA conducts or participates in.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						120	120	120	Exercises	Above Target	
Actual					120	164					

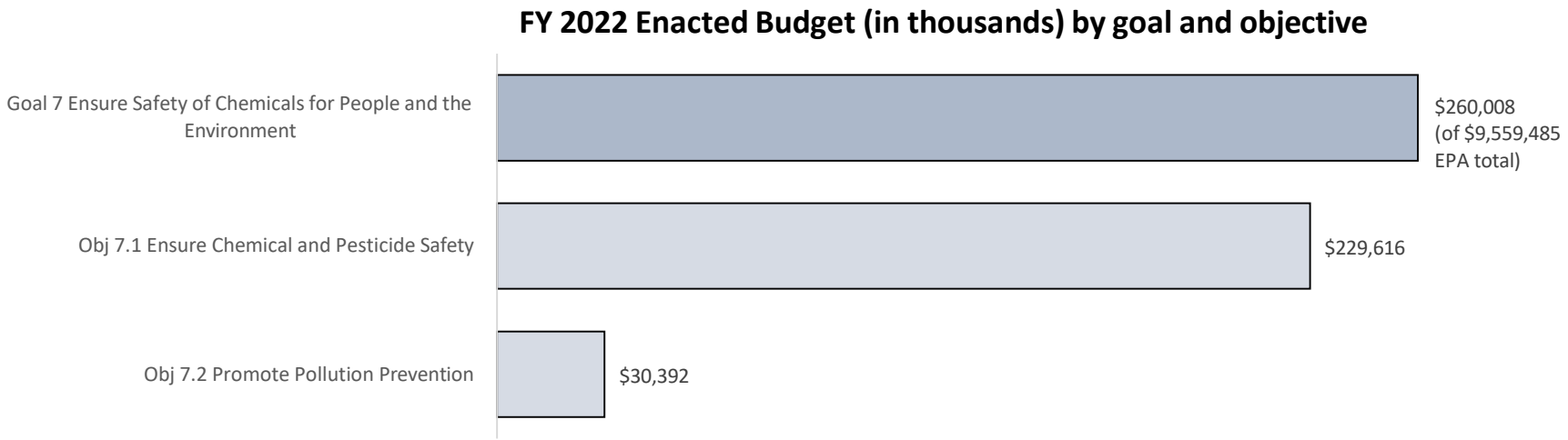
Key Takeaways:

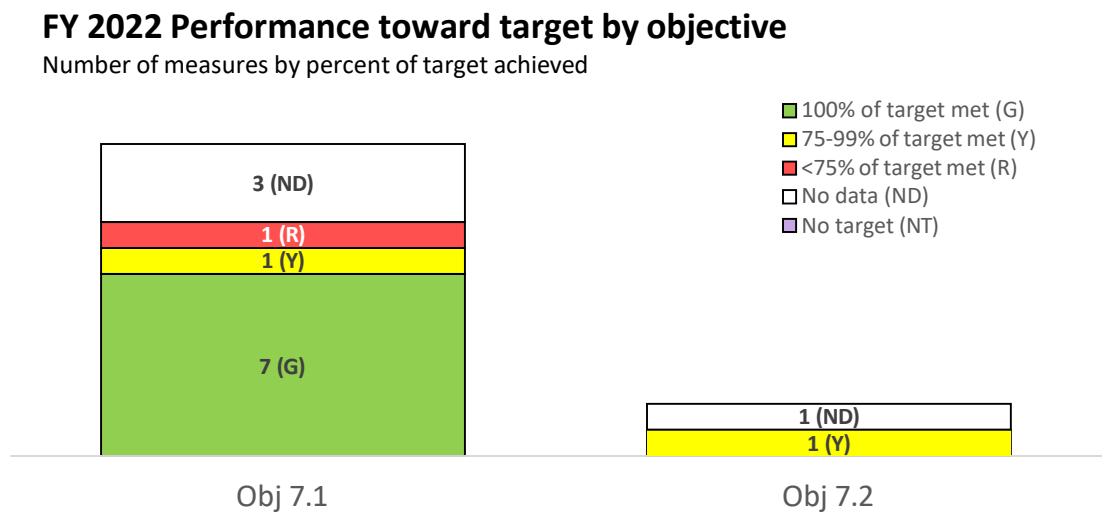
- Exceeded the target by conducting or participating in 164 emergency response and removal exercises.

Metric Details: This measure tracks the number of emergency response and removal exercises that EPA conducts or participates in, including: (1) CERCLA exercises which are exercises specific to CERCLA requirements or contaminants. These can include participation in exercises with Local Emergency Planning Committees (LEPCs) or Risk Management Plan (RMP) facilities with emphasis on CERCLA hazardous substance releases. (2) Oil spill preparedness exercises including tabletop, functional and full scale, and Government-Initiated Unannounced Exercises (GIUEs). These include internal exercises to ensure readiness and external training and readiness exercises. (3) Homeland Security exercises at which EPA staff participated. And (4) Federal Emergency Management Agency (FEMA) exercises in which EPA staff participated. The baseline is 120 exercises in FY 2021. Annual targets for this measure maintain this level of effort.

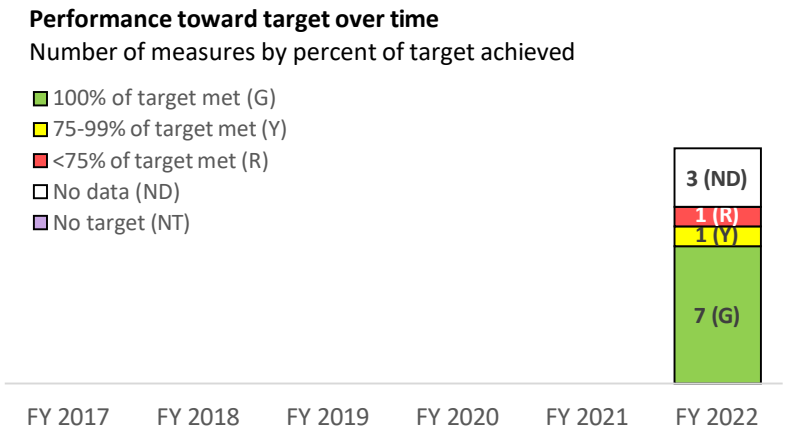
Goal 7 at a Glance

Ensure Safety of Chemicals for People and the Environment: Increase the safety of chemicals and pesticides and prevent pollution at the source.





Objective 7.1: Ensure Chemical and Pesticide Safety—*Protect the health of families, communities, and ecosystems from the risks posed by chemicals and pesticides.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

Toxic Substances Control Act (TSCA)

- Issued six draft and two final revised unreasonable risk determinations addressing worker risks and issued final risk evaluation scoping documents for two chemicals.
- Developed four risk management rules addressing health risks for Office of Management and Budget review; conducted option selection meetings on an additional five chemicals in preparation for rulemaking; held 25 trainings on lead-safe work practices; completed 121 Premanufacture Notices (PMNs); proposed, modified, or finalized 288 significant new use rules (SNURs); launched an initiative to reduce rework of new chemicals risk assessments to ensure more timely completion of PMNs; and launched a major initiative to update risk assessment methods and improve the science underpinning PMN reviews.

Pesticides

- Considered effects determinations or protections for federally listed or threatened species in 100% of its risk assessments supporting new active ingredients and 79% of those supporting registration review decisions, significantly exceeding targets.
- Completed 35 docket openings, 25 draft risk assessments, and 16 registration review cases with statutory due dates that fall after October 1, 2022.
- Farmworkers' level of knowledge after participating in pesticide safety training was 96.3% and exceeded the target of 95%.

Challenges:

- Funding has remained largely unchanged from levels prior to the TSCA amendments in 2016, while new work was added by the law. The 2018 TSCA fees rule resulted in collection of 13% of the artificially low baseline cost estimate for the program and the first 10 risk evaluations were exempted from the fees. The January 2021 proposal excluded the costs of risk management for the first 10 chemicals and 20 high-priority substances. To correct this, EPA developed a supplemental notice of proposed rulemaking to revise the estimate of implementation cost.
- There is an increasing backlog of Pesticide Registration Improvement Act (PRIA) and non-PRIA actions and rising renegotiation rates for PRIA actions. To address this, EPA committed to fully complying with the Endangered Species Act (ESA) before registering any new conventional active ingredients and released a workplan to address this challenge, including by incorporating protections for ESA listed species earlier in the process.
- EPA supported pesticide safety training of 12,716 farmworkers, which was below the target of 20,000 due to pandemic-related impacts on the national network of trainer organizations.

Long-Term Performance Goal: By September 30, 2026, complete at least eight High Priority Substance (HPS) TSCA risk evaluations annually within statutory timelines compared to the FY 2020 baseline of one.

Annual performance goal that supports this long-term performance goal:

(PM TSCA4) Number of HPS TSCA risk evaluations completed within statutory timelines.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						0	0	7	Evaluations	Above Target	
Actual				1	0	0					

Key Takeaways

- No risk evaluations were expected in FY 2022 (target zero). Due to reconsideration of earlier risk evaluations, EPA does not plan to complete any risk evaluations in FY 2023. EPA plans to complete seven risk evaluations in early FY 2024. For more information, see: https://www.epa.gov/newsreleases/epa-announces-path-forward-tsca-chemical-risk-evaluations.

Metric Details: This measure tracks HPS chemical risk evaluations completed annually for existing chemicals within the statutory deadline. Risk evaluations are needed to protect human health and the environment from unnecessary risks. TSCA requires risk evaluations for HPS to be completed within 3.5 years of the date the chemical is prioritized. TSCA requires that upon completion of a HPS risk evaluation, EPA must designate at least one additional HPS to take its place, thus ensuring that at least 20 EPA-initiated HPS risk evaluations are underway at all times. A baseline of one HPS risk evaluation was completed within statutory timelines to protect human health and the environment from unnecessary risk in FY 2020. For more information, see: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluations-existing-chemicals-under-tsca.

Long-Term Performance Goal: By September 30, 2026, initiate all TSCA risk management actions within 45 days of the completion of a final existing chemical risk evaluation.

Annual performance goal that supports this long-term performance goal:

(PM TSCA5) Percentage of existing chemical TSCA risk management actions initiated within 45 days of the completion of a final existing chemical risk evaluation.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						100	100	100	Percent	Above Target	No Trend Data
Actual						N/A					
Numerator									Actions		
Denominator											

Key Takeaways:

- No risk management actions were initiated in FY 2022, as no final existing chemical risk evaluations were completed. Revision of risk determinations for eight of the first 10 EPA-initiated risk evaluations commenced in 2016 will result in risk management actions for those chemicals in FY 2024 and FY 2025.

Metric Details: This measure tracks the percentage of existing chemical risk management rulemakings initiations, defined as the point at which EPA convenes the Agency workgroup following the tiering process for the rulemaking, within 45 days of publishing the final risk evaluation. TSCA Section 6(a) requires EPA to issue a proposed risk management rule for a chemical substance no later than one year after the date on which the final risk evaluation is published, and to publish a final rule no later than two years

after the publication date of the final risk evaluation. While EPA's Action Development Process includes timelines that do not conform to TSCA's rulemaking expectations, prompt initiation of risk management actions after the completion of risk evaluations is necessary for protecting human health and the environment from chemical risks. A baseline of 100% of existing chemical TSCA risk management actions were initiated within 45 days of the completion of a final existing chemical risk evaluation in FY 2020. For more information, see: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-existing-chemicals-under-tsca#process.

Long-Term Performance Goal: By September 30, 2026, review 90% of risk management actions for past TSCA new chemical substances reported to the 2020 Chemical Data Reporting Rule (CDR) compared to the FY 2021 baseline of none.[5]

Annual performance goals that support this long-term performance goal:

(PM TSCA6a) Percentage of past TSCA new chemical substances decisions with risk management actions reviewed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						5	25	30	Percent	Above Target	No Trend Data
Actual						N/A					
Numerator									Decisions		
Denominator											

Key Takeaways:

- The database by which this measure will be tracked and calculated is under development. EPA will be able to report for this measure in FY 2023.
- EPA has reviewed risk management actions for over 200 chemical substances included in a SNUR that were reported under the Chemical Data Reporting rule. This universe does not yet include Consent Orders.

Metric Details: This measure tracks the percentage of past risk management decisions for TSCA new chemical substances that were reported under the Chemical Data Reporting Rule (CDR), that EPA reviews for adherence/non-adherence with these requirements. EPA will use the 2020 CDR report which covers calendar years 2016 to 2019. Initial upfront work is required to prepare three data sources for comparison, which may take up to one year to complete (by December 2022). EPA puts measures in place to protect human health and the environment by identifying conditions to be placed on the use of a new chemical before it is entered into commerce. EPA will review compliance with established restrictions in TSCA Section 5 Consent Orders or SNURs by cross-walking action requirements with information reported under the CDR rule. Instances of non-compliance will be relayed to EPA's Office of Enforcement and Compliance Assurance for additional actions. This could include additional virtual records auditing, on-site audits, issuance of compliance advisories or guidances, requests for information/subpoenas, and modifications/updates to TSCA Section 5 Consent Orders, SNURs, or other requirements, as appropriate. For more information, see: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/basic-information-review-new.

[5] Changed from "By September 30, 2026, review 90% of risk mitigation requirements for past TSCA new chemical substances reported to the 2020 Chemical Data Reporting Rule (CDR) compared to the FY 2021 baseline of none."

(PM TSCA6b) Percentage of TSCA new chemical substances with risk management actions reported to the 2020 CDR reviewed for adherence/non-adherence with TSCA Section 5 risk management actions that are determined to adhere to those requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						N/A	25	30	Percent	Above Target	No Trend Data
Actual						N/A					
Numerator									Substances		
Denominator											

Key Takeaways:

- The database by which this measure will be tracked and calculated is under development. EPA will be able to report for this measure in FY 2023.
- EPA has reviewed risk management actions for over 200 chemical substances included in a SNUR that were reported under the Chemical Data Reporting rule. This universe does not yet include Consent Orders.

Metric Details: This measure tracks the percentage of new chemicals substances reported under the 2020 CDR reviewed for adherence/non-adherence with TSCA Section 5 risk management actions that are determined to be in adherence with reported risk mitigation requirements of the actions. For more information, see: https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/basic-information-review-new.

Long-Term Performance Goal: By September 30, 2026, recertify before the expiration date 36% of lead-based paint Renovation, Repair, and Painting (RRP) firms whose certifications are scheduled to expire compared to the FY 2021 baseline of 32%.

Annual performance goal that supports this long-term performance goal:

(PM RRP30) Percentage of lead-based paint RRP firms whose certifications are scheduled to expire that are recertified before the expiration date.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						32	33	34	Percent	Above Target	
Actual	18	17	19	40	36	31					
Numerator	1,793	1,134	1,185	9,006	6,524	2,874			RRP Firms		
Denominator	9,851	6,855	6,091	22,384	18,158	9,423					

Key Takeaways:

- To ensure the highest recertification rates, which are indicative of industry interest in providing these critical services, EPA will continue outreach and compliance assistance activities designed to encourage program participation. These activities include communication with participating firms and, to the extent possible with existing resources, outreach designed to encourage consumers to seek certified firms with the thought that increased demand for lead-safe services will lead to greater participation.

Metric Details: This measure tracks the percentage of expiring lead-based paint firm certifications renewed before the expiration date. Number of recertifications can vary widely from year to year due to external variabilities. This industry has a high level of turnover (companies closing and opening). Higher numbers for this measure reflect interest in the industry for continuing to provide these critical services. Federal law requires all RRP firms working in housing, or facilities where children are routinely present, built before 1978, to be certified. Firms must apply to EPA for certification to perform renovations or dust sampling. To apply, a firm must submit a completed application and fee to EPA online. EPA RRP firm certifications are good for five years. Firms must apply for recertification at least 90 days before the firm's current certification expires. Data are tracked in

the Federal Lead-based Paint Program database. Data include recertifications from jurisdictions where EPA administers the RRP Program. These data do not include recertifications from tribes or states with delegated programs. The baseline of 32% is based on the average recertification rate during the final six months of FY 2021 due to unusual circumstances in the first half of the fiscal year.

Long-Term Performance Goal: By September 30, 2026, complete 78 pesticide registration review cases with statutory due dates that fall after October 1, 2022.

Annual performance goals that support this long-term performance goal:

(PM FIFRA3a) Number of pesticide registration review cases completed with statutory due dates that fall after October 1, 2022.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						15	8	14	Cases	Above Target	
Actual						16					

Key Takeaways:

- Exceeded target due to 11 completed biopesticide active ingredient cases with ESA "no effects" determinations.

Metric Details: This measure tracks the annual number of pesticide registration review case completions with statutory due dates that fall after October 1, 2022. EPA is reviewing each registered pesticide every 15 years to determine whether it still meets the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) standard for registration and to ensure that pesticides already in the marketplace do not pose unreasonable adverse effects on people or the environment based on current science standards. A total of 78 registered pesticides has a 15-year cycle due dates that fall after October 1, 2022. The baseline is one pesticide registration review case completed in FY 2020 with a statutory due date that falls after October 1, 2022.

(PM FIFRA3b) Number of pesticide registration review dockets opened for registration review cases with statutory completion dates that fall after October 1, 2022.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						25	20	28	Dockets	Above Target	
Actual						35					

Key Takeaways:

- Exceeded target due to completion of 10 workplans for biopesticide active ingredients that identified minimal risks.
- These additional completions could reduce completions in future years.

Metric Details: This measure tracks the annual number of docket openings for pesticide registration review with statutory due dates that fall after October 1, 2022. Docket openings are the first stage of the registration review process and offer the first opportunity for the public to provide comment. The baseline is 11 docket openings in FY 2020.

(PM FIFRA3c) Number of draft risk assessments completed for pesticide registration review cases with statutory completion dates that fall after October 1, 2022.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						9	16	19	Draft As-sessments	Above Target	
Actual						25					

Key Takeaways:

- Exceeded target due to completion of 19 combined workplan/proposed interim decision documents for biopesticide active ingredients that identified minimal risks, allowing EPA to skip the risk assessment phase of registration review.
- These early completions could reduce completions in future years.

Metric Details: This measure tracks the annual number of draft risk assessments completed for pesticide registration review cases with statutory due dates that fall after October 1, 2022. The draft risk assessment presents EPA's preliminary risk findings to the public and provides opportunity for public comment. Maintaining targets for this measure helps ensure that registration review case completion targets are achieved. The baseline is five draft risk assessments completed in FY 2020.

Long-Term Performance Goal: By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species for new active ingredients in 90% of the risk assessments supporting pesticide registration decisions compared to the FY 2020 baseline of 50%.

Annual performance goal that supports this long-term performance goal:

(PM ESA1) Percentage of risk assessments supporting pesticide registration decisions for new active ingredients that consider the effects determinations or protections for federally threatened and endangered species.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						40	80	90	Percent	Above Target	
Actual				50	62	100					
Numerator				8	8	14			Risk Assessments		
Denominator				16	13	14					

Key Takeaways:

- After releasing the ESA workplan in January 2022, EPA began considering ESA effects determinations in new active ingredient regulatory decisions on a more aggressive schedule than was projected when the *FY 2022-2026 EPA Strategic Plan* measures were being developed. Outyear targets were adjusted accordingly.
- EPA has committed to including ESA for conventional new active ingredient registrations only, but there will likely be registrations that won't have ESA evaluations and are not expected to routinely hit 90-100% annually.

Metric Details: This measure tracks the percentage of risk assessments for pesticide registration decisions for new active ingredients that incorporate ESA requirements to ensure federal actions do not jeopardize the continued existence of federally threatened or endangered species or damage their critical habitat. Historically, EPA has not incorporated ESA determinations into its regulatory decisions other than determinations of "no effects" (mostly for biopesticides), due to the lengthy process of ESA consultation with the Services (U.S. Fish and Wildlife Service and National Marine Fisheries Service). EPA will more routinely incorporate ESA effects determinations into its regulatory decisions and ensure protection for listed species earlier in the consultation process through label mitigation. The FY 2020 baseline year included a relatively higher percentage of determinations of "no effects" for biopesticide new active ingredient registration decisions in relation to overall new active ingredient registration decisions. Biopesticide determinations of "no effects"

are estimated to apply to 70-80% of new active ingredient registration decisions in any given fiscal year; the remainder includes conventional pesticides, antimicrobial pesticides, and biopesticides for which determinations of "no effects" cannot be made.

Long-Term Performance Goal: By September 30, 2026, consider the effects determinations or protections of federally threatened and endangered species in 50% of the risk assessments supporting pesticide registration review decisions compared to the FY 2020 baseline of 27%.

Annual performance goal that supports this long-term performance goal:

(PM ESA2) Percentage of risk assessments supporting pesticide registration review decisions that include effects determinations or protections of federally threatened and endangered species.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						20	30	30	Percent	Above Target	
Actual				27		79					
Numerator				29		27			Risk Assessments		
Denominator				107		34					

Key Takeaways:

- The FY 2022 result is driven by ESA "no effects" determinations for biopesticides that exceeded levels considered in setting the target. The targets are largely based on litigation-driven ESA assessment for conventional pesticides.

Metric Details: This measure tracks the percentage of risk assessments for pesticide registration review decisions that incorporate ESA requirements, including decisions subject either to the statutory deadline of October 2022 for the first cycle of registration review or to a 15-year schedule of review under the second cycle. Implementation of this process for pesticide registration review decisions will follow implementation for new active ingredient pesticide registration decisions. Some cases in the first cycle of registration review are currently involved in litigation due to EPA's failure to incorporate ESA considerations. EPA calculated the FY 2020 baseline of 27% based on the portion of all actions in registration review during FY 2020 for conventional pesticides, biopesticides, and antimicrobial pesticides that included either a determination of "no effects" or measures that are intended to reduce exposure to listed species. The risk assessments that considered endangered species in FY 2020 were cases where EPA made a determination of "no effects" on listed species based either on a lack of potential exposure or a lack of toxicological harm. EPA calculated the FY 2020 baseline assuming 107 completed risk assessments of which 29 included determinations of "no effects" on listed species.

Long-Term Performance Goal: By September 30, 2026, support Agricultural Worker Protection Standard (WPS) pesticide safety training for 20,000 farmworkers annually compared to the FY 2018-2020 annual average baseline of 11,000.

Annual performance goals that support this long-term performance goal:

(PM WPS1a) Number of farmworkers receiving EPA-supported WPS pesticide safety training.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						20,000	12,000	12,000	Farmworkers	Above Target	
Actual						12,716					

Key Takeaways:

- Results fell short of target due to pandemic-related impacts on the national network of trainer organizations, including hiring/retention of trainers, training organizations being defunct, and access to farms/farmworkers denied.
- The grantee is currently aligning/redirecting resources to institutions with training capacity and will continue reaching out to their network and partnering organizations, including local agencies, nonprofit organizations, community leaders and agricultural employers, to better understand their capacity and increase efforts to return to in-person training.

Metric Details: This measure tracks the number of farmworkers trained under EPA cooperative agreements in accordance with the Agricultural WPS rule. The purpose of the WPS is to reduce pesticide poisonings and injuries among agricultural workers and pesticide handlers. The WPS offers occupational protections to over 2 million agricultural workers and pesticide handlers who work at over 600,000 agricultural establishments. WPS pesticide safety training is an annual requirement. An average of 11,000 individuals had the EPA-supported WPS training from FY 2018-2020, which reflects a sharp drop-off in training in FY 2020 due to the COVID-19 pandemic.

(PM WPS1b) Percentage of content knowledge demonstrated by farmworker/trainees of pesticide safety upon completion of EPA-supported WPS pesticide training.

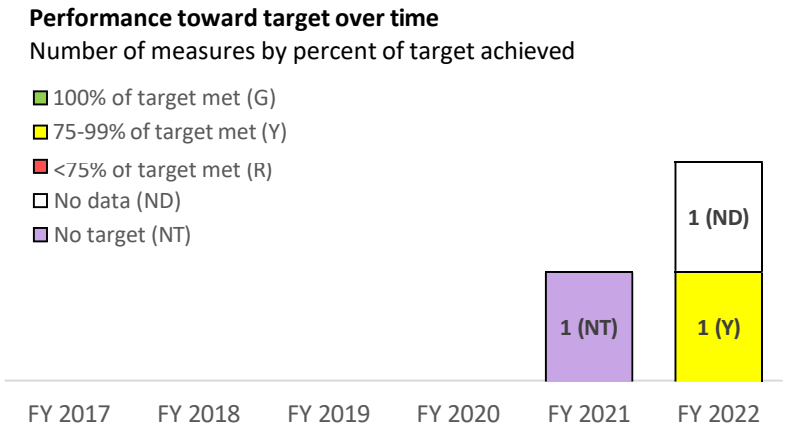
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						95	95	95	Percent	Above Target	
Actual						96					

Key Takeaways:

- Those that received training demonstrated desired knowledge gains from the training; the average percentage of knowledge demonstrated based on post-training assessment is 96.3% for FY 2022.

Metric Details: This measure tracks the average level of knowledge of the pesticide safety content demonstrated by farmworkers/trainees at the conclusion of EPA-supported WPS pesticide training, based on pre- and post-survey questions administered to trainees. The baseline of 95% is based on post-training assessments conducted annually from FY 2018-2020.

Objective 7.2: Promote Pollution Prevention—*Encourage the adoption of pollution prevention and other stewardship practices that conserve natural resources, mitigate climate change, and promote environmental sustainability.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

Summary of progress toward strategic objective:

- Announced the availability of $100 million over five years in Bipartisan Infrastructure Law (BIL) funding for additional investment in pollution prevention grants, including substantial investment in disadvantaged communities in alignment with Justice40, to promote the use of source reduction techniques by businesses. These funds will help mitigate climate change, reduce the use of hazardous materials and target communities with environmental justice concerns.
- The Safer Choice program added 22 new chemicals to the Safer Choice Ingredients List and certified 208 new products to carry EPA's Safer Choice label.
- EPA awarded 71 pollution prevention grants to states/tribes to help businesses adopt source reduction practices and technologies, with emphasis on addressing climate change impacts and environmental justice.

Challenges:

- The overall number of Safer Choice-certified products has fallen since the baseline was set because resource levels have required the program to prioritize maintenance of core functions, including product certification for existing products, over certifying new products.

Long-Term Performance Goal: By September 30, 2026, reduce a total of 6 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) released attributed to EPA pollution prevention grants.

Annual performance goal that supports this long-term performance goal:

(PM P2mtc) Reduction in million metric tons of carbon dioxide equivalent ($MMTCO_2e$) released per year attributed to EPA pollution prevention grants.*

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target					No Target Established	1.2	1.2	1.2	$MMTCO_2e$	Above Target
Actual	1.7	1.6	1.5	1.4	1.1	Data Avail 10/2023				

Key Takeaways:

- The FY 2021 decrease from past years may be due in part to the COVID-19 pandemic and resulting shutdowns and economic impacts on facilities implementing pollution prevention practices. EPA has asked grantees to shift some of their resources from direct technical assistance (which produces direct results such as CO_2 reductions) to documenting and widely sharing pollution prevention approaches so those actions and results can be replicated.

Metric Details: This measure tracks $MMTCO_2e$ reductions from all Pollution Prevention Grant Program activities. $MMTCO_2e$ is calculated by using an online tool to convert standard metrics for electricity, green energy, fuel use, chemical substitutions, water management, and materials management into $MMTCO_2e$ (https://www.epa.gov/p2/pollution-prevention-tools-and-calculators). Annual results are the total reported by grantees in a single year plus the contributions from the previous three years. This method accounts for recurring benefits of a pollution prevention action, not just in the year it was implemented, but also in future years. Pollution prevention grants are "two-year" grants with an optional third year for follow-up reporting and case study development. These grants have annual reporting but with a one-year reporting lag due to the grant reporting cycle.

* This measure is also used to track progress in implementing the Bipartisan Infrastructure Law.

Long-Term Performance Goal: By September 30, 2026, EPA's Safer Choice program will certify a total of 2,300 products compared to the FY 2021 baseline of 1,892 total certified products.[6]

Annual performance goal that supports this long-term performance goal:

(PM P2sc) Number of products certified by EPA's Safer Choice program.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target						1,950	2,000	2,100	Products	Above Target
Actual	1.948	1,958	1,989	1,929	1,892	1,835				

Key Takeaways:

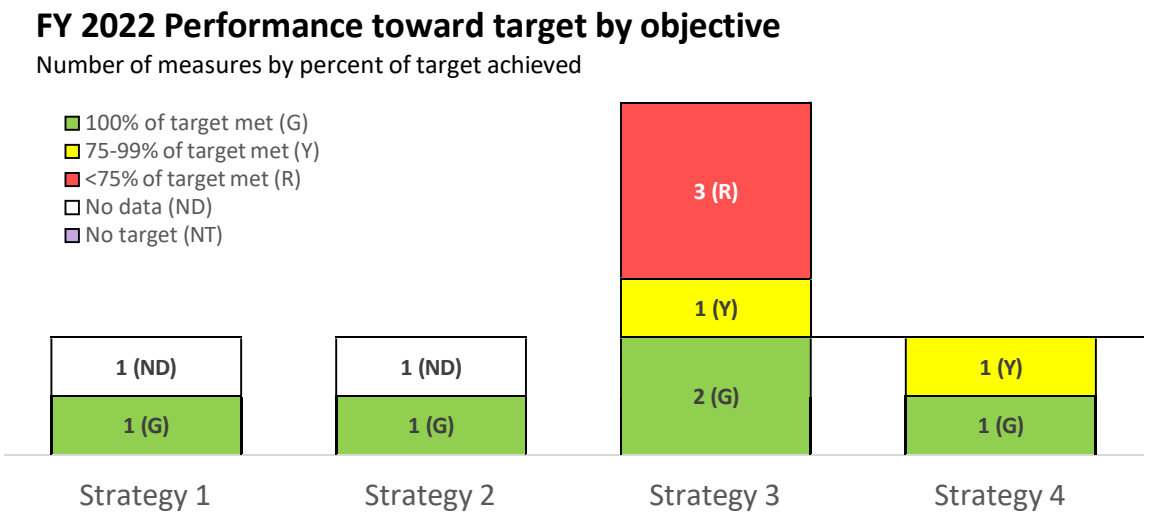
- Disinvestment from the program in prior years caused a drop in the number of certified products. At FY 2022 resource levels, EPA is prioritizing maintenance of existing partnerships and is not able to invest in broadening the number of certified products and new product sectors.

[6] Changed from "By September 30, 2026, EPA's Safer Choice program will certify a total of 2,300 products compared to the FY 2021 baseline of 1,950 total certified products."

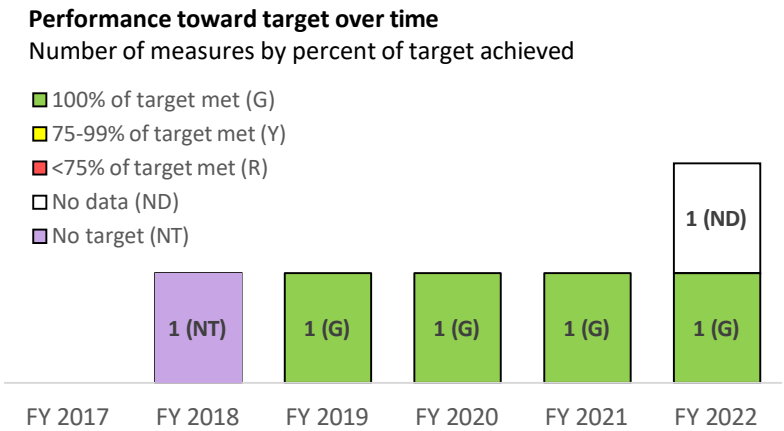
Metric Details: This measure tracks the total number of products certified by the Safer Choice program at the end of the year. Safer Choice is a voluntary program that helps consumers, businesses, and purchasers find products that perform and contain ingredients that are safer for human health and the environment. Certified products are verified by EPA to meet the Safer Choice Standard through initial certification, annual audits, and recertification every three years. The total includes Design for the Environment-certified antimicrobial products and total number of products certified. Data are tracked in EPA's Safer Choice database. For additional information, see: https://www.epa.gov/saferchoice.

Cross-Agency Strategies at a Glance

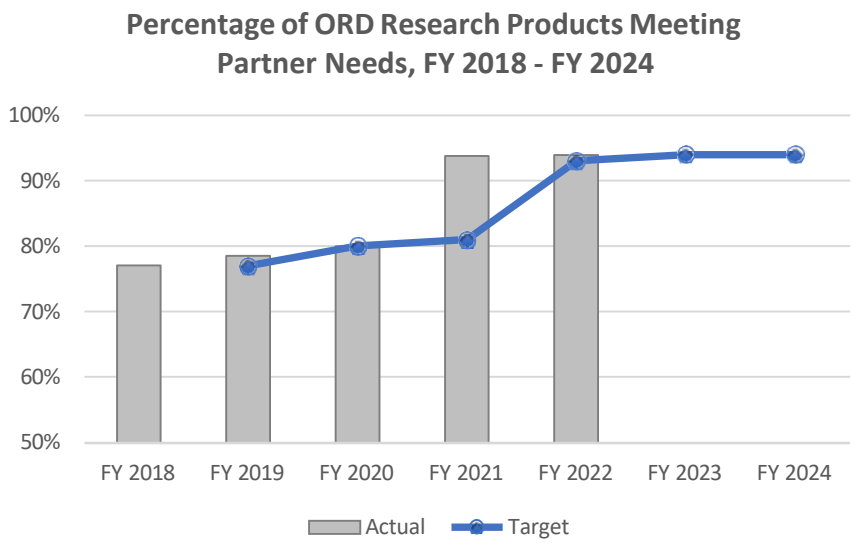
EPA's FY 2022 enacted budget, in thousands, included $1,573,930 of $9,559,485 total for cross-agency mission and science support. This funding was allocated across strategic goals and objectives in the FY 2022-2026 EPA Strategic Plan.



Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making—*Deliver rigorous scientific research and analyses to inform evidence-based decision-making.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Strengthening scientific integrity (SI) by providing trainings, conducting outreach events, implementing senior leader performance standards, and developing policies, procedures and approaches to address outcomes resulting from audits Federal Managers' Financial Integrity Act (FMFIA) analyses, the Federal Employee Viewpoint Survey, and the biennial SI survey.
- All Deputy Scientific Integrity Officials (DSIOs) developed implementation plans outlining actions they will take to strengthen SI at EPA. The Agency is on track to complete 21 actions by the end of FY 2023.
- Developed an SI training to implement in FY 2023.
- Developed an evaluation and assessment plan to monitor SI Program success and effective SI Policy Implementation.
- Met partner needs for 94% of research products included in the annual customer satisfaction assessment.
- Expanded the Lab Information Management System to include 225 different analyses and 125 preparation methods, with 21,048 samples processed. The percentage of EPA regional labs delivering at least 80% of sample analysis work orders on time improved from an annual average of 50% in FY 2018 to 88% in FY 2022.
- Released the Vision and Principles for Participatory Science (available at: https://www.epa.gov/participatory-science/epa-vision-participatory-science). This document will guide EPA's use of participatory and community science in its programs to increase public engagement and take actions to investigate and mitigate environmental problems.

Challenges:

- The COVID-19 pandemic caused delays in EPA's research as most of the workforce in FYs 2021 and 2022 were forced into full-time telework. EPA staff published fewer journal articles in FY 2022 than in previous years and experienced delays in producing research products.
- As of October 2022, 27% of EPA's research and development career staff are retirement eligible. If unable to sustain a suitably trained and skilled workforce, EPA will be delayed in meeting research project goals. To address this, ORD is improving its hiring efficiencies and enhancing its succession management practices.

Long-Term Performance Goal: By September 30, 2026, increase the annual percentage of Office of Research and Development (ORD) research products meeting partner needs to 95% from a baseline of 93% in FY 2021.

Annual performance goal that supports this long-term performance goal:

(PM RD1) Percentage of ORD research products meeting partner needs.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction
Target		No Target Established	77	80	81	93	94	94	Percent	Above Target
Actual		77	79	80	94	94				
Numerator		171	154	120	60	77			Products	
Denominator		222	196	150	64	82				

Key Takeaways:

- Met partner needs for 94% of research products included in the annual customer satisfaction assessment, based on an annual customer survey of 50 randomly selected ORD research products. The FY 2022 survey was provided to 210 federal and 63 non-federal respondents and had a 61.9% response rate.
- Nine of the products that were assessed were related to updated Provisional Peer-Reviewed Toxicity Value (PPRTV) assessments that provide an important source of toxicity information and toxicity values for chemicals of concern to the Superfund Program.
- The number of products being assessed has increased from the previous fiscal year for the first time after having trended downward for four consecutive years. This trend is likely to continue through FY 2023 as the number of products being delivered to ORD partners increases in response to the conclusion of the FY 2019-2022 Strategic Research Action Plan cycle.

Metric Details: Partner satisfaction is assessed through a robust survey process. The annual survey engages key users of ORD products. Survey respondents assessed the scientific rigor of research products (quality), product relevance (usability), and timeliness of product delivery. Products are randomly selected from the universe of products identified as delivered during the previous fiscal year in the Research Approval Planning Implementation Dashboard (RAPID). Per information collection request stipulations, each year ORD surveys 50 randomly selected products of the universe of products that were delivered. The numerator is a statistical inference from the survey results calculated via a stratified sample design to account for the proportion of products delivered by ORD and then applied to the entire universe of products. The denominator is the total universe of products.

Long-Term Performance Goal: By September 30, 2026, implement 126 actions for scientific integrity objectives that are certified by Deputy Scientific Integrity Officials in each EPA program and region.

Annual performance goal that supports this long-term performance goal:

(PM RD5) Number of actions implemented for EPA scientific integrity objectives.

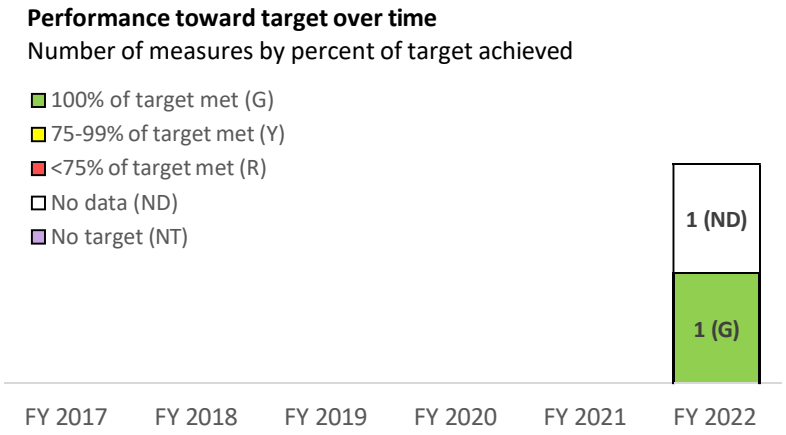
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						No Target Established	21	21	Actions	Above Target	No Trend Data
Actual						N/A					

Key Takeaways:

- All DSIOs have completed development of their implementation plans, which outline actions they will complete to support the long-term performance goal. The Agency is on track to complete 21 actions by the end of FY 2023.

Metric Details: This measure tracks the number of actions completed by EPA DSIOs to implement the scientific integrity objectives that implement the EPA Scientific Integrity Policy (https://www.epa.gov/sites/default/files/2014-02/documents/scientific_integrity_policy_2012.pdf). Each DSIO will certify completion of two actions for each of the three scientific integrity objectives: scientific integrity is highly visible at EPA (Objective 1); all of EPA embraces and models scientific integrity (Objective 2); and robust mechanisms protect and maintain EPA's culture of scientific integrity (Objective 3). DSIOs are members of the Scientific Integrity Committee representing each EPA program office and region.

Strategy 2: Consider the Health of Children at All Life Stages and Other Vulnerable Populations—*Focus on protecting and improving the health of children at all life stages and other vulnerable populations in implementing our programs.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.

EPA, in consultation with the Office of Management and Budget, has highlighted this cross-agency strategy as a focus area for improvement due to delays in finalizing EPA's methodology for tracking progress toward the long-term performance goal. EPA finalized the methodology and will begin reporting results in FY 2023.

Summary of progress toward strategic objective:

- Updated EPA's Policy on Children's Health to improve EPA's approach to protect children by consistently and explicitly considering early life exposures and lifelong health (see: https://www.epa.gov/system/files/documents/2021-10/2021-policy-on-childrens-health.pdf).
- Worked with federal partners through the President's Task Force on Environmental Health Risks and Safety Risks to Children to launch a new interagency subcommittee on children's health in the context of climate, emergencies and disasters (see: https://ptfcehs.niehs.nih.gov/features/featured-activity/page930423.htm).
- Established Children's Health Program Champions in each EPA national program to identify opportunities to enhance investments in protection of children's environmental health.
- Sponsored a National Academies of Science workshop on the future of children's environmental health, drawing almost 1,500 attendees.
- Developed an annual performance goal for stakeholder engagement to promote consideration of children's health at all life stages, with an emphasis on projects in underserved communities. With regional input, developed guidance outlining and defining the criteria of projects that are durable, replicable, and widespread.
- Established an annual performance goal to increase number of EPA actions that include evaluation and consideration of environmental health information and data for children at all life stages to the extent relevant data are available. With leadership input, simplified approach to focus on the most important actions and motivate adoption.

Challenges:

- Environmental and public health statutes differ in the extent to which they require protection of children and sensitive populations, presenting challenges in aligning approaches across program offices.
- Some EPA regional offices may need time to adapt and strategically choose children's health projects that are durable, replicable, and widespread. Most regions have projects that are replicable and widespread but lack durability (projects or results that last more than one year) due to changing priorities or lack of resources.

Long-Term Performance Goal: By September 30, 2026, assess and consider environmental health information and data for children at all life stages for EPA actions that concern human health.[7]

Annual performance goals that support this long-term performance goal:

(PM CH01) Number of EPA actions that concern human health that include assessment and consideration of environmental health information and data for children at all life stages to the extent relevant data are available.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						50%	163	TBD	Actions	Above Target	
Actual						N/A					

Key Takeaways:

- Established the approach and began implementation of the long-term performance goal for Cross-Agency Strategy 2. Set aggressive target and will begin reporting data in FY 2023.

Metric Details: This measure tracks the number of EPA actions (e.g., rules, risk assessments, exposure assessments, economic and benefits analyses, research and other products, program implementation guidances, enforcement and compliance efforts and activities, grants, training, partnerships, fact sheets, internal capacity building work other communication materials) that have a human health impact and for which children's environmental health information and data was considered and assessed, to the extent relevant data are available. The intent of this measure is to demonstrate improvements in complying with EPA's *2021 Policy on Children's Health* (https://www.epa.gov/children/epas-policy-childrens-health), which calls for EPA to protect children from environmental exposures by "consistently and explicitly considering early life exposures and lifelong health in all human health decisions." In FY 2022, the measure was a percentage. EPA will set the FY 2024 target based on experience in FY 2023 and will report this target in the FY 2025 Budget.

(PM CH02) Number of EPA regional offices with stakeholder engagement on children's environmental health designed to provide durable, replicable, and widespread results.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target						3	6	7	Regional Offices	Above Target	
Actual						6					

Key Takeaways:

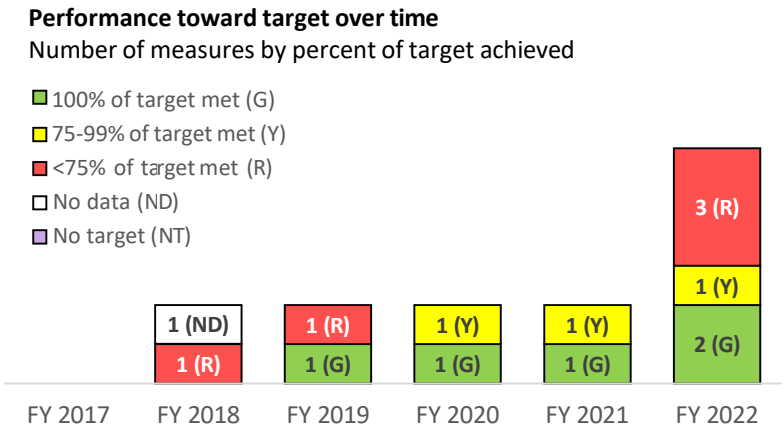
- Six regional offices met the criteria, exceeding the target. For example, EPA Region 6 began implementing a project to provide education on pesticide use and its potential health impacts to migrant farmworkers and their families along the U.S.-Mexico border, as part of a multi-year five-state effort to train health care providers, school nurses, respiratory therapists, community health workers, and others in children's environmental health issues.
- In addition, EPA Region 9 supported the Western States Pediatric Environmental Health Specialty Unit (WSPEHSU) in culturally and linguistically adapting resources from their Green Cleaning, Sanitizing, and Disinfecting Toolkit for Early Care and Education for use in the Pacific Islands. The WSPEHSU worked with local community groups in

[7] Changed from "By September 30, 2026, assess and consider environmental health information and data for children at all life stages for all completed EPA actions that concern human health."

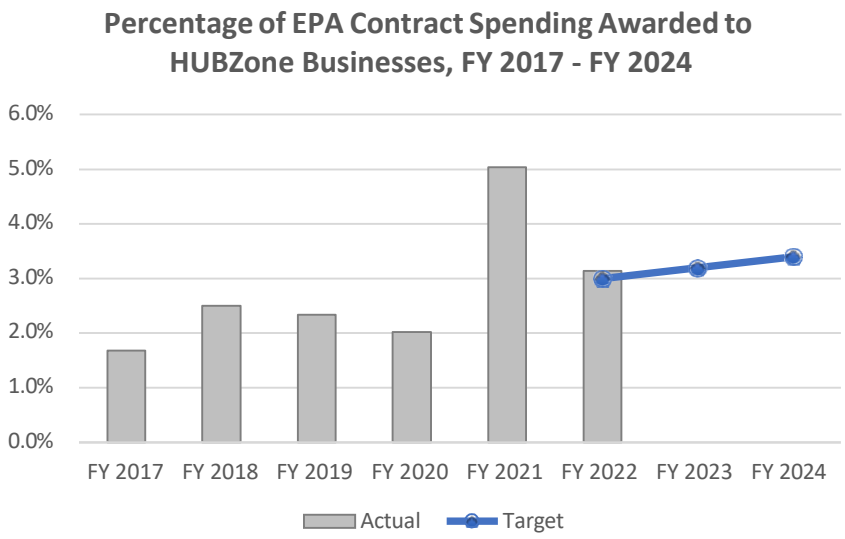
American Samoa and the Commonwealth of the Northern Mariana Islands to identify priority resources and three key languages for translation – Tagalog, Samoan, and Chamorro – and disseminate the information throughout the Pacific Islands to help communities protect children.

Metric Details: This measure tracks the number of EPA regional offices that have developed and are implementing stakeholder engagement activities on children's environmental health that support joint planning, collaboration, or action; identify and address community-scale issues; build federal/state/local "whole-of-government" partnerships; and/or address health disparities. EPA aims to increase outcome-driven stakeholder participation and program visibility. The activities under this measure must be underway in disadvantaged communities for more than one year (durable), include outreach or training materials that could be adapted by other regions or communities (replicable), and involve more than one EPA region or program office and/or community (widespread).

Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity—*Foster a diverse, equitable, and inclusive workforce within an effective and mission-driven workplace.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Formed workgroup to improve and coordinate approaches for reporting the location of projects funded under the Bipartisan Infrastructure Law (BIL), including investments in disadvantaged communities in alignment with Justice40.
- Assessed effectiveness of EPA's workforce planning tools for the EPA Learning Agenda workforce priority area.
- Submitted EPA Diversity, Equity, Inclusion, and Accessibility (DEIA) Strategic Plan to the Office of Management and Budget outlining necessary actions to meet the highest DEIA Maturity Level, Leading and Sustaining; conducted mandatory training for all supervisors on unconscious bias in the hiring process; and expanded access to affordable childcare for employees and prospective applicants by increasing the childcare subsidy income eligibility from $75K to $100K.
- Made significant progress toward implementing cybersecurity measures across the Agency in response to Executive Order 14028: *Improving the Nation's Cybersecurity*.
- Developed a repeatable process for conducting climate resiliency assessments at EPA-owned facilities to identify potential risks and impacts from climate change, and completed the first assessment at EPA's laboratory in Gulf Breeze, FL.
- Developed an inventory of current permitting information technology (IT) tools and automation needs and identified 13 permitting-related processes to automate.
- Developed comprehensive strategy and electronic toolkit of resources and best practices to guide the EPA acquisition workforce in enhancing contracting opportunities for HUBZone and other socioeconomic program small businesses.
- For the 23rd consecutive year, EPA received an unmodified opinion (highest possible) on its Consolidated Financial Statements.
- Developed and published the *FY 2022-2026 EPA Strategic Plan* and issued four major Evidence Act deliverables.

Challenges:

- Increased workload, competing demands on staff time, and growing costs in Operations & Administration Program Area may jeopardize the Agency's ability to advance DEIA and climate resiliency and sustainability efforts. EPA has requested additional funding for these efforts in the FY 2024 President's Budget.
- EPA faces challenges in meeting cybersecurity mandates due to non-enterprise hosting and decentralized management of local IT infrastructure.

Long-Term Performance Goal: By September 30, 2026, EPA will be in full compliance with the five high-priority directives in Executive Order 14028 - *Improving the Nation's Cybersecurity*.

Annual performance goals that support this long-term performance goal:

(PM MFA) Percentage of EPA applications in compliance with multifactor authentication requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						75	85	90	Percent	Above Target	No Trend Data
Actual						48					
Numerator						223			Applications		
Denominator						463					

Key Takeaways:

- Missed ambitious target but continuing to make significant progress towards achieving multifactor authentication compliance for EPA applications in FY 2023.
- Implemented login.gov for multifactor authentication for external facing Web Access Management (WAM)-protected applications.
- Performed an audit of system compliance, strengthening the Agency's understanding for application noncompliance.
- Currently undergoing a gap analysis which will provide input to the implementation schedule to fully comply with multifactor authentication requirements.

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of Executive Order 14028 – *Improving the Nation's Cybersecurity* (https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/). Multifactor authentication confirms user identify and ensures only authorized users have access to Agency systems and information.

(PM DAR) Percentage of EPA data at rest in compliance with encryption requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							90	95	Percent	Above Target	No Trend Data
Actual											
Numerator									Systems		
Denominator											

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of *Executive Order 14028 – Improving the Nation's Cybersecurity*. Encrypting data at rest ensures any unauthorized individual who has gained access to EPA's network or any of its information systems will still be unable to read the data in any meaningful and potentially destructive or malicious way. The August 2022 baseline for this measure is 83%.

(PM DIT) Percentage of EPA data in transit in compliance with encryption requirements.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							90	95	Percent	Above Target	No Trend Data
Actual											
Numerator									Systems		
Denominator											

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of *Executive Order 14028 – Improving the Nation's Cybersecurity*. Encrypting data in transit ensures any unauthorized individual who has gained the ability to monitor network traffic will be unable to read and interpret data in a meaningful and potentially destructive or malicious way. The August 2022 baseline for this measure is 82%.

(PM ZTA) Percentage of "Zero Trust Architecture" projects completed on time.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							100	100	Percent	Above Target	No Trend Data
Actual											
Numerator									TBD		
Denominator											

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of *Executive Order 14028 – Improving the Nation's Cybersecurity*. The "Zero Trust Architecture" security model eliminates implicit trust in any one element, node, or service and instead requires continuous verification of the operational picture via real-time information from multiple sources to determine access and other system responses. Once implemented, the various components of Agency network infrastructure will be more resistant to unauthorized access. As of August 2022, EPA is determining the final portfolio of ZTA implementation projects that will be completed under this annual performance goal and the associated deadlines. EPA will work to achieve the deadlines 100% of the time.

(PM ALR) Implementation of advanced event logging requirements (EL3) across EPA networks.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						EL1	EL3	EL3	Tier	Above Target	No Trend Data
Actual						EL0					

Key Takeaways:

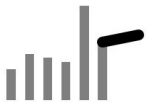
- Faced challenges in this area due to continued non-enterprise hosting and decentralized management of local equipment. EPA is making significant progress to move from EL0 – "Not Effective" toward achieving the highest event logging tier and has made a significant investment in modernizing EPA's enterprise log management capability.

Metric Details: This measure tracks EPA implementation of one of the five priority requirements of *Executive Order 14028 – Improving the Nation's Cybersecurity*. EPA will implement the highest event logging tier of "Advanced" (EL3) across EPA networks and infrastructure as established by *Office of Management and Budget Memorandum M-21-31 – Improving the Federal Government's Investigative and Remediation Capabilities Related to Cybersecurity Incidents.*

Long-Term Performance Goal: By September 30, 2026, award 4% of EPA contract spending to small businesses located in Historically Underutilized Business Zones (HUBZones) compared to the FY 2018-2020 average annual baseline of 2.2%.

Annual performance goal that supports this long-term performance goal:

(PM SB1) Percentage of EPA contract spending awarded to HUBZone businesses.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						3.0	3.2	3.4	Percent	Above Target	
Actual	1.6	2.4	2.2	2.0	4.9	3.1					
Numerator	25.2	37.5	35.0	30.3	75.6	59.6			Millions of Dollars		
Denominator	1,500	1,500	1,500	1,500	1,500	1,900					

Key Takeaways:

- EPA's Office of Small and Disadvantaged Business Utilization (OSDBU) led several Agency initiatives to expand the utilization of small businesses located in HUBZones, and those owned and controlled by socially and economically disadvantaged individuals, in EPA acquisitions. These initiatives included hosting an informational forum soon after the enactment of the Infrastructure Investment and Jobs Act, to help equip HUBZone and other small businesses to successfully compete for upcoming awards under EPA's unprecedented investments in environmental infrastructure.
- Developed a focused acquisition strategy and electronic toolkit of resources and best practices to guide and empower the Agency's acquisition workforce to enhance contracting opportunities for small businesses located in HUBZones, and those owned and controlled by socially and economically disadvantaged individuals, in accordance with governing law and federal contracting priorities.
- Engaged in vendor outreach to identify qualified and capable small businesses owned and controlled by socially and economically disadvantaged individuals in EPA's top spend categories, by conducting industry listening sessions; coordinating targeted vendor matchmaking with Agency officials; leveraging third-party small business conferences to expand access to EPA contacting information; and creating a new Vendor Engagement Calendar (see: https://vpmdsweb.epa.gov/Event/list) to provide a comprehensive list of EPA small business outreach activities.
- Launched a Small Business Vendor Database (see: https://vpmdsweb.epa.gov/Vendors/create) to simplify identification of capable small businesses interested in doing business with EPA, and deployed a new fully automated internal Small Business Contracting Dashboard providing comprehensive contracting data and robust functionality for effective EPA data-driven acquisition planning and tracking.

Metric Details: This measure tracks the percentage of total EPA prime contracting dollars awarded to firms designated as a certified HUBZone small business awardees in the Federal Procurement Data System. To qualify for certification as a HUBZone firm, the small business must: 1) be at least 51% owned and controlled by U.S. citizens, a Community Development Corporation, an agricultural cooperative, or an Indian tribe; 2) maintain its principal office within a HUBZone; and 3) hire at least 35% of its workforce from a HUBZone area. HUBZones are generally defined to include urban and rural communities with low income, high poverty, or high unemployment.

Long-Term Performance Goal: By September 30, 2026, initiate all priority climate resiliency projects for EPA-owned facilities within 24 months of a completed facility climate assessment and project prioritization.

Annual performance goals that support this long-term performance goal:

(PM CRP) Percentage of priority climate resiliency projects for EPA-owned facilities initiated within 24 months of a completed facility climate assessment and project prioritization.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							100	100	Percent	Above Target	No Trend Data
Actual											
Numerator									Projects		
Denominator											

Metric Details: This measure tracks initiation of climate adaptation projects at EPA-owned facilities following a climate assessment. EPA will prioritize identified projects based on multiple factors – ability to execute, impact on facility resiliency, cost, etc. – and initiate projects within 24 months of identification as a priority.

(PM CAA) Number of EPA-owned facility climate adaptation assessments completed.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						2	5	6	Assessments	Above Target	No Trend Data
Actual						1					

Key Takeaways:

- Completed one climate resiliency assessment at EPA's laboratory in Gulf Breeze, FL and partially completed a climate resiliency assessment at EPA's laboratory in Narragansett, RI.
- Faced challenges in this area as a result of time needed to develop and enhance materials and processes for resiliency assessments. The Agency succeeded in establishing a consistent and updated process for performing climate resiliency assessments at EPA facilities and finalizing a prioritization strategy for high priority resiliency goals.

Metric Details: This measure tracks completion of climate adaptation assessments at EPA-owned facilities with planned long-term occupancy that will determine which facilities require investments to protect against climate change. Climate resiliency assessments enable EPA to identify facility-specific vulnerabilities and proactively identify projects that will increase resiliency and fortify facilities against climate-related events.

Long-Term Performance Goal: By September 30, 2026, EPA will achieve the highest Diversity, Equity, Inclusion and Accessibility (DEIA) Maturity Level of "Leading and Sustaining" as defined by the November 2021 *Government-wide Strategic Plan to Advance DEIA in the Federal Workforce* and achieve all EPA goals identified in the Agency's Gender Equity and Equality Action Plan.

Annual performance goal that supports this long-term performance goal:

(PM DEIA) Diversity, Equity, Inclusivity, and Accessibility (DEIA) actions completed toward Maturity Level "Leading and Sustaining" achieved.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target							2	4	Actions	Above Target	
Actual											

Metric Details: This measure tracks completion of the eight Strategic Actions in the EPA Diversity, Equity, Inclusion and Accessibility (DEIA) Strategic Plan. Each completed action signifies progress toward achieving the highest DEIA Maturity Level of "Leading and Sustaining."

Long-Term Performance Goal: By September 30, 2026, automate all priority internal administrative processes.

Annual performance goal that supports this long-term performance goal:

(PM GOPA) Percentage of priority internal administrative processes automated.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	No Trend Data
Target							10	10	Percent	Above Target	
Actual											
Numerator									Internal Processes		
Denominator											

Metric Details: This measure tracks completion of transitioning priority administrative forms and/or processes to full automation for improved internal data collection and utilization. Previous examples of administrative process automation include: transitioning OGE-450 Financial Disclosure Forms from electronic documents to a centralized reporting database; paper-based performance reviews to USA Performance; and transitioning Headquarters Transit Subsidy requests from a paper form to a digital approval workflow.

Long-Term Performance Goal: By September 30, 2026, automate the major EPA permitting programs.

Annual performance goals that support this long-term performance goal:

(PM PAT) Percentage of EPA permitting processes automated.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target							10	30	Percent	Above Target	No Trend Data
Actual											
Numerator									Permitting Processes		
Denominator											

Metric Details: This measure tracks the Agency's progress toward bringing EPA into the 21st century by transitioning EPA's major permitting programs from paper to electronic processes. EPA will advance the paperless transformation through automation of permit application, review, and issuance processes for EPA's permitting programs. This will reduce processing time on issuing permits, decrease the time between receiving monitoring data and engaging in enforcement actions, and foster transparency by allowing communities to search, track, and access permitting actions easily. Further, permit automation will enable the integration of climate change and environmental justice considerations into permit processes and ensure that they are addressed within the terms and conditions of the permit. For the regulated community, permit automation will allow for a simplified, streamlined, and transparent permitting process which will result in time and costs savings. EPA identified a universe of 13 eligible processes. The baseline for this measure is zero as of FY 2021.

Long-Term Performance Goal: By September 30, 2026, improve 1,000 operational processes.

Annual performance goal that supports this long-term performance goal:

(PM OP1) Number of operational processes improved.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target		25	50	72	500	200	200	200	Operational Processes	Above Target	
Actual		N/A	66	502	507	208					

Key Takeaways:

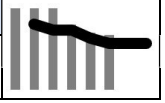
- Exceeded the target with 208 processes improved, with contributions from all 10 of EPA's regional offices and 10 of EPA's program offices. The Office of Air and Radiation (OAR) achieved 34 improvements—the most of any program office. Region 6 was the highest regional contributor, achieving 19 improvements.
- In Region 6, an executive-sponsored project improved drinking water compliance in New Mexico by working with the State to reduce ground water rule violations by 33%, including a reduction of 27% in small and rural community water systems.
- In OAR, an executive-sponsored project helped the Office of Transportation and Air Quality create an online funds application that made the Clean School Bus Rebate Program process smoother for applicants and EPA staff, and reduced the number of mistakes, irregularities, and rework.
- EPA launched a new Process Improvement Awards Program, with monetary incentives, in June 2022. This program aims to recognize the outstanding work performed by EPA teams who are improving the efficiency and effectiveness of the Agency's operations.
- Each EPA regional and program office completed executive sponsored improvement projects resulting in 100 projects across the Agency which fed into the total number of operational processes improved.

Metric Details: This measure tracks the number of EPA operational processes improved through the application of Lean principles improving the efficiency and cost effectiveness of the Agency's operations. An operational process is a sequence of activities that results in the delivery of a service. Process improvements efforts are intended to empower frontline staff, engage leadership, drive innovation, improve operations, and create a better customer experience. A process improvement is counted when a baseline measure is exceeded by a reasonable amount, as determined by EPA program or regional office leadership. While a standard percentage improvement is not required, teams are encouraged to have stretch goals to promote breakthroughs. Process improvements result from a variety of tools (e.g., kaizen events, special senior leadership projects, other problem-solving activities) and often include standard work (e.g., standard operating procedures) and visual management (visible placement of information and indicators that quickly convey the status of the process) to help ensure the improvement is sustained and can be shared to promote benchmarking when appropriate.

Other Core Work

Annual performance goal:

(PM CF2) Number of Agency administrative systems and system interfaces.

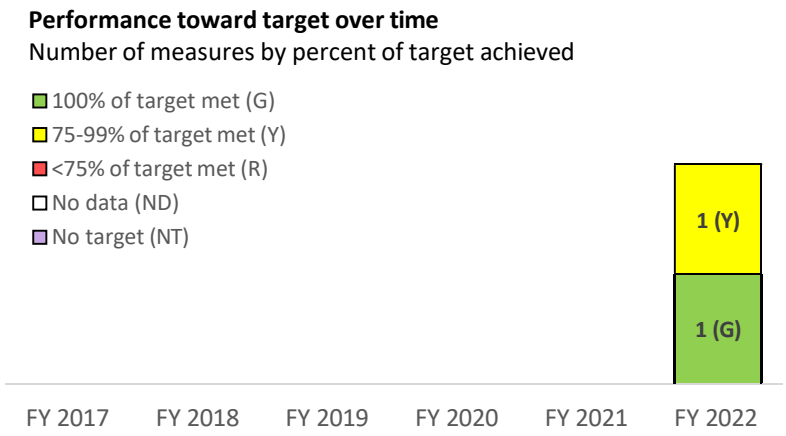
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target		24	22	22	19	17	17		Systems and Interfaces	Below Target	
Actual	30	30	30	24	21	20					

Key Takeaways:

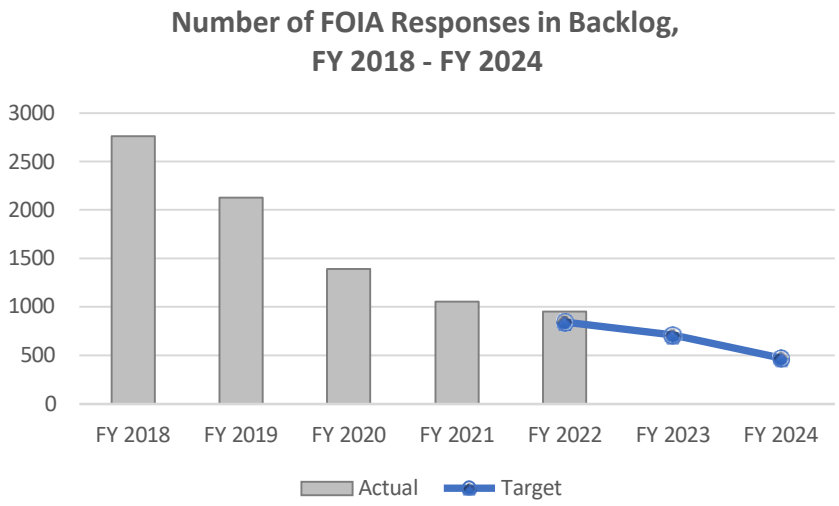
- Retired one administrative system in FY 2022: Legacy PeoplePlus for tracking employee time worked. Legacy payroll data are now accessible through a reporting tool that allows for data access and corrections without the need to maintain a separate system.
- Missed the target due to delays in the full implementation of the Invoice Processing Platform (IPP). Once IPP implementation is complete in the second quarter of FY 2023, EPA will retire the three remaining administrative systems originally planned for FY 2022: EASYLITE invoice payment system, Contract Payment System (CPS), and Small Purchase Information Tracking System (SPITS).

Metric Details: This measure tracks the number of administrative systems or system interfaces EPA actively operates. Administrative systems support execution of the Agency's administrative functions such as accounting, grants management, and contracts management. System interfaces are connections among administrative systems where data are shared. Reducing the number of administrative systems and system interfaces has a positive impact on streamlining operational processes and drives the integration of financial transactions across multiple administrative systems, reducing manual entry, improving data quality, and allowing EPA to input and access data more easily and standardize reporting as payment processing is moved to a federal shared service provider.

Strategy 4: Strengthen Tribal, State, and Local Partnerships and Enhance Engagement—*Collaborate and engage effectively with Tribal nations in keeping with the Federal Government's trust responsibilities, state and local governments, regulated entities, and the public to protect human health and the environment.*



Counts are of measures that exist in FY 2022. Chart does not include measures that previously existed but were eliminated prior to FY 2022.



Summary of progress toward strategic objective:

- Led the White House Council on Native American Affairs effort to secure 17 federal agencies' signatures, including EPA's, to the Tribal Treaty Rights Memorandum of Understanding as announced at the White House Tribal Nations Summit.
- Reduced by 10% EPA's backlog of overdue Freedom of Information Act (FOIA) requests, down to 950 from 1,056 at the beginning of the fiscal year.
- Conducted more than 145 separate tribal consultations on EPA actions or decisions that may affect tribes, including 19 consultations that considered tribal treaty rights.
- Developing revisions to the 2011 EPA Tribal Consultation Policy to boost effectiveness, clarify the goals of consultations, and to include tribal treaty rights consultations more broadly under the Policy.
- In partnership with tribes, filled all 10 tribal representative E-Enterprise Leadership Council positions, a first since the program was initiated in 2016. E-Enterprise promotes collaborative and transformative environmental protection among EPA, states, and tribes.
- Engaged with states and tribes to update the National Program Guidance emphasizing how Performance Partnership Grants support stronger partnerships by providing flexibility to states and tribes.
- Oversaw three public meetings of the Local Government Advisory Committee and Small Community Advisory Subcommittee and the development of 65 recommendations for EPA leadership to improve how the Agency works with local governments.
- Held federalism consultations on several major Agency actions, including the National Primary Drinking Water Regulation for per- and polyfluoroalkyl substances (PFAS).
- Interviewed EPA staff to collect best practices in grant results reporting practices for the EPA Learning Agenda priority area on grants commitments met.

Challenges:

- Additional tools and training will be needed for EPA staff to implement the EPA Tribal Consultation Policy revisions under development and expand tribal treaty rights consultations to national level consultations.
- FOIA backlog reduction is challenged by a historically large backlog of overdue requests and complex new requests requiring time and significant resources to reduce.
- In FY 2023 through 2024, EPA must procure, configure, deploy, and train EPA staff and the public to use a new FOIA case management and recordkeeping software solution to replace FOIAonline, which will be terminated in FY 2023.

Long-Term Performance Goal: By September 30, 2026, consider Tribal treaty rights as part of all EPA Tribal consultations that may affect Tribal treaty rights.

Annual performance goal that supports this long-term performance goal:

(PM EC41) Percentage of EPA Tribal consultations that may affect Tribal treaty rights that consider those rights as part of the consultation.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						20	25	50	Percent	Above Target	No Trend Data
Actual						100					
Numerator						19			Tribal Consultations		
Denominator						19					

Key Takeaways:

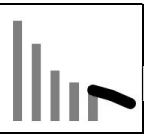
- Developing revisions to the 2011 EPA Tribal Consultation Policy in consideration of tribal input received during a March 2021 consultation period and President Biden's Memorandum on Uniform Standards for Tribal Consultation.

Metric Details: This measure tracks the annual percentage of EPA Tribal consultations that may affect tribal treaty rights that consider those rights as part of the consultation, consistent with the *EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights* (https://www.epa.gov/tribal/epa-policy-consultation-and-coordination-indian-tribes-guidance-discussing-tribal-treaty) which establishes clear Agency standards for consultations when an EPA action or decision may affect tribal treaty rights. Data are collected in EPA's Tribal Consultation Opportunities Tracking System, a publicly accessible database used to communicate upcoming and current EPA consultation opportunities to tribal governments that documents EPA consultations using the tribal treaty rights guidance. The system provides a management, oversight, and reporting structure that helps ensure accountability and transparency.

Long-Term Performance Goal: By September 30, 2026, eliminate the backlog of overdue Freedom of Information Act (FOIA) responses, compared to the FY 2021 baseline of 1,056.

Annual performance goal that supports this long-term performance goal:

(PM FO2) Number of FOIA responses in backlog.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Units	Preferred Direction	
Target						845	712	474	Responses	Below Target	
Actual		2,761	2,128	1,395	1,056	950					

Key Takeaways:

- Missed the FY 2022 target but nevertheless reduced by 10% the backlog of overdue FOIA requests.
- Reviewed and assigned for processing 6,595 FOIA requests, processed 234 expedited FOIA processing requests, and processed 799 applications for fee waiver.
- EPA's National Freedom of Information Office provided oversight, project management, legal counseling, training support, and cross-agency coordination for the Agency's most complex and potentially sensitive FOIA requests, including requests pertaining to scientific integrity; PFAS; EPA's proposed determination to prohibit and restrict the

use of certain waters in the Bristol Bay, AK watershed as disposal sites for the discharge of dredged or fill material associated with mining the Pebble deposit; and EPA's COVID-19 response closeout

- Provided training, coaching, and guidance to help EPA's Office of Chemical Safety and Pollution Prevention reform its FOIA response process.
- The pace of EPA's FOIA backlog reduction is challenged by historically large backlog of overdue FOIA requests in two offices that will likely require both time and significant resources to reduce, as well as complex multi-part and voluminous electronic records requests.

Metric Details: This measure tracks EPA's responsiveness to the public by measuring progress toward reducing EPA's backlog of responses to FOIA requests. Overdue responses are indicated in FOIAonline.gov as pending beyond the statutory deadline of 20 working days for simple requests, 30 days or longer for unusual circumstances (e.g., complex requests), or another timeframe to which the requestor has agreed. EPA receives approximately 7,000 FOIA requests annually.

FY 2022 EPA Program Evaluations

Office of Enforcement and Compliance Assurance (OECA)

Activity 1:

Title	EPA Learning Agenda: Drinking Water Systems Out of Compliance
Lead National Program	OECA
FY 2022-2026 Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable
Estimated Completion date	2026

Purpose and brief description: The Agency Learning Agenda includes Drinking Water Systems out of Compliance as a learning priority area. EPA has been working to reduce noncompliance through guidance, grants, technical assistance, enforcement, and oversight. Building and using evidence under the Evidence Act to evaluate the effectiveness of these tools and identify ways to make them more effective will help EPA and the states better understand the factors and program elements that improve compliance with drinking water regulations.

Policy, programmatic, and/or operational questions the activity is intended to address:

a. *Does EPA have ready access to data to reliably and accurately measure drinking water compliance?*
b. *What factors determine system noncompliance and continuous compliance?*
c. *Does increased use of compliance assurance tools (inspections and enforcement) improve system compliance, and if so under what circumstances?*
d. *How can we determine if a system has the technical, managerial, and financial capacity to provide safe water on a continuous basis to its customers?*
e. *What EPA oversight activities are effective at assessing and improving state programs' ability to drive compliance?*

Brief list of results/conclusions/findings**:**

The interim findings from each Drinking Water Learning Agenda priority question are detailed below:

1. *Does EPA have ready access to data to reliably and accurately measure drinking water compliance?*
    a. Identified documentation of quality control checks built into SDWIS-Fed that ensures incoming state data conforms. Completed comparison of 2 state databases to SDWIS-Fed to assess data transfer errors. Found very high agreement.
    b. Reviewed available state file review reports to identify compliance determination errors. Not able to quantify or draw conclusions about frequency of compliance determination errors nationally.
    c. Conducted an analysis of monitoring and reporting violations in SDWIS-Fed, taken at face value, to determine percent of M&R violations that are more or less likely to be indicative of serious noncompliance. Adds a level of precision to our understanding of what is not known due to failure to monitor and/or report.
    d. Work on Question 1 is ongoing and final results/conclusions/findings are not available to use for decision-making and planning purposes.
2. *What factors determine system noncompliance and continuous compliance?*
    a. Identified and synthesized three existing predictive tools that have been tested and proven successful at identifying systems of concern (each organization defined different endpoints). Evaluation of those tools confirmed key public water system characteristics that are important to focus on for maintaining or improving compliance: source water quality; sound financial management; operator and technical capacity; management plans in place.
    b. The Question 2 evaluation is ongoing and final results/conclusions/findings are not available to use for decision-making and planning purposes.
3. *Does increased use of compliance assurance tools (inspections and enforcement) improve system compliance, and if so under what circumstances?*
    a. EPA started evaluating Question 3 in the third quarter of FY 2022. The Agency consulted with GSA about conducting a prospective study on the impact of EPA inspections at public water systems and designed a generic study method to recruit participants, but have not yet determined if the inspection work will be ripe for study.
    b. For the enforcement part of the question, EPA established an agreement with an academic institution to help evaluate existing enforcement data and potentially conduct a prospective study to determine how and when enforcement improves compliance.
    c. Work on Question 3 is ongoing and final results/conclusions/findings are not available to use for decision-making and planning purposes.

How EPA used the results/conclusions/findings/interim findings:

Work on Questions 1, 2, and 3 is ongoing and final results/conclusions/findings are not yet available to use for decision-making and planning purposes. When all priority questions are

answered, EPA will use findings to evaluate the efficacy of components of EPA's drinking water program (and may, by extension, also be applicable to policies or practices used in state and tribal programs).

Link for findings*:* Results are not yet published.

Activity 2:

Title	Assessing the effectiveness of offsite compliance monitoring (OfCM)
Lead National Program	OECA
FY 2022-2026 Strategic Goal and Objective	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.2: Detect Violations and Promote Compliance
Estimated completion date	2023

Purpose and brief description:

The COVID-19 pandemic restricted OECA's ability to carry out onsite inspections, which helped OECA recognize that a broader portfolio of Offsite Compliance Monitoring (OfCM) activities may provide EPA with additional tools for enforcement and compliance programs. These tools might include Desk Audits, Clean Air Act (CAA) Stack Test Reviews, Information Request Response Reviews, among others. To assess what the office learned from the extended use of OfCM over the past two years and gain insight into the efficacy of OfCM tools in finding and deterring noncompliance (in comparison to onsite inspections), EPA conducted a preliminary, short-term assessment of EPA's use of OfCM using readily available data and information to inform interim guidance and best practices. The Agency now seeks to use those results to guide a longer-term assessment and research into OfCM and the best uses of these tools moving forward. OECA anticipates that the answers to these questions will involve multiple research efforts given the range of programs and OfCM tools that will need to be assessed.

Policy, programmatic, and/or operational questions the activity is intended to address:

Research questions:

1. How does the effectiveness of Offsite Compliance Monitoring (OfCM) activities compare to onsite inspections?
    - Can OfCM identify the same violations, provide the same specific and general deterrence, and promote and maintain compliance in the same way as onsite inspections?
    - What are the attributes of OfCM activities and onsite inspections required to assess their effectiveness?

2. What outcomes does OfCM provide?
    - Does compliance depend on which monitoring tool is used or on whether there is OfCM activity that includes subsequent enforcement action?
3. Do OfCM tools support enforcement activities?
    - Can evidence collected using only OfCM tools support an impactful enforcement action?
    - What are the key attributes of an effective OfCM tool?
4. What is the best use for OfCM?
    - Does it depend on the tool, the program, and/or on the compliance history of the facility?

Brief list of results/conclusions/findings including interim findings:

The Agency conducted a short-term study that included a regional questionnaire and preliminary analysis with collected answers and other available data to begin to answer: 1. Do OfCM activities lead to enforcement. 2. Are OfCM activities effective? 3. Can OfCM replace onsite inspections?

These short-term findings include:

- OfCM activities do not supplant the need for onsite inspections.
    - In many cases the OfCM activity is performed in addition to, or identifies the need for, onsite inspections.
- Formal enforcement rates from OfCM activities estimated between 0% to 43%, depending on the program.
- The assessment identified trends for when OfCM activities were most useful/effective and when were not:

When is OfCM ***most*** useful/effective?	When is OfCM ***not*** as useful/effective?
With large, target-rich universe of regulated entities (e.g., TSCA LBP)	To identify deficiencies that rely upon visual observations and/or contemporaneous conversation
To narrow the scope of the investigation for onsite inspections	To identify activities with a temporal component (time-sensitive activities) (e.g., SW BMPs)
For efficient use of limited resources	To identify facilities which have failed to apply for permit coverage (non-filers)
To screen and target facilities in remote locations	To identify facilities which have never met reporting requirements and exist under the radar
To review multiple facilities with a common operator/owner	To confirm implementation of plans
To review settlements or correct previously identified violations	When facility personnel are less sophisticated and not technology savvy
To perform audits, document-heavy compliance reviews	When facility/regulated entity has history of noncompliance or inspector questions the facility's statements
To assess reporting requirements and planning documents	

How EPA used the results/conclusions/findings/interim findings:

These preliminary findings, when supplemented by longer-term studies, will help inform and shape enforcement and compliance strategies.

Link for findings*:* Results are not yet published.

Office of Water (OW)

Activity 1:

Title	National Estuary Program
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	September 2022

Purpose and brief description: The primary purpose of the Program Evaluation (PE) process is to help EPA assess how the National Estuary Programs (NEPs) are making progress in achieving programmatic and environmental results through implementation of their Comprehensive Conservation and Management Plans (CCMPs). The PE process has proven to be an effective, interactive management process that ensures national program accountability and transparency, while incorporating local priority considerations. It also demonstrates the value of federal investment in estuarine and coastal watershed restoration and protection at the local and regional levels. The PE process was revised, and new guidance distributed to the 28 NEP locations at the end of 2021.

The PE process is also useful for:

- Transferring lessons learned among NEPs, EPA, and stakeholders through the sharing of case studies and transferable examples;
- documenting the value added to environmental management of estuarine systems using the partnership model of the national program and its individual NEPs, including their role in convening stakeholders for decision-making and interpreting science for management actions;
- demonstrating continued stakeholder commitment; and
- highlighting achievements and successes of each NEP, as well as suggestions for continued program improvements.

Policy, programmatic, and/or operational questions the activity is intended to address: Five PEs were conducted in FY 2022. The evaluation process for NEP locations informs the Agency

on the progress of the NEP program. It also ensures the locations are delivering environmental results and are well-managed programs so that they can continue to receive annual grants from EPA which are matched 1:1 with non-federal dollars.

The program evaluation is focused on the National Estuary Program as described in Section 320 of the Clean Water Act. The PE goals are to:

- ensure submissions enable objective and consistent evaluations among the different NEPs;
- ensure a consistent and transparent process to determine NEP CCMP implementation progress;
- further align the PEs with individual NEP CCMP priorities and related NEP annual work plan goals and accomplishments;
- determine progress in achieving programmatic and environmental results by documenting NEP contributions to improving or reducing pressures on their coastal watersheds and enabling all NEPs to successfully serve as local implementation partners for EPA programs; and
- identify areas of improvement to assist NEPs in becoming stronger programs and achieving environmental results.

Brief list of results/conclusions/findings including interim findings: The NEP Program Evaluation is an ongoing process that occurs each year. Each location within the NEP is evaluated every five years. The PE process uses a two-category determination of Proficient and Progressing, as defined in the 2021 NEP Program Evaluation Guidance. Proficient means a NEP is adequately meeting programmatic and environmental results. A Progressing determination means there are missing criteria that need to be addressed before the next PE cycle. A Progressing determination will catalyze a timeline to address those missing elements or opportunities for improvement before the next PE cycle. This determination is informed by the entire PE package (narrative submission, National Estuary Program Online Reporting Tool (NEPORT) data, annual work plans, and EPA required annual end of year reports), on-site visit, and through discussions with the NEP under review.

How EPA used the results/conclusions/findings/interim findings: The regular PE process examines each NEP location on a variety of topics as listed below. Each presents a potential challenge and can be addressed through the discussions between the PE team and NEP location. The results include recommendations for improvement based upon the following categories below and are submitted to each program as a final PE letter.

- NEP Administration and Governance Structure
- Grant Obligations and Finance including budget summary
- Healthy Ecosystems (e.g., fish, shellfish, plant, eelgrass, and wildlife populations; habitat protection/restoration, natural resources, land use, hydrological and ecological

restoration, invasive species)

- Community and Stakeholder Engagement
- Education and Outreach
- Monitoring and Assessment
- Clean Water Act Programs Relationship
- EPA Priorities (nutrient pollution, water reuse and conservation, marine litter reduction, green infrastructure, environmental justice, climate change)

Summary information on the NEP is available on the EPA's NEP website. We acknowledge the importance of NEP partnerships and proactive actions of most NEP location activities which are mostly non-regulatory and highly leveraged offering EPA an average value of $22 for every $1 of EPA investment. Individual PE results are typically not made available to the public.

Activity 2:

Title	Report to the Principals' Staff Committee on the status and vulnerabilities of existing and future Chesapeake Bay monitoring networks
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Estimated completion date	October 2022

Purpose and brief description: In March 2021, the Principals' Staff Committee (PSC) requested a study and recommendations on how to improve Chesapeake Bay Program (CBP) monitoring networks. The monitoring networks include (1) CBP core networks supported primarily by EPA Chesapeake Bay Program funding, and (2) partnership networks supported by multiple federal and state agencies. The monitoring review was guided by leadership from the CBP Scientific, Technical Assessment and Reporting (STAR) team, the Chesapeake Bay Program Office Monitoring Team, with input from the CBP Scientific and Technical Advisory Committee (STAC) leadership.

Policy, programmatic, and/or operational questions the activity is intended to address: The report addressed shortcomings or needed resources to fill existing gaps and to provide recommendations on monitoring enhancement to support the Chesapeake Bay Program.

Brief list of results/conclusions/findings including interim findings: The estimate to enhance the CBP core networks is $5.4 million in the first year ($1.8 million in capital costs and $3.6 million for operation and maintenance). It is an estimate that could rise subject to operational and inflationary pressures.

How EPA used the results/conclusions/findings/interim findings: With the additional funding that came to CBPO through the Infrastructure Investment and Jobs Act funds, EPA was able to partially fund the monitoring needs identified in this report.

Link for findings: https://www.epa.gov/system/files/documents/2022-04/enclosure1_epa_evaluation_of_pennsylvanias_amended_phase_iii_wip_final_0.pdf

Additional FY 2022 Contributions to EPA's Portfolio of Evidence

Office of the Administrator (OA)

Activity 1:

Title	EPA Learning Agenda: Grant Commitments Met
Lead National Program	OA
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 4: Strengthen Tribal, State, and Local Partnerships and Enhance Engagement
Estimated completion date	Year 2 activities completed September 2022. EPA anticipates completing all activities by September 2024.

Purpose and brief description:
Historically, EPA annually awarded over $4 billion in grants and other assistance agreements. With these grants, EPA helps to protect human health and the environment through the work of its grantees. The management and tracking of the individual awards are dispersed amongst thousands of staff throughout headquarters and EPA's ten regional offices, which makes tracking results at the national level challenging. This Learning Agenda's focus is to better understand how EPA's grant programs track, report, and analyze its outputs and outcomes achieved to assess and communicate the environmental results accomplished.
The importance and visibility of this effort has increased with the additional funding provided by American Rescue Plan (ARP), Bipartisan Infrastructure Law (BIL), and, most recently, the Inflation Reduction Act (IRA). The potential funding level for EPA's programs could reach over
$100 billion, making it critical to have mechanisms in place to track, report and assess the agency's progress in protecting human health and the environment through its grant programs.

This learning priority area outlines work to establish the baseline, assess the current state, and define the future state of grant result reporting. The effort spans multiple fiscal years, beginning in FY 2021. In FY 2021, EPA used a survey instrument to establish a baseline knowledge of grant results reporting practices at the agency. In FY 2022, EPA focused on interviewing regional and NPM contacts to collect best practices. Efforts in FY 2023 and FY 2024

will focus on using the gathered data to implement grant program reviews and inform grant result tracking systems to better communicate and assess the environmental results achieved through EPA's grant programs.

Policy, programmatic, and/or operational questions the activity is intended to address:

- What data and information exists to provide a baseline assessment of the agency's grant and tracking systems?
- Which criteria are used to assess the ability of programs to successfully monitor grantee performance?
- How are the agency's grant programs meeting their intended purpose?

Brief list of results/conclusions/findings including interim findings:

- EPA surveyed all active EPA grant programs to determine the universe of existing grant reporting and tracking systems. The surveys provided the data and information needed to understand existing Agency approaches and processes for collecting, monitoring, reporting, and evaluating grant commitments.
- EPA learned that 99 percent of programs collect output data, but only 31 percent collect long-term outcomes.
- Word documents are the most common method of collecting grantee data.
- Common challenges to grantee data collection include labor intensity, poor communication with grantees, and capacity issues internal to grantees.

How EPA used the results/conclusions/findings/interim findings: EPA used the findings to determine a research strategy for FY 2022. Using the FY 2021 results as a launching point, EPA identified and interviewed 31 regional and NPM staff. Interview criteria included prioritizing programs receiving additional BIL or ARP funding, programs that reported best practices, and programs that addressed administrative priorities. In FY 2023, EPA will analyze the Agency's ability to review progress made in protecting human health and the environment through its grant programs and demonstrate how EPA's grants programs are achieving the intended environmental results. A report outlining the findings from the interviews will be published in FY 2023.

Link for findings*:* Findings from FY 2021 were published on the Agency's Evidence Act site, linked below. Findings from FY 2022 will be published in FY 2023.
https://www.epa.gov/system/files/documents/2022-09/learning-agenda-grants-commitments-met.pdf

Office of Air and Radiation (OAR)

Activity 1:

Title	Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020
Lead National Program	OAR

FY 2022-2026 Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.1: Reduce Emissions that Cause Climate Change
Completion date	April 2022

Purpose and brief description: EPA has prepared the Inventory of U.S. Greenhouse Gas Emissions and Sinks since the early 1990s, which is submitted to the United Nations in accordance with the Framework Convention on Climate Change. This annual activity provides a comprehensive accounting of total greenhouse gas emissions from all man-made sources in the United States. New in 2022, EPA has also released the Inventory of U.S. Greenhouse Gas Emissions and Sinks by State, which provides state-by-state data consistent with the national greenhouse gas inventory and with international standards. As with the national inventory, the state-level greenhouse gas inventory provides annual data and will be updated each year. This effort helps inform a variety of questions related to EPA policy, regulations, and program design as it relates to GHG emissions.

Policy, programmatic, and/or operational questions the activity is intended to address: Specific questions of interest include:

- What are the annual trends in US greenhouse gas emissions and sinks?
- How do emissions for 2020 compare to previous years and the long-term trend? What are the drivers behind any changes in trends?
- What is the relative contribution of different emission sources and greenhouse gases to climate change?

Brief list of results/conclusions/findings including interim findings: In 2020, total gross U.S. greenhouse gas emissions were 5,981 million metric tons of carbon dioxide equivalent (MMT CO_2 Eq.). Net emissions (including sinks) were 5,222 MMT CO_2 Eq. From 2005 to 2020, net emissions declined 21.4 percent, reflecting the combined impacts of long-term trends in many factors including population, economic growth, energy markets, technological changes including energy efficiency, and energy fuel choices. The decline in recent years is due to an increasing shift to use of less CO_2-intensive natural gas for generating electricity and a rapid increase in the use of renewable energy in the electric power sector. Between 2019 and 2020, greenhouse gas emissions decreased by 10.6 percent due to multiple factors. The primary driver for the decrease was due to an 11 percent decrease in CO_2 emissions from fossil fuel combustion which was due to a 13 percent decrease in transportation emissions driven by decreased demand due to the ongoing COVID-19 pandemic. Electric power sector emissions also decreased 10 percent, reflecting both a slight decrease in demand from the COVID-19 pandemic and a continued shift from coal to less carbon intensive natural gas and renewables. Total U.S. emissions in 2020 were 7.3 percent lower than in 1990, down from a high of 15.7 percent above 1990 levels in 2007.

How EPA used the results/conclusions/findings/interim findings: An emissions inventory that identifies and quantifies a country's anthropogenic sources and sinks of greenhouse gases is

essential for addressing climate change. This inventory adheres to both (1) a comprehensive and detailed set of methodologies for estimating sources and sinks of anthropogenic greenhouse gases, and (2) a common and consistent format that enables Parties to the United Nations Framework Convention on Climate Change (UNFCCC) to compare the relative contribution of different emission sources and greenhouse gases to climate change. EPA prepares the official U.S. Inventory of Greenhouse Gas Emissions and Sinks to fulfill annual existing commitments under the United Nations Framework Convention on Climate Change (UNFCCC).

Link for findings*:* https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2020

Activity 2:

Title	2021 Power Sector Programs – Progress Report
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts
Completion date	July 2022

Purpose and brief description: Under the Clean Air Act, EPA implements regulations to reduce emissions from power plants, including the Acid Rain Program (ARP), the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update, the Revised CSAPR Update, and the Mercury and Air Toxics Standards (MATS). These programs require fossil fuel-fired electric generating units to reduce emissions of sulfur dioxide (SO_2), nitrogen oxides (NO_X), and hazardous air pollutants including mercury (Hg) to protect human health and the environment. This reporting year marks the seventh year of CSAPR implementation, the fifth year of the CSAPR Update implementation, the first year of Revised CSPAR Update Implementation, the twenty-seventh year of the ARP, and the fifth year of MATS implementation. This report summarizes annual progress through 2021, highlighting data that EPA systematically collects on emissions for all five programs and on compliance for the ARP and CSAPR. Commitment to transparency and data availability is a hallmark of these programs, and a cornerstone of their success.

Policy, programmatic, and/or operational questions the activity is intended to address: This annual activity assesses implementation of multiple regulations to reduce air pollution from power plants. Specific questions of interest include:

- Have the regulations met their emission reduction goals?
- What is the compliance record of air pollution sources controlled under these regulations?
- What is the air quality and environmental response of implementing these regulations?

Brief list of results/conclusions/findings including interim findings: The ARP, CSAPR, CSAPR Update, Revised CSPAR Update, and MATS have delivered substantial reductions in power sector emissions of SO_2, NO_X, and hazardous air pollutants, along with significant improvements in air quality and the environment. Program highlights include, but are not limited to:

- Annual SO_2 emissions:
  - CSAPR – 592,000 tons (93 percent below 2005)
  - ARP – 936,000 tons (94 percent below 1990)
- Annual NO_X emissions:
  - CSAPR – 440,000 tons (80 percent below 2005)
  - ARP – 763,000 tons (85 percent below 2000)
- CSAPR ozone season NO_X emissions:
  - 242,000 tons (46 percent below 2015)
- Compliance:
  - 100 percent compliance for power plants in the market-based ARP and CSAPR allowance trading programs
- Emissions reported under MATS: Mercury – 3.0 tons (90 percent below 2010)

In addition to the demonstrated reductions achieved by the power sector emission control programs described in this report, SO_2, NO_X, and hazardous air pollutant emissions have declined steadily in recent years due to a variety of power industry trends that are expected to continue.

How EPA used the results/conclusions/findings/interim findings: The ARP, CSAPR and the CSAPR Update are implemented through trading programs[1] designed to reduce emissions of SO_2 and NO_X from power plants. Established under Title IV of the 1990 Clean Air Act Amendments, the ARP was a landmark nationwide cap and trade program, with a goal of reducing the emissions that cause acid rain. The success of the program in achieving significant emission reductions in a cost-effective manner, as demonstrated through past progress reports, led to the application of the market-based emissions trading tool for other regional environmental problems, namely interstate air pollution transport, or pollution from upwind emission sources that impacts air quality in downwind areas. MATS set limits on emissions of hazardous air pollutants from power plants. EPA published the final standards in February 2012, and the compliance requirements generally went into effect in April 2015, with extensions for some plants until April 2016 and a small number until April 2017. As such, 2021 is the fifth full year for which most sources covered by MATS have reported emissions data to EPA.

Exposure to mercury and other hazardous air pollutants at certain concentrations and durations can increase chances of neurological and developmental effects, cancer, and reproductive, respiratory, and other health problems. NOX emissions contribute to the formation of ground- level ozone and fine particle pollution, which cause a variety of adverse human health effects, while SO_2 emissions are linked with a number of adverse effects to human health and ecosystems. These adverse effects underline the continued need for pollution reduction under the ARP, CSAPR, CSAPR Update, the Revised CSAPR Update and MATS. These reports are critical

for monitoring these programs to ensure they are continuing to deliver substantial environmental and human health benefits.

Link for findings: https://www3.epa.gov/airmarkets/progress/reports/

Activity 3:

Title	U.S. State-level Non-CO_2 Greenhouse Gas Mitigation Potential: 2025-2050
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.1: Reduce Emissions that Cause Climate Change
Completion date	March 2022

Purpose and brief description: This report is a follow-on to the 2019 EPA technical report, Global Non-CO_2 Greenhouse Gas (GHG) Emission Projections & Mitigation Potential: 2015-2050. The *U.S. State-level Non-CO_2 Mitigation Potential* provides states with improved data to better understand the costs and opportunities for reducing emissions of potent greenhouse gases, including methane, nitrous oxide, and fluorinated gases from anthropogenic sources at the state level. This report looks at projected emissions of these gases through 2050 and provides comprehensive technical and economic data on the opportunities and costs for reducing non- CO_2 greenhouse emissions.

Policy, programmatic, and/or operational questions the activity is intended to address: This report and its web-based summary are intended to provide analysis of the abatement potential and costs of implementing specific abatement technologies for reducing non-CO_2 greenhouse emissions. The analysis and accompanying dataset provide information that can be used by state and local policymakers to understand mitigation opportunities in areas that may not have received the same attention as electricity generation and transportation.

Brief list of results/conclusions/findings including interim findings:

- U.S. energy-sector non-CO_2 GHG emissions are projected to be 285 $MtCO_2e$ in 2030
- Industrial process emissions are projected to reach 307 $MtCO_2e$ in 2030
- National agriculture-sector emissions are projected to reach 625 $MtCO_2e$ in 2030
- Through 2030 emissions from landfills and wastewater are projected to grow at similar rates, reaching 174 $MtCO_2e$ in 2030

How EPA used the results/conclusions/findings/interim findings: The analysis and accompanying dataset are intended for use by state and local policymakers to understand mitigation opportunities in areas that may not have received the same attention as electricity

generation and transportation including sub-national contributions to GHG emissions, as well as the costs and opportunities for various mitigation measures. The report presents technical information that can be useful in economic modeling and climate mitigation analysis. The accompanying dataset is an input into the Non-CO_2 Greenhouse Gas Data Tool, a data exploration tool for viewing non-CO_2 GHG projections and mitigation assessments.

Link for findings: https://www.epa.gov/global-mitigation-non-co2-greenhouse-gases/us-state-level-non-co2-ghg-mitigation-report

Activity 4:

Title	Seasonality and Climate Change: A Review of Observed Evidence in the United States
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.1: Reduce Emissions that Cause Climate Change
Completion date	December 2021

Purpose and brief description: This technical report summarizes observed changes related to seasonality in the United States, discusses how climate change affects the timing and nature of seasonal events, and describes some of the related implications of those changes. To accomplish this, EPA analyzed a subset of indicators based on long-term observations to explore the interconnectedness of seasonal changes, including the cascading effect of physical climatic changes and downstream biological, ecological, and social responses.
The report aims to summarize the current state of the science related to historical changes in seasonality and provide tangible examples of the ways in which climate change is altering the nature of seasonal events—and how these changes affect ecological and societal systems.

Policy, programmatic, and/or operational questions the activity is intended to address: Specific questions of interest for the activity include:

- What are the seasonal impacts of climate change?
- What seasonality changes have been observed in the United States?
- What are the downstream effects of these seasonal changes?

Brief list of results/conclusions/findings including interim findings: Indicators reveal that warming temperatures have shortened frost seasons, led snowmelt to occur earlier in the year, and contributed to a decline in snowpack. Similarly, wildfire and heat wave seasons have increased in duration and severity, impacting ecosystems, human health, and economies. Leaf and bloom dates are occurring earlier than before, and the growing season has extended to cover a greater portion of the year. Subsequent sections of this report explore how changes in

one season cascade across and impact events in other seasons (e.g., winter conditions affect harvests in the following fall).

How EPA used the results/conclusions/findings/interim findings: Examining indicators of seasonal processes and systems sensitive to seasonality provides a framework for better understanding the implications of a changing climate through time. EPA intends for this report to be used as a tool for the public, scientists, analysts, decision-makers, educators, and others to communicate the seasonal impacts of climate change and their downstream effects.

Link for findings: https://www.epa.gov/climate-indicators/seasonality-and-climate-change

Activity 5:

Title	Climate Change Indicators in the United States
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.1: Reduce Emissions that Cause Climate Change
Completion date	*The Climate Change Indicators Page is Regularly Updated*

Purpose and brief description: EPA's Climate Change Indicators in the United States were created with the primary goal of informing readers' understanding of climate change, specifically the public, scientists, analysts, decision-makers, and educators. The climate change indicators can also be used as a tool for communicating climate change science. EPA partners with more than 50 data contributors from various government agencies, academic institutions, and other organizations to compile a key set of indicators related to the causes and effects of climate change. These indicators also provide important input to the National Climate Assessment and other efforts to understand and track the science and impacts of climate change.

Policy, programmatic, and/or operational questions the activity is intended to address: The Climate Change Indicators serve to increase understanding of the impacts of climate change and track trends. They also provide a tool to improve communication on climate change science. By increasing understanding and improving communication the Climate Change Indicators help inform science-based decision making.

Brief list of results/conclusions/findings including interim findings: These indicators characterize observed changes from long-term records related to the causes and effects of climate change; the significance of these changes; and their possible consequences for people, the environment, and society. Examples of indicators include:

- Heat waves: trends in the number of heat waves per year (frequency); the average length of heat waves in days (duration); the number of days between the first and last

heat wave of the year (season length); and how hot the heat waves were, compared with the local temperature threshold for defining a heat wave (intensity).

- Coastal flooding: tracks periodic inundation based on measurements from tide gauges at locations along U.S. coasts.
- Glaciers: examines the balance between snow accumulation and melting in glaciers and describes how glaciers in the United States and around the world have changed over time.
- Growing season: looks at the impact of temperature on the length of the growing season in the contiguous 48 states, as well as trends in the timing of spring and fall frosts.
- Wildfire: tracks four aspects of wildfires over time: the total number of fires (frequency), the total land area burned (extent), the degree of damage that fires cause to the landscape (severity), and the acreage burned by fires starting in each month of the year (seasonal patterns).

How EPA used the results/conclusions/findings/interim findings: EPA uses the findings of the Climate Change Indicators in the United States to:

- Effectively communicate relevant climate science information in a sound, transparent, and easy-to-understand way.
- Assess trends in environmental quality, factors that influence the environment, and effects on ecosystems and society.
- Inform science-based decision-making.

EPA also uses the data gathered through this activity to produce technical reports including the above report: Seasonality and Climate Change: A Review of Observed Evidence in the United States.

Link for findings*:* https://www.epa.gov/climate-indicators

Activity 6:

Title	Our Nation's Air: Status and Trends Through 2021
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts
Completion date	June 2022

Purpose and brief description: EPA is committed to protecting public health and the environment by improving air quality and reducing air pollution. In this review and annual

report, EPA presents the trends in the nation's air quality and summarizes the detailed information found at EPA's Air Trends website.

Policy, programmatic, and/or operational questions the activity is intended to address: Specific questions of interest include:

- What are the national trends in air quality, including unhealthy air days and air pollutant emissions?

Brief list of results/conclusions/findings including interim findings: Nationally, concentrations of the criteria air pollutants dropped significantly since 1970. Between 1970 and 2021, the combined emissions of the six common pollutants (particulate matter (PM2.5 and PM10), sulfur dioxide (SO2), nitrogen oxides (NOx), volatile organic compounds (VOCs), carbon monoxide (CO) and lead (Pb)) dropped by 78%. This progress occurred while the U.S. economy continued to grow, Americans drove more miles, and population and energy use increased.

How EPA used the results/conclusions/findings/interim findings: Annual emissions estimates are used as one indicator of the effectiveness of the Air Program. EPA and states track direct emissions of air pollutants and emissions that contribute to the formation of key pollutants, also known as precursor emissions. Emissions data are compiled from many different organizations, including industry and state, tribal, and local agencies. Understanding emission sources helps EPA and states control air pollution.

Link for findings*:* https://gispub.epa.gov/air/trendsreport/2022/#home

Activity 7:

Title	Title V Permitting Program Reviews
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts
Completion date	September 2022

Purpose and brief description: EPA periodically reviews state and local permitting programs, including fees, under Title V of the Clean Air Act as part of its responsibility to oversee delegated and approved air permitting programs. In general, the purpose of these program reviews is to identify good practices, document areas needing improvement, and learn how EPA can help the permitting agencies improve their performance.

Policy, programmatic, and/or operational questions the activity is intended to address: N/A (same as above).

Brief list of results/conclusions/findings including interim findings: Results varied and were specific to the program being reviewed.

How EPA used the results/conclusions/findings/interim findings: The reviews assess the overall effectiveness of the planning, permitting, monitoring and compliance, and enforcement programs to identify good practices implemented by the state/tribal agency, areas needing improvement within the state/tribal program, and ways in which EPA can improve oversight.

Link for findings*:* https://www.epa.gov/title-v-operating-permits/epa-oversight-operating-permits-program

Activity 8:

Title	2021 EPA Automotive Trends Report
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.1: Reduce Emissions that Cause Climate Change
Completion date	November 2021

Purpose and brief description: This annual report is part of EPA's commitment to provide the public with information about new light-duty vehicle greenhouse gas (GHG) emissions, fuel economy, technology data, and auto manufacturers' performance in meeting the Agency's GHG emissions standards. The data that EPA gets from our compliance and testing programs are important to the transportation and research communities for setting the baseline to inform policy and regulatory discussions.

Policy, programmatic, and/or operational questions the activity is intended to address: Specific questions include:

- What are the new light-duty vehicle greenhouse gas (GHG) emissions, fuel economy, and technology data?
- What is the auto manufacturers' performance in meeting the agency's GHG emissions standards?

Brief list of results/conclusions/findings including interim findings: The report found that since 2004, CO2 emissions have decreased 24%, or 112 g/mi, and fuel economy has increased 32%, or 6.1 mpg. The EPA Automotive Trends Report found that all large car manufacturers have achieved compliance with the Model Year (MY) 2020 light-duty GHG standards.

How EPA used the results/conclusions/findings/interim findings: The data collected as part of this report support several important national programs, including EPA criteria pollutant and GHG standards, the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) Corporate Average Fuel Economy (CAFE) standards, and vehicle Fuel Economy and Environment labels. The analysis is a snapshot of the data collected by EPA in support of several important regulatory programs and is presented with the intent of providing as much transparency to the public as possible. The data show the change and innovation in the industry since model year 1975, and the manufacturers' performance under EPA's GHG standards.

Link for findings: https://www.epa.gov/automotive-trends/download-automotive-trends-report#Full%20Report

Activity 9:

Title	Office of Inspector General (OIG) Report: EPA Needs to Develop a Strategy to Complete Overdue Residual Risk and Technology Reviews and to Meet the Statutory Deadlines for Upcoming Reviews
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts
Completion date	March 2022

Purpose and brief description: The U.S. Environmental Protection Agency's Office of Inspector General initiated this evaluation to determine whether EPA has conducted residual risk and technology reviews, or RTRs, in a timely manner, as required for EPA to revise standards, as needed, to protect the public from air toxics emitted by stationary sources. Through these reviews, EPA determines whether more health-protective standards are necessary. If the reviews are delayed or not performed, public health may be impacted.

Policy, programmatic, and/or operational questions the activity is intended to address: The report addressed the following question:

- Has EPA conducted residual risk and technology reviews in a timely manner, as required for EPA to revise standards, as needed, to protect the public from air toxics emitted by stationary sources?

Brief list of results/conclusions/findings including interim findings: EPA needs to complete overdue RTRs or TRs to ensure that National Emission Standards for Hazardous Air Pollutants (NESHAPs) are updated to protect the public from air toxics emissions, including minority and low-income communities that are disproportionately impacted by industrial facilities and other

pollution sources cited in their communities. EPA needs to determine the workforce needed to meet its statutory mandate. In addition, rather than being driven by court orders and consent decrees, as well as by administration priorities that may detract from the Agency's ability to meet statutory deadlines, EPA should develop a strategy incorporating the results of its workforce analysis to ensure that overdue reviews are completed in as timely a manner as practicable and that future reviews are conducted in accordance with statutory deadlines.

How EPA used the results/conclusions/findings/interim findings: The OIG has 2 recommendations for OAR: Recommendations 1 and 2 are both resolved. The OIG's recommendations are as follows:

- Perform a workforce analysis to determine the staff and resources needed to meet the statutory deadlines for residual risk and technology reviews, initial technology reviews, and recurring eight-year technology reviews, as well as to complete any such reviews that are overdue.
- Develop and implement a strategy to conduct (a) residual risk and technology reviews and recurring technology reviews by the applicable statutory deadlines and (b) any overdue residual risk and technology reviews and recurring technology reviews in as timely a manner as practicable. The strategy should take into account the Agency's environmental justice responsibilities under Executive Order 12898 and other applicable EPA and executive branch policies, procedures, and directives.

Link for findings*:* https://www.epa.gov/office-inspector-general/report-epa-needs-develop-strategy-complete-overdue-residual-risk-and-0

Activity 10:

Title	OIG Report: EPA's Title V Program Needs to Address Ongoing Fee Issues and Improve Oversight
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts
Completion date	January 2022

Purpose and brief description: The U.S. Environmental Protection Agency's Office of Inspector General initiated this evaluation to determine the extent to which EPA has conducted evaluations of state and local Title V programs and identified insufficient collection or misuse of fees in accordance with two guidance documents published in 2018: Updated Guidance on EPA Review of Fee Schedules for Operating Permit Programs Under Title V, and the Program and Fee Evaluation Strategy and Guidance for 40 CFR Part 70.

Policy, programmatic, and/or operational questions the activity is intended to address: The report addressed the following question:

- To what extent has EPA conducted evaluations of state and local Title V programs and identified insufficient collection or misuse of fees in accordance with relevant guidance?

Brief list of results/conclusions/findings including interim findings: The nation's Title V permitting authorities continue to face many Title V fee challenges, and EPA regional oversight has varied significantly because of a lack of criteria for when to conduct Title V fee evaluations, as well as a lack of a standard minimum level of review. Further, many regions struggle with a lack of resources and financial expertise. Without adequate fee evaluations, regions may not identify and resolve Title V fee issues, resulting in Title V programs that are not self-sufficient and unable to conduct Title V activities, including permit renewals, compliance monitoring, and enforcement. As Title V activities diminish, there is an increased risk of noncompliance with the requirements of the Clean Air Act, which could result in increased pollution and other impacts to human health and the environment.

How EPA used the results/conclusions/findings/interim findings: The OIG has 6 recommendations for OAR: All 6 recommendations are resolved. The OIG's recommendations are as follows:

- Coordinate with EPA regions to provide recurring training on Clean Air Act Title V fee laws and regulations to permitting agencies.
- In collaboration with EPA regions, develop and implement a plan to address declining Clean Air Act Title V revenues.
- Update EPA's guidance documents to require regions to establish time frames for permitting authorities to complete corrective actions in program and fee evaluation reports and clear, escalating consequences if timely corrective actions are not completed.
- Update the Clean Air Act Title V guidance documents to establish criteria for when regions must conduct Title V fee evaluations and require a minimum standard of review for fee evaluations.
- Provide training to EPA regional staff on the updated Clean Air Act Title V fee guidance and how to conduct fee evaluations.
- Collaborate with regional staff to identify and make available the regional resources and expertise necessary to conduct fee evaluations.

Link for findings*:* https://www.epa.gov/office-inspector-general/report-epas-title-v-program-needs-address-ongoing-fee-issues-and-improve

Activity 11:

Title	OIG Report: EPA Is Taking Steps to Update Its Federal Radiation Guidance
Lead National Program	OAR

FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.2: Reduce Exposure to Radiation and Improve Indoor Air
Completion date	January 2022

Purpose and brief description: The U.S. Environmental Protection Agency's Office of Inspector General initiated this evaluation to address an OIG Hotline complaint that alleged EPA is not following the best-available science regarding low-dose radiation because it continues to use the linear no-threshold (LNT) model to inform its radiation guidance. The objective was to determine the extent to which EPA has effectively implemented a process for reviewing and updating its federal radiation policies and guidance, specifically those that rely on the LNT model.

Policy, programmatic, and/or operational questions the activity is intended to address: The report addressed the following question:

- To what extent has EPA effectively implemented a process for reviewing and updating its federal radiation policies and guidance, specifically those that rely on the LNT model?

Brief list of results/conclusions/findings including interim findings: The report found that EPA does not have a formal process for updating its federal radiation guidance, some of which relies on the LNT model, but instead updates the guidance pursuant to its strategic plan and annual priority goals. EPA relies on the Office of Radiation and Indoor Air's strategic plan, as well as on new models, peer-reviewed information, and updated data identified by the Center for Radiation Protection Knowledge, to keep its radiation guidance current. By issuing FGR 15, developing FGR 16, and requesting that the Scientific Advisory Board review the draft FGR 16, EPA has taken steps to ensure that its radiation guidance, including that regarding low-dose radiation exposure, is updated and informed by the best-available and peer-reviewed science.

How EPA used the results/conclusions/findings/interim findings: The OIG had no recommendations for OAR.

Link for findings: https://www.epa.gov/office-inspector-general/report-hotline-epa-taking-steps-update-its-federal-radiation-guidance

Activity 12:

Title	U.S. Government Accountability Office (GAO) report: Oil and Gas: Federal Actions Needed to Address Methane Emissions from Oil and Gas Development
Lead National Program	OAR

FY 2022-2026 Strategic Goal and Objective supported	Goal 1: Tackle the Climate Crisis Objective 1.1: Reduce Emissions that Cause Climate Change
Completion date	April 2022

Purpose and brief description: GAO reviewed methane emissions from oil and gas development on federal lands. This report (1) describes the steps federal agencies have taken to reduce methane emissions from oil and gas, and implementation challenges; (2) examines actions selected industry entities are taking to reduce methane emissions; and (3) examines how selected states regulate methane emissions and to what extent those efforts could inform federal actions.

Policy, programmatic, and/or operational questions the activity is intended to address: The evaluation addressed the following questions:

- What steps have federal agencies taken to reduce methane emissions from oil and gas?
    - What have been the implementation challenges for federal agencies in taking these steps?
- What actions are industry entities taking to reduce methane emissions?
- How do selected states regulate methane emissions?
    - To what extent can those efforts inform federal actions?

Brief list of results/conclusions/findings including interim findings: Methane is a substantial contributor to global greenhouse gas emissions, results in air pollution, and constitutes a lost source of revenue for the federal government when emitted from sources on federal lands. While EPA and BLM have taken steps in an array of rules to reduce methane emissions, administrative and legal challenges have hindered their implementation. In the midst of federal uncertainty, the oil and gas industry is voluntarily taking actions to reduce methane emissions, but federal regulations can impede adoption of alternative technologies for detecting methane emissions. Without greater flexibility in its process for approving alternative technologies, EPA may hinder the adoption of innovative approaches by operators for detecting and reducing methane emissions. Large oil- and gas-producing states are taking steps to regulate methane that go beyond what BLM demands, such as requiring operators to submit gas capture plans prior to drilling and to establish and meet goals for gas capture. Without BLM taking steps to institute similar requirements for operators on federal lands, operators will continue to vent or flare methane that contributes to pollution and greenhouse gas emissions, and the federal government will continue to lose revenues from the production of oil and gas.

How EPA used the results/conclusions/findings/interim findings: The report included one recommendation for EPA:

- EPA Administrator should provide greater flexibility to operators for using alternative technologies to detect methane emissions.

Link for findings: https://www.gao.gov/products/gao-22-104759

Activity 13:

Title	GAO Report: Refined Coal Production Tax Credit: Coordinated Agency Review Could Help Ensure the Credit Achieves Its Intended Purpose
Lead National Program	OAR
FY 2022-2026 Strategic Goal and Objective supported	Goal 4: Ensure Clean and Healthy Air for All Communities Objective 4.1: Improve Air Quality and Reduce Localized Pollution and Health Impacts
Completion date	December 2021

Purpose and brief description: GAO examined (1) the extent to which producers have claimed the refined coal production tax credit since tax year 2010; (2) what the federal government knows about the extent to which producers have demonstrated the emissions reductions required to claim the credit; and (3) the extent to which the federal government's implementation of the credit aligned with selected criteria for assessing tax expenditure performance.

Policy, programmatic, and/or operational questions the activity is intended to address: GAO's assessment addressed the following question:

- To what extent have producers claimed the refined coal production tax credit since tax year 2010?
- What does the federal government know about the extent to which producers have demonstrated the emissions reductions required to claim the credit?
- To what extent has the federal government's implementation of the credit aligned with selected criteria for assessing tax expenditure performance?

Brief list of results/conclusions/findings including interim findings: Congress considered whether to extend the tax credit period, which expired on December 31, 2021, for refined coal production facilities. However, federal agencies do not have a good understanding of the credit's effectiveness in reducing emissions of certain harmful pollutants. This limited understanding stems in part from producers' use of pilot-scale testing—one of the three methods allowed by IRS guidance—to demonstrate emissions reductions. GAO recommended that if Congress extended the credit period, a coordinated review by Treasury, IRS, EPA, and DOE could help determine whether changes are warranted to improve the credit's performance.

How EPA used the results/conclusions/findings/interim findings: The assessment included one recommendation for EPA:

- The GAO recommended that if Congress would have extended the refined coal production tax credit, the Administrator of EPA should coordinate with Treasury, IRS,

and DOE to review the performance of the credit in achieving its intended purpose and identify and implement, as appropriate, any improvements towards achieving that intended purpose, such as adjustments to allowable emissions testing methods.

Link for findings: https://www.gao.gov/products/gao-22-104637

Office of the Chief Financial Officer (OCFO)

Activity 1:

Title	OIG Report: The EPA Was Not Compliant with the Payment Integrity Information Act for Fiscal Year 2021 – P00050
Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	June 2022

Purpose and brief description: The Office of Inspector General conducted this audit to determine whether the U.S. Environmental Protection Agency met the requirements of the Payment Integrity Information Act of 2019 as they relate to the formulation and inclusion of payment integrity information in the Fiscal Year 2021 Agency Financial Report and accompanying materials.

Policy, programmatic, and/or operational questions the activity is intended to address: The Payment Integrity Information Act of 2019 requires inspectors general to determine and report their agencies' compliance with the Act every fiscal year. The Act also requires the heads of each agency to periodically review and identify all programs and activities with costs exceeding the $10-million statutory threshold that may be susceptible to significant improper payments. Prior to fiscal year 2021, the EPA had designated its grants payments as susceptible to significant improper payments.

Brief list of results/conclusions/findings including interim findings: The EPA was not compliant with the Payment Integrity Information Act of 2019 because the Agency did not adhere to all of the Office of Management and Budget's improper payment reporting requirements for fiscal year 2021. Specifically, the EPA did not adequately conclude whether its programs with annual outlays greater than $10 million were likely to make improper payments above or below the statutory threshold.

How EPA used the results/conclusions/findings/interim findings: The OIG made four recommendations:

1. Review the OIG-identified questioned costs for the grants payment stream, determine the payment allowability, recover costs as appropriate, and recalculate the error rate.

2. Conduct an off-cycle risk assessment, applying the Standard Operating Procedure Grants Improper Payment Review, dated September 2021, and include the risk assessments in the Agency's Fiscal Year 2023 Agency Financial Report, ensuring that the risk assessments contain:

a. An assessment of all programs and activities with outlays greater than $10 million.

b. An identification of which programs and activities with annual outlays exceeding the statutory threshold are included in each risk assessment.

c. A mechanism for identifying, accounting for, estimating, and reporting improper and unknown payments and for detailing efforts taken to prevent and reduce such payments.

2. For payment streams other than the grants payment stream, update the standard operating procedures so that they establish a sufficient methodology for programs and activities with outlays of more than $10 million to adequately conclude whether they are susceptible to significant improper payments. The standard operating procedures should identify which programs or activities are included.

4. Periodically train Agency personnel on and provide completed course training certificates for:

a. The Standard Operating Procedure Grants Improper Payment Review, dated September 2021, which includes the Payment Integrity Information Act Review Checklist. Such training should include any updates to these documents and emphasize the application of the cost-allowance principles and adherence to the terms and conditions of federal awards.

b. All standard operating procedures, as well as any updates to them, implemented for other payment streams.

Link for findings: *https://www.epa.gov/system/files/documents/2022-06/_epaoig_20220627-22-P-0050.pdf*

Activity 2:

Title	OIG Report: The EPA's Fiscal Years 2021 and 2020 (Restated) Hazardous Waste Electronic Manifest System Fund Financial Statements – P0062
Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity

Completion date	September 2022

Purpose and brief description: The OIG performed this audit pursuant to the Hazardous Waste Electronic Manifest Establishment Act. The Act requires the U.S. Environmental Protection Agency to prepare and the Office of Inspector General to audit the accompanying financial statements of the EPA's Hazardous Waste Electronic Manifest System Fund.

Policy, programmatic, and/or operational questions the activity is intended to address: The objectives were to determine whether:

- The fund's financial statements were fairly stated in all material respects.
- The EPA's internal controls over financial reporting were in place.
- EPA management complied with applicable laws, regulations, contracts, and grant agreements.

The Act also requires the OIG to analyze the fees collected and disbursed, fee structure, level of use of the system, and success of the system in operating on a self-sustaining basis.

Brief list of results/conclusions/findings including interim findings: The OIG rendered a qualified opinion on the EPA's fiscal years 2021 and 2020 (restated) Hazardous Waste Electronic Manifest System Fund, known as the e-Manifest Fund, financial statements, meaning that, except for material errors in accounts receivable and earned revenue, the fiscal year 2021 financial statements were fairly presented. The OIG made two recommendations:

1. Correct the accounts receivable and earned revenue balances.
2. Assess EPA's procedures for recording eManifest delinquent amounts and implement controls to prevent accounts receivable and earned revenue duplication.

How EPA used the results/conclusions/findings/interim findings: EPA concurred with both recommendations: The balances have been corrected and controls in the new e-Manifest system have been designed to prevent these types of issues in the future. In addition, an interface between the e-Manifest system and Compass was implemented in April 2022 which properly records the accounts receivable and earned revenue in the accounting month in which they are earned. Controls were implemented in the new system to properly record delinquent amounts and prevent duplicate reporting

Link for findings: *https://www.epa.gov/office-inspector-general/report-epas-fiscal-years-2021-and-2020-restated-hazardous-waste-electronic*

Activity 3:

Title	OIG Report: EPA's Fiscal Years 2020 and 2019 Hazardous Waste Electronic Manifest System Fund Financial Statements – F00015

Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	December 2021

Purpose and brief description: The OIG performed this audit pursuant to the Hazardous Waste Electronic Manifest Establishment Act. The Act requires the U.S. Environmental Protection Agency to prepare and the Office of Inspector General to audit the accompanying financial statements of the EPA's Hazardous Waste Electronic Manifest System Fund.

Policy, programmatic, and/or operational questions the activity is intended to address: The primary objectives were to determine whether:

- The financial statements were fairly stated in all material respects.
- The EPA's internal controls over financial reporting were in place.
  - EPA management complied with applicable laws, regulations, contracts, and grant agreements.

The Act also requires the OIG to analyze the fees collected and disbursed, fee structure, level of use of the system, and success of the system in operating on a self-sustaining basis.

Brief list of results/conclusions/findings including interim findings: The OIG rendered a qualified opinion on the EPA's fiscal years 2020 and 2019 Hazardous Waste Electronic Manifest System Fund, known as the e-Manifest Fund, financial statements, meaning that, except for material differences in accounts receivable and earned revenue, the fiscal year 2020 financial statements were fairly presented. The OIG noted the following material weaknesses:

- The EPA continued to make errors in its financial statement preparation process.
- The EPA did not have adequate internal control over accounts receivable and earned revenue. We noted the following significant deficiency: the EPA misstated its appropriated balances.

How EPA used the results/conclusions/findings/interim findings: The report contains two recommendations for the Office of the Chief Financial Officer. The OCFO does not agree with the categorization of the issue presented by the Office of Inspector General as a significant deficiency but concurs with the recommendations and has provided corrective actions.

1. In coordination with the assistant administrator for Land and Emergency Management, enhance internal controls over accounting for expenses recorded under fund codes so that appropriation balances are accurate. Specifically, EPA needs to implement preventative controls, so fund expenses are properly coded when processed, and

implement detective controls at the fund level to ensure fee-based expenses and appropriations-based expenses are properly segregated, reconciled, and recorded in the general ledger.

2. Correct the expenses recorded in excess of appropriated balances.

Link for findings: *https://www.epa.gov/system/files/documents/2022-08/_epaoig_20211229-22-F-0015.pdf*

Activity 4:

Title	OIG Report: EPA's Fiscal Years 2020 and 2019 Financial Statements for the Pesticide Registration Fund 22-F-0014
Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	December 2021

Purpose and brief description: The Pesticide Registration Improvement Act requires that the U.S. Environmental Protection Agency's Office of Inspector General perform an annual audit of the financial statements for the Pesticide Registration Fund.

Policy, programmatic, and/or operational questions the activity is intended to address: To expedite the registration of certain pesticides, the Pesticide Improvement Act requires the EPA to assess and collect pesticide registration fees. The fees collected are deposited into the Pesticide Registration Fund. The Agency is required to prepare financial statements that present financial information about the fund. The Pesticide Registration Fund also requires that decision-time review periods be established for pesticide registration actions and that the OIG perform an analysis of the Agency's compliance with those review periods.

Brief list of results/conclusions/findings including interim findings: The OIG did not identify any instances of noncompliance that would result in a material misstatement to the audited financial statements. In addition, the Agency was in substantial compliance with the statutory decision-time review periods

How EPA used the results/conclusions/findings/interim findings: The OIG made three recommendations which were both accepted and implemented by the Agency.

1. Correct the calculation in its Pesticide Registration Improvement Act 20-04 on-top adjustment to accurately capture the amounts for footnote 10, "Income and Expenses from Other Appropriations."

2. Document the control activities and procedures for calculating the income and expense amounts for footnote 10, "Income and Expenses from Other Appropriations."
3. Develop a plan to strengthen and improve the preparation and management review of the Pesticide Registration Improvement Act Fund financial statements and adjustments entered into the accounting system so that errors and misstatements are detected and corrected in a timely manner.

Link for findings: *https://www.epa.gov/system/files/documents/2021-12/_epaoig_20211221-22-f-0014.pdf*

Activity 5:

Title	OIG Report: EPA's Fiscal Years 2020 and 2019 (Restated) Financial Statements for the Pesticides Reregistration and Expedited Processing Fund - 22-F00012
Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	December 2021

Purpose and brief description: The Food Quality Protection Act requires that the U.S. Environmental Protection Agency's Office of Inspector General perform an annual audit of the financial statements for the Pesticides Reregistration and Expedited Processing Fund, also known as the Federal Insecticide, Fungicide, and Rodenticide Act Fund. The EPA is responsible for reassessing the safety of older pesticide registrations against modern health and environmental testing standards.

Policy, programmatic, and/or operational questions the activity is intended to address: To expedite the reregistration process, Congress authorized the EPA to collect fees from pesticide manufacturers. These fees are deposited into the fund. Each year, the Agency prepares financial statements that present information about the fund, along with information about the EPA's progress in reregistering pesticides.

Brief list of results/conclusions/findings including interim findings: The OIG noted one material weakness: the EPA materially misstated the FIFRA income and expenses from other appropriations and one significant deficiency: the EPA needs to improve its financial statement preparation process. The significant deficiency was initially reported in OIG Report No. 21-F-0014, EPA's Fiscal Year's 2020 and 2019 (Restated) Consolidated Financial Statements, issued November 16, 2020. The OIG is reporting this significant deficiency for the FIFRA Fund financial statements.

How EPA used the results/conclusions/findings/interim findings: The OIG made three recommendations which were accepted by the Agency and corrective actions have been completed.

1. Correct the calculation in the Federal Insecticide, Fungicide, and Rodenticide Act 20-03 on-top adjustment to accurately capture the amounts for footnote 10, "Income and Expenses from Other Appropriations."
2. Document the control activities and procedures for calculating the income and expense amounts for footnote 10, "Income and Expenses from Other Appropriations."
3. Develop a plan to strengthen and improve the preparation and management review of the Federal Insecticide, Fungicide, and Rodenticide Act Fund financial statements and adjustments entered the accounting system so that errors and misstatements are detected and corrected in a timely manner.

Link for findings: *https://www.epa.gov/office-inspector-general/report-epas-fiscal-years-2020-and-2019-restated-financial-statements*

Activity 6:

Title	OIG Report: EPA's Fiscal Years 2021 and 2020 (Restated) Consolidated Financial Statements 22-F-0007
Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	November 2021

Purpose and brief description: The OIG performed this audit in accordance with the Government Management Reform Act of 1994, which requires the U.S. Environmental Protection Agency's Office of Inspector General to audit the financial statements prepared by the Agency each year.

Policy, programmatic, and/or operational questions the activity is intended to address: The primary objectives were to determine whether:

- The EPA's consolidated financial statements were fairly stated in all material respects.
- The EPA's internal controls over financial reporting were in place.
- EPA management complied with applicable laws, regulations, contracts, and grant agreements.

Brief list of results/conclusions/findings including interim findings: The OIG noted the following significant deficiencies:

- The EPA did not reconcile cash differences with the U.S. Department of the Treasury.
- The EPA did not recognize revenue for the Water Infrastructure Finance and Innovation Act of 2014 fee fund expenses.
- Accounts receivable source documentation was not provided in a timely manner by EPA regions.
- The Office of the Chief Financial Officer needs to conduct periodic reviews of user s' accounts within the EPA's Contract Payment System.

The OIG also noted the following instance of noncompliance with laws and regulations: the EPA did not comply with Office of Management and Budget Circular A-136 form and content requirements for the balance sheet.

How EPA used the results/conclusions/findings/interim findings: The OIG made four recommendations to OCFO:

1. Timely reconcile EPA cash differences with the U.S. Department of the Treasury.
2. Update the Water Infrastructure Finance and Innovation Act accounting model to properly recognize earned revenue and unearned revenue as fee fund expenses are incurred. OCFO/ OC Concur.
3. Reclassify unearned revenue to earned revenue for Water Infrastructure Finance and Innovation Act fee fund expenses incurred during fiscal years 2021 and 2020.
4. Record the three receivables totaling approximately $8.1 million in the fiscal year 2021 financial statements.

OCFO concurred with the recommendations and has completed the corrective actions.

Link for findings: *https://www.epa.gov/system/files/documents/2021-11/_epaoig_20211115-22-f-0007.pdf*

Activity 7:

Title	OIG Report: EPA Has Not Performed Agencywide Risk Assessments, Increasing the Risk of Fraud, Waste, Abuse, and Mismanagement - 22-E-0011
Lead National Program	OCFO
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	December 2021

Purpose and brief description: The OIG conducted this evaluation to determine whether the U.S. Environmental Protection Agency's Office of the Chief Financial Officer is conducting agencywide entity-level risk assessments and implementing internal controls for annual and supplemental appropriations that comply with federal and Agency requirements.

Policy, programmatic, and/or operational questions the activity is intended to address: The Office of Management and Budget Circular A-123, Management's Responsibility for Enterprise Risk Management and Internal Control, dated July 2016, requires federal agencies to integrate internal control activities under the umbrella of an enterprise risk-management program through a risk-assessment process. The U.S. Government Accountability Office's GAO-14-704G, Standards for Internal Control in the Federal Government, dated September 2014, provides the overall framework for establishing and maintaining an effective internal control system. The OIG assessed evidence to determine whether the Agency's actions were consistent with:

- FMFIA requirement to establish an internal control system that provides reasonable assurance of achieving internal control objectives.
- OMB Circular A-123 requirement to integrate and coordinate risk management with other internal control-related activities.
- Green Book framework to establish and maintain an effective internal control system.
- Resource Management Directives System Policy Manual 2520 requirement to manage funds effectively and efficiently while following applicable rules, statutes, and regulations.
- 44 U.S.C. chapter 31, "Records Management by Federal Agencies," requirement to make and maintain accurate and proper documentation of activities, decisions, policies, and procedures.
- EPA Records Schedule 1006, Administrative Management, requirement to retain administrative management records for six years.

Brief list of results/conclusions/findings including interim findings: The OIG determined that the OCFO has not performed agencywide entity-level risk assessments over the EPA's annual and supplemental appropriations. Specifically, the OCFO has not developed or implemented an agencywide entity-level risk-assessment process—in which executive officials are fully engaged in entity-level risk activities—to identify high-priority risks that cut across individual Agency programs. In addition, the OCFO has not performed agencywide entity-level risk assessments over the EPA's annual and supplemental appropriations.

How EPA used the results/conclusions/findings/interim findings: The OIG made two recommendations which the Agency accepted. Corrective actions have been completed.

1. Develop and communicate a strategy to implement, direct, and oversee agencywide enterprise risk management, as required by the 2016 revision of Office of Management and Budget Circular A-123.
2. After developing the strategy from Recommendation 1, establish agency policies and procedures, including updates to Resource Management Directives System 2520,

Administrative Control of Appropriated and Other Funds, EPA Order 1000.24, and EPA Delegation 1-16, to comply with Office of Management and Budget Circular A-123 requirements.

Link for findings: *https://www.epa.gov/system/files/documents/2021-12/_epaoig_20211215-22-e-0011.pdf*.

Office of Chemical Safety and Pollution Prevention (OCSPP)

Activity 1:

Title	OIG Report: EPA's Safer Choice Program Would Benefit from Formal Goals and Additional Oversight
Lead National Program	OCSPP
FY 2022-2026 Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.2: Promote Pollution Prevention
Completion date	June 2022

Purpose and brief description: EPA's Office of Inspector General (OIG) conducted this audit to determine whether the Safer Choice program effectively meets its goals and whether the program achieves quality standards through its product qualification, renewal, and required audit processes.

Policy, programmatic, and/or operational questions the activity is intended to address:

Does the Safer Choice program effectively meet its goals?

Does the Safer Choice program achieve quality standards through its product qualification, renewal, and required audit processes?

Brief list of results/conclusions/findings including interim findings: OIG recommended that the assistant administrator for Chemical Safety and Pollution Prevention:

- Develop goals and performance measures that capture the impacts of the Safer Choice program.
- Publish or otherwise notify Congress and the public of the goals and performance measures for the EPA Safer Choice program, as well as the annual results of the program.

- Establish and implement procedures to conduct periodic oversight reviews of audits conducted by the third-party profilers (TPP) to include physical oversight of the third-party profilers' on-site audits.
- Amend memorandums of understanding with the third-party profilers, requiring that EPA conduct performance reviews of third-party profilers. Recommendation 4 is resolved with no corrective actions pending.
- Collect and document all information that third-party profilers review in their audits in the Safer Choice Community database.

EPA agreed with each of these recommendations and has implemented all promised corrective actions as described below.

1. Develop goals and performance measures that capture the impacts of the Safer Choice program. For Recommendation 1, EPA did not commit to state any goals for the program. The performance measures currently tracked for the Safer Choice program – including the number of products certified and the number of chemicals added to the Safer Chemical Ingredients List (SCIL) – are good measures of the impact of the Safer Choice program in voluntarily helping the marketplace adopt safer chemicals in cleaning product formulations. To fulfill **Recommendation 1a**, on October 1, 2020, the Agency implemented the following performance measures:

- Number of Products Certified by the Safer Choice Program
- Number of chemicals added to SCIL
- Timeliness of EPA reviews of Safer Choice products

To fulfill **Recommendation 1b**, on October 1, 2020, EPA began collecting the following data from Safer Choice partner companies, and implemented the following performance measures on October 1, 2021:

- Total volume of Safer Choice-marketed products
- Total volume of Safer Choice-marketed products, by category
- Reformulations Ultimately Qualifying for the Safer Choice Label

2. Publish or otherwise notify Congress and the public of the goals and performance measures for the EPA Safer Choice program, as well as the annual results of the program. To fulfill Recommendation 2, on January 21, 2021, the Agency published the first set of performance measures from Corrective Action 1a on a new Safer Choice webpage (https://www.epa.gov/saferchoice/safer-choice-performance-measures). The second set of performance measures from Corrective Action 1b were incorporated into this webpage on January 3, 2022.
3. Establish and implement procedures to conduct periodic oversight reviews of audits conducted by the third-party profilers (TPP) to include physical oversight of the third-party profilers' on-site audits. EPA agreed to conduct yearly oversight reviews of TPP desk and on-site audits. To fulfill Recommendation 3, on November 10, 2020, the Agency developed a standard operating procedure (SOP) to annually conduct oversight

reviews of audits conducted by TPPs, including physical oversight of those audits. For 2021-2022, on-site-product-manufacturer audits were conducted remotely because of the ongoing Covid-19 pandemic. By December 2, 2021, Safer Choice conducted two desk audits per TPP (NSF International and ToxServices LLC; note that new TPP Gradient does not yet have clients at the audit stage).

4. Amend memorandums of understanding with the third-party profilers, requiring that EPA conduct performance reviews of third-party profilers. To fulfill Recommendation 4, on September 9, 2020, the Agency finalized amendments to the TPP Memorandums of Understanding to indicate that EPA will conduct performance reviews for each of the three TPPs: NSF International; ToxServices LLC; and Gradient.
5. Collect and document all information that third-party profilers review in their audits in the Safer Choice Community database. EPA proposed to incorporate a checklist in the data system that will confirm that TPPs collected and reviewed all audit documentation. Documentation will then be available for EPA to conduct yearly oversight reviews of TPP desk and on-site audits. To fulfill Recommendation 5, on December 2, 2020, the Agency incorporated a checklist in the Safer Choice Community that TPPs will include with each audit summary, confirming that the TPP has collected and reviewed all the audit documentation required by the Safer Choice Standard. On June 13, 2021, the Agency confirmed that the TPPs have incorporated the checklist into their submitted audit summaries.

How EPA used the results/conclusions/findings/interim findings: EPA used the findings of the report to strengthen its oversight of TPPs and to re-establish a more transparent measures-tracking system.

Link for findings: https://www.epa.gov/office-inspector-general/report-epas-safer-choice-program-would-benefit-formal-goals-and-additional

Activity 2:

Title	GAO Report: Persistent Chemicals
Lead National Program	OCSPP
FY 2022-2026 Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety
Completion date	July 2022

Purpose and brief description: In Persistent Chemicals: Technologies for PFAS Assessment, Detection, and Treatment (GAO-22-105088), GAO reported on technologies to detect and treat per- and polyfluoroalkyl substances (PFAS) contamination and assess its health effects. GAO also offered policymakers additional actions to consider.

PFAS are a large group of heat and stain resistant chemicals, first developed in the 1940s. PFAS are used in a wide range of products, including carpet, nonstick cookware, waterproof clothing, and firefighting foam used at airports and military bases. PFAS can persist in the environment, including in water, soil, and air, for decades or longer. The Centers for Disease Control and Prevention has found that most people in the U.S. have been exposed to two of the most widely studied PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). Both have been linked to human health problems.

Policy, programmatic, and/or operational questions the activity is intended to address:

GAO was asked to conduct a technology assessment on PFAS assessment, detection, and treatment. This report examines (1) technologies for more efficient assessments of the adverse health effects of PFAS and alternative substances; (2) the benefits and challenges of current and emerging technologies for PFAS detection and treatment; and (3) policy options that could help enhance benefits and mitigate challenges associated with these technologies.

Brief list of results/conclusions/findings including interim findings: GAO identified three challenges associated with PFAS assessment, detection, and treatment technologies:

- PFAS chemical structures are diverse and difficult to analyze for health risks, and machine learning requires extensive training data that may not be available.
- Researchers lack analytical standards for many PFAS, limiting the development of effective detection methods.
- The effectiveness and availability of disposal and destruction options for PFAS are uncertain because of a lack of data, monitoring, and guidance.

GAO developed the following three policy options that could help mitigate these challenges.

- Policymakers could support development of technologies and methods to more efficiently research PFAS health risks.
- Policymakers could collaborate to improve access to standard reference samples of PFAS, known as analytical standards and increase the pace of method and reference sample development for PFAS detection.
- Policymakers could encourage the development and evaluation of full-scale technologies and methods to dispose of or destroy PFAS.

How EPA used the results/conclusions/findings/interim findings: The three policy options provided in the report are not pertinent to OCSPP's work.

Link for findings*:* https://www.gao.gov/products/gao-22-105088

Activity 3:

Title	OIG Report: EPA Needs to Improve the Transparency of Its Cancer-Assessment Process for Pesticides
Lead National Program	OCSPP
FY 2022-2026 Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety
Completion date	September 2022

Purpose and brief description: The OIG performed this evaluation to examine the extent to which the EPA followed policies and procedures in developing the cancer assessment for the 1,3-Dichloropropene (1,3-D) pesticide registration-review decision to prevent unreasonable adverse effects on human health. EPA initiated this evaluation based on multiple complaints submitted to the Office of Inspector General Hotline.

Policy, programmatic, and/or operational questions the activity is intended to address: The Federal Insecticide, Fungicide, and Rodenticide Act requires EPA to review every pesticide registration no later than 15 years after the active ingredient's initial registration to determine whether the pesticide continues to meet the statutory standard—that is, whether the pesticide performs its intended function without unreasonable adverse effects on human health and the environment.

Brief list of results/conclusions/findings including interim findings: The OIG found that EPA did not adhere to all standard operating procedures and requirements for the 1,3-D pesticide cancer-assessment process. OIG recommended that the Assistant Administrator for Chemical Safety and Pollution Prevention:

- Issue guidances on when and how to conduct kinetically derived maximum (KMD) approach and weight of evidence approach in cancer risk assessments for pesticides.
- Update the docket for 1,3-D to include all required materials, including meeting minutes and list of participants for meetings between the EPA and the registrant related to the 1,3-Dichloropropene pesticide registration review and cancer assessment.
- Develop guidance to clarify when to docket meetings related to a registration review for other related activities that occur concurrent to the pesticide registration review process.
- Conduct an additional literature search that identifies all published scientific studies concerning the potential carcinogenicity of 1,3-Dichloropropene, including a methodology to reconcile inconsistencies in the scientific data, and publish the results of the literature search and reconciliations.
- Develop procedures to ensure independence of Cancer Assessment Review Committee (CARC) members from the work products they review, ensure appropriate expertise is

represented on CARC and when to include ad hoc scientists, and regularly assess CARC to ensure internal peer review standards are met.

- Conduct an external peer review of the 1,3-D cancer risk assessment.
- Develop and implement specific criteria requiring external peer review of Office of Pesticide Programs risk assessments that use scientifically or technically novel approaches, or are likely to have precedent-setting influence, on future risk assessments, in accordance with the Office of Management and Budget's 2005 *Final Information Quality Bulletin for Peer Review*.

How EPA used the results/conclusions/findings/interim findings: The OIG made nine recommendations to improve the transparency of the 1,3-D cancer-assessment process and restore the scientific credibility of the Agency's 1,3-D cancer classification. These recommendations address the lack of guidance for EPA's use of the kinetically derived maximum dose and weight-of-evidence approaches, an incomplete public docket, an incomplete literature search, noncompliance with internal peer review standards, and the need for an external peer review.

EPA has agreed to implement corrective actions for 8 of the 9 recommendations, and the OIG has accepted Agency corrective actions. OIG and the Agency remain in discussions about Recommendation 8 (peer review). To fulfill the OIG recommendations for the 8 agreed upon corrective actions:

- EPA is currently working in conjunction with other international regulatory authorities to develop guidance on the integration of kinetic information (i.e., KMD) in the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) pesticide risk assessments.
- EPA has agreed to develop guidance on the use of weight of evidence approach in cancer assessments for pesticides. Once developed, EPA will post a link to the guidance on an EPA's pesticide website.
- EPA will complete its search of any available existing meeting materials and/or meeting notes on the 1,3-D cancer assessment and add any additional materials found to the1,3- D registration review docket.
- EPA will develop and implement internal guidance to clarify when to docket meetings related to pesticide registration review for the specific related activity of a cancer assessment that occurs concurrent to the registration review process.
- EPA conducted an updated comprehensive literature search to inform the carcinogenic potential of 1,3-D. The results of the search will be posted to the registration review docket for 1,3-D.
- The SOP for CARC will be updated to reflect the OIG recommendations specifically addressing the independence of CARC members from the work products they review, ensuring there is the appropriate expertise on the CARC for each meeting, including ad hoc voting scientists when needed. EPA will continue to regularly assess CARC processes and procedures and update the SOP as needed.

- OCSPP will develop a Standard Operating Procedure to determine when an external peer review is required for assessments using scientifically or technically novel approaches or likely to have precedent-setting influence. This guidance will be used to ensure consistency in the external peer review process across OSCPP.

The implementation of the 8 OIG recommendations will help to improve transparency and consistency in the review process to conduct cancer assessments for pesticides.

Link for findings: *https://www.epa.gov/office-inspector-general/report-epa-needs-improve-transparency-its-cancer-assessment-process*

Activity 4:

Title	OIG Report: Long-Chain PFAS Rule
Lead National Program	OCSPP
FY 2022-2026 Strategic Goal and Objective supported	Goal 7: Ensure Safety of Chemicals for People and the Environment Objective 7.1: Ensure Chemical and Pesticide Safety
Completion date	July 2022

Purpose and brief description: EPA's Office of Inspector General conducted this assessment to determine the extent to which EPA followed applicable policies, procedures, and guidance for changes made to the Long-Chain Perfluoroalkyl Carboxylate and Perfluoroalkyl Sulfonate Chemical Substances Significant New Use Rule (LCPFAC SNUR) after signature by the EPA Administrator.

Policy, programmatic, and/or operational questions the activity is intended to address: Did EPA follow all applicable policies, procedures, and guidance when making changes to the LCPFAC SNUR between the EPA Administrator's signing of the final rule on June 22, 2020, and publication of the final rule in the Federal Register on July 27, 2020?

Brief list of results/conclusions/findings including interim findings: EPA did not follow all applicable policies, procedures, and guidance when making changes to the LCPFAC SNUR after signature by the EPA Administrator and before publication in the Federal Register. In accordance with the procedure outlined in the "Changes to Rule Documents Prepared for the Administrator's Signature" memorandum, the Agency developed a post-signature change memorandum identifying the changes, but EPA did not docket that memorandum as stipulated by the Docketing FAQs. OIG could not determine whether EPA complied with the transparency provisions of E.O. 12866. EPA followed the Office of the Federal Register's Document Drafting Handbook guidance for requesting changes to the final rule.
How EPA used the results/conclusions/findings/interim findings: OIG made three recommendations in its audit, which EPA has agreed with and have completed out as described below:

1. The Assistant Administrator for Chemical Safety and Pollution Prevention should update the docket for the Long-Chain Perfluoroalkyl Carboxylate and Perfluoroalkyl Sulfonate Chemical Substances Significant New Use Rule by posting the decision memorandum, Corrections to the Final Rule for Long-Chain Perfluoroalkyl Carboxylate and Perfluoroalkyl Sulfonate Chemical Substances; Significant New Use Rule (Tier 3; SAN 5684; RIN 2070-AJ99; FRL- 10010-44; EPA-HQ-OPPT-20 13-0225) - DECISION MEMORANDUM, which outlines the changes 8 22-E-0052 made to the final rule after the EPA administrator signed it but before it was published in the Federal Register. EPA agreed with and completed this recommendation. EPA added to the final rule docket a copy of the EPA Administrator memorandum signed on July 13, 2020, with accompanying attachments.

2. The Associate Administrator for Policy should update Creating and Managing Dockets: Frequently Asked Questions for EPA Action Developers (Docketing FAQs), dated October 2011, and other applicable policies, procedures, and guidance as needed to require the docketing of any decision memorandum that outlines substantive changes made to a final rule after the EPA Administrator signs it, but before it is published in the Federal Register. EPA agreed to revise the 2011 Docketing FAQs, the 2006 EPA memorandum Changes to Rule Documents Prepared for the Administrator's Signature, and the ADP Guidance to clarify expectations regarding the docketing of final post signature change memos that have been signed by the Administrator.

3. The Associate Administrator for Policy should update applicable policies, procedures, and guidance as needed to require that—when EPA makes changes to a regulatory action as a result of a suggestion or recommendation received from the Office of Information and Regulatory Affairs between the time the action is submitted to the Office of Information and Regulatory Affairs for review and the time the action is published in the Federal Register— EPA identify those changes for the public, consistent with Executive Order 12866 section 6(a)(3)(E)(iii). EPA agreed to address this recommendation by March 21, 2023, by updating the introductory Action Development Process training for EPA senior leadership to explicitly address post-signature changes to regulatory documents, the importance of documenting any verbal decisions and instructions that occur post-signature, and the need for adequate documentation and records management consistent with Executive Order 12866.

Link for findings*:* https://www.epa.gov/office-inspector-general/report-epa-was-not-transparent-about-changes-made-long-chain-pfas-rule

Office of Enforcement and Compliance Assurance (OECA)

Activity 1:

Title	Discharge Monitoring Report (DMR) Integrity Screening Project

Lead National Program	OECA
FY 2022-2026 Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable
Completion date	Preliminary Results: March 2022.

Purpose and brief description:

Discharge Monitoring Report (DMR) Integrity Screening is an Enforcement and Compliance History Online (ECHO) search tool that uses statistical filters to look for signs of possible misreporting in NPDES DMRs. Facilities with high scores may be candidates for further review and possible on-site investigation, compliance assistance, or civil or criminal enforcement. OECA piloted the application with eight states that agreed to test the tool and report back on their use and findings.

Policy, programmatic, and/or operational questions the activity is intended to address:

The results from the pilot will help to improve the tool and gather information about what methods are effective at finding misreporting. This effort will support the goal of reducing significant non-compliance (SNC) in the NPDES program.

Brief list of results/conclusions/findings including interim findings:

The pilot concluded in 2021. Initial results from two states (AR, MD) indicated that they used the tool to help target inspections or inform inspections that were already planned. One finding at a specific facility seemed likely to result in civil or criminal enforcement for intentional misreporting.

As of March 2022, the analysis concluded that notifications increased the timeliness of submission but did not make a notable impact on moving submissions from the category of late to on time. Permittees who had a record of submitting on time began submitting earlier, but permittees with a record of submitting late continued to do so. EPA's analysis showed a larger effect from notifications including information about potential penalties for non-submission. Researchers plan to assess additional factors like municipal budget data or depopulation that may show correlation to chronic non-submission. A formal conclusions paper is underway, and an expected completion date is November 2022.

How EPA used the results/conclusions/findings/interim findings:

EPA plans to use the results of this pilot to make improvements to the tool. The tool itself will help EPA identify misreporting in NPDES DMRs and investigate the cause of misreporting as needed.

Link for findings*:*

Information on the pilot and tool can be found on the ECHO website (DMR Integrity Screening | ECHO | US EPA), with restricted access sign on needed.

Activity 2:

Title	OIG Report: "Total National Reported Clean Air Act Compliance-Monitoring Activities Decreased Slightly During Coronavirus Pandemic, but State Activities Varied Widely"
Lead National Program	OECA
FY 2022-2026 Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.2: Detect Violations and Promote Compliance
Completion date	November 2021

Purpose and brief description:

The U.S. Environmental Protection Agency's Office of Inspector General (OIG) initiated this assessment to assess how the coronavirus pandemic—that is, the SARS-CoV-2 virus and resultant COVID-19 disease— has impacted air compliance-monitoring activities undertaken by EPA-delegated state and local agencies to confirm that facilities that emit air pollution are complying with the Clean Air Act, or CAA, and federal air regulations.

Policy, programmatic, and/or operational questions the activity is intended to address:

The EPA OIG conducted this assessment to:

- Assess the impacts of the coronavirus pandemic on the number and type of compliance-monitoring activities taken by state and local agencies at facilities that emit air pollution.

- Determine what guidance the U.S. Environmental Protection Agency provided to state and local agencies to target or prioritize compliance-monitoring activities at facilities and how agencies conducted those tasks during the pandemic. EPA's Clean Air Act Stationary Source Compliance Monitoring Strategy recommends the frequency and type of activities to be conducted by delegated state and local agencies, which then report those activities to EPA; OIG relied on those reported activities for its findings and recommendations.

Brief list of results/conclusions/findings including interim findings:

The OIG report stated the following:

- The coronavirus pandemic marginally impacted the total number of nationwide compliance monitoring activities at facilities that emit air pollution. However, activities varied widely among states and territories, with reported changes in activities at high-emitting sources in fiscal year 2020 ranging from an 88-percent decline to a 234-percent increase. Substantially lower levels of compliance monitoring limit the deterrent effect that consistent monitoring can have on facilities' noncompliance and increase the risk that noncompliance could go undetected at facilities.

- State and local agencies shifted some types of compliance-monitoring activities from on-site to off-site. This shift is in accordance with guidance EPA issued in July 2020, which provided some flexibility to state and local agencies to count off-site compliance-monitoring activities toward the Clean Air Act Stationary Source Compliance Monitoring Strategy (CAA CMS) commitments for full compliance evaluations. EPA, however, has not yet assessed the impact of this flexibility on the use of off-site full-compliance evaluations to ensure that evaluations are consistent with the CAA CMS. In addition, while EPA convened a workgroup to explore using remote video to conduct off-site partial-compliance evaluations, the Agency has not yet determined the conditions under which remote video is technically, legally, and programmatically feasible and has not finalized its draft standard operating procedures.

How EPA used the results/conclusions/findings/interim findings:

The EPA OIG recommended that EPA address the needs of agencies that had significant declines in compliance-monitoring activities. They also recommended internal controls to strengthen EPA's oversight of off-site compliance-monitoring activities. EPA provided corrective actions and planned completion dates for the six recommendations, which were agreed to by the OIG. All recommendations have planned completion dates of 12/30/22, with the exception of one which has a planned completion date of 9/30/23 (see table, below).

Rec No.	Page No.	Subject	Action Official	Planned Completion Date
1	18	In coordination with the EPA regional offices, evaluate the needs of the state and local agencies in states and territories that had significant	Assistant Administrator for Enforcement and	9/30/23

		declines, as determined by the EPA, in their total compliance-monitoring activities for fiscal year 2020 to determine whether technical assistance is needed and provide it as appropriate.	Compliance Assurance	
2	18	Assess a portion of off-site full-compliance evaluations reported by state and local agencies during the coronavirus pandemic to determine whether they meet the requirements of a full compliance evaluation	Assistant Administrator for Enforcement and Compliance Assurance	12/30/22
3	18	After assessing a portion of the off-site full-compliance evaluations reported by state and local agencies during the coronavirus pandemic, determine whether additional guidance on what constitutes an off-site full-compliance evaluation, the types of facilities where an off-site full-compliance evaluation is appropriate, and when a remote visual component is necessary. If such a determination is made, issue updated guidance on off-site full-compliance evaluations.	Assistant Administrator for Enforcement and Compliance Assurance	12/30/22
4	18	Determine and document the conditions or parameters under which the use of remote video to conduct off-site partial compliance evaluations is feasible from a legal, technical, and programmatic perspective.	Assistant Administrator for Enforcement and Compliance Assurance	12/30/22

5	18	Finalize the Remote Video Partial Compliance Evaluation workgroup's standard operating procedures.	Assistant Administrator for Enforcement and Compliance Assurance	12/30/22
6	18	Determine whether and how remote video can be used in conjunction with a document review to qualify as a full compliance evaluation for purposes of the Clean Air Act Stationary Source Compliance Monitoring Strategy and provide instruction to state and local agencies.	Assistant Administrator for Enforcement and Compliance Assurance	12/30/22

Link for findings: Link

Activity 3:

Title	OIG Report: "Additional Internal Controls Would Improve EPA's System for Electronic Disclosure of Environmental Violations"
Lead National Program	OECA
FY 2022-2026 Strategic Goal and Objective supported	Goal 3: Enforce Environmental Laws and Ensure Compliance Objective 3.1: Hold Environmental Violators and Responsible Parties Accountable
Completion date	June 2022

Purpose and brief description:

The U.S. Environmental Protection Agency's Office of Inspector General (OIG) initiated this assessment to determine whether EPA's process for screening regulated entities' self-disclosed environmental violations reported through the eDisclosure system is effective and ensures that significant concerns, such as criminal conduct and potential imminent hazards, are addressed by the Office of Enforcement and Compliance Assurance, or OECA.

Policy, programmatic, and/or operational questions the activity is intended to address:

The goal of the eDisclosure system is to provide an efficient mechanism for regulated entities to self-disclose—that is, voluntarily discover, report, and correct—violations of federal environmental laws and regulations. Self-disclosed violations are automatically processed under EPA's audit policies. EPA subsequently screens certain eDisclosure submissions to ensure that significant concerns, such as criminal conduct and potential imminent hazards, are properly addressed.

Brief list of results/conclusions/findings including interim findings:

The OIG report stated the following:

- EPA's Audit Policy Program does not have adequate internal controls to ensure that the screening process for eDisclosure submissions is effective and that significant concerns are identified and addressed by the regions and OECA. While EPA has committed to screening submissions, there is no formal, written national guidance or training on how staff should conduct this screening. As a result, some regional staff are not screening eDisclosure submissions or are screening them inconsistently. Additionally, EPA has not conducted any monitoring or established any performance measures to determine whether the eDisclosure system and screening procedures are being consistently and effectively implemented. The eDisclosure system could also be improved to offer real-time notifications of new eDisclosure data and robust data analyses. By implementing these internal controls, EPA can reduce the risk that significant concerns are not being addressed while also enhancing the impacts of the eDisclosure system.

How EPA used the results/conclusions/findings/interim findings:

EPA OIG recommend that the assistant administrator for Enforcement and Compliance Assurance develop national guidance that includes a process for screening eDisclosure submissions for significant concerns; provide eDisclosure-specific training to EPA headquarters and regions to clarify expectations, establish staff responsibilities, and communicate best practices; develop performance measures for the eDisclosure system, as well as a monitoring plan to track its effectiveness; and assess eDisclosure system functionality to identify and implement improvements.

Rec No.	Page No.	Subject	Action Official	Planned Completion Date
1	10	Develop national guidance that includes a process for screening eDisclosure submissions for significant concerns, such as	Assistant Administrator for Enforcement	9/30/23

		criminal conduct and potential imminent hazards.	and Compliance Assurance	
2	10	Provide eDisclosure-specific training to EPA Headquarters and regions to clarify expectations, establish staff responsibilities, and communicate best practices.	Assistant Administrator for Enforcement and Compliance Assurance	9/30/23
3	10	Develop performance measures for the eDisclosure system and a monitoring plan to track its effectiveness.	Assistant Administrator for Enforcement and Compliance Assurance	9/30/23
4	10	In coordination with EPA regions, assess eDisclosure system functionality to identify and implement improvements.	Assistant Administrator for Enforcement and Compliance Assurance	9/30/23

OECA agreed with all four recommendations and corrective actions and estimated completion dates agreed to by the OIG. All recommendations have planned completion dates of 9/30/23 (see table, below). EPA OIG revised the report based on technical comments provided by OECA.

Link for findings*: https://www.epa.gov/system/files/documents/2022-06/_epaoig_20220630-22-E-0051.pdf*

Office of Land and Emergency Management (OLEM)

Activity 1:

Title	OLEM Population Analysis
Lead National Program	OLEM

FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	July 2022

Purpose and brief description: This is a descriptive study. The purpose is to conduct an annual analysis to support evidence-based descriptions of who benefits from EPA's cleanup and prevention work, by collecting data on the population living within three and one mile(s) of a Superfund site, Brownfields site, Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) facility, Leaking Underground Storage Tank (LUST) site, and Underground Storage Tank (UST) facility that exist in thousands of communities across the United States ranging from remote to large urban settings. Many of them are located in economically distressed communities. This analysis also supports EPA's *America's Children and the Environment Report*, by estimating the number of children and their socioeconomic/demographic characteristics who live within one mile of a RCRA CA or Superfund site that may not have had all human health protective measures in place at the time of the analysis.

Policy, programmatic, and/or operational questions the activity is intended to address: Who benefits from EPA's cleanup and prevention work related to Superfund sites, Brownfields sites, Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) facility, Leaking Underground Storage Tank (LUST) sites, and Underground Storage Tank (UST) facilities?

Brief list of results/conclusions/findings including interim findings: To help describe who benefits from our cleanup work, EPA collected data on the population living within three and one mile(s) of these sites. Using census data, EPA found that approximately 207 million people live within three miles of a Superfund remedial site, RCRA Corrective Action facility, or Brownfields site, roughly 63 percent of the U.S. population, including 64 percent of all children in the U.S. under the age of five. While there is no single way to characterize communities located near our sites and facilities, this population is more minority, low income, linguistically isolated, and less likely to have a high school education than the U.S. population as a whole. As a result, these communities may have fewer resources with which to address concerns about their health and environment. OLEM also works with states, territories, tribes and industry to protect the environment and human health from potential releases at Underground Storage Tank (UST) facilities. The greatest potential threat from a leaking UST is contamination of groundwater, the source of drinking water for nearly half of all Americans. Approximately 94 percent of the US population lives within 3 miles of an active UST facility, and 75 percent of the US population lives within 3 miles of an open LUST release.

How EPA used the results/conclusions/findings/interim findings: Results are included in EPA's annual budget reviews with OMB, and in budget justifications for Congress. Results also are used in general communications with press, other government agencies, and the public. Results are also compared with previous years to identify whether there are any emerging or changes

in trends from year-to-year. Results also indicate populations sub-groups that are disproportionately located near to our sites, which may indicate a need for intervention.

Link for findings: https://www.epa.gov/aboutepa/office-land-and-emergency-management-olem-program-benefits#Programs

Activity 2:

Title	Redevelopment Economics at Remedial Sites (non-federal facility)
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	February 2022

Purpose and brief description: Cleaning up contaminated sites can serve as a catalyst for economic growth and community revitalization. The Superfund Remedial Program facilitates the redevelopment of sites across the country while protecting human health and the environment. Collaborative efforts among state, local, and tribal partners, redevelopers and other federal agency programs encourage restoration of sites. Since Superfund sites often encompass buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of Superfund sites. The analysis will provide current, reliable business-related information for a subset of Superfund sites in reuse and continued use. These uses can help economically revitalize communities near Superfund sites.

Policy, programmatic, and/or operational questions the activity is intended to address: What are the economic outcomes of reuse of non-federal Superfund remedial sites?

Brief list of results/conclusions/findings including interim findings: Over the last 11 years (2011-2021) for Superfund sites in reuse where EPA has economic data, businesses have generated at least $478 billion in sales, which is 27 times the $17.3 billion EPA has spent cumulatively to clean up those sites. In 2022, data EPA collected at 650 sites in reuse indicate these sites supported approximately 10,230 businesses. These businesses' ongoing operations generate annual sales of $65.8 billion. They also employ more than 246,000 people who earned a combined income of $18.6 billion.

How EPA used the results/conclusions/findings/interim findings: Economic data are included in budget justifications to Congress and are used in general communication, including the annual Superfund Accomplishment Reports, with key stakeholders, state and local government, external partners, and the public. Community development organizations, local government, developers etc. can use this data to illustrate potential returns from Superfund site

reuse. Internally, EPA considers these findings to be a key data point and results are also compared with previous years to identify whether there are any emerging or changes in trends from year-to-year.

Link for findings: https://www.epa.gov/superfund-redevelopment/redevelopment-economics-superfund-sites

Activity 3:

Title	Redevelopment Economics at Federal Facilities
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	January 2022

Purpose and brief description: Cleaning up contaminated sites at federal facilities can serve as a catalyst for economic growth and community revitalization. The Superfund Federal Facilities Program facilitates the redevelopment of federal facility sites across the country by assisting other federal agencies (OFAs) to expedite activities related to CERCLA response actions, while protecting human health and the environment. Collaborative efforts among OFAs; developers; and state, local, and tribal partners encourage restoration of sites. Since federal facility Superfund sites often encompass thousands of acres with buildings, roads, and other infrastructure, their effective and efficient cleanup and reuse can play a pivotal role in a community's economic growth. EPA has initiated efforts to collect economic data at a subset of federal facility Superfund sites which is outlined on the public webpage Redevelopment Economics at Federal Facilities. The analysis will provide current, reliable business-related information for a subset of federal facility Superfund sites in reuse and continued use. Some innovative business owners and organizations reuse Superfund sites for a variety of purposes. These uses can help economically revitalize communities near Superfund sites. EPA has initiated efforts to collect economic data at a subset of federal facility Superfund sites.

Policy, programmatic, and/or operational questions the activity is intended to address: What are the economic outcomes of reuse of federal facility Superfund sites?

Brief list of results/conclusions/findings including interim findings: An economic analysis of 50 Federal Facility Superfund Sites identified over 2,000 businesses that generated $17 billion in annual sales, provided over 220,000 jobs and $19 billion in estimated annual employment income. Readily available internet and database sources are utilized to create estimates of national totals related to the beneficial effects of Superfund sites in reuse. Without more

extensive research it is not always possible to identify all business names and addresses on site.

How EPA used the results/conclusions/findings/interim findings: Economic data are included in budget justifications to Congress and are used in general communication with other Federal agencies and the public. Economic Data results are also be used to highlight projects that demonstrate that the restoration of Superfund sites protects public health and serves as a catalyst for community revitalization and economic growth. The highlighted projects can serve as models for future redevelopment projects.

Link for findings: https://www.epa.gov/fedfac/redevelopment-federal-facilities

Activity 4:

Title	Analyses of Economic Benefits at RCRA Corrective Action Facilities, After Cleanup
Lead National Program	OLEM
FY 2018-2022 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	June 2022

Purpose and brief description: Cleaning up contaminated sites serves as a catalyst for economic growth and community revitalization and can help to preserve existing business operations. The RCRA economic benefits study provides information on currently active businesses now operating at former RCRA Corrective Action (CA) facilities that are now in reuse or continued use after cleanup and remediation. Economic impacts associated with facilities in reuse highlight how cleanup performed under RCRA CA can set the stage for a wide range of new development. These developments can often attract new businesses and bolster local economies. In some cases, reuse priorities are incorporated into the remedial design process, resulting in cleanups that directly facilitate future reuse. Such facilities can serve as models of what is possible when EPA and RCRA-authorized states, other state and local entities, and facility stakeholders work together to address cleanup and consider reuse priorities early in the cleanup process. Additionally, this study reveals how cleanup performed under RCRA CA can also facilitate safe, continued operations of long-time facility businesses, while also protecting human health and the environment through remediation.

Policy, programmatic, and/or operational questions the activity is intended to address: The ongoing analysis of economic benefits provides current, reliable business-related information for a subset of RCRA Corrective Action Facilities now in reuse or continued use after they have been cleaned up. The study helps to highlight the significant economic benefits that can occur when such facilities are remediated. The analyses furthermore help the RCRA cleanup program characterize the many types of redevelopments that can occur at RCRA Corrective Action

facilities. To leverage these economic findings, the program is also producing facility case studies that showcase the cleanup and current uses so that they may be used as examples of what may be replicable at other RCRA cleanups.

Brief list of results/conclusions/findings: EPA's analyses of 79 RCRA cleanups revealed that these cleaned up facilities support 1,028 on-site businesses, which provide economic benefits including: $39 billion in annual sales revenue; over 82,000 jobs; and $7.9 billion in estimated annual employment income. Additionally, the RCRA program also sought to further assess potential environmental justice disparities as part of this study. These analyses revealed that approximately 25% of the 79 study facilities are located within communities with potential environmental justice concerns. With these facilities now having been cleaned up, more than 170 businesses are operating at these same locations, helping to generate 7,900 jobs and more than $522 million in annual income for these communities.

How EPA used the results/conclusions/findings: Economic data are included in budget justifications to Congress and are used in general communication with key stakeholders and the public. The most recent results were released in an EPA Press Release, and a new webpage was launched to make these findings and associated facility case studies broadly available to the public (See link below). Going forward, these analyses are being expanded for additional purposes. For example, the results are being used to assess environmental justice concerns and to identify the economic impacts from cleanups located in disadvantaged communities. Further utilization of the results will involve the assessment of Energy Production, GHG Mitigation, and Climate Change Impacts at these facilities.

Links for findings: *https://www.epa.gov/hw/redevelopment-economics-rcra-corrective-action-facilities#method*

Activity 5:

Title	Superfund Remedial Socioeconomic Business Utilization Improvement Workgroup
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights Objective 2.1: Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels Objective 2.2: Embed Environmental Justice and Civil Rights into EPA's Programs, Policies, and Activities
Completion date	September 2022

Purpose and brief description:

The Remedial Acquisition Framework (RAF) has been successful with small businesses, but limited in the number of procurements awarded to socioeconomic businesses, such as small-disadvantaged businesses (SDBs), women-owned small businesses (WOSBs), small businesses located in Historically Underutilized Business Zones (HUBZones), and service-disabled veteran owned small businesses (SDVOSBs
With the influx of the Bipartisan Infrastructure Law funding and an increase in large construction projects, the percentage of work going to socioeconomic businesses which equated to 6% in FY21 may continue to decrease in future years. Without a strategic focus on increasing opportunities to socioeconomic firms it is unlikely that the Superfund Remedial Program will meet EPA's socioeconomic utilization targets.

This project involved developing a toolkit for the utilization under the Superfund RAF and the best approaches to procuring remedial activities for socioeconomic businesses (i.e. using targeted standalone contracts). To further support these efforts training materials were developed that will familiarize the Regions with the use of the toolkit's resources. Additionally, the Superfund Remedial program is tracking procurements to assess the changes in the use of socioeconomic businesses.

Policy, programmatic, and/or operational questions the activity is intended to address:

1. Is socioeconomic business utilization in the remedial program projected to increase or decrease in the coming fiscal years?
2. What are the root causes of any potential decrease in utilization?
3. What can be done to increase socioeconomic business utilization in the remedial program?
4. How can OSRTI leverage its partnerships (both internal to EPA and external to other federal agencies) to increase socioeconomic business utilization?

Brief list of results/conclusions/findings including interim findings:

1. Socioeconomic business utilization in the remedial program is projected to decrease without intervention due to the increased funding on preplaced contracts that do not include socioeconomic businesses.
2. To increase socioeconomic business participation, the Superfund Remedial program must focus on options within the RAF which includes standalone (site-specific) contracts to socioeconomic businesses.
3. Socioeconomic business utilization can be promoted by providing training and support to EPA regions.

How EPA used the results/conclusions/findings/interim findings:

Based on our findings, we developed a toolkit to provide EPA regions with resources and best practices that will enhance their ability to utilize socioeconomic businesses. We also developed plans to implement recurring trainings/refreshers to ensure that both new and experienced regional staff will have frequent chances to familiarize themselves with developments regarding socioeconomic business utilization. We further developed our internal and external partnerships with relevant groups (EPA-OSDBU and USACE), which allows all three groups to better assist each other in our ongoing socioeconomic business utilization efforts.

Link for findings*:*
https://work.epa.gov/small-business/toolkit-socioeconomic-business-utilization-under-superfund-remedial-acquisitions

Activity 6:

Title	Recycling Infrastructure and Market Opportunities Map
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.2: Reduce Waste and Prevent Environmental Contamination
Completion date	September 2022

Purpose and brief description: The national recycling sector lacks an accessible, comprehensive resource for understanding opportunities related to material recovery. In response to this, and in support of the Bipartisan Infrastructure Law (BIL) and EPA's National Recycling Goal of increasing the U.S. recycling rate from the current 32% to 50% by 2030, EPA has developed the Recycling Infrastructure and Market Opportunities Map. This interactive map identifies and displays information on estimated generation, recycling and recycling potential by zip code and material; locations of recycling infrastructure; potential primary and secondary end markets for recycled materials; market factors such as landfill tipping fees and bottle bill deposit prices; and MSW infrastructure such as landfills and transfer stations. Users can leverage this tool to better understand the intersection of recycling and solid waste management, end market opportunities, and environmental justice.
While several data visualization tools exist within the recycling industry, they are primarily tailored to discrete regions or product sectors and provide limited use for understanding the overall national recycling sector. EPA's Recycling Infrastructure and Market Opportunities Map uncovers opportunities for recycling infrastructure investment and recycling market development by visually presenting data estimates from all phases of the recycling process, including generation, collection, sortation, and end use. This aims to address the lack of an accessible, comprehensive resource for understanding opportunities related to material recovery.

Policy, programmatic, and/or operational questions the activity is intended to address:

- How can we better understand the overall national recycling sector?
- How can we comprehensively understand opportunities related to material recovery?

Brief list of results/conclusions/findings including interim findings: This interactive map identifies and displays multiple layers of data on information such as estimated generation, recycling and recycling potential by zip code and material; locations of recycling infrastructure; potential primary and secondary end markets for recycled materials; market factors such as

landfill tipping fees and bottle bill deposit prices; and MSW infrastructure such as landfills and transfer stations.

How EPA used the results/conclusions/findings/interim findings: The Recycling Infrastructure and Market Opportunities Map can be used for a variety of purposes, including:

- Assisting developers with recycling infrastructure site selection;
- Visualizing the distribution of available recycled material generated by geographic region to inform facility development and expansion sites, including environmental justice considerations;
- Identifying recycled material feedstocks for circular economy entrepreneurs;
- Developing or expanding hub-and-spoke collection systems to help provide economies of scale to rural recycling programs; and
- Helping local governments design recycling programs by estimating gaps in required recycling capacity.

Link for findings*:* To be released for public comment January 2023.

Activity 7:

Title	Drum Reconditioner Damage Case Report
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.2: Reduce Waste and Prevent Environmental Contamination
Completion date	September 2022

Purpose and brief description: On September 8, 2022, EPA published a drum reconditioner report to improve Agency understanding of how the drum reconditioning industry operates and document damage case incidents at facilities that have caused significant harm to human health and the environment. The report also serves to inform domestic policymakers, enforcement officials, and the public about the regulatory and waste issues surrounding drum reconditioning facilities. EPA plans to use information gathered from this report to engage stakeholders on approaches to address and mitigate these issues. This analysis examined the existing Resource Conservation and Recovery Act (RCRA) regulations, particularly the empty container provision found in Title 40 of the Code of Federal Regulations in section 261.7, which exempts from regulation hazardous waste residues that remain in a drum or other container if certain conditions are met. Both RCRA empty containers (that can still have small amounts of residues) and non-empty containers are shipped to drum reconditioners creating compliance challenges. Even when in compliance, drum reconditioners are receiving and managing large quantities of hazardous waste residues. This report begins the process of examining this industry to see what further Agency action, regulatory or otherwise, is needed to protect human health and the environment.

Policy, programmatic, and/or operational questions the activity is intended to address: What further Agency action, regulatory or otherwise, is needed in the drum reconditioning industry to protect human health and the environment?

Brief list of results/conclusions/findings including interim findings: The report's findings indicate an estimated national drum reconditioning universe of 181 facilities, of which 106 are presumed to still be operating, with approximately 40 million total drums being processed each year and 47.5 percent of all facilities having experienced one or more reported damage case. This analysis helped identify common types of incidents within this industry and their underlying causes, the populations most at risk to damage cases at these facilities, and the current and future risks to human health and the environment.

How EPA used the results/conclusions/findings/interim findings: This report began the process of examining the drum reconditioner industry to see what further Agency action, regulatory or otherwise, is needed to protect human health and the environment by documenting damage cases and releases into the environment. EPA will use this report and its evidence to increase awareness of issues at drum reconditioners and serve as the first step in a larger data gathering and formal engagement process to work towards mitigation of future damage to human health and the environment from these facilities.

Link for findings: *https://www.epa.gov/hw/drum-reconditioner-damage-case-report*

Activity 8:

Title	OIG Report: Authorized State Hazardous Waste Program Inspections and Operations Were Impacted During Coronavirus Pandemic Report No**. 22-E-0009**
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.2: Reduce Waste and Prevent Environmental Contamination
Completion date	December 2021

Purpose and brief description: The OIG conducted this review to determine the ability of authorized state RCRA hazardous waste programs to continue operations during the coronavirus pandemic. Under RCRA, states and territories may be authorized to implement the federal hazardous waste program under U.S. Environmental Protection Agency regional oversight. EPA has authorized the program in 48 states and two territories. States received EPA guidance to assist in maintaining adequate regulatory oversight during the pandemic. Issues addressed included holding virtual public meetings, adjusting state inspection commitments, and conducting off-site compliance monitoring activities.

Brief list of results/conclusions/findings including interim findings: The OIG found that the pandemic impacted state RCRA program operations and resulted in a lower number of inspections and violations. The OIG reports that a number of inspections from March 2020 through February 2021 for RCRA treatment, storage, and disposal facilities, known as TSDFs, decreased by 34 percent and for large quantity generators, or LQGs, decreased by 47 percent when compared to the prior year. The number of violations found per inspection also decreased. After a sharp initial reduction in TSDF inspections in April 2020, states neared normal inspection rates by July 2020, but the number of inspections decreased again in October 2020 and remained below historical levels through February 2021. LQG inspections followed a similar pattern except that the decrease in inspections was more significant from October 2020 through February 2021. In addition, states did not consistently use EPA guidance on Off-site compliance monitoring.

How EPA used the results/conclusions/findings/interim findings: The OIG issued five recommendations to the agency. The OIG recommends that the Agency review inspection data and determine why the rate of inspections and violations was reduced during the coronavirus pandemic. The Agency should also support the ability of authorized state RCRA programs to respond to future pandemic events and disasters. OLEM was responsible for two recommendations and provided corrective actions which have been completed.

Link for findings*:* Authorized State Hazardous Waste Program Inspections and Operations Were Impacted During Coronavirus Pandemic Report No. 22-E-0009

Activity 9:

Title	Leaking Underground Storage Tank (LUST) Cleanup Cost Study
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	March 2022

Purpose and brief description: There are approximately 544,000 underground storage takes (USTs) nationwide and approximately 62,000 releases that are currently in cleanup. These cleanups employ a number of technologies and, due to a wide range of factors, cleanup costs of LUSTs vary substantially. Due to this variability, state LUST programs asked OUST for help in calculating the lifecycle cost of different LUST cleanup technologies and approaches with the goal of making better, more cost-effective cleanup decisions. This project's goals were to establish ranges of costs for various cleanup phases and technologies used in LUST cleanups

and to identify additional cost drivers by analyzing projection duration assessment versus total costs.

Policy, programmatic, and/or operational questions the activity is intended to address: Which LUST cleanup technology is the most cost effective? For example, is it better to employ a technology that has larger upfront costs and a greater potential of attaining cleanup goals quickly or a seemingly less expensive longer-term technology that may involve more O&M costs over time?

Brief list of results/conclusions/findings including interim findings: Differences in cleanup programs between the pilot states (Kansas, South Carolina, and Virginia) prevented detailed comparisons of cleanup program costs and durations, although more detailed analysis was possible within individual states. Within each state, the median phase and total costs were lower than average costs, which suggests that a small number of the most expensive sites represent major drivers of average total project costs. Specifically, total project costs averaged $300,241, $135,636, and $88,274 in Kansas, South Carolina and Virginia, respectively, compared to median costs of $265,883, $94,195, and $27,120. The higher costs reported for Kansas can largely be attributed to our data for Kansas being limited to remedial action sites, which means these total costs are not comparable to those in South Carolina and Virginia, whose data included a large number of (less-expensive) non-remedial action sites. Across the states, assessment costs were similar across projects of various sizes although, for sites that underwent remedial action, typical project costs varied across the states. Site assessment in South Carolina, Virginia, and Kansas made up 37, 44, and 52 percent of total projects costs, respectively for projects costing over $100,000. At sites with costs totaling less than $100,000, site assessment made up an average of 83 percent of the total in South Carolina and 87 percent in Virginia.

Finally, non-remedial sites were often closed very quickly, however, remedial site cleanups lasted an average of more than five years. Ultimately, project duration was a significant driver of remedial action costs and, therefore, overall site costs. A one day increase in project duration corresponds with a $116 increase in total project cost.

How EPA used the results/conclusions/findings/interim findings: Based on key findings from this study, EPA was able to provide states with several factors to consider as they plan the future direction of their LUST cleanup programs. A key finding from this study was that even states with robust data still lack the granularity and connectedness across datasets to conduct a comprehensive analysis of key cost drivers. A follow up study, "Best Practices for High Resolution Site Characterization at Petroleum Underground Storage Tank Release Sites,' is currently underway.

Link for findings*:* Leaking Underground Storage Tank Cleanup Cost Study.pdf (epa.gov)

Activity 10:

Title	OIG Report: Brownfields Program-Income Monitoring Deficiencies Persist Because EPA Did Not Complete All Certified Corrective Actions Report No. **22-P-0033**
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	March 2022

Purpose and brief description: The Office of Inspector General (OIG) conducted this audit to determine whether the corrective actions taken by the U.S. Environmental Protection Agency's Office of Brownfields and Land Revitalization (OBLR), under the Office of Land and Emergency Management, effectively addressed the program deficiencies identified in OIG Report No. 17-P-0368, Improved Management of the Brownfields Revolving Loan Program Is Required to Maximize Cleanups, issued August 23, 2017

Brief list of results/conclusions/findings including interim findings: The OIG determined that OBLR continues to lack current, accurate, and complete data necessary for effective post-closeout monitoring of program income. Without such data, the EPA is unable to determine whether an estimated $46.6 million of program income under closed cooperative agreements was used timely and for the purposes authorized under the closeout agreements, as required by federal regulation, or whether actions are needed to address noncompliance with closeout agreement terms and conditions.

How EPA used the results/conclusions/findings/interim findings: In its December 2021 response to the OIG's 2021 draft report, EPA addressed the 5 recommendations, which included an explanation of how the Agency implemented their recommendations and limitations to implementing them to the extent the OIG expected. In the time since the OIG's 2017 recommendations, the Agency determined that it needs to take a few additional actions on some of the recommendations. EPA agreed with the report recommendations and provided corrective actions and milestone dates. The OIG accepted the proposed corrective actions.

Link for findings*:* Brownfields Program-Income Monitoring Deficiencies Persist Because EPA Did Not Complete All Certified Corrective Actions

Activity 11:

Title	OIG Report: The Coronavirus Pandemic Caused Schedule Delays, Human Health Impacts, and Limited Oversight at Superfund National Priorities List Sites Report No. **22-E-0049**

Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.1: Clean Up and Restore Land for Productive Uses and Healthy Communities
Completion date	June 2022

Purpose and brief description: The OIG conducted this assessment to determine the impact of the coronavirus pandemic on long-term cleanups at Superfund National Priorities List sites.

Brief list of results/conclusions/findings including interim findings: The OIG found that the coronavirus pandemic caused schedule delays and changed or extended exposure to human health or ecological receptors at 31 Superfund National Priorities List, or NPL, sites. The OIG reported that the pandemic also prolonged human health and environmental exposures and disproportionate impacts on some communities.

How EPA used the results/conclusions/findings/interim findings: The OIG recommends that EPA develop and implement guidance about how to use virtual technologies for community involvement activities and how to conduct oversight for Superfund sites when travel or site access is limited. The OIG also recommends that EPA develop and implement a policy to provide the necessary tools—such as appropriate testing, vaccination, and supplies—to safely deploy remedial project managers (RPMs) during a pandemic or other emergency. Multiple offices share responsibility for the report recommendations. The Agency agreed with the recommendations and provided corrective actions and milestone dates. The Agency is awaiting the OIG Management Decision on the proposed corrective actions.

Link for findings*:* The Coronavirus Pandemic Caused Schedule Delays, Human Health Impacts, and Limited Oversight at Superfund National Priorities List Sites

Activity 12:

Title	GAO Report: Household Hazardous Waste Removal: EPA Should Develop a Formal Lessons Learned Process for Its Disaster Response **(GAO-22-104726)**
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.3: Prepare for and Respond to Environmental Emergencies
Completion date	March 2022

Purpose and brief description: The U.S. Government Accountability Office (GAO) began their work for this engagement in May 2020 under the title: EPA Disaster Debris Removal (104276) in response to a congressional mandate. GAO's key questions for review are: What steps did EPA take to plan and carry out debris removal for the November 2018 wildfires in California, including coordination with intergovernmental partners?; To what extent did EPA oversee debris removal, including coordinating contractor activities, in response to the 2018 wildfires?; and, To what extent has EPA identified lessons learned from its response to the 2018 wildfires, and what steps, if any, has EPA taken to address lessons learned?
Region 9 was the lead for EPA due to GAO's focus of the 2018 and 2020 California wildfires.

Brief list of results/conclusions/findings including interim findings: GAO believes EPA plays a significant role in responding to wildfires under the National Response Framework as a primary agency for helping to provide a coordinated federal response, including removing household hazardous waste, to incidents involving hazardous materials. As a result, GAO advised the Agency to develop a formal lessons learned process for disaster responses—similar to EPA's lessons learned process following exercises—that incorporates the key practices of a lessons learned process may enable EPA to be better prepared to respond to wildfires. Specifically, a formal lessons learned process for disaster responses would provide EPA with a consistent process to identify lessons learned and implement needed corrective actions following actual events.

How EPA used the results/conclusions/findings/interim findings: GAO made one recommendation for EPA as follows: The Director of the Office of Emergency Management at EPA should develop a formal lessons learned process with written guidelines for disaster responses, including responses to Stafford Act disasters, that incorporates the key practices of a lessons learned process. EPA agreed with the GAO recommendation and provided a corrective action with a December 2022 completion date.

Link for findings*:* Household Hazardous Waste Removal: EPA Should Develop a Formal Lessons Learned Process for Its Disaster Response (GAO-22-104276)

Activity 13:

Title	GAO Draft report: Chemical Accident Prevention: EPA Should Ensure Regulated Facilities Consider Risks from Climate Change **(GAO-22-104494)**
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.2: Reduce Waste and Prevent Environmental Contamination Goal 1: Tackle the Climate Crisis

	Objective 1.2: Accelerate Resilience and Adaption to Climate Change
Completion date	February 2022

Purpose and brief description: Pursuant to its authority under 31 U.S.C. 717 and at the request of Senator Tom Carper, Ranking Member, Senate Committee on Environment and Public Works; and Senator Cory Booker, Ranking Member, Subcommittee on Superfund, Waste Management, and Regulatory Oversight, GAO was asked to review climate change risks at Risk Management Plan (RMP) facilities.
This GAO report examines, among other things, (1) what available federal data indicate about RMP facilities in areas with natural hazards that may be exacerbated by climate change; and 2) challenges RMP facilities face in managing risks from natural hazards and climate change, and opportunities for EPA to address these challenges. GAO analyzed federal data on RMP facilities and four natural hazards (flooding, storm surge, wildfire, and sea level rise) that may be exacerbated by climate change, reviewed Agency documents, and interviewed Agency officials and stakeholders, such as industry representatives.

Brief list of results/conclusions/findings including interim findings: GAO's position is RMP facilities face several challenges, including insufficient information and direction, in managing risks from natural hazards and climate change, according to some EPA officials and stakeholders. By issuing regulations, guidance, or both to clarify requirements and provide direction on how to incorporate these risks into risk management programs, EPA can better ensure that facilities are managing risks from all relevant hazards. When developing any such regulation, EPA should, pursuant to executive orders, conduct a cost-benefit analysis.

How EPA used the results/conclusions/findings/interim findings: GAO made a total of six (6) recommendations. OLEM bears partial or full responsibility for three of these, including that EPA issue regulations, guidance, or both to clarify requirements and provide direction to facilities on incorporating natural hazards and climate change into risk management programs. EPA concurred with the recommendations and noted that these are long term actions that will require a multi-year approach.

Link for findings: GAO Draft report: Chemical Accident Prevention: EPA Should Ensure Regulated Facilities Consider Risks from Climate Change (GAO-22-104494)

Activity 14:

Title	GAO Report: Offshore Oil Spills: Additional Information Is Needed to Better Understand the Environmental Tradeoffs of Using Chemical Dispersants (project no. **GAO-22-104153**).
Lead National Program	OLEM
FY 2022-2026 Strategic Goal and Objective supported	Goal 6: Safeguard and Revitalize Communities Objective 6.2: Reduce Waste and Prevent Environmental Contamination

Completion date	December 2021

Purpose and brief description: In April 2010, an explosion onboard the Deepwater Horizon drilling rig in the Gulf of Mexico resulted in 11 deaths and the release of approximately 206 million gallons of oil. During the Deepwater Horizon oil spill, responders applied dispersants to the oil slick at the ocean surface as well as at the wellhead more than 1,500 meters below the surface. The subsurface use of dispersants was unprecedented and controversial.
GAO was asked to review what is known about the use of chemical dispersants. This report examines, among other things, what is known about the effectiveness of dispersants, what is known about the effects of chemically dispersed oil on the environment, and the extent to which federal agencies have taken action to help ensure decision makers have quality information to support decisions on dispersant use. GAO reviewed scientific studies, regulations, and policies. GAO also interviewed Agency officials and stakeholders from academia and industry.

Brief list of results/conclusions/findings including interim findings: GAO found that when an oil spill occurs, responders have several options to manage the environmental impacts, including using chemical dispersants (see figure). Chemical dispersants used on a surface oil slick can be effective at breaking up floating oil, which can help prevent the oil from reaching shore and harming sensitive ecosystems, according to studies GAO reviewed and stakeholders GAO interviewed. However, the effectiveness of applying dispersants below the ocean surface—such as when responding to an uncontrolled release of oil from a subsurface wellhead—is not well understood. Various reasons account for this. For example, measurements for assessing effectiveness of dispersants applied at the subsurface wellhead during the Deepwater Horizon oil spill had limitations and were inconclusive. In addition, there are limited experimental data on the effectiveness of subsurface dispersants that reflect conditions found in the deep ocean.

How EPA used the results/conclusions/findings/interim findings: GAO made four recommendations, including that the Coast Guard and EPA assess the potential environmental effects of the subsurface use of dispersants. EPA concurred with the recommendation issued to the agency and corrective action activities are underway.

Link for findings*:* Offshore Oil Spills: Additional Information Is Needed to Better Understand the Environmental Tradeoffs of Using Chemical Dispersants (project no. GAO-22-104153).

Office of Mission Support (OMS)

Activity 1:

Title	EPA Learning Agenda: Workforce

Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion Date	September 2023

Purpose and brief description: EPA's mission to protect human health and the environment requires a highly skilled and dedicated workforce. Almost forty percent of EPA's workforce is or will be eligible for retirement within five years. This, along with changing workforce demographics, will impact every region and program. EPA has a unique opportunity to transform its human capital processes, including workforce planning, knowledge transfer and succession management to prepare itself for the future of work. EPA is carrying out evidence- building activities to address priority questions related to workforce planning, one of EPA's Learning Agenda priority areas. The Agency will use the results to inform and develop policies and approaches that equip employees with the needed competencies, knowledge and most up- to-date tools to advance EPA's mission.

OMS assessed: 1) overall effectiveness of EPA's existing workforce planning tools (Workforce Demographics Dashboard, Diversity Dashboard, Succession Management Guide and Workforce Plan); 2) consistent use of the tools; 3) alignment of the tools with stakeholder needs; and 4) effectiveness of EPA communications and training for these tools.

Policy, programmatic, and/or operational questions the activity is intended to address: To what extent does EPA have access to the tools and strategies needed to analyze and understand the Agency's near and long-term workforce needs?

Brief list of results/conclusions/findings including interim findings: OMS administered a workforce planning/succession management survey to the Human Resource Officer (HRO)/Program Management Officer (PMO) Community. The survey captured current workforce planning efforts and assessed respondent's knowledge and use of EPA's corresponding resources and tools. OMS shared results from the survey with the HRO/PMO community during a stakeholder call. Additionally, insights from the survey helped shape guidance and educational and training material supporting organizations in their succession management plan development in FY 2023.

OMS developed and administered a workforce planning-related survey to help organizations prioritize immediate staffing needs for the Infrastructure Investment and Jobs Act (IIJA) while also considering long-term workforce goals. OMS shared results from the IIJA survey with the HRO/PMO community during a stakeholder call. Survey results helped organizations assess immediate needs in the context of shifting or new strategic priorities and facilitated more accurate planning for the influx of recruitment designed to support new IIJA related activities for EPA.

Several organizations within OMS completed a workforce planning pilot in FY 2022. The pilot walked organizations through EPA's process and templates for each of the five steps on OPM's workforce planning model: 1) Set strategic direction; 2) Analyze workforce, identify skill gaps and conduct workforce analysis; 3) Develop action plan; 4) Implement action plan; and 5) Monitor, evaluate and revise. Each organization will use the information gathered to monitor and track actions designed to close perceived competency gaps.

How EPA used the results/conclusions/findings/interim findings: The data collected through the workforce planning/succession management baseline survey, IIJA survey, and workforce planning informs EPA's current succession management initiative. The survey and pilot data served as starting points in understanding office perceptions of and experience with workforce planning. The information also helped improve support material and guidance for the tools facilitating succession management plan development. All EPA first-level offices have been asked to complete a succession management plan by the end of FY 2023. Templates and training materials from the workforce planning pilot have been modified as needed for the current (FY 2023) succession management initiative.

Activity 2:

Title	OIG Report: EPA Should Consistently Track Coronavirus Pandemic-Related Grant Flexibilities and Implement Plan for Electronic Grant File Storage (22-P-0018)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Estimated Completion Date	December 2023

Purpose and brief description: The OIG is conducting this audit to determine the extent to which the U.S. Environmental Protection Agency has implemented the coronavirus pandemic-related grant flexibilities permitted by the Office of Management and Budget. Specifically, OIG is assessing the extent to which EPA modified work plans, adjusted budgets, and extended periods of performance for grants; granted administrative relief or continued to compensate grant recipients whose work had been interrupted; and provided regulatory exceptions on a case-by-case basis. In response to the coronavirus pandemic, the Office of Management and Budget issued several memorandums that provided temporary administrative, financial management, and audit requirement flexibilities for grants. EPA manages over $20 billion in cumulative grant awards annually.

Policy, programmatic, and/or operational questions the activity is intended to address: The activity is intended to address efficiency and effectiveness, and a top EPA management

challenge – managing infrastructure funding and business operations. Specific questions include:

- To what extent has EPA implemented the coronavirus pandemic-related grant flexibilities permitted by the Office of Management and Budget?
- To what extent has EPA modified work plans, adjusted budgets, and extended periods of performance for grants; granted administrative relief or continued to compensate grant recipients whose work has been interrupted; and provided regulatory exceptions on a case-by-case basis?

Brief list of results/conclusions/findings including interim findings: The OIG states that EPA Office of Grants and Debarment does not know the full extent to which program offices and regions have implemented grant flexibilities and exceptions permitted by the Office of Management and Budget due to the coronavirus pandemic—that is, the SARS-CoV-2 virus and resultant COVID-19 disease.

The OIG states that EPA risks mismanaging over $20 billion in cumulative grant funds by inconsistently tracking grants that were modified during the coronavirus pandemic and lacking an electronic data storage plan.

How EPA used the results/conclusions/findings/interim findings: The OIG recommends that the assistant administrator for Mission Support develop a standard operating procedure that instructs program offices and regions on tracking and documenting grant flexibilities and exceptions for unanticipated events to ensure consistency in the information needed to manage grants, as well as develop a plan to implement, by December 2022, a uniform electronic record-keeping system for grants to meet the Office of Management and Budget's direction that all federal records be created, retained, and managed in electronic formats.
EPA and the OIG reached agreement on corrective actions for all three recommendations.

Link for findings: *https://www.epa.gov/system/files/documents/2022-02/_epaoig_20220222-22-p-0018.pdf*

Activity 3:

Title	OIG Report: EPA Needs to Complete Implementation of Religious Compensatory Time Training for Supervisors and Employees (22-P-0019)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity

Completion date	June 2023

Purpose and brief description: The U.S. Environmental Protection Agency's Office of Inspector General conducted this follow-up audit to determine whether EPA's corrective actions effectively addressed the weaknesses identified in EPA OIG Report No. 16-P-0333, Enhanced Controls Needed to Prevent Further Abuse of Religious Compensatory Time, issued September 27, 2016. The purpose of this report is to follow up recommendations from the previous report. The activity is intended to address efficiency and effectiveness, as well as address a top EPA management challenge – managing infrastructure funding and business operations.

Policy, programmatic, and/or operational questions the activity is intended to address: The activity addresses the following question: To what extent have EPA's corrective actions addressed the weaknesses identified in EPA OIG Report No.16-P-0333, Enhanced Controls Needed to Prevent Further Abuse of Religious Compensatory Time?

Brief list of results/conclusions/findings including interim findings: Report No. 16-P-0333 contained four recommendations: x Recommendations 1, 2, and 3 were issued to the assistant administrator for Administration and Resources Management. The Office of Administration and Resources Management was merged into the Office of Mission Support in November 2018. x Recommendation 4, which was issued to the chief financial officer, is no longer applicable due to regulatory changes and is, therefore, not addressed in this follow-up report. EPA's Office of Human Resources, within the Office of Mission Support, took corrective actions to address Recommendations 1, 2, and 3 issued in OIG Report No. 16-P- 0333. The Agency completed corrective actions for Recommendations 1 and 2 that met the intent of those recommendations. However, although the Agency agreed with Recommendation 3, the related corrective action that the Agency certified as complete did not fully implement the recommendation. Specifically, training was provided to EPA's human resources community, but it was not provided to all employees who use Religious Compensatory Time and all supervisors who approve such time.

Providing training on religious compensatory time to all EPA supervisors and employees would decrease the potential for employee misuse, as well as the Agency's monetary liability.

How EPA used the results/conclusions/findings/interim findings: The OIG recommend that EPA train all employees and supervisors who earn, use, or approve Religious Compensatory Time on the U.S. Office of Personnel Management's current regulatory requirements for, and EPA's current policy and procedures related to, Religious Compensatory Time. EPA and OIG reached agreement on the corrective actions for the three applicable recommendations,

Link for findings: *https://www.epa.gov/system/files/documents/2022-03/_epaoig_20220307-22-p-0019.pdf*

Activity 4:

Title	OIG Report: Considerations from Single Audits Reports for EPA's Administration of Infrastructure Investment and Jobs Act Funds (22-N-0057)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	September 2022

Purpose and brief description: The OIG performed this review to highlight findings identified in single audit reports that are relevant to the U.S. Environmental Protection Agency's administration of programs under the Infrastructure Investment and Jobs Act. The review covered fiscal years 2019 through 2021. The project number for this review was OA-FY22-0099. OIG performed this review to help EPA prepare to administer an additional $60 billion in funds pursuant to the Infrastructure Investment and Jobs Act, or IIJA.

The activity is intended to address compliance with the law, partnering with states and other stakeholders, operating efficiency and effectiveness, and addressing a top management challenge – managing infrastructure funding and business operations.

Policy, programmatic, and/or operational questions the activity is intended to address: Specific questions addressed include:

- Which areas of noncompliance with applicable federal laws, regulations and program requirements were most frequently noted in single audit reports conducted from FY 2019 through FY 2021?
- Which programs have the most instances of noncompliance noted in single audit reports conducted from FY 2019 through FY 2021?

Brief list of results/conclusions/findings including interim findings: During the review of single audit findings from fiscal years 2019 through 2021, the OIG identified 364 instances of noncompliance with applicable federal laws, regulations, and program requirements by nonfederal entities expending EPA grant dollars. OIG found that most instances of noncompliance were associated with two programs: the Clean Water State Revolving Fund (CWSRF) program and the Drinking Water State Revolving Fund (DWSRF) program.

How EPA used the results/conclusions/findings/interim findings: N/A (No recommendations received)

Link for findings: *https://www.epa.gov/system/files/documents/2022-09/_epaoig_20220914-22-N-0057.pdf*

Activity 5:

Title	OIG Report: EPA Lacks Documented Procedures for Detecting and Removing Unapproved Software on the Agency's Network (22-E-0028)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Estimated completion date	January 2023

Purpose and brief description: The OIG performed this assessment to assess the U.S. Environmental Protection Agency's compliance with the FY 2021 Inspector General Federal Information Security Modernization Act of 2014 (FISMA) Reporting Metrics and determine whether EPA followed its processes to investigate and remove unapproved software from the network. The activity is intended to address compliance with the law, operating effectively and efficiently, as well as address a top EPA management challenge – protecting information technology and systems against cyberthreats.

Policy, programmatic, and/or operational questions the activity is intended to address: The activity addresses the following question:

- To what extent is EPA in compliance with FISMA reporting metrics?
- To what extend has EPA followed FISMA processes to investigate and remove unapproved software from the network?

Brief list of results/conclusions/findings including interim findings: The OIG concluded that EPA achieved an overall maturity level of Level 3 (Consistently Implemented) for the five security functions and nine domains outlined in the FY 2021 Inspector General Federal Information Security Modernization Act of 2014 (FISMA) Reporting Metrics. This means that EPA consistently implemented its information security policies and procedures, but quantitative and qualitative effectiveness measures are lacking. The OIG identified that EPA has deficiencies in documenting software management procedures on the detection and removal of nonbase software, which is software that is not part of the standard Agency package.

Without documented procedures governing software management and vulnerability remediation processes, EPA continues to be at risk of outsiders gaining access to compromise and exploit Agency systems and data.

How EPA used the results/conclusions/findings/interim findings: The Agency developed a software triage team in response to an August 2019 chief information officer memorandum to senior information officers asking them to certify software on EPA network. The software triage team maintains an agencywide dashboard available to all information management officers that shows all software loaded on program office and regional computers. The team meets regularly to discuss the justification for unapproved software discovered on the network or the information management officers' plans for software removal and updates the dashboard accordingly.

Link for findings: *https://www.epa.gov/system/files/documents/2022-03/_epaoig_20220330-22-e-0028.pdf*

Activity 6:

Title	OIG Report: EPA Established a Web Management Program, but Improvements Are Needed in Deploying Web Analytics (22-P-0013)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	March 2022

Purpose and brief description: The OIG conducted this audit to determine whether the U.S. Environmental Protection Agency's public websites and digital services complied with federal laws and policies, as outlined in Office of Management and Budget Memorandum M-17-06, Policies for Federal Agency Public Websites and Digital Services. The activity is intended to address efficiency and effectiveness, as well as a top EPA management challenge – integrating and leading environmental justice, including communicating risks.

Policy, programmatic, and/or operational questions the activity is intended to address: The activity addresses the following question:

- Do EPA public websites and digital services comply with federal laws and policies?

Brief list of results/conclusions/findings including interim findings: The OIG concluded that EPA has established a program to manage its public websites and digital services in accordance with federal laws and policies outlined in Office of Management and Budget M-17-06. EPA has developed a digital strategy, governance structure, Web Council, and policy, as well as procedures and standards, but it has not deployed the required web analytics tracking code for 14 of the 308 public websites that provide essential environmental information to communities. The required code captures website traffic data, such as the number of visitors, the type of web browser used, the length of time visitors remains on each webpage, the documents downloaded from a webpage, and the visitors' locations.

Without fully implementing web analytics, EPA could be without vital usage information to meet the needs of the public, regulatory agencies, industries, and other stakeholders when conveying environmental issues.

How EPA used the results/conclusions/findings/interim findings: During the audit, the OIG identified broken links in six of the ten websites reviewed. The OIG notified the Agency of these issues, and Agency personnel indicated that actions were taken to fix the broken links. The OIG revisited the websites and verified that the Agency fixed the links.

Link for findings: *https://www.epa.gov/system/files/documents/2021-12/_epaoig_20211220-22-p-0013.pdf*

Activity 7:

Title	OIG Report: EPA Generally Adheres to Information Technology Audit Follow-Up Processes, but Management Oversight Should Be Improved (22-P-0010)
Lead National Programs	OMS, OCSPP
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	December 2021

Purpose and brief description: The Office of Inspector General conducted this audit to determine whether the (1) U.S. Environmental Protection Agency completed corrective actions for agreed-to cybersecurity audit recommendations in OIG reports issued from fiscal year 2017 through fiscal year 2020 and (2) corrective actions effectively resolved the weaknesses identified. The OIG has identified Enhancing Information Technology Security to Combat Cyberthreats as a key management challenge confronting EPA. The activity is intended to address efficiency and effectiveness, as well as top EPA management challenges – enhancing information technology security and complying with key internal control requirements (data quality; policies and procedures).

Policy, programmatic, and/or operational questions the activity is intended to address: The activity addressed the following questions:

- To what extent has EPA completed corrective actions for agreed-to cybersecurity audit recommendations in OIG reports issued from FY 2017 through FY 2020?
- To what extent have corrective actions effectively resolved weaknesses identified?

Brief list of results/conclusions/findings including interim findings: The OIG concluded that EPA completed the 13 corrective actions for cybersecurity audit recommendations in the OIG reports that were reviewed as part of this audit. However, for one of the 13 corrective actions, EPA inaccurately reported its timely completion. For two of the 13 corrective actions, EPA lacked management oversight to effectively resolve identified weaknesses. EPA's goal to provide its workforce and the public with accurate information is undermined when the Agency does not correct deficiencies in a timely manner, which weakens the integrity of its systems and data.

How EPA used the results/conclusions/findings/interim findings: The OIG recommended that the assistant administrator for Chemical Safety and Pollution Prevention develop a strategy to validate that corrective actions are completed before closing them in the Agency's audit tracking system and implement controls to comply with federal and Agency required time frames to install patches. In addition, the OIG recommended that the assistant administrator for Mission Support develop and implement processes for storing certifications collected for annual role-based training requirements in a centralized restricted location. EPA agreed with all four audit recommendations; completed corrective actions for two of them; and provided corrective actions and estimated milestone dates for the remaining two, which are consider resolved with corrective actions pending.

Link for findings: *https://www.epa.gov/system/files/documents/2021-12/_epaoig_20211208-22-p-0010.pdf*

Activity 8:

Title	OIG Report: Considerations For EPA'S Implementation of Grants Awarded Pursuant to the Infrastructure Investment and Jobs Act (22-N-0055)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	August 2022

Purpose and brief description: The OIG performed this review to highlight findings from prior U.S. Environmental Protection Agency Office of Inspector General and U.S. Government Accountability Office audit reports that are relevant to EPA's administration and oversight of grant awards pursuant to the Infrastructure Investment and Jobs Act. The project number for this review was OA-FY22-0080. The activity is intended to address efficiency and effectiveness, as well as address a top EPA management challenge – managing infrastructure funding and business operations.

Policy, programmatic, and/or operational questions the activity is intended to address: The activity addresses the following question:

- What are key areas for EPA to consider as it prepares to administer and oversee IIJA grants, based on findings from prior OIG and GAO audit reports?

Brief list of results/conclusions/findings including interim findings: The OIG concluded that prior OIG and GAO findings of deficiencies in EPA's grant administration and oversight can be grouped into three broad areas for improvement for EPA to consider as it prepares to administer and oversee IIJA grants: Enhancing the grants oversight workforce and strengthening monitoring and reporting, Establishing and implementing comprehensive guidance and detailed work plans, as well as improving communications, and acquiring adequate documentation to support grant payments.

How EPA used the results/conclusions/findings/interim findings: N/A (No recommendations given)

Link for findings: *https://www.epa.gov/system/files/documents/2022-08/_epaoig_20220811-22-N-0055.pdf*

Activity 9:

Title	OIG Report: The Coronavirus Pandemic Caused Schedule Delays, Human Health Impacts, and Limited Oversight at Superfund National Priorities List Sites (22-E-0049)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Estimated completion date	April 2023

Purpose and brief description: The U.S. Environmental Protection Agency's Office of Inspector General conducted this assessment to determine the impact of the coronavirus pandemic—that

is, the SARS-CoV-2 virus and resultant COVID-19 disease—on long-term cleanups at Superfund National Priorities List sites. The activity is intended to address EPA mission-related efforts to clean up and revitalize land, as well as address a top EPA management challenge – integrating and leading environmental justice, including communicating risks.

The Comprehensive Environmental Response, Compensation, and Liability Act, informally called Superfund, authorizes EPA to oversee the cleanup of contaminated sites. The National Priorities List identifies the worst hazardous waste sites that warrant further investigation and cleanup.

Policy, programmatic, and/or operational questions the activity is intended to address: The audit addresses the following question:

- What impact did the coronavirus pandemic have on long-term cleanups at Superfund National Priorities list sites?

Brief list of results/conclusions/findings including interim findings: OIG sent surveys to 457 remedial project managers in February 2021 and received 279 responses, a 61-percent response rate. OIG also interviewed EPA regional Superfund and Emergency Management Division directors, as well as directors from EPA headquarters. The coronavirus pandemic caused schedule delays and changed or extended the exposure of human health and ecological receptors to hazardous substances, pollutants, or contaminants at 31 Superfund National Priorities List, or NPL, sites. The pandemic also prolonged such human health and environmental exposures, as well as contributed to disproportionate impacts on some communities. Furthermore, some communities that do not use or cannot access electronic communications were unable to participate in community-involvement activities. Conversely, the pandemic did steer some positive changes, such as improved health and safety protocols, increased community participation in virtual meetings, and reduced EPA travel costs. Also, as of February 2021, there were no known impacts to cleanup costs at a large majority of Superfund NPL sites.

Coronavirus pandemic restrictions delayed work and limited on-site oversight, with disproportionate impacts to some communities.

How EPA used the results/conclusions/findings/interim findings: The OIG made three recommendations to improve community involvement, Superfund site oversight, and safe deployment of RPMs during a pandemic or other emergency. Based on additional information provided by EPA gave to the OIG in its response to the draft report, Recommendation 1 was revised. The OIG agreed with the Agency's proposed corrective action for Recommendation 3, which is resolved. Recommendations 1 and 2 are unresolved with resolution efforts underway. The report was updates as appropriate based on EPA's technical comments.

Link for findings*: https://www.epa.gov/system/files/documents/2022-06/_epaoig_20220623-22-E-0049.pdf*

Activity 10:

Title	OIG Report: EPA's Reporting of Its Financial and Award Data in Accordance with the Digital Accountability And Transparency Act (DATA ACT) Of 2014 (22-P-0001)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Estimated completion date	September 2023

Purpose and brief description: The Digital Accountability and Transparency Act of 2014 requires the inspector general to review a statistically valid sample of the U.S. Environmental Protection Agency's spending data submitted under the Act to assess the completeness, accuracy, timeliness, and quality of the data sampled, as well as EPA's implementation and use of the data standards established by the Office of Management and Budget and U.S. Department of the Treasury. To satisfy this requirement, the OIG performed this audit on fiscal year 2020 fourth-quarter financial and award data submitted to the Department of the Treasury by EPA's Office of the Chief Financial Officer. The activity is intended to address compliance with the law, and effectiveness and efficiency, as well as address top EPA management challenges – complying with key internal control requirements (data quality) and fulfilling mandated reporting requirements.

Policy, programmatic, and/or operational questions the activity is intended to address:. The activity addresses the following question:

- To what extent is EPA in compliance with the requirements of the Digital Accountability and Transparency Act of 2014?
- To what is extent is EPA spending data complete, accurate, and timely?

Brief list of results/conclusions/findings including interim findings: The OIG found that EPA substantially complied with the requirements of the Digital Accountability and Transparency Act of 2014 and submitted financial and award data to the Department of the Treasury's DATA Act Broker on time. The OIG's nonstatistical and statistical tests of EPA's DATA Act submissions—including those tests that assessed the data attributes of completeness, accuracy, and timeliness—determined that EPA's fiscal year 2020 fourth-quarter financial and award data were of "higher" quality, as defined by the CIGIE FAEC Inspectors General Guide to Compliance under the DATA Act, dated December 4, 2020.

How EPA used the results/conclusions/findings/interim findings: The OIG recommended that the assistant administrator for Mission Support update EPA's policies and procedures to address the errors identified in this audit, as well as update EPA's grants management system to align with the DATA Act data standards and provide training to improve the consistency of data entry. EPA agreed with the six recommendations and provided acceptable planned corrective actions and estimated completion dates. The recommendations are considered resolved with corrective actions pending.

Link for findings: *https://www.epa.gov/system/files/documents/2021-11/_epaoig_20211108-22-p-0001.pdf*

Activity 11:

Title	OIG Report: EPA Did Not Follow Agency Policies in Managing the Northbridge Contract and Potentially Violated Appropriations Law (22-E-0027)
Lead National Program	OMS
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity
Completion date	September 2022

Purpose and brief description: The U.S. Environmental Protection Agency's Office of Inspector General conducted this assessment of EPA Contract EP-C-16-001, awarded to Northbridge, to follow up on funding and invoice irregularities in Region 9 for the States of Hawaii and California identified in OIG Report No. 20-P-0331. The purpose of this assessment was to determine whether (1) EPA properly approved, paid for, and accounted for charges submitted by Northbridge for work in Region 9 for the States of Hawaii and California under EPA Contract EP-C-16-001 and (2) Northbridge provided acceptable deliverables, as specified in EPA Contract EP-C-16-001 and the associated work plans. This contract provided support services to states for their municipal drinking water and wastewater programs.

Policy, programmatic, and/or operational questions the activity is intended to address: Specific questions the activity addressed include:

- Did EPA properly approve, pay for and account for charges submitted by Northbridge for work in Region 9 for the States of Hawaii and California under EPA Contract EP-C-16-001?
- Did Northbridge provide acceptable deliverables, as specified in EPA Contract EP-C- 16001?

Brief list of results/conclusions/findings including interim findings: The OIG found that the Agency did not follow estimated split-funding policy when allocating $6.8 million for the entire contract during the period analyzed. Staff did not follow protocols nor obtain proper approvals when paying invoices for the contract according to EPA's Administrative Control of Appropriated Funds, Release 3.2, known as the 2008 Funds Control Manual, and EPA Acquisition Guide. These issues occurred because management in the Office of Water and in the Office of Acquisition Solutions, within the Office of Mission Support, did not ensure that EPA's contract staff understood and adhered to EPA accounting policies. By not following these policies, the staff increased the risk of expending appropriated funds in ways that were inconsistent with the funds' purposes and beyond the amounts available, which could have violated 31 U.S.C. § 1301(a), known as the Purpose Statute, and increased the likelihood of the Agency violating the Antideficiency Act, 31 U.S.C. § 1341(a)(1)(A).

Because key accounting policies were not adhered to, EPA cannot ensure that $6.8 million in appropriated dollars went toward their intended purposes, potentially violating laws.

How EPA used the results/conclusions/findings/interim findings: The OIG recommended that the assistant administrators for Water and for Mission Support, in coordination with the general counsel and chief financial officer, (1) assess whether and to what extent EPA staff failed to comply with 31 U.S.C. §§ 1301(a) and 1341(a)(1)(A); (2) annually train staff on requirements applicable to funding contract activity using multiple appropriations; (3) review and update internal controls to ensure the segregation of duties between staff, as well as the proper review and tracking of the completion of contractor deliverables. EPA and the OIG reached agreement on corrective actions for the three recommendations.

Link for findings: *https://www.epa.gov/system/files/documents/2022-03/_epaoig_20220331-22-e-0027.pdf*

Office of Research and Development (ORD)

Activity 1:

Title	Assessing End User Satisfaction of ORD's Research Products
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	August 2022

Purpose and brief description: To measure ORD's progress on its Long-Term Performance Goal of the percentage of research products that meet partner's needs, ORD distributed 273 surveys to research product users in EPA Program Offices, Regions, other federal and non-federal partners to solicit feedback on the products. This survey seeks to gather input from partners to address any potential quality, usability, and/or timeliness issues that may have been experienced with ORD product use and delivery. The activity is meant to be a catalyst to identify and improve operational inefficiencies during research product development and provide data to further the continuous improvement of ORD research.

Policy, programmatic, and/or operational questions the activity is intended to address:

This survey seeks to gather input from partners to address any potential quality, usability, and/or timeliness issues that may have been experienced with ORD product use and delivery. The activity is meant to be a catalyst to identify and improve operational inefficiencies during research product development and provide data to further the continuous improvement of ORD research. The results from this survey have highlighted the need for consistent engagement with ORD partners throughout the product life cycle and the importance of communicating products to the partner once it has been delivered.

Brief list of results/conclusions/findings including interim findings: ORD found that 94% of ORD's research products assessed in FY 2022 had met partner needs.

How EPA used the results/conclusions/findings/interim findings: The survey data collected provided important insights into ORD's contributions to its partners' missions and the data was used to support research planning and engagement activities. The data collected will inform staff-level and management discussions with ORD's partners ranging from technical improvements to the quality, usability, and timeliness of ORD's research products to broader improvements to ORD's relationship with its product user base. This measure has also provided an additional mechanism for managers to ensure that peer review and clearance processes are strictly adhered to for each product prior to its delivery.

Link for findings*:* Results are published in the Annual Performance Report.

Activity 2:

Title	GAO Report: Small Business Research Programs: Agencies Should Further Improve Award Timeliness
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	October 2021

Purpose and brief description: This engagement occurs on an annual basis to ensure agency-wide timely issuance of Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards. Timely issuance can affect the speed with which small businesses receive funds and begin work. Participating agencies have awarded over $3 billion to small businesses to develop and commercialize new technologies.

Policy, programmatic, and/or operational questions the activity is intended to address: GAO's audit examines: (1) agencies' timeliness in notification and issuance, (2) the extent to which agencies have addressed risks to award timeliness, and (3) the extent to which DOD established a pilot program to improve timeliness.

Brief list of results/conclusions/findings including interim findings: GAO found that less than 30 percent of awards have been issued on time during the 5-year review periods. However, EPA commented that GAO's report lacks acknowledgment that efforts have been undertaken resulting in progress not covered during this audit review period. For example, EPA implemented new procedures to substantially improve identified timeliness issues for the current Small Business Innovative Research (SBIR) Request for Application (RFS) cycle. EPA expects further improvements following the full implementation of these procedures. In October 2022, the GAO released a timeliness report that stated the following, "*After evaluating the impact of previous steps taken to improve timeliness, EPA is formalizing a structure for establishing, tracking, and reviewing significant milestones in the SBIR award process in order to meet SBA time frames*."

How EPA used the results/conclusions/findings/interim findings: GAO issued one recommendation: EPA (ORD) should evaluate the effectiveness of steps taken to improve SBIR award timeliness and take any necessary additional steps to consistently meet SBA award timeliness guidelines. EPA agreed with the recommendation and during the engagement, steps were taken to assess best practices, leading to the discovery that a formalized plan will further enhance EPA's ability to improve SBIR award timeliness. This comprehensive plan will create a structure for establishing, tracking, and reviewing significant milestones in the SBIR process to determine compliance with timeliness goals. In October 2022, the GAO released their most recent report and stated, "Other civilian agencies—U.S. Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) in particular—have shown timeliness improvements over the last few years." ORD submitted the completed timeliness plan to the GAO in July 2022. The GAO will assess EPA's timeliness data for the current and subsequent fiscal years' award timeliness data to determine whether the efforts outlined in the plan led to "consistently meet SBA award timelines guidelines" as called for by the recommendation before closing out the recommendation as implemented.

Link for findings*:* https://www.gao.gov/assets/gao-22-104677.pd*f*

Activity 3:

Title	GAO Report: Persistent Chemicals: Technologies for PFAS Assessment, Detection, and Treatment
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	July 2022

Purpose and brief description: This engagement was initiated as a technology assessment on the Federal Government's capabilities concerning PFAS assessment, detection, and treatment. The technology assessment examined technologies for more efficient assessments of the adverse health effects of PFAS and alternative substances; the benefits and challenges of the current and emerging technologies for PFAS detection and treatment, and policy options that could help enhance benefits and mitigate challenges associated with these technologies.

Policy, programmatic, and/or operational questions the activity is intended to address: The GAO did not audit the Environmental Protection Agency (EPA) or its programs, but rather conducted a review and assessment of PFAS detection and removal technologies and the assessment of PFAS alternatives under GAO's Technology Assessment product line.

Brief list of results/conclusions/findings including interim findings: The GAO found that current and promising technologies and methods could accelerate the assessment of human health effects caused by per- and polyfluoroalkyl substances (PFAS) and improve the detection and treatment of PFAS in the environment. The GAO identified three policy options that could help to mitigate issues caused by PFAS. GAO states that policymakers can promote research, expand method development, and support full-scale treatment to help mitigate challenges associated with PFAS assessment, detection, and treatment technologies. These policy options did not constitute recommendations.

How EPA used the results/conclusions/findings/interim findings: Recommendations are not issued as part of a technology assessment.

Link for findings: *https://www.gao.gov/assets/gao-22-105088-highlights.pdf*

Activity 4:

Title	GAO Report: Offshore Oil Spills: Additional Information Is Needed to Better Understand the Environmental Tradeoffs of Using Chemical Dispersants
Lead National Program	ORD

FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	December 2021

Purpose and brief description: In 2020, the GAO initiated an engagement to understand the use and effectiveness of chemical dispersants. In April 2010, an explosion onboard the Deepwater Horizon drilling rig in the Gulf of Mexico resulted in eleven deaths and the release of approximately 206 million gallons of oil. During the Deepwater Horizon oil spill, responders applied dispersants to the oil slick at the ocean surface as well as at the wellhead more than 1,500 meters below the surface. The subsurface use of dispersants was unprecedented and controversial due to the unknown effects of dispersants below sea-level.

Policy, programmatic, and/or operational questions the activity is intended to address: This audit examined the following: (1) what is known about the effectiveness of dispersants, (2) what is known about the effects of chemically dispersed oil on the environment, (3) what is known about the effects of dispersants on human health, and (4) the extent to which federal agencies have taken action to help ensure decision makers have quality information to support decisions about the use of chemical dispersants.

Brief list of results/conclusions/findings including interim findings: The GAO found that while agencies have supported research, there is limited quality information about the effectiveness of subsurface dispersants and the toxicity and biodegradation of chemically dispersed oil. This is due to a variety of factors, including a wide variation in modeling results, inconsistent test designs, and experiments that may not reflect ocean conditions. The GAO concluded that by assessing the potential environmental efforts of the subsurface use of dispersants, the Coast Guard and EPA could help ensure that decision makers are fully equipped with information about the environmental tradeoffs.

How EPA used the results/conclusions/findings/interim findings: GAO issued one recommendation to EPA (the Office of Research and Development and the Office of Land and Emergency Management). EPA should work with the Coast Guard and other agencies to conduct assessments—such as biological assessments or ecological risk assessments— examining the potential effects of the subsurface use of dispersants on ocean ecosystems in regions where this is considered a viable response option. EPA agrees with this recommendation, understanding it provides flexibility for conducting these assessments as part of contingency planning in regions where subsurface dispersant is considered amongst the viable response options. EPA will support the U.S. Coast Guard (USCG) in identifying assessment methodologies to examine potential environmental and ecological effects of subsurface use of dispersants on ocean systems for select regions, and, as appropriate, coordinate with the National Oceanic and Atmospheric Administration and other federal agencies. EPA anticipates completing this recommendation in 2026.

Link for findings: *https://www.gao.gov/assets/gao-22-104153.pdf*

Activity 5:

Title	ORD External Webinar Series Planning Process
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	August 2022

Purpose and brief description: ORD establishes an annual external webinar series schedule to track webinar dates, series, topics, presenters, and other relevant information for the upcoming year. A draft process has been developed in an effort to standardize the process, however, not all relevant stakeholders have been involved. The current process requires repetitive topic gathering and submission of information for review.

Policy, programmatic, and/or operational questions the activity is intended to address: This kaizen event served as a catalyst to develop a process of selecting and approving annual topics for each of ORD's established external webinar series.

Brief list of results/conclusions/findings including interim findings: ORD identified issues with the current selection process and created process steps to identify and select potential webinar topics, and schedule and coordinate approval. ORD found that developing a standardized process eliminated the burden when selecting topics and improved engagement with management and branding/messaging both internally and externally.

How EPA used the results/conclusions/findings/interim findings: ORD developed a centralized process to select webinar topics and series which

Link for findings: *N/A*

Activity 6:

Title	Research Area: Assessment and Management of Harmful Algal Blooms
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	February 2022

Purpose and brief description: Harmful algal blooms (HABs) are increasing in intensity, and geographic range. Potential impacts from blooms and associated toxins include health risks to humans, pets, livestock, wildlife, and other biotas; restricted recreational activities; increased treatment costs and decreased economic revenue. HABs are complex ecological processes that are affected by various conditions (i.e., physical-chemical, biological, hydrological, and meteorological) and therefore are difficult to predict. This research area focuses on toxicity and impacts to humans and biota, mitigation of blooms and their effects in source and drinking waters, and the characterization of bloom-impacted environments.

Policy, programmatic, and/or operational questions the activity is intended to address: EPA, states, and tribes need tools to predict toxic bloom occurrence, characterize bloom development, increase the effectiveness of cyanotoxin monitoring techniques, and understand the impacts of shifting temperature patterns and hydrologic regimes on blooms. This research informed best management practices to mitigate HABs including but not limited to refining Drinking Water Health advisories and informing Recreational Criteria for cyanotoxin exposures.

Brief list of results/conclusions/findings including interim findings: This research area, under EPA's Safe and Sustainable Water Resources research program (SSWR), supported planned activities in the FY19-23 Strategic Research Action Plan (StRAP) and expanded the state of scientific understanding and best management approaches for nutrient/harmful algae bloom reduction. ORD developed predictive and forecasting models that may identify the top drivers that promote or deter cyanobacteria bloom development in lakes and reservoirs. The tools will be used to predict toxic bloom occurrence, characterize bloom development, and increase the effectiveness of cyanotoxin monitoring techniques.

How EPA used the results/conclusions/findings/interim findings: EPA publications such as the Cyanobacteria in Lakes indicator in the Report on the Environment, produced data to estimate cyanobacteria concentrations in water to describe trends in detectable cyanobacteria in more than 2,000 lakes and reservoirs across the U.S.

Link for findings: *https://www.epa.gov/water-research/cyanobacteria-assessment-network-cyan; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8843926/*

Activity 7:

Title	Research Area: Waste Recovery and Beneficial Use
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 1: Ensure Scientific Integrity and Science-Based Decision Making
Completion date	May 2022

potentially be reused, recycled, or reprocessed to reduce the consumption of natural resources, decrease waste generation, and reduce the volume of materials disposed into hazardous and nonhazardous landfills. This project provided methodologies that can be used to determine whether the potential for adverse impacts to human health and the environment from a proposed beneficial use is comparable to or lower than that posed by an analogous product, or at or below relevant health-based and regulatory benchmarks.

Policy, programmatic, and/or operational questions the activity is intended to address: This research enhanced scientific understanding of material recycling, waste remediation, and the potential for adverse human health and environmental impacts of beneficial material reuse.

Brief list of results/conclusions/findings including interim findings: This research area, under EPA's Sustainable and Healthy Communities research program (SHC), supported the planned activities in the FY 2019-22 StRAP, and identified potential for recycling materials and quantified the risks and associated adverse impacts of beneficial reuse of materials. FY 2022 specific topic areas include studying advanced separation technologies for recovery and reuse of industrial-use solvents, engineering soil amendments for remediation of lead and other contaminants, remediation of industrial by-products, and Polyethylene Terephthalate (PET) Recycling Processes Research into the PET reclamation and converting steps found that the amounts of materials represent opportunities for recycling, with a fraction of PET bottles collected and almost no non-bottle PET collected. While 29.0% of PET bottles are collected for recycling, collected material is processed for conversion to products at a 65.5% efficiency. Mismanaged waste represents 2.66% of PET that would go to disposal, totaling 183 million pounds.

How EPA used the results/conclusions/findings/interim findings: This research area produced numerous tools, models, and peer-reviewed journal articles. These outputs and products used a variety of data, tools, and method/analytical approaches including, but not limited to:

- Evaluation and characterization of emerging technologies, policies, sorting, and identification trends in reuse, recycling, and demolition activities.
- Collection and analysis of data from ORD colleagues, existing data, and/or review of new literature to address issues related to leaching of organics into groundwater
- LEAF methods and software (i.e., LeachXS-Lite) to measure organic and inorganic Constituents of Potential Concern (COPCs) 745
- In situ laboratory experiments on soil amendments, including implementation of screening tools and engineered soil amendment mixtures

Link for findings: *https://www.epa.gov/smm/sustainable-management-industrial-non-hazardous-secondary-materials; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9065037/*

Activity 8:

Title	Leadership for Inclusion (L4I) Survey
Lead National Program	ORD
FY 2022-2026 Cross-Agency Strategy supported	Cross-Agency Strategy 3: Advance EPA's Organizational Excellence and Workforce Equity

Completion date	August 22

Purpose and brief description: Ensuring a diverse, equitable, inclusive, and accessible environment within the workplace is one the Agency's, and ORD's top priorities. ORD is continually looking for innovative ways to improve its Diversity, Equity, Inclusion, and Accessibility (DEIA) program. ORD is partnering with the Office of Personnel Management (OPM) to administer the Leadership for Inclusion (L4I) Survey. This survey is designed to help agencies develop a climate of diversity, equity, inclusion, and accessibility.

Policy, programmatic, and/or operational questions the activity is intended to address: The survey seeks input from all staff, with the results informing leadership on the DEIA climate across ORD. The survey focuses on the measurement of five categories of leadership behaviors that result in a positive DEIA climate:

- Openness
- Team Stewardship
- Individual Support
- Consistency
- Advocacy

Brief list of results/conclusions/findings including interim findings: OPM administered the survey and sent results to Managers in September 2022.

How EPA used the results/conclusions/findings/interim findings: Feedback received improves ORD and provides leaders with insights into what they are doing well and where they should improve upon on in our DEIA efforts. This survey allowed ORD employees to provide anonymous feedback on ORD leadership, their efforts toward inclusion, and areas they may improve upon. There was a 48% response rate (737 of 1530 employees responded). 90% of ORD employees are proud to be a part of their team, 87% of employees are satisfied with their time, and 85% felt integral to their team.

Link for findings: *N/A*

Office of Water (OW)

Activity 1:

Title	EPA's Annual Assessment of the Jurisdictions' Progress toward Meeting the Chesapeake Bay Total Maximum Daily Load (Bay TMDL)
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	June 2022

Purpose and brief description: Through the *2014 Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to having 100% of pollution-reducing practices in place that would achieve all of the nitrogen, phosphorus and sediment reductions necessary to meet the goals outlined in the Bay TMDL by 2025. These estimates are generated by the Chesapeake Bay Watershed Model and are derived from land use data, implementation and effectiveness of best management practices and the most up-to-date water quality monitoring data. The Chesapeake Bay Program assesses water quality by the amount of dissolved oxygen in the Bay, chlorophyll a (a measure of algae growth) and water clarity (using underwater grass acreage).

Policy, programmatic, and/or operational questions the activity is intended to address: The seven watershed jurisdictions, in coordination with local governments, businesses, non-governmental organizations and individuals have installed pollution-reducing best management practices to lower the amount of nitrogen, phosphorus and sediment entering tributaries of the Chesapeake Bay. The conservation practices reported by the seven watershed jurisdictions, along with land use, manure and fertilizer information, are entered into a sophisticated suite of modeling tools to estimate the progress that each jurisdiction is making in meeting their individual nitrogen, phosphorus and sediment goals as outlined in the Bay TMDL. By incorporating the best available data into the computer simulations and pollution load estimates, EPA can more accurately track the jurisdictions' progress toward their pollution- reducing goals. Assessing the progress that each jurisdiction is making toward reducing nitrogen, phosphorus and sediment pollution entering not only the Chesapeake Bay, but also their local waterways, gives EPA and the larger partnership a more holistic view of how conservation practice installation and improved management actions are helping to improve Bay water quality.

Brief list of results/conclusions/findings including interim findings: As of 2021, the best management practices in place to reduce pollution are estimated to achieve 49% of the nitrogen reductions, 64% of the phosphorus reductions and 100% of the sediment reductions needed to attain applicable water quality standards when compared to 2009 levels. The jurisdictions are off track for nitrogen and phosphorus since BMPs are not in place to achieve the 2021 target for nitrogen and phosphorus. The 2021 target is essentially 80% of the needed nitrogen, phosphorus, and sediment pollution load reductions to attain water quality standards (the difference between the 2009 pollution load and the 2025 pollution load). While BMPs are in place to achieve 80% of the needed sediment load reductions, marking the sediment goal complete, the pollution control measures are not in place to achieve the 2021 target for nitrogen and phosphorus loads.

Over the past year, it was determined that 77% of nitrogen reductions came from the agricultural sector. Declines in phosphorus and sediment pollution came primarily from the natural (forests, scrub and brush, stream beds and banks, wetlands and shorelines) and agricultural sectors. While historically, nitrogen and phosphorus reductions have come from the wastewater sector, in 2021, nitrogen and phosphorus entering the Bay actually increased in the wastewater sector, mainly due to permit violations at select Maryland wastewater facilities.

How EPA used the results/conclusions/findings/interim findings: EPA uses these estimates to evaluate whether jurisdictions are on track to meet the reduction goals as reflected in the Bay TMDL, the Watershed Implementation Plans, and two-year milestones, and whether increased levels of oversight are needed in order to assist the jurisdictions in meeting their water quality goals. In addition, funding and technical assistance is greater targeted towards those sectors (e.g., agriculture or stormwater) that may be off track.

Link for findings*:* https://www.chesapeakeprogress.com/clean-water/watershed-implementation-plans and https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/2021-2022-Bay-Barometer_2022-10-10-202922_hdrd.pdf

Activity 2:

Title	Clean Water State Revolving Fund Reviews
Lead National Program	OW
Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities. Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure.
Estimated Completion Date	September 2023

Purpose and brief Description: EPA completes annual reviews of each Clean Water State Revolving Fund Program (CWSRF).

Policy, programmatic, and/or operational questions the activity is intended to address: These reviews will help assess if states are effectively implementing the CWSRF Categorical Grant Program by increasing the amount of non-federal dollars leveraged. The reviews will also be used to encourage states to direct funding to projects that address climate resiliency and equity.

Brief list of results/conclusions/findings including interim findings: EPA CWSRF review results are reported out in 51 State specific Performance Evaluation Reports annually. The reports function similarly to base line monitoring reports for grant programs. Because reports are state specific, there is not a national report of overall program evaluation. Examples of items included in the review include:

- Are states effectively implementing the CWSRF Categorical Grant Program by leveraging non-federal funds?
- Are the states complying with the EPA's State and Tribal Assistance Grant Program requirements?
- What steps are the states taking to promote climate resiliency and equity through CWSRF funding?

How EPA used the results/conclusions/findings/interim findings: EPA makes publicly available an annual report on the status of the national CWSRF program. EPA also shares project and financial data at the national and state level.

Link for findings*:* The findings from the annual state reviews are documented in Program Evaluation Reports, which are provided to EPA Headquarters by the regional offices. EPA Headquarters periodically updates our guidance based on these findings. Revised guidance is made available to states and stakeholders through EPA's CWSRF website.

Activity 3:

Title	Great Lakes Restoration Initiative Environmental Accomplishments in the Great Lakes (EAGL2) Data System Audit Procedures and Results
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	September 2022

Purpose and brief description: Annual review of Great Lakes Restoration Initiative (GLRI) Action Plan III reported results through an audit of information reported to EPA through the Environmental Accomplishments in the Great Lakes 2 (EAGL 2) data system.

Policy, programmatic, and/or operational questions the activity is intended to address: The annual system-wide audit of the EAGL 2 data system is conducted to assess the accuracy, completeness, consistency, and currency (respective to the Data Call for which the results were submitted) of reported results for audited Measures of Progress. The audit identifies sources of error so EPA and Regional Working Group (RWG) agencies may implement systematic and procedural changes to improve the data quality of future reporting. The system-wide audit, unlike internal audits conducted by individual RWG agencies, reviews data entered in the EAGL 2 system by all RWG agencies.

The EAGL 2 system-wide audit assesses whether stored records and documentation, uploaded to EAGL 2, support results entered in the system, and whether the reported results meet GLRI Action Plan III Measure of Progress definitions.

Brief list of results/conclusions/findings including interim findings: Findings of the most recent audit continue to indicate improvements to the quality of GLRI project data and results in EAGL2. Inconsistencies were found in 3-6% of audited projects in FY 2021 and FY 2022 vs 27% in FY 2020. Improvements have been made through implementation of additional agency reviews, data entry improvements, and training. All instances where the results did not match supporting documentation were examined and corrective actions were taken.

How EPA used the results/conclusions/findings/interim findings: To further improve data collection, EPA has continued to make improvements to the EAGL2 Information System: the system is a more robust database system than the previous spreadsheet-based system, providing improved control over data, better verification and documentation, and help in maintaining and enhancing the reliability of reported results in line with GAO recommendations in its July 2015 Report (GAO-15-526). As a result of audit findings, EPA is improving the EAGL2 Information System by: (i) using the system to enforce a requirement for all agencies to include supporting documentation when entering results and (ii) improving the workflow to ensure reviewers can more quickly and easily verify results, make changes, or send a request for changes to the project officer who did data entry.

Link for findings: N/A

Activity 4:

Title	Great Lakes Restoration Initiative Report to Congress
Lead National Program	OW
FY 2022-2026 Strategic Goal and	Goal 5: Ensure Clean and Safe Water for All Communities

Objective supported	Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	December 2022

Purpose and brief description: The EPA Administrator is required by Clean Water Act Section 118 (c)(7)(H)(iii) to provide annually the Great Lakes Restoration Initiative (GLRI) Report to Congress (RTC) to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate. The RTC is to provide a detailed description of the progress of the GLRI and amounts transferred to participating Federal departments and agencies. To satisfy these requirements, the RTC provides examples of progress within each of the five GLRI focus areas (Toxic Substances and Areas of Concern; Invasive Species; Nonpoint Source Pollution Impacts on Nearshore Health; Habitats and Species; and Foundations for Future Restoration Actions) and provides details on annual results for each of the 23 measures of progress pertaining to the focus areas. The RTC also identifies annual funding to participating Federal departments and agencies over time.

Policy, programmatic, and/or operational questions the activity is intended to address:

- What progress has been made under each of five focus areas and their associated measures and annual targets?
- What resources have been transferred to participating Federal departments and agencies over a five-year period?

Brief list of results/conclusions/findings including interim findings: Since its inception in 2010, the GLRI has greatly accelerated efforts to protect and restore the Great Lakes – the largest system of fresh surface water in the world. The GLRI continues to address the most persistent and challenging environmental problems facing this vital ecosystem. Under EPA's leadership, the GLRI has been a catalyst for unparalleled coordination among the federal agencies and departments that make up the GLRI Interagency Task Force and the GLRI Regional Working Group. This unprecedented coordination has produced unprecedented results. Through March of 2022, GLRI has funded over 6,800 projects focused on the most important Great Lakes environmental issues, including cleaning up highly contaminated Areas of Concern (AOCs), protecting, and restoring native habitat and species, and preventing and controlling invasive species. In FY 2022 all management actions were completed at the Buffalo River AOC; 16 U.S. AOCs (out of 31) now have either been delisted or have achieved "all management actions complete" status.

How EPA used the results/conclusions/findings/interim findings: EPA is using results to influence outyear planning and funding decisions. Results are informing development of a new GLRI Action Plan IV, covering FY 2025 – FY 2029. For example, assuming continued use of an invasive species measure regarding the reported amount of acreage on which invasive species is controlled, the result from that measure will be used to establish ambitious, yet achievable, targets for that measure from FY 2025 – FY 2029. Reported results would be similarly used to establish ambitious, yet achievable targets for the corresponding measures for pounds of

phosphorus reductions from conservation practices, gallons of untreated stormwater runoff captured or treated, and habitat acreage protected or restored.

Link for findings: https://www.glri.us/documents. Results under Action Plan III measures are also tracked at https://www.glri.us/results.

Activity 5:

Title	Review of Great Lakes Long-Term Monitoring Programs
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	September 2022

Purpose and brief description: Great Lakes National Program Office (GLNPO) annually monitors Great Lakes water quality, aquatic life, sediments, air, and coastal wetlands.

Policy, programmatic, and/or operational questions the activity is intended to address: Monitoring results are used to help determine the overall health of the Great Lakes ecosystem and fulfill some of the requirements of Clean Water Act Section 118 and the obligations under the Great Lakes Water Quality Agreement. GLNPO uses a variety of internal and external mechanisms to maintain the integrity of these long-term programs and ensure the timely and accurate reporting on the health of the Great Lakes ecosystem. Quality documentation and standard operating procedures are frequently reviewed and updated as necessary. Datasets undergo a vigorous validation and verification process before they are reported and shared publicly. Further, GLNPO intermittently reviews the sampling and analytical frameworks for each monitoring activity using external technical experts.

Brief list of results/conclusions/findings including interim findings: Monitoring datasets continue to be uploaded to the Great Lakes Environmental Database portal on EPA's Central Data Exchange. Data continues to be reported for monitored Great Lakes water quality, aquatic life, sediments, air, and coastal wetlands. Data from the EPA long-term monitoring surveys have played a major role in tracking Great Lakes ecosystem health and emerging threats to Great Lakes water quality. As a result of these monitoring programs, EPA is able to assess and report on lake-wide and basin-wide ecological improvements and on potential ecosystem threats that could require management attention. Examples of the results from these programs include the following:

- A 50+ year dataset of Polychlorinated Biphenyls (PCBs) in Lake Trout collected by the EPA Great Lakes Fish Monitoring and Surveillance Program reveal significant decreases in PCBs in Lake Michigan Lake Trout since the late 1970s when PCB manufacture and use

was phased out. These data have supported model forecasts by EPA Office of Research and Development that predict continued declines in PCB concentrations in Lake Trout as a result of long-term decreases of PCBs in other media including air, water and sediment as a result of management actions.

- Long term monitoring of the Great Lakes phytoplankton and zooplankton community through EPA's Great Lakes Biology Monitoring program has documented changes in taxa, biomass and depth distributions due to environmental stressors associated with invasive species introductions and changes in climate. Actions taken by environmental managers are informed by the results of the program such as identification of a major shift in the Lake Huron zooplankton community structure that impacted forage fish and the recreational fishery. The Great Lakes Biology Monitoring Program also searches for new aquatic non-native species, helping to identify newly introduced species even when they are at low abundances.
- GLNPO's Great Lakes Water Quality Monitoring Program includes monitoring of Spring Total Phosphorus (TP) concentrations in Lake Erie open waters since 1983 that allows EPA to assess whether those concentrations meet Great Lakes Water Quality Agreement objectives. Program monitoring indicates that exceedances of TP concentration objectives in the three Lake Erie basins have been particularly evident since the early 2000s, and most consistently so in the western and central basins.

How EPA used the results/conclusions/findings/interim findings: EPA is using results to report on the health of Great Lakes ecosystem and identify the current and emerging challenges impacting the health of the ecosystem. Results also influence outyear planning and funding decisions.
Link for findings: Great Lakes Monitoring | US EPA.

Activity 6:

Title	Gulf of Mexico Performance Metrics
Lead National Program and Region	Office of Water/Region 4
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	September 2022

Purpose and brief description: Gulf of Mexico Division (GMD) quarterly monitors Gulf of Mexico water quality, habitat restoration, community resilience, and environmental education.

Policy, programmatic, and/or operational questions the activity is intended to address: Environmental results (water quality, habitat restoration, community resilience, and environmental education), are used to help determine the overall health of the Gulf of Mexico ecosystem and to improve resiliency levels and environmental education of communities throughout the Gulf of Mexico watershed to fulfill requirements of Clean Water Act 104B3. GMD uses a variety of internal and external mechanisms to maintain the integrity of environmental results and ensure the timely and accurate reporting on the health of the Gulf of Mexico ecosystem. Quality documentation and standard operating procedures are frequently reviewed and updated as necessary.

Brief list of results/conclusions/findings including interim findings: The GMD has a target for each metric mentioned above and uses these to assess performance and to identify possible ways to focus resources. During this fiscal year, GMD exceeded its annual target for all metrics:

Measure	Target	Actual	Unit of Measure
Habitat Restoration	350	253,195	Acres Restored, Enhanced, or Protected
Environmental Education	10,000	31,199	Individuals Reached
Community Resilience	40	155	Communities Impacted
Water Quality	6	70	Segments Improved

It should be noted the actual numbers could change due to the two-month quality assurance and control period. Final FY 2022 metrics will be reported in December 2022.

How EPA used the results/conclusions/findings/interim findings: GMD reviews quarterly and final reports from recipients of assistance agreements to determine project effectiveness and to narrow foci of Federal Funding Opportunities. These data aid innovation and highlight geographically prone contributors of issues impacting the Gulf of Mexico. We used data from quarterly reports and our engagement with partners to expand GMD's nutrient reduction efforts that concentrated mostly on agricultural environmental degradation to work on non- agricultural rural and urban communities. This allows for a broader focus on improving habitat to reduce nutrient pollution (projects to enhance or restore riparian and near coastal areas in rural, urban, and suburban communities) and managing urban runoff (projects to capture, store, filter, and treat runoff to reduce nutrient loads and improve water quality consistent with a broader strategy for watershed protection or restoration).

To ensure Federal Funding Opportunities address stakeholders needs and concerns, GMD hosted virtual and in-person listening sessions to collect input on activities or projects. GMD also assessed partnership opportunities and identified gaps in our outreach and engagement with Minority Serving Institutions. As a result, we specifically reached out to institutions of higher learning in Mississippi and will be expanding engagement to academia across the Gulf of Mexico.

Link for findings: N/A

Activity 7:

Title	GAO Report: Long Island Sound Restoration: Improved Reporting and Cost Estimates Could Help Guide Future Efforts
Region	EPA Region 1 and Region 2
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Completion date	November 2021

Purpose and brief description: In 2017 the GAO conducted a review of the Long Island Sound Study (LISS) as part of a larger review that GAO was conducting of EPA's National Estuary Program (NEP). GAO reviewed a total of four NEPs, including Puget Sound, Columbia River, San Francisco Bay, and the LISS. The LISS final report was issued on July 12, 2018.

Policy, programmatic, and/or operational questions the activity is intended to address: The objectives for this GAO review were to assess:

- What roles the federal, state, and other groups play in restoring the Long Island Sound;
- What federal funds have been spent to date;
- What progress has been made in restoring the Long Island Sound; and,
- What remains to be done.

Brief list of results/conclusions/findings including interim findings: In July 2018, GAO issued the final report *Improved Reporting and Cost Estimates Could Help Guide Future Efforts*, which included three recommendations for the program:

- The Director should ensure that as the Study finalizes its reporting format, it fully incorporates leading practices of performance reporting. (Recommendation 1)
- The Director should develop cost estimates that include analyses of uncertainties for each of the targets in the 2015 plan. (Recommendation 2)
- The Director should estimate the range of potential costs for all implementation actions and include the estimates in future supplements to the 2015 plan. (Recommendation 3)

How EPA used the results/conclusions/findings/interim findings: The EPA Long Island Sound Office (LISO – Region 2 and Region 1) worked to fully implement all GAO recommendations and updated the GAO tracking system in November 2021 to confirm that the Agency considered all recommendations to be fully implemented.

Recommendation #1: The Long Island Sound Study's online reporting and tracking system is completed and in full use by the Study. Data has been added to the online tracking and reporting system to show progress in implementing the 2020-2024 implementation actions.

Data will be added to the tracking and reporting system approximately every six months to allow the Study to evaluate progress toward goal implementation. As reported previously, the Study has already implemented two leading practices into its reporting format. The Study website shows the past condition and progress over time toward ecosystem targets compared to the recovery plan. The online reporting and tracking system addresses the leading practice of reporting recommended by the GAO, which is to evaluate actions for unmet goals. By tracking the 2020-2024 implementation actions, the Study will be able to explain why goals are not being met and create plans and schedules to achieve the goals. With the online tracking system in place, the Study has fully incorporated the three leading practices of performance reporting and considers this recommendation to be fully implemented.

Recommendation #2: In June 2020, the Study hired a contractor to develop a report that included the estimated cost (with a high and low range) needed to attain each of the targets in the 2015 plan. The contractor estimated costs for each ecosystem target by adding up the existing cost ranges for each of the implementation actions in the 2015 plan. The report is posted and accessible to the public on the Long Island Sound Study website (https://longislandsoundstudy.net/2019/11/addressing-gaos-recommendations-liss- performance-reporting-and-cost-estimating/). The report contained recommendations for the Study to continue estimating costs in future reports. In September 2020, EPA stated that the cost ranges for the implementation actions would be updated as the Study updated the CCMP implementation actions for the period 2020-2024. This information was developed and contained in the CCMP supplemental documents completed in 2020.

Recommendation #3: In June 2020, the Study said that the Plan 2020-2024 implementation action update would include a range of costs for implementation actions. The Study received concurrence from the EPA Regional Administrators (Region 1 and Region 2) and EPA Office of Water on the 2020-2024 CCMP Update. In January 2021, the CCMP Update was completed and posted on the LISS website, including the Technical Supporting Documents that indicate the range of cost estimates for each Implementation Action. See: https://longislandsoundstudy.net/2021/01/ccmp-implementation-actions-supplemental- documents/ to view the CCMP Update and associated Technical Supporting Documents.

Link for findings*:* The public version of the LISS online reporting and tracking system is available at: https://longislandsoundstudy.net/program-implementation-and-progress/

Activity 8:

Title	Long Island Sound Study 2022 Report to Congress "Returning the Urban Sea to Abundance"
Region	EPA Region 1 and Region 2
FY 2022-2026 Strategic Goal and Objective Supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.2: Protect and Restore Waterbodies and Watersheds
Estimated completion date	January 2023

Purpose and brief description: The purpose of the Long Island Sound Study Report to Congress is to meet the statutory requirement under the Clean Water Act Section 119 for the Long Island Sound Office to issue biennial reports to Congress summarizing the progress made in implementing the Comprehensive Conservation and Management Plan (CCMP), any modifications to the CCMP, and recommendations concerning the CCMP. To accomplish this, the program will use grant progress report data that is entered into an internal EPA SharePoint site. That data is used to compare intended to actual performance in accomplishing the targets and actions in the CCMP

Policy, programmatic, and/or operational questions the activity is intended to address: The objectives for this review were to assess:

- Progress made toward meeting the goals, actions, and schedules of the CCMP.
- Overview on the status of the Ecosystem Targets.
- Demonstrate investments in Implementation Actions.
- Feature success stories in New York and Connecticut highlighting progress towards goals under each CCMP theme.
- Overview of the FY 2020 and FY 2021 investments by budget categories.
- Areas of focus in the near future under each CCMP theme.

Brief list of results/conclusions/findings including interim findings: The report provides a summary of the progress made toward achieving the goals in each of the CCMP themes.

Program Results: Program investments have allowed the LISS partners to better characterize the health of the Long Island Sound watershed and waterbody. Water quality monitoring has expanded from the open sound to embayments (bays and harbors). Researchers have been able to document water quality improvements due to decreased nitrogen loading from wastewater treatment facilities despite the increasing climate change impacts that make it harder to maintain water quality standards. The program continues to support wildlife and fish by investing in the protection of open space habitat; this led to 1,007 habitat acres preserved from 2020 to 2021. Public involvement and education activities, such as the International Coastal Cleanup events, enhance the sustainability and resiliency of the watershed by reducing the amount of marine debris that flows into the waterbody. These activities collectively contribute to the overall health of Long Island Sound.

How EPA used the results/conclusions/findings/interim findings: The EPA Long Island Sound Office will use the assessment of Implementation Action investments to target implementation actions where further progress needs to be made. The assessment of the status of ecosystem targets will also be used to focus efforts on program activities and projects to bring ecosystem

targets on track or keep them on schedule. The sections focused on future areas of investment will help guide program priorities.

Link for findings*:* A link will be provided once the report is made final.

Activity 9:

Title	Public Water System Supervision (PWSS) Program Reviews & Drinking Water State Revolving Fund State Reviews
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure
Completion date	September 2022

Purpose and brief description: EPA annually conducts reviews of agencies with Public Water System Supervision (PWSS) primacy (55 reviews) and reviews of each state Drinking Water State Revolving Fund program (51 reviews).

Policy, programmatic, and/or operational questions the activity is intended to address: These reviews evaluate if primacy entities are effectively implementing the PWSS program to oversee community water system compliance with the Safe Drinking Water Act and evaluate if states are effectively implementing the Drinking Water State Revolving Fund program to facilitate public water system compliance with the Safe Drinking Water Act (SDWA). Questions addressed include:
Are primacy entities effectively implementing the range of activities in the PWSS program to oversee community water system compliance with the Safe Drinking Water Act?

Are states effectively implementing the Drinking Water State Revolving Fund program to facilitate public water system compliance with the Safe Drinking Water Act, addressing public health protection and affordability, and complying with the EPA's State and Tribal Assistance Grant program requirements?

Brief list of results/conclusions/findings including interim findings: EPA DWSRF review results are reported out in 51 State specific Performance Evaluation Reports annually. The reports function similarly to base line monitoring reports for grant programs. Because reports are state specific, there is not a national report of overall program evaluation. Examples of items included in the review include

- The results of reviews of state program files for system compliance with DWSRF rules and cross cutting requirements
- The results of regional transaction testing for federal cash draws

- State performance in key DWSRF program metrics
- Success (or lack of success) in addressing past issues raised

How EPA used the results/conclusions/findings/interim findings: EPA's regional offices engage and share results with primacy agencies under their purview. EPA shares PWSS information on water system compliance rates across and within states. EPA makes publicly available an annual report on the status of the national DWSRF program. EPA also shares project and financial data at the national and state level.

Link for findings*:* For the most recent annual report, 2019 DWSRF annual report, is available here: https://www.epa.gov/sites/default/files/2020-10/documents/2019_annual_report_final_508compliant.pdf

Activity 10:

Title	Safe Drinking Water Information System (SDWIS) National Community Water System Non-Compliance Review
Lead National Program	OW
FY 2022-2026 Strategic Goal and Objective supported	Goal 5: Ensure Clean and Safe Water for All Communities Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure
Completion date	September 2022

Purpose and brief description: EPA conducts a review quarterly of the Safe Drinking Water Information System (SDWIS) National Community Water System (CWS) health-based non-compliance data.

Policy, programmatic, and/or operational questions the activity is intended to address: This review evaluates the trends and causes of non-compliance to information technical, managerial and financial state and public water system capacity building training or future drinking water regulation needs, in support regulatory drinking water compliance. The question addressed was:

What are the barriers and challenges of CWS systems maintaining compliance with health- based drinking water standards?

Brief list of results/conclusions/findings including interim findings: Annual Program Reviews provide a management level review of each SDWA primacy agency's (55 total) accomplishments and challenges. Some notable accomplishments include efforts to reduce the number of health-based violations especially those for the Stage 2 DBPR, state programs to require asset management plans for their PWS, and programs that states have developed for

lead testing in schools. Challenges often include documenting programs with resources constraints, for example programs with a significant number of vacancies, that impact performance on key implementation actions, such as timely completion of sanitary surveys.

How EPA used the results/conclusions/findings/interim findings: Data are provided from the EPA's SDWIS database. There is a non-compliance review of CWS systems with health-based violations by regulation type, geographical distribution, and system source type**.**

Link for findings*:* The findings from the program reviews will be publicly shared. Quarterly data reports are shared publicly via the SDWIS FED Data Warehouse[1].

[1] *https://ofmpub.epa.gov/apex/sfdw/f?p=108%3A200%3A%3A%3A%3A%3A%3A*.

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Coordination With Other Federal Agencies

Air and Radiation Programs

National Ambient Air Quality Standards (NAAQS) Implementation
EPA cooperates with other agencies to achieve goals related to ground level ozone and particulate matter (PM), and to ensure the actions of other agencies are compatible with state plans for attaining and maintaining the National Ambient Air Quality Standards (NAAQS). The Agency works closely with the U.S. Department of Agriculture (USDA), Department of the Interior (DOI), and Department of Defense (DOD) on issues such as prescribed burning at silviculture and agricultural operations. EPA, the U.S. Department of Transportation (DOT), and the U.S. Army Corps of Engineers (USACE) also work with state and local agencies to integrate transportation and air quality plans, reduce traffic congestion, and promote livable communities.

Air Quality in the Agricultural Sector
To improve EPA's understanding of environmental issues in the agricultural sector, the Agency works with USDA and others to improve air quality while supporting sustainable agriculture. The collaborative approach to the agriculture sector includes scientific assessment, outreach and education, and implementation/compliance.

Regional Haze
EPA works with the National Park Service (NPS), and U.S. Forest Service (USFS) and DOI in implementing its regional haze program and operating the Interagency Monitoring of Protected Visual Environments (IMPROVE) visibility monitoring network. The operation and analysis of data produced by this air monitoring system is an example of the close coordination of efforts between EPA and state and tribal governments.

Air Quality Assessment, Modeling, and Forecasting
For pollution assessments and transport, EPA works with the National Aeronautics and Space Administration (NASA) on technology transfer using satellite imagery. EPA further distributes NASA satellite products and National Oceanographic and Atmospheric Administration (NOAA) air quality forecast products to states, local agencies, and tribes to provide a better understanding of daily air quality and to assist with air quality forecasting. EPA works with NASA to develop a better understanding of PM formation using satellite data. EPA also works with the Department of the Army on advancing emission measurement technology and with NOAA for meteorological support for our modeling and monitoring efforts. EPA collects real-time ozone and PM measurements from state and local agencies, which are used by both NOAA and EPA to improve and verify Air Quality Forecast models.

EPA's *AirNow* Program (the national real-time Air Quality Index reporting and forecasting system) works with the National Weather Service (NWS) to coordinate NOAA air quality forecast guidance with state and local agencies for air quality forecasting efforts and to render the NOAA model output in EPA's Air Quality Index (AQI), which helps people determine appropriate air quality protective behaviors. In wildfire situations, EPA and USFS work closely with states to deploy monitors and report monitoring information and other conditions on *AirNow*. The *AirNow* Program also collaborates with NPS and USFS in collecting air quality monitoring observations, in addition to over 130 state, local, and tribal air agency observations, and with NASA in a project to incorporate satellite data with air quality observations.

EPA, USDA, and DOI established a collaborative framework to address issues pertaining to wildland fire and air quality. The agreement recognizes the key roles of each agency, as well as opportunities for collaboration. For example, the partnership explains that the agencies seek to reduce the impact of emissions from wildfires, especially catastrophic wildfires, and the impact of those emissions on air quality. In addition, the partnership highlights opportunities for enhancing coordination among the agencies through information sharing and consultation, collaboration on tools and information resources, and working together to collaborate with state and other partners, among others on strategic goals.

Mobile Sources

EPA works with DOT's National Highway Traffic Safety Administration (NHTSA) on the coordinated national program establishing standards to improve fuel efficiency for light-duty and heavy-duty vehicles. Specifically, EPA, in coordination with DOT's fuel economy and fuel consumption standards programs, implements vehicle and commercial truck greenhouse gas standards.

To address criteria pollutant emissions from marine and aircraft sources, EPA works collaboratively with the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO), as well as with other federal agencies, such as the U.S. Coast Guard (USCG) and the Federal Aviation Administration (FAA). EPA also collaborates with the USCG in the implementation of Emission Control Area (ECA) around the U.S., and with Mexico and Canada in the North American Commission for Environmental Cooperation (CEC) to evaluate the benefits of establishing a Mexican ECA.

To better understand the sources and causes of mobile source pollution, EPA works with the Department of Energy (DOE) and DOT to fund applied research projects including transportation modeling projects. EPA also works closely with DOE on refinery cost modeling analyses to support clean fuel programs, and coordinates with DOE regarding fuel supply during emergency situations. EPA works with DOE in evaluating petitions for small refinery hardship exemptions under the Renewable Fuel Standards (RFS) Program.

For mobile sources program outreach, the Agency participates in a collaborative effort with DOT's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), and the Centers for Disease Control and Prevention (CDC) to educate the public and communities about the impacts of transportation choices on traffic congestion, air quality, climate change, and human health. These partnerships can involve policy assessments and toxic emission reduction strategies in different regions of the country. EPA works with DOE, DOT, and other agencies, as needed, on the requirements of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007, such as the Renewable Fuel Standard. EPA also has worked with other agencies on biofuel topics through the Biomass Research and Development Institute.

To develop air pollutant emission factors and emission estimation algorithms for military aircraft, ground equipment, and vehicles, EPA partners with the DOD. This partnership provides for the joint undertaking of air-monitoring/emission factor research and regulatory implementation.

Air Toxics
EPA works closely with other health agencies such as the CDC, National Institute of Environmental Health Sciences (NIEHS), and National Institute for Occupational Safety and Health (NIOSH) on health risk characterization for both toxic and criteria air pollutants. The Agency also contributes air quality data to CDC's Environmental Public Health Tracking Program, which is made publicly available and used by various public health agencies.

Addressing Transboundary Air Pollution
In developing regional and international air quality projects, and in working on regional agreements, EPA works with the Department of State (DOS), NOAA, NASA, DOE, USDA, U.S. Agency for International Development (USAID), and the Office of Management and Budget (OMB), and with regional organizations. In addition, EPA has partnered with other organizations and countries worldwide, including the United Nations Environment Programme (UNEP), the European Union (EU), the Organization for Economic Cooperation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), CEC, Canada, Mexico, China, and Japan. EPA also partners with environment and public health officials and provides technical assistance through UNEP to facilitate the development of air quality management strategies to other major emitters and/or to key regional or sub-regional groupings of countries.

Stratospheric Ozone
EPA works closely with DOS and other federal agencies in international negotiations among Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, with the goal of protecting the ozone layer and through managing ozone depleting substances (ODS) it controls. EPA also supports several multilateral environmental agreements to simultaneously protect the ozone layer and climate system working closely with the DOS and other federal agencies, including but not limited to the Office of Science Technology and Policy (OSTP), Council on Environmental Quality (CEQ), Department of Commerce (DOC), OMB, USDA NOAA, and NASA.

EPA works with other agencies, including the Office of the United States Trade Representative (USTR) and DOC, to analyze potential trade implications in stratospheric protection regulations that affect imports and exports. EPA has coordinated efforts with the Department of Justice (DOJ), Department of Homeland Security (DHS), Department of Treasury (U.S. Treasury), and other agencies to curb the illegal importation of ODS.

Indoor Air and Radon
EPA works closely with U.S. Department of Health and Human Services (HHS), DOE, U.S. Department of Housing and Urban Development (HUD), and National Institute of Standards and Technology (NIST) to reduce risks from poor air quality in homes and schools. EPA also partners with the U.S. Department of Education (ED) to provide guidance and technical assistance to improve school environments through indoor air quality (IAQ) improvements. EPA, CDC, and HUD have leadership roles in the public-private strategic partnership to advance radon risk reduction (National Radon Action Plan). EPA co-leads the Federal Asthma Disparities Work Group under the President's Task Force and leads the Federal Interagency Committee on Indoor Air Quality—these two coordinating bodies serve to increase communication, coordination, and collaboration across the federal family to address IAQ risk reduction.

Radiation and Radiation Preparedness and Response
EPA works primarily with the Nuclear Regulatory Commission (NRC), DOE, and DHS on multiple radiation-related issues. EPA has ongoing planning and guidance discussions with DHS on emergency response activities, including exercises responding to nuclear related incidents. As the regulator of DOE's Waste Isolation Pilot Plant (WIPP), EPA is charged with coordinating with DOE to ensure the facility is operating in compliance with EPA regulations. EPA is a member of the Interagency Radiation Source Protection and Security Task Force, established in the Energy Policy Act, to improve the security of domestic radioactive sources. EPA also is a working member of the interagency Nuclear Government Coordinating Council (NGCC), which coordinates across government and the private sector on issues related to security, communications, and emergency management within the nuclear sector. EPA is a charter member of the Interagency Nuclear Safety Review Board which was established to review the nuclear safety analysis for launching space nuclear systems. EPA works with DOD, DOE, NASA, NRC, DOS, and DOT to coordinate the safety review and launch emergency response plans for commercial and non-commercial launches of space nuclear systems.

For emergency preparedness, EPA coordinates with other federal agencies through the Federal Radiological Preparedness Coordinating Committee and the Advisory Team for Environment, Food and Health which provides federal scientific advice and recommendations to state and local decision makers, such as governors and mayors, during a radiological emergency. EPA participates in planning and implementing exercises including radiological anti-terrorism activities with the HHS, NRC, DOE, DOD, and DHS.

EPA is a charter member and co-chairs the Interagency Steering Committee on Radiation Standards (ISCORS), which was created at the direction of Congress. Through its activities, member agencies are kept informed of cross-cutting issues related to radiation protection, radioactive waste management, and emergency preparedness and response. ISCORS also helps coordinate U.S. responses to radiation-related issues internationally.

During radiological emergencies, EPA works with expert members of the International Atomic Energy Agency (IAEA). EPA also works with OECD's Nuclear Energy Agency (NEA) on two committees: the Radioactive Waste Management Committee (RWMC) and the Committee on Radiation Protection and Public Health (CRPPH). Through participation on the CRPPH, EPA is successful in bringing U.S. perspectives to international radiation protection policy.

Climate Change
To carry out a diverse range of regulatory and partnership programs to help tackle the climate crisis, EPA works with a number of other federal agencies, including the Department of HUD, Federal Energy Regulatory Commission (FERC), DOE, USDA, DOS, USAID, DOI, and DOT.

Climate protection partnership programs, government-wide, stimulate the development and use of renewable energy technologies, energy efficient products, and other strategies that will help reduce greenhouse gas (GHG) emissions. The effort is led by EPA and DOE with significant involvement from the USDA, HUD, and the National Institute of Standards and Technology (NIST).

The Global Methane Initiative (GMI) is a U.S.-led, international public-private partnership that brings together over 40 partner governments and over 1,000 public and private sector organizations to advance methane recovery and use methane as a clean energy source. EPA works with DOS on the GMI, building on the success of EPA's domestic methane programs and focusing on advancing methane reductions from agriculture, coal mines, landfills, oil and gas systems, and municipal wastewater.

EPA also will support DOS as the technical lead in developing projections and compiling information on GHG mitigation policies and measures as part of the upcoming U.S. Biennial Report and National Communication as required by the U.N. Framework Convention on Climate Change. EPA will support the State Department and National Science Foundation with applying applicable goals and GHG mitigation policies in the review of environmental evaluations for non-Governmental activities in Antarctica consistent with Antarctica Treaty Commission commitments.

Research Supporting the Air and Radiation Program
EPA continues to coordinate with other agencies, such as the National Institutes of Health (NIH), HHS, CDC, NOAA, DOE, USDA, and USFS to develop effective and sustainable approaches to manage air pollution and climate change risks.

ENERGY STAR
In 2009, EPA and DOE signed a Memorandum of Understanding (MOU) that redefined roles and responsibilities to address implementation challenges and capitalize on the strengths of each agency. Feedback from stakeholders has been positive on improvements in the Program since the 2009 Memorandum of Understanding.

Prior to 2009, both EPA and DOE were implementing the Program for different products, resulting in inconsistent approaches, duplicative efforts, and market confusion. The 2009 Memorandum of Understanding was designed to solve such problems raised by industry stakeholders. EPA is the ENERGY STAR brand manager and is accountable for maintaining the integrity of the label. For ENERGY STAR products, EPA is responsible for setting product performance levels, educating consumers and businesses, and supporting the efforts of manufacturers, retailers, and utilities. EPA also oversees third-party certification and verification testing. Across the more than 75 product categories, EPA has demonstrated accessibility and transparency in the implementation of the ENERGY STAR products program. EPA also is responsible for the ENERGY STAR Residential New Construction, Commercial, and Industrial programs, including ENERGY STAR Portfolio Manager.

For ENERGY STAR products, DOE develops test procedures for ENERGY STAR products and contributes to verification testing of appliances and equipment. DOE also sets minimum, mandatory energy efficiency standards for some products through a regulatory process. EPA and DOE work closely to share data and analyses, synchronize timing, and coordinate requests to industry in the development of both the voluntary ENERGY STAR specifications and the DOE minimum efficiency standards. DOE also is responsible for implementing Home Performance with ENERGY STAR.

Water Programs

Collaboration with Public and Private Partners on Water Infrastructure Preparedness, Response and Recovery

EPA coordinates with other federal agencies, primarily DHS, CDC, FDA, and DOD, on biological, chemical, and radiological contaminants of high concern, and how to detect and respond to their presence in drinking water and wastewater systems. EPA maintains a close linkage with the Federal Bureau of Investigation (FBI) and DHS, particularly with respect to ensuring the timely dissemination of threat information through existing communication networks. Additionally, throughout the pandemic, EPA worked with DHS and other federal agencies to coordinate aspects of information sharing, disseminate personal protective equipment, address shortages of treatment chemicals, provide for equipment and qualified water system operators, and recognize water system operators and associated contract personnel as critical workers.

EPA works with USACE and the Federal Emergency Management Agency (FEMA) to refine coordination processes among federal partners engaged in providing emergency response support to the water sector, including maintaining clear roles and responsibilities under the National Disaster Recovery Framework. In addition, EPA continues to work with FEMA, USACE, and other agencies, on the Federal Interagency Floodplain Management Task Force regarding water resources and floodplain management.

As the Agency in charge of water sector security, EPA works with DHS Cyber and Infrastructure Security Agency (CISA) and other government agencies on the Industrial Control System (ICS) working group to develop an ICS interagency Strategy and Implementation Plan. EPA also collaborates with CISA on various working groups and cybersecurity issues such as roles and responsibilities, ICS supply chain, cyber workforce, cybersecurity standards, and cyber response.

Drinking Water Programs

EPA and the U.S. Geological Survey (USGS) established an Interagency Agreement to coordinate activities and information exchange in the areas of unregulated contaminants occurrence, the environmental relationships affecting contaminant occurrence, protection area delineation methodology, and analytical methods. This effort improves the quality of information to support risk management decision-making at all levels of government, generates valuable new data, and eliminates potential redundancies. EPA also collaborates with HUD to develop strategies to decrease drinking water lead exposure in homes. The partnership promotes the exchange of information, leverages funding, and reviews processes to facilitate better-informed and coordinated decisions and investments.

In addition, EPA collaborates with DHHS to better understand, characterize, and manage public health risks from Contaminants of Emerging Concern (CECs), with activities spanning from assessing CDC's waterborne disease surveillance data related to *legionella* and other biofilm-related pathogens to partnering with FDA on antibiotic resistance-related issues. EPA collaborates with multiple federal agencies to address Per- and Polyfluoroalkyl Substances (PFAS) issues including DOD, DOE, USDA, FDA, DHHS, the NIH, the Consumer Product Safety Commission, the Small Business Administration (SBA), NASA, FAA, and the Executive Office of the President (EOP).

Infrastructure Support for Tribal Water Systems
EPA coordinates the multi-agency tribal Infrastructure Task Force (ITF), created to develop and coordinate federal activities in delivering water infrastructure, wastewater infrastructure and solid waste management services to tribal communities. The ITF is the formal mechanism for interagency coordination among EPA, DHHS's Indian Health Service (IHS), HUD, USDA, and the Bureau of Indian Affairs (BIA).

Drinking Water and Wastewater Work in Indian Country
EPA works under a five-federal agency MOU to better coordinate the federal government's efforts in providing access to safe drinking water and basic wastewater facilities for tribal communities. EPA, DOI, DHHS, USDA, and HUD work as the Federal Tribal Infrastructure Task Force (TITF) to use their combined authorities to maintain a framework to enhance interagency efficiency and coordination, and to cultivate greater cooperation in carrying out their tribal infrastructure responsibilities. Since 2007, the TITF has: maintained procedures necessary for a common understanding of the programs pertaining to funding infrastructure construction, solid waste management efforts, and technical assistance to tribes; worked together to improve the capacity of tribal communities to operate and maintain sustainable infrastructure; enhanced the efficient leveraging of funds; worked directly with tribes to promote an understanding of federal programs; identified ways to improve construction, operation, and maintenance of sustainable infrastructure; and worked to allow and facilitate the exchange of data and information amongst partners.[1]

Bipartisan Infrastructure Law (BIL) / Infrastructure Investment and Jobs Act (IIJA)
Coordination work with other federal agencies also will support EPA's BIL/IIJA implementation priorities.

Sustainable Rural Drinking and Wastewater Systems
EPA and USDA work together to increase the sustainability of rural drinking water and wastewater systems to ensure the protection of public health, water quality, and sustainable communities. The two agencies facilitate coordinated funding for infrastructure projects that aid in the compliance of national drinking water and clean water regulations.

National Water Sector Workforce Development: Department of Veterans Affairs
EPA and the Departments of Education, Interior, Agriculture, and Veterans Affairs (VA) are building on existing collaborations, exploring new opportunities and actions, and identifying potential additional federal programs and partners to support the Nation's water sector professionals.

Coordination with Department of Defense on Analytical Methods for Detecting PFAS
EPA's Clean Water Act (CWA) analytical methods program is collaborating with DOD on their efforts to develop an analytical method for detecting certain PFAS compounds in wastewater.

Carbon Capture, Utilization, and Storage (CCUS)
EPA participates in quarterly and ad hoc meetings with the Internal Revenue Service (IRS), DOE, DOI, DOT, and DOJ to share information on carbon capture and storage developments. In

[1] For additional information, please visit: https://www.epa.gov/tribal/federal-infrastructure-task-force-improve-access-safe-drinking-water-and-basic-sanitation.

addition, EPA serves as a liaison to DOE's National Risk Assessment Partnership to advance its work in developing tools to improve collective understanding of risk at CO_2 storage projects and inform science and risk-based decision-making at geologic sequestration projects; and to explore opportunities to integrate the partnership work into EPA's Class VI permitting process. EPA also will collaborate with DOE and CEQ on several reports and other initiatives related to carbon sequestration requested by Congress, including developing a report on UIC Class VI permitting. Through the CAA §309 review program, EPA is collaborating with DOE and other agencies as needed to assist with identifying potential impacts and ways to avoid and minimize those impacts from CO_2 storage projects.

Research to Support Water Programs
While EPA is the federal agency mandated to ensure safe drinking water, other federal and non-federal entities conduct research that complements EPA's research on priority contaminants in drinking water. Cooperative research efforts have been ongoing with the American Water Works Association, Water Research Foundation, and other stakeholders to coordinate drinking water research where the private sector is conducting research in areas such as analytical methods, treatment technologies, and the development and maintenance of water resources. EPA also has worked with the USGS to evaluate performance of newly developed methods for measuring microbes in potential drinking water sources.

Interagency coordination in research also is occurring in developing sediment criteria. Here, EPA has joint research initiatives with NOAA and USGS for linking monitoring data and field study information with available toxicity data and assessment models for developing sediment criteria.

EPA also conducts studies with the USGS to monitor the occurrence of contaminants of emerging concern (CECs). Research efforts to monitor the effects of chemical mixtures continue, increasing our understanding of wastewater effluent impacts to human and aquatic health and prioritizing future research on developing solutions for the removal of CECs in wastewater treatment operations.

Source Water Collaborative
EPA participates in the Source Water Collaborative along with USDA (NRCS, Farm Service Agency (FSA), USFS), USGS, and 25 other national organizations. The goal of the collaborative is to protect sources of drinking water by combining the strengths and tools of its member organizations. EPA provides funding to support these efforts.

Source Water Protection and Harmful Algal Blooms (HABs)
To combat HABs and hypoxia, the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014 (HABHRCA 2014, P.L. 113-124, reauthorized through the National Integrated Drought Information System [HABHRCA 2017, Public Law 115-423]) emphasizes the mandate to advance the scientific understanding and ability to detect, predict, control, mitigate, and respond to HABs and hypoxia. This legislation established the Interagency Working Group (IWG) on HABHRCA (IWG-HABHRCA). It tasked the group with coordinating and convening federal agencies to discuss HAB and hypoxia events in the U.S., and to develop action plans, reports, and assessments of these situations. The IWG-HABHRCA is co-chaired by representatives from EPA, NOAA, and the OSTP, and it is composed of the following member agencies and

departments: CDC, FDA, NIEHS, USACE, USGS, BOEM, NPS, FWS, NASA, USDA, DOS, and the National Science Foundation (NSF).

2018 Farm Bill Source Water Protection Provisions

EPA collaborates with the USDA Natural Resources Conservation Service (NRCS), state and utility partners to develop implementation strategies and guidance to comply with the 2018 Farm Bill provisions. These provisions dedicate at least 10 percent of total funds available for conservation programs (with the exception of the Conservation Reserve Program) to be used for source water protection. In addition, the Agency partners with NRCS to foster collaboration at the state and local levels to identify priority source water protection areas in each state to address agriculture-related impacts to drinking water sources. EPA also is collaborating with USFS in developing strategies to implement the 2018 Farm Bill (Title VIII, Subtitle D, Section 8404) Source Water Protection provisions requiring a "Water Source Protection Program" on National Forest Service (NFS) lands. EPA is supporting USFS by fostering partnerships with state, utilities, and other water stakeholders.

National Water Quality Initiative (NWQI)

The Agency works with the USDA Natural Resources Conservation Service (NRCS), which implements Farm Bill conservation programs that can help control nonpoint source pollution. The National Water Quality Initiative partnership with USDA focuses federal resources on agricultural sources of pollution in select watersheds in every state. From 2012 to 2021, NRCS has invested more than $250 million and worked with over 5 million farmers and ranchers to implement conservation practices on 1.1 million acres. Between FY 2017-2020, over $20 million in Clean Water Act section 319 funding was invested in these same NWQI watersheds, which was matched by over $22 million in nonfederal funding. These conservation efforts have reduced sediment loss from cropland by >1.1 million tons, reduced phosphorous loss by >3.1 million pounds and reduced nitrogen loss by >13.5 million pounds.

Gulf Hypoxia Task Force

EPA, as the federal chair of the Gulf Hypoxia Task Force, works with member federal agencies (USDA, NOAA, USGS) and twelve member states to continue implementation of the 2008 Gulf Hypoxia Action Plan. A key goal of the Gulf Hypoxia Action Plan is to improve water quality in the Mississippi River Basin and reduce the size of the hypoxic zone in the Gulf of Mexico by implementing existing and innovative approaches to reduce nitrogen and phosphorus pollution in the Basin and the Gulf. The Hypoxia Task Force is developing basin-wide metrics, while Task Force member states are using Infrastructure Investment and Jobs Act resources to implement nutrient reduction strategies, partner with land grant universities, report on measures to track progress, and identify a need for adaptive management. State support for effective nutrient reduction in the Gulf is coordinated with other Hypoxia Task Force federal member agencies, such as the U.S. Department of Agriculture and U.S. Geological Survey, in high-priority watersheds.

Coastal Nonpoint Pollution Control Program

The Coastal Nonpoint Pollution Control Program, established by section 6217 of the Coastal Zone Act Reauthorization Amendments, addresses nonpoint source pollution problems in coastal waters. Section 6217 requires states and territories with approved Coastal Zone Management Programs to develop Coastal Nonpoint Pollution Control Programs. In its program, a state or

territory describes how it will implement nonpoint source pollution controls, known as management measures. This program is administered jointly with the National Oceanic and Atmospheric Administration (NOAA).

Deepwater Horizon Natural Resource Damage Assessment and Restoration
The EPA Deepwater Horizon (DWH) Natural Resource Damage Assessment and Restoration (NRDA) Program works closely with federal (NOAA, DOI, USDA) and state (5 Gulf states) NRDA co-Trustees to evaluate, select, and implement projects to restore Gulf of Mexico natural resources injured by the DWH oil spill. This restoration effort provides the opportunity for EPA and co-Trustees to collaborate on a wide variety of issues across the Gulf that are important to the federal co-Trustees including water quality, nutrient reduction, fisheries, wetlands, marine debris, coastal resilience, monitoring, and adaptive management.

Ocean Dumping Program
The MPRSA regulates the disposition of any material in the ocean unless expressly excluded under MPRSA. Under the MPRSA, EPA is responsible for establishing criteria for reviewing and evaluating permit applications, as well as issuing ocean dumping permits for materials other than dredged material. In the case of dredged material, the U.S. Army Corps of Engineers (USACE) is responsible for issuing ocean dumping permits, using EPA's environmental criteria. Permits for ocean dumping of dredged material are subject to EPA review and written concurrence. EPA and USACE together develop site management and monitoring plans for each designated ocean dredged material disposal site. In the United States, the MPRSA implements the requirements of the London Convention, where EPA collaborates with the State Department and USACE.

Vessels
EPA works closely under the Clean Water Act to jointly regulate vessels of the armed forces with the Department of Defense through the Department of the Navy. EPA works closely with the U.S. Coast Guard to regulate incidental discharges from commercial vessels – EPA establishes discharge standards that become effective once the Coast Guard issues implementing regulations under the Vessel Incidental Discharge Act.

Urban Waters Federal Partnership
EPA leads the Urban Waters Federal Partnership with over 15 federal partner agencies, including DOI and USDA, to support 21 Urban Waters locations. The Urban Waters Federal Partnership reconnects urban communities, particularly those that are overburdened or economically distressed, with their waterways by improving coordination among federal agencies and collaborating with community-led revitalization efforts to improve our nation's waters and promote their economic, environmental, and social benefits.

Wetlands
EPA works closely with USACE to oversee and implement the Clean Water Act section 404 permitting program. Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. The Army Corps of Engineers administers day-to-day program, including individual and general permit decisions. EPA develops and interprets policy, guidance, and environmental criteria used in evaluating permit applications; determines scope of geographic jurisdiction and

applicability of exemptions; and reviews and comments on individual permit applications. EPA also coordinates with the Fish and Wildlife Service and the National Marine Fisheries Service (NMFS) on certain permitting actions.

Interagency Coastal Wetlands Workgroup
EPA works on the Coastal Wetlands Initiative in partnership with a number of federal agencies involved in coastal wetlands conservation, including FWS, NMFS, DOT, USGS, USDA, and USACE. The ultimate goal of the Interagency Coastal Wetlands Workgroup is to reduce and reverse the trend of coastal wetland loss. The workgroup has developed a series of recommendations to address coastal wetland loss grouped under five themes: increasing the acreage of wetlands restored in coastal watersheds; reducing loss of coastal wetlands to development; reducing loss of coastal wetlands associated with silviculture in the Southeast; supporting the collection, enhancement, and dissemination of landscape-scale wetland monitoring data; and conducting targeted outreach and stakeholder engagement.

Coral Reef Task Force
EPA partners with other federal agencies in support of the U.S. Coral Reef Task Force (USCRTF). The USCRTF was established in 1998 by Presidential Executive Order to lead U.S. efforts to preserve and protect coral reef ecosystems. The USCRTF includes federal agencies, states, territories, commonwealths, and Freely Associated States. The USCRTF helps build partnerships, strategies, and support for on-the-ground action to conserve coral reefs.

National Water Quality Monitoring Council (NWQMC)
EPA partners with other federal agencies, states and other organizations to promote water quality monitoring. The NWQMC includes representatives from NOAA, Forest Service, NRCS, FWS, NPS and participation from USGS. A key deliverable of the NWQMC is the National Monitoring Conference. The NWQMC established a Justice, Equity, Diversity and Inclusion (JEDI) workgroup to advance inclusion of JEDI issues in programming and expand representation of Black, Indigenous, and people of color (BIPOC) and lesbian, gay, bisexual, transgender, queer, or questioning, intersex, asexual, and more (LGBTQ+) in the conference and the broader monitoring workforce.

National Aquatic Resource Surveys
EPA partners with other federal agencies, states, territories, and tribes in implementation of NARS, a national monitoring network producing statistically representative assessments on the condition of the nation's rivers and streams, lakes, wetlands, coastal estuaries, and Great Lakes nearshore waters. Federal agencies that have participated in NARS include NRCS, NPS, FS, BLM, and USGS.

Advice about Eating Fish and Shellfish
FDA and EPA collaborate to issue advice regarding eating fish and shellfish that are lower in mercury. This advice is for those who might become pregnant, are pregnant, or are breastfeeding as well as parents and caregivers who are feeding children. It can help people make informed choices about the types of fish that are nutritious and safe to eat.

Land and Emergency Management Programs

Brownfields
EPA's Brownfields and Land Revitalization Programs partner with the NPS's River, Trails and Conservation Assistance Program to support *Groundwork USA* and individual Groundwork Trust organizations in their efforts to engage youth in brownfields redevelopment and community revitalization.

Superfund Remedial Program
The Superfund Remedial Program maintains ongoing coordination and collaboration with ATSDR, NIEHS, HUD, and USACE as well as with the Federal Mining Dialogue and the Federal Remediation Technologies Roundtable, two multi-agency consortia. Interaction with these entities enhances program implementation through activities that are mutually beneficial, such as information sharing and resource leveraging. For example, ATSDR has a statutory mandate to complete health assessments on sites listed on EPA's National Priorities List while EPA conducts site characterization and remediation. Moreover, EPA site managers work with their ATSDR counterparts to coordinate public human health messaging. For NIEHS, EPA collaborates and coordinates academic research related to contaminant toxicities, site characterization and remediation and risk communication. EPA collaborates with HUD on residential risk evaluation and mitigation, while the Agency's work with USACE spans a wide range of technical, management and acquisition support functions to implement or oversee responsible party Superfund project implementation for the remedial and removal programs. EPA's participation in the Federal Mining Dialogue has established the Agency's role in a multi-agency (*e.g.*, DOE, DOI, etc.) partnership to address abandoned hard rock mining sites on federal and mixed ownership lands. Membership in the Federal Remediation Technologies Roundtable facilitates EPA's collaboration with multiple federal entities, such as DOD, NASA, DOT, to advance the use of innovative technologies to clean up hazardous waste contamination. EPA also co-chairs with DOE and DOD a subgroup of the PFAS Interagency Policy Committee (IPC) on PFAS cleanup and disposal. The purpose is to foster inter-agency collaboration and communication to accelerate PFAS cleanups. USDA, EPA, SBA, OMB/OIRA, DHS, DOT/FAA, OSTP and CEQ also participate in this IPC subgroup and CEQ leads the IPC group.

Superfund Federal Facilities Restoration and Reuse Program
EPA's Superfund Federal Facilities Restoration and Reuse Program coordinates with other Federal Agencies (OFAs); state, tribal, and local governments; and communities to implement its statutory responsibilities to ensure protective and efficient cleanup and reuse of federally contaminated landon the Federal Agency Hazardous Waste Compliance Docket and the NPL. Successful coordination requires strong partnerships and enhanced engagement by having regularly scheduled and ad hoc meetings that target and resolve critical programmatic issues, emphasize selection and implementation of protective cleanups, and recognize site reuse opportunities and successes. EPA has committed to early engagement with our partners that focus on issues with a problem-solving and action-oriented approach.

The Program also coordinates with national organizations that help to improve engagement such as the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the Interstate Technology and Regulatory Council (ITRC), and the Environmental Council of the States (ECOS). ASTSWMO has a Federal Facilities Research Center Subcommittee that promotes

and enhances state and territory involvement in the cleanup and reuse of contaminated federal facilities and fosters information exchange by and between states, territories, and OFAs. This includes identifying and researching emerging issues related to state and federal cleanup programs at federal facility sites, producing and disseminating resource documents and tools, and working with EPA and OFAs on a variety of federal facility issues and forums. Current topics of interest include addressing contaminants of emerging concern like PFAS; ensuring Applicable or Relevant and Appropriate Requirements (ARARs) are identified and implemented; coordination with civilian federal agencies; Performance-Based Contracting; and participating in the implementation and oversight of the Munitions Response Program. ITRC is a state-led coalition working to reduce barriers to the use of innovative air, water, waste, and remediation environmental technologies and processes. ITRC produces documents and training that broaden and deepen technical knowledge and expedite quality regulatory decision making while protecting human health and the environment. EPA, along with OFAs and industry representatives, works through ITRC in defining continuing research needs through its teams including on topics of relevance and benefit to federal facility sites, like PFAS, chemicals of emerging concern, and performance-based optimization of pump and treat systems.

Through the establishment of a national cleanup dialogue with the DOE and the states in coordination with ECOS, EPA supports special emphasis engagement for nuclear weapons sites, the largest and costliest portfolio of remaining federal facilities cleanup work. The Dialogue enhances ongoing working relationships in the cleanup of DOE Environmental Management sites and focuses on topics of mutual relevance and highest priority to ensure timely advancement of protective cleanups. The Dialogue exemplifies how collaboration can advance DOE sites and foster an understanding of challenges and successes nationally.

EPA also participates with OFAs and states on the Munitions Response Dialogue (MRD), partners with DOD research and development programs on munitions management and environmental restoration. Current MRD activities include EPA, DOD, Federal Land Management Agencies, and states updating and harmonizing previous munitions risk/hazard assessment methodologies. The MRD's goal is to achieve consensus on an updated munitions risk/hazard assessment methodology. EPA also co-chairs the Intergovernmental Data Quality Task Force (IDQTF) with DoD and DOE. The IDQTF works to ensure that environmental data are of known and documented quality and suitable for the intended use.

EPA actively participates in the Defense Environmental Restoration Program and Formerly Used Defense Sites (FUDS) forums hosted by the DOD. DOD's gathering of State and Federal regulators offers a unique opportunity to partner, share information, and facilitate more efficient and effective management of DoD's cleanup program. Recent forums focused on emerging issues, best practices, and lessons learned, as well as new policies and technology investments to maximize efficiencies and minimize the time it takes to complete cleanup at active, Base Realignment and Closure installations, and FUDS. Similar forums hosted by DOD service components provide EPA and states further opportunities for engagement, often focused on topics tailored to the unique aspects of the response programs of the Army, Navy or Air Force.

EPA coordinates with OFAs on the Federal Mining Dialogue (FMD). The FMD is a cooperative initiative among federal environmental and land management agencies that provide a national-

level forum for federal agencies to identify and discuss lessons learned and technical mining impact issues associated with the cleanup and reuse of abandoned and inactive hard rock mine and mineral processing sites across the country. EPA also engages with OFAs in the complementary Abandoned Uranium Mine Work Group, which focuses on investigation and cleanup of legacy uranium ore mining and mill tailing sites in the western U.S. Multiple program and enforcement offices participate for EPA in both venues to ensure coordinated engagement across the Agency.

Accelerate Work to Clean-up Contaminated Lands Under the Alaska Native Claims Settlement Act (ANCSA)

EPA with the other federal agencies (DOI, DOD and others as needed) will use a whole-of-government approach to clean up and address lands that were contaminated when transferred under the Alaska Native Claims Settlement Act (ANCSA). Agencies will strengthen collaboration between the Federal government, the State of Alaska, Alaska Native Corporations, Tribes, and Alaska Native Organizations to improve data and transparency through the creation of a joint inventory and public facing dashboard; prioritize assessment and cleanup of contaminated sites; and initiate cleanup of sites that have not yet been addressed.

RCRA Waste Minimization and Recycling: Supporting Sustainable Materials Management and a Circular Economy for All

Natural resource extraction and processing make up approximately 50 percent of total GHG emissions. Under RCRA, EPA provides data, information, guidelines, tools, and technical assistance on resource conservation, recycling, and resource recovery. As part of this work, EPA focuses on increasing the conservation and recovery of municipal solid waste (*e.g.*, plastics, aluminum, paper, food waste) and industrial waste (*e.g.*, construction and demolition materials) to advance a circular economy. EPA is working closely with other federal agencies to implement EPA's 2021 National Recycling Strategy, the 2020 Save our Seas Act 2.0, and the 2021 Infrastructure Investment and Jobs Act (IIJA), as well as to develop additional strategies on plastics, food waste and organics, critical minerals and electronics, textiles, and the built environment.

EPA works collaboratively with USDA, and the U.S. Food and Drug Administration (FDA) to reduce food waste in support of the national goal of reducing food loss and waste by 50 percent by 2030. EPA also is providing national estimates of food waste generation and management; convening, educating, and supporting communities seeking to reduce food waste.

The Save our Seas Act 2.0, passed by Congress in December 2020, demonstrates bipartisan congressional support and provides EPA with authority to further act on domestic recycling and address plastic waste through new grant programs, studies, and extensive federal coordination. EPA is coordinating with DOE, several offices within the DOC (NIST, NOAA, USTR and ITA), and USAID to implement Save our Seas. EPA also works with these same federal agencies and the Department of State to implement Save Our Seas 2.0, with particular emphasis on addressing the global plastic pollution challenge.

The IIJA was enacted on November 15, 2021. The IIJA provides funding for the solid waste infrastructure for recycling grants under section 302(a) of the Save Our Seas 2.0 Act as well as education and outreach grants focused on improving material recycling, recovery, management.

The IIJA also establishes new programs focused on battery recycling and directs EPA to develop a model recycling program toolkit, increase coordination on federal procurement guidelines, and provide assistance to the educational community to incorporate recycling best practices into school curriculum. EPA coordinates closely with DOE on the development of battery recycling best practices and the voluntary labeling program, as DOE also received significant new IIJA funding to advance battery recycling.

Resource Conservation and Recovery Act (RCRA) and Toxic Substances Control Act (TSCA) Polychlorinated Biphenyl (PCB) Programs
The RCRA Corrective Action Program coordinates closely with OFAs, primarily DOD and DOE, which have many corrective action sites. A top agency priority is to help federal facilities meet the Program's goals of investigating and cleaning up hazardous releases. EPA also coordinates with other agencies on cleanup and disposal issues posed by PCBs under the authority of the Toxic Substances Control Act (TSCA).

Emergency Preparedness and Response
EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil discharges pose to human health and the environment. EPA's leadership in federal preparedness begins with co-chairing the National Response Team (NRT) and the 13 Regional Response Teams (RRTs) with the USCG. These teams, which have member participation from 15 total federal agencies (EPA, USCG, DOS, DOD, DHS/FEMA, DOE, USDA, DHHS (including CDC, NIOSH, and ATSDR), DOI, DOC, DOT, U.S. Nuclear Regulatory Commission, U.S. General Services Administration (GSA), DOJ, and the U.S. Department of Labor [DOL] [including OSHA]), provide guidance and deliver federal assistance to state, local, and tribal governments to plan for and respond to natural disasters, acts of terrorism, and other major environmental incidents. This requires coordination with many federal, state, and local agencies. The Agency participates with other federal agencies to develop national planning and implementation policies at the operational level.

The National Response Framework (NRF), under the direction of DHS, provides for the delivery of federal assistance to states to help them deal with the consequences of terrorist events, acts of malfeasance, as well as natural and other significant disasters. EPA maintains the lead responsibility for the NRF's Emergency Support Function #10 (covering inland hazardous materials and petroleum releases) and participates in the Federal Emergency Support Function Leaders Group which addresses NRF planning and implementation at the operational level.

EPA supports the Weapons of Mass Destruction Strategic Group (WMDSG) crisis-action team intended to coordinate the United States Government's efforts to successfully resolve a WMD threat and support interagency senior leader decision making. The WMDSG is comprised of over 50 SMEs representing over 15 different departments and agencies. The WMDSG is on call 24/7/365 to respond to the FBI's Strategic Information and Operations Center (SIOC) within two hours. The WMDSG – led by the FBI – provides enhanced coordination by focusing on information sharing and operation synchronization. The WMDSG helps maintain situational awareness by working directly with FBI Counterterrorism Division (CTD) regarding investigative activities, and the National Assets Command Post (NACP) regarding crisis operations.

The National Biodefense Strategy (NBS) provides a single coordinated effort to orchestrate the full range of activity that is carried out across the United States Government to protect the American people from biological threats. The National Security Presidential Memorandum (NSPM)-14 strategy explains how the United States Government will manage its activities more effectively to assess, prevent, detect, prepare for, respond to, and recover from biological threats by coordinating its biodefense efforts with those of international partners, industry, academia, non-governmental entities, and the private sector. The Biodefense Steering Committee, chaired by the Secretary of Health and Human Services, and comprising the Secretary of State, the Secretary of Defense, the Attorney General, the Secretary of Agriculture, the Secretary of Veterans Affairs, the Secretary of Homeland Security, and the Administrator of the Environmental Protection Agency, will be responsible for overseeing and coordinating the execution of the strategy and its implementation plan, and ensuring federal coordination with domestic and international government and non-governmental partners. EPA regularly works with the Biodefense Steering Committee to address questions from the White House Security Council.

EPA supports the DHS Science and Technology Directorate through Interagency Agreements to conduct bench-scale research and full-scale field studies to improve the nation's ability to respond to and recover from terrorist incidents. These multi-year, interagency efforts include critical efforts to improve consequence management of wide-area biological events, chemical warfare agent attacks, and radiological incidents.

EPA continues to provide critical assets and expertise as members of DHS's nuclear incident response team (NIRT). The EPA maintains mission capable systems and personnel trained to respond to a nuclear incident. The EPA coordinates and collaborates with the DOE as part of NIRT. EPA and DOE participate in joint exercises and data exchanges to ensure our national programs provide equivalent capabilities during response activities.

EPA continuously monitors DoD investments and technological developments as they mature from basic research through advanced manufacturing for potential transition to civilian applications and reducing or eliminating duplication of efforts. Through the DoD sponsored multi-agency aligned irregular warfare support directorate program, the EPA submits and reviews partner agency requirements to identify synergistic efforts throughout all of government. EPA is providing DoD organizations laboratory sampling capacity for chemical warfare demilitarization operations at army depots. The EPA can mobilize units to these army depots and perform Chemical Agent Standard Analytical Reference Material (CASARM) Quality Assurance Plan compliant analytical services, which illustrates the strong partnership and alignment with the organizations.

Chemical Accident Prevention and Response

Under CAA Section 112(r), EPA administers the Risk Management Program (RMP) regulations designed to prevent and respond to chemical accidents at fixed facilities that use or store more than a threshold quantity (TQ) of listed highly toxic or flammable substances in a process. In administering these regulations, EPA collaborates closely with other federal agencies, including DOL, DOT, DHS, and others. An important nexus for this collaboration is the National Working Group on Chemical Safety and Security, which includes participation by EPA, DOL/OSHA, DHS, DOT, and BATF. The Working Group was initially formed as a result of Executive Order 13650 – Improving Chemical Facility Safety and Security – which tasked federal agencies with various

actions to further improve chemical facility safety and security in coordination with facility owners and operators. Through the Working Group, EPA works with federal agency partners to share information, develop fact sheets and guidance, and coordinate regulatory and policy actions relating to chemical safety and security. EPA also conducts additional regular coordination with DOL and OSHA, which administer the OSHA Process Safety Management standard, a regulation that shares common provisions with EPA's RMP regulations.

Under the Emergency Planning and Community Right-to-Know Act, EPA administers regulations that establish the list of extremely hazardous substances for community emergency response planning, as well as regulations that establish chemical inventory and release reporting requirements. In administering these regulations, EPA works closely with DOT, DHS, FEMA, and other agencies that are involved in planning for chemical emergencies. For example, EPA collaborates with the National Oceanic and Atmospheric Administration (NOAA) to develop the Computer Aided Management of Emergency Operations (CAMEO) software suite and Tier II Submit software, which provide free computer software tools to help fire departments, local emergency agencies and other stakeholders manage chemical inventory information and develop and implement emergency response plans.

Oil and Chemical Spills

EPA is responsible for maintaining the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which sets out the federal government's blueprint for responding to oil and hazardous substance spills. More specifically, the NCP details federal responsibilities and procedures for preparing for and responding to discharges of oil or releases of hazardous substances, pollutants, or contaminants in inland and coastal zones of the U.S. EPA is authorized to amend the NCP in consultation with other federal agencies. Under the NCP, EPA serves as the pre-designated On-Scene Coordinator for oil discharges and hazardous substance releases in the inland zone. As part of its responsibilities, EPA also maintains a list—called the Product Schedule—of dispersants and other chemical and bioremediation products that may be authorized for use during a spill.

EPA helps agencies such as FWS and the USCG and works in coordination to address oil discharges nationwide. EPA also assists agencies with judicial referrals when enforcement of violations becomes necessary. In addition, EPA and the USCG work in coordination to address oil spills nationwide. Under the authorities provided by the Federal Water Pollution Control Act (FWPCA) or Clean Water Act (CWA), EPA develops oil discharge response, prevention, and preparedness regulations. EPA also provides compliance monitoring activities to enforce these regulations and coordinates with USCG, DOT, and BSEE in their implementation.

EPA serves as member of the Interagency Coordinating Committee on Oil Pollution Research (ICCOPR) established under the Oil Pollution Act of 1990. ICCOPR coordinates a comprehensive program of oil pollution research, technology development, and demonstration among federal agencies in cooperation and coordination with external entities, such as industry, universities, research institutions, state governments, and other nations, as appropriate. Comprised of 16 federal agencies, ICCOPR is chaired by USCG, with EPA having served in a rotating Vice Chair capacity. ICCOPR develops priorities for oil spill research across the federal government on a 6-year cycle and prepares biennial reports to Congress on research activities and key interagency committee activities.

Strengthen Human Health and Environmental Protection in Indian Country
EPA, DOI, DHHS, USDA, and HUD work through several MOUs as partners to improve infrastructure on tribal lands. All five federal partners have committed to continue federal coordination in delivering services to tribal communities. The Infrastructure Task Force has built on prior partner successes, including improved access to funding and reduced administrative burden for tribal communities through the review and streamlining of agency policies, regulations, and directives as well as improved coordination of technical assistance to water service providers and solid waste managers through regular coordination meetings and web-based tools.

Homeland Security
EPA's Homeland Security, Preparedness and Response Program continues to develop and maintain agency assets and capabilities to respond to and support nationally significant incidents with emphasis on those involving chemical warfare agents. The Program implements a broad range of activities for a variety of internal and multi-agency efforts consistent with the NRF and the Homeland Security Presidential Directives that EPA leads or supports. This includes being the lead analytical agency for environmental sampling during a CWA incident. EPA also coordinates its preparedness activities with DHS, FEMA, FBI, and other federal, state, and local agencies.

Research to Support Homeland Security
EPA collaborates with numerous agencies on Homeland Security research to leverage funding across multiple programs and produce synergistic results. EPA's Homeland Security Research Program and OLEM work with DHS provide science-based information and options to support decisions made in its role as a lead agency responsible for cleanup during a Stafford Act declaration under ESF-10 and as the lead agency for water infrastructure. EPA also works with the DOD and its sub-organizations in its research work related to biological and chemical warfare agents. Further, EPA participates in a tri-agency research partnership (Technical Coordination Working Group [TCWG]) with the DOD and DHS that focuses on chemical and biological defense needs and gaps. TCWG activities include information sharing; joint science and technology research projects; and complementing policies. EPA also collaborates with the CDC in conducting biological agent research.

EPA works with these aforementioned entities and others to address areas of mutual interest and concern related to both homeland security cleanup and water infrastructure protection issues. The Program conducts joint research with USDA and DOI focusing on addressing homeland security threats at the intersection of the environment/public health and agriculture/natural resources. EPA also works with DOE to access and conduct research at the DOE's National Laboratories specialized research facilities, such as to establish the Water Security Test Bed and develop analytical capabilities for biological and chemical agents in environmental matrices.

Research to Support Land and Emergency Management Programs
EPA has complementary and joint programs with the USFS, USGS, USDA, USACE, NOAA, BLM, and many others to minimize duplication, maximize scope, and maintain a real-time information flow for land and emergency management issues. EPA coordinates its research to support a range of environmental priorities at other federal agencies, including work with DOD in its Strategic Environmental Research and Development Program and the Environmental Security

Technology Certification Program, and works with DOE and its Office of Health and Environmental Research. EPA also conducts collaborative laboratory research with DOD, DOI, and USGS to improve characterization and risk management options for dealing with subsurface contamination. EPA also works through the Interstate Technology Regulatory Council (ITRC) in defining continuing research needs through its teams on topics including PFAS, radionuclides, and brownfields.

Chemical Safety and Pollution Prevention Programs

National Coordination for General Issues Relating to Chemical Safety
EPA established an Interagency Policy Group comprised of other federal agencies with interest and expertise in chemical issues to hold periodic meetings to obtain input on significant actions such as the TSCA Risk Evaluations, rules, and potential existing chemical candidates for Prioritization under TSCA. The agencies on the Interagency Policy Group include: CPSC, DOD, OMB, NASA, DOL, SBA, NIH, FDA, and CDC. EPA has utilized this group to review TSCA materials including, but not limited to, risk evaluations documents related to the scoping of existing chemicals for risk evaluation and associated draft risk evaluations. Additionally, EPA has initiated regular engagement with both NIOSH and OSHA to discuss occupational exposure assessments and risk management.

EPA also engages in biannual meetings with the OMNE[2] Committee, which includes the Occupational Safety and Health Administration (OSHA), Mining Safety and Health Administration (MSHA), NIOSH, and the NIEHS. The OMNE Committee exists to provide a venue for federal agencies to share information and coordinate activities regarding proposed rules, risk assessments, and risk management strategies for controlling exposure to chemicals.

Federal Lead Action Plan
Established by Executive Order 13045, the President's Task Force on Environmental Health Risks and Safety Risks to Children comprises 17 federal departments and offices and is co-chaired by the Secretary of DHHS and the EPA Administrator. In December 2018, through cross-governmental collaboration, the Task Force unveiled the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts (Federal Lead Action Plan). The Federal Lead Action Plan is a blueprint for reducing lead exposure and associated harms by working with a range of stakeholders, including states, tribes and local communities, along with businesses, property owners and parents. In 2019, EPA released the *Implementation Status Report for EPA Actions under the December 2018 Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts*[3] and *Progress Report on the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.*[4] In FY 2022 and FY 2023, the Agency will continue to lead those goals and actions, coordinate with federal, state, tribal and community partners to amplify the impacts, and report on activities and implementation, as appropriate.

[2] The OMNE Committee is named for the first letter in each participating agency's name.

[3] For additional information, please visit: https://www.epa.gov/sites/default/files/2019-04/documents/leadimplementationbooklet_april2019.pdf.

[4] For additional information, please visit: https://www.epa.gov/leadactionplanimplementation/progress-report-federal-action- plan-reduce-childhood-lead-exposures.

Participation in International Agreements addressing Chemicals and Pesticide Management
To participate effectively in international agreements addressing chemicals and pesticide management (*e.g.*, the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention on Mercury, the Rotterdam Convention on the Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade, the Strategic Approach to International Chemicals Management, CODEX Alimentarius, and a wide range of multilateral, regional, and bilateral free trade agreements), EPA coordinates with other federal agencies, such as the Office of the U.S. Trade Representative (USTR), DOS, DOC, USDA, DOE, FDA, and DHHS on a regular basis to develop the policy views and positions of the United States.

EPA also coordinates with other parts of the U.S. Government, including the Agency for Toxic Substances and Disease Registry (ATSDR), NIH, and CPSC, on more technical international matters related to the safety and management of chemicals and pesticides. At the regional and global levels, EPA engages in bilateral cooperation and information exchange with a wide range of countries and regional organizations, such as the European Union (EU), Canada, China, Australia, Japan, Brazil, and many others.

In addition to participating in the U.S. Government trade development process, EPA also specifically engages in trilateral cooperation with Canada and Mexico through the U.S.-Mexico-Canada (USMCA) Free Trade Agreement, particularly with respect to the provisions related to agriculture, technical barriers to trade, and environment, among others. Such engagement is designed to promote further trade and regional cooperation among the three governments through targeted efforts and technical working groups. In 2022-2024, for example, under OCSPP's leadership, EPA is working within the USMCA's CEC with Canada and Mexico on a project to explore supply chain transparency to identify innovative approaches and digital tools supporting the identification and disclosure of chemical contents in goods and materials. The project is intended to foster best practices for information exchanges and collaboration and to engage different industry sectors, environmental experts, and government and technical authorities.

EPA also works closely with a number of countries in the context of the Organization for Economic Cooperation and Development (OECD) to further coordination amongst the OECD Member countries and observer governments. For example, OCSPP serves as the National Coordinator for the United States in support of the OECD Test Guidelines Program's mutual acceptance of data work, which aims to reduce the need to repeat health effects studies due to incompatible test protocols. Additionally, among others working groups and committees, EPA is engaged in the OECD Working Group on Pesticides (WGP), which shares pesticide registration work and develop tools to monitor and minimize pesticide risk to human health and the environment, and with the Chemicals and Biotechnology Committee, which oversees eleven working groups and other subsidiary bodies in the chemicals and pesticide arenas.

Capacity Building and Technical Assistance
EPA also participates significantly with other Agencies and international organizations in the development, coordination, and delivery of capacity-building and technical assistance. For example, OCSPP is collaborating with USDA's Foreign Agricultural Service and the Inter-American Institute for Cooperation on Agriculture to address the many inquiries from foreign countries on pesticide registrations, standard setting processes, maximum residue level (MRL)

harmonization, and risk assessment procedures. ORD and OLEM collaborate with USDA's Animal and Plant Health Inspection Service on research on foreign animal disease to determine decontamination and waste management strategies following large outbreaks impacting livestock (such as African Swine Fever, Highly Pathogenic Avian Influenza.

Certification and Training, Worker Protection, IPM, and Environmental Stewardship
EPA will continue to coordinate with USDA, DOD, DOI, DOE, tribes, territories, and states to implement Certification Plans for pesticide applicators who use the riskiest pesticides. EPA provides technical guidance and assistance to the states and tribes in the implementation of all pesticide program activities, such as protecting workers, promoting Integrated Pest Management and environmental stewardship. EPA also provides support through grants, cooperative agreements, or interagency agreements with states, tribes, and other partners, including universities, non-profit organizations, other federal agencies, pesticide users, environmental groups, and other entities, as necessary, to assist in strengthening and implementing EPA's pesticide activities, such as worker protection, pollinator protection and certifying pesticide applicators.

Assessing Potential Pesticide Risks with Supplemental Data
EPA relies on data from DHHS and USDA to supplement data from the pesticide industry to assist the Agency in assessing the potential risks of pesticides in the diets of adults and children. Specifically, EPA uses National Health and Nutrition Survey (NHANES) food consumption survey data developed by the DHHS, as well as pesticide residue data in food commodities generated by the USDA in its Pesticide Data Program (PDP) as inputs for dietary risk assessment.

Endangered Species & Pollinator Protection
EPA will continue collaborating with the USDA, FWS, and NMFS on protecting endangered and threatened species and improving methods for assessing potential risks and effects of pesticides to them. EPA, in cooperation with USDA, other federal agencies, state agencies, tribes, territories, and other entities, will continue to address pesticide risks to bees and other pollinators which are critical to our environment and the production of food crops.

Homeland Security – Protecting Food & Agriculture Sectors
EPA collaborates with the agencies such as DOD, DHS, DHHS, USDA, FDA, FEMA, and other federal, tribal, and state organizations on a variety of homeland security issues as part of the Government Coordinating Council (GCC) For Food and Agriculture. The issues focus on protecting the public and food and agriculture sector from various threats (*e.g.*, biological agents, diseases, or natural disasters) which are vital to critical functions of the government and private sector. EPA collaborates with these organizations on many issues such as research pertaining to effective disinfectants for high threat microorganisms, planning for response to various potential incidents, training and development of policies and guidelines. Technical and analytical support is provided to EPA Regions and states specific to enforcement and litigation of possible illegal pesticides and/or contamination of registered products. In addition to GCC efforts, EPA continues to partner with the OSHA, NIOSH, and CPSC on risk assessment and risk mitigation activities.

Pesticide Program Dialogue Committee (PPDC) and State and Tribal Stakeholder Groups
One of the Agency's methods for receiving input on pesticide issues has been the Pesticide

Program Dialogue Committee (PPDC), a Federal Advisory Committee, that brings together a broad cross-section of knowledgeable stakeholders from organizations that represent divergent views in order to discuss pesticide regulatory, policy, and implementation issues. The PPDC includes members from federal and state governments, industry/trade associations, pesticide user and commodity groups, consumer and environmental/public interest groups, and others. The PPDC provides a structured environment for meaningful information exchanges and discussions, and keeping the public involved in decisions that affect them. Dialogue with outside groups is essential for the Agency to remain responsive to the needs of its many partners. EPA also works extensively with the Association of American Pest Control Officials and the Tribal Pesticide Program Council to maximize communication with states, tribes, and territories on pesticide implementation issues.

General Research to Support Chemical Safety

EPA participates in a multi-agency effort under the *Tox21* Consortium. *Tox21* pools chemical research, data and screening tools from multiple federal agencies including EPA, and the NIH and FDA. EPA has contributed a chemical library, currently exceeding 4,000 chemicals, to the Tox21 testing program.[5,6] Nearly all of this library includes data from EPA's Toxicity Forecaster (*ToxCast*™), an effort that utilizes existing resources to develop faster, more thorough predictions of how chemicals may affect human and environmental health. The Tox21 Consortium has screened thousands of chemicals with more than 70 assays, resulting in more than 120 million data points which can inform decision making regarding the safety of chemicals. The full Tox21 library comprises approximately equal sized contributions from the EPA, the National Toxicology Program (NTP), and the National Center for Advancing Translational Sciences (NCATS).

PFAS are a large, diverse class of chemicals that have been widely used in industry and consumer products and are ubiquitous in the environment. EPA is committed to working collaboratively with federal, state, tribal and local partners to address the challenges posed by PFAS. Efforts include working with other federal agencies to address scientific challenges such as the lack of published toxicity data for most PFAS chemicals. The results will be used to identify categories of PFAS chemicals having similar structural and toxicological properties that may inform the development and strength of predictive toxicological models. EPA anticipates increased interagency collaboration on PFAS research and development efforts through an OSTP-led interagency working group, established as required by the FY 2021 National Defense Authorization Act. Resources requested in FY 2024 will build upon the research foundation formed from completed work.

Research to Support the Amended Toxic Substances Control Act

EPA collaborates globally with other federal agencies on research to accelerate the pace of chemical risk assessment and to provide greater regulatory certainty for the public. EPA is working with Health Canada and the European Joint Research Center on the development and testing of new non-animal approach methodologies to evaluate chemicals quickly and cost-effectively for safety. These new approach methods are a critical part of implementing the TSCA Strategic Plan

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[5] Collins, F.S., Gray, G.M., and Bucher, J.R. (2008). Transforming environmental health protection. *Science, 319*, 906–907. doi: 10.1126/science.1154619

[6] Tice, R.R., Austin, C.P., Kavlock, R.J., and Bucher, J.R. (2013). Improving the human hazard characterization of chemicals: a Tox21 update. *Environmental Health Perspectives, 121*, 756–765. doi: 10.1289/ehp.1205784.

to reduce, refine, and replace the use of vertebrates in toxicity testing and evaluation. EPA also commenced work with Health Canada and ECHA to promote sharing of non-confidential chemical safety information with the intent of advancing chemical evaluations across regulatory jurisdictions. This collaborative approach will help EPA and other federal agencies screen, prioritize, and evaluate chemicals, and promote implementation of alternative methods to replace vertebrate animal testing under TSCA. Finally, EPA is engaged in multiple OECD chemical safety groups that share information, expertise, and research results related to chemical safety. Ultimately, these international efforts will work towards creating transparent data requirements for industry and reducing the regulatory uncertainty of multiple regulatory environments globally.

Research to Support Agencywide Risk Assessment Activities

EPA consults and collaborates routinely with other federal agencies to improve the rigor and consistency of the science and practice of risk assessment. EPA engages on the science of individual assessments, such as the Integrated Risk Information System (IRIS) assessments. EPA also coordinates, respectively, with: ATSDR, through an MOU on the development of toxicological assessments; NIEHS and the National Toxicology Program, on assessment methodology, software, and assay development platforms; FDA on advisories and reports; and DOD on assessment development methods. EPA serves as advisors to federal and international agencies and departments (e.g. IARC, EFSA, Health Canada, WHO, ATSDR) to review and provide scientific input on risk assessment related topics. In addition, EPA collaborates with other federal agencies on complex human health assessment science topics through workshops, including those managed by National Academy of Sciences, Engineering, and Medicine (NASEM). EPA also participates in the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) to work towards increasing the efficiency and effectiveness of U.S. federal agency test method review, eliminating unnecessary duplication of effort, sharing experience among U.S. federal regulatory agencies, and reducing, refining, and replacing the use of animals in testing.

Environmentally Preferable Purchasing

EPA's Environmentally Preferable Purchasing Program (EPP) implements the direction provided to EPA in the Pollution Prevention Act, the National Technology Transfer and Advancement Act,8 Federal Acquisition Regulations, and Executive Orders that mandate sustainable federal procurement, including through the development and use of sustainability standards, specifications, and ecolabels. The EPP Program collaborates closely with partner federal agencies in developing, refining, and issuing the EPA Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing. Through FY 2022 these recommendations have been maintained and updated to include 48 private sector standards and ecolabels that cover 30 product and service categories commonly acquired through federal purchasing. These recommendations help federal procurement officials determine which private sector standards and ecolabels, among sometimes dozens within a single purchase category, are appropriate and effective in meeting federal procurement goals and mandates for environmental performance. The EPP Program's work has generated significant cost savings and environmental benefits to the federal government.

EPA also coordinates federal procurement programs that integrate environmental performance into procurement, including building software tools for seamlessly integrating sustainable procurement conditions and language into government procurement solicitations and contracts. Environmental

benefits calculators help federal agencies document the environment performance and benefits associated with their sustainable procurement. Working with the General Services Administration, the EPP Program assists in identifying and highlighting best-in-class existing blanket purchase contracts to further support and streamline efforts by federal procurement officials to meet federal environmental and cost effectiveness goals, putting tools into the hands of federal procurement officials, and collaborating with federal agencies such as the General Services Administration, National Institute of Standards and Technology, the Departments of Defense and Energy, and more.

Enforcement and Compliance Assurance Programs

General Enforcement Coordination

The Enforcement and Compliance Assurance Program coordinates closely with:

- Department of Justice (DOJ) on all civil and criminal environmental enforcement matters. In addition, the Program has coordinated with other agencies on specific environmental issues as described herein.
- The Chemical Safety and Hazard Investigation Board, Occupational Safety and Health Administration (OSHA), and Agency for Toxic Substances and Disease Registry (ATSDR) in preventing and responding to accidental releases and endangerment situations.
- Department of Interior's (DOI) Bureau of Indian Affairs (BIA), and Department of Health and Human Service's (DHHS) Indian Health Service (IHS) on issues relative to compliance with environmental laws in Indian country.
- The Department of Commerce (DOC) and Small Business Administration (SBA) on the implementation of the Small Business Regulatory Fairness Act (SBREFA). In addition, it has collaborated with the SBA to maintain current environmental compliance information at *Business.gov*, a website initiated as an e-government initiative in 2004, to help small businesses comply with government regulations. The Internal Revenue Service (IRS) on cases that require defendants to pay civil penalties, thereby assisting the IRS in assuring compliance with tax laws.
- United States Army Corps of Engineers (USACE) on wetlands issues.
- Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration on pipeline spills.
- United States Department of Agriculture (USDA) on the regulation of animal feeding operations and on food safety issues arising from the misuse of pesticides and shares joint jurisdiction with the Federal Trade Commission on pesticide labeling and advertising.

International Trade

EPA works with U.S. Customs and Border Protection (CBP) on implementing the secure International Trade Data System (ITDS) across all federal agencies and on chemical and pesticide imports, hazardous waste and Cathode Ray Tube exports, imports of internal combustion vehicles and engines that do not meet Clean Air Act requirements, implementation of the American Innovation and Manufacturing (AIM) Act, as well as on a variety of other import/export issues under the various statutes.

Coordination on Issues Involving Shared Jurisdiction

EPA and the Food and Drug Administration (FDA) share jurisdiction over general-purpose

disinfectants used on non-critical surfaces and some dental and medical equipment surfaces. EPA and FDA also collaborate and share information on Good Laboratory Program inspections to avoid duplication of inspections and maximize efficient use of limited resources. EPA, FDA, and the Federal Aviation Administration (FAA) jointly regulate drinking water safety on airlines via the Aircraft Drinking Water Rule. The Agency has entered into an agreement with the Department of Housing and Urban Development (HUD) concerning enforcement of the Toxic Substances Control Act (TSCA) lead-based paint notification requirements. The Agency has coordinated with the United States Coast Guard (USCG) under the Act to Prevent Pollution from Ships, and on discharges of pollutant from ships and oil spills under the Clean Water Act (CWA). EPA also works with DOI on CWA permit enforcement on the Outer Continental Shelf, as well as both the Interior and Transportation Departments on enforcement of CWA requirements for offshore facilities.

Criminal Enforcement

EPA's Criminal Enforcement Program coordinates with FBI, CBP, DOL, U.S. Treasury, DHS, DOI, USCG, and DOJ and with international, state, tribal, and local law enforcement organizations in the investigation and prosecution of environmental crimes. EPA also works with DOJ to establish task forces that bring together federal, state, tribal, and local law enforcement organizations to address environmental crimes. EPA has an Interagency Agreement with DOJ's Environment and Natural Resources Division to develop the first federal Environmental Crime Victim Assistance Program. This allows both agencies to meet their statutory obligations under the Crime Victims' Rights Act (CVRA) and the Victims' Rights and Restitution Act (VRRA), to make sure that environmental crime victims are notified of and accorded their rights under the CVRA and VRRA. In addition, the Program has an Interagency Agreement with the DHS to provide specialized criminal environmental training to federal, state, local, and tribal law enforcement personnel at the Federal Law Enforcement Center (FLETC) in Glynco, Georgia.

Monitoring the Environmental Compliance of Federal Agencies

Most environmental statutes require departments, agencies, and instrumentalities of the U.S. government to comply with environmental requirements just like any other regulated entity. EPA and states inspect federal facilities and take enforcement actions, as appropriate. In addition, Executive Order 12088 on *Federal Compliance with Pollution Control Standards* directs EPA to monitor compliance by federal agencies with all environmental laws and provide technical assistance. The Federal Facility Enforcement Program coordinates with other federal, state, tribal, and local agencies to ensure compliance by federal agencies with all environmental laws. EPA works with the Federal Facilities Environmental Stewardship and Compliance Assistance Center (*FedCenter*) (www.fedcenter.gov), which is governed by a board of more than a dozen contributing federal agencies. EPA also partners with other federal agencies to identify ways to expedite cleanup of Superfund sites and prevent and address regulatory compliance issues. *FedCenter* works with federal agencies to plan Federal Environmental Symposiums to encourage collaboration, information sharing, stewardship, and improved environmental compliance across the federal government. EPA is working with other Agencies through *FedCenter* to address Administration priorities including PFAS and Environmental Justice (EJ).

EPA has commenced a number of specific collaborative efforts to work one-on-one with other federal agencies to help foster productive relationships through environmental compliance

outreach efforts. EPA has developed partnerships with other federal agency headquarters offices including, for example, HHS, BIA, the Department of Defense (DOD), the Department of Energy (DOE), and the National Aeronautics and Space Administration (NASA) to discuss EPA's compliance initiatives and explore ways EPA can best help federal agencies remain aware of their environmental compliance status and requirements nationwide. EPA has instituted a biweekly dialogue with DOD to help address compliance issues at housing for military personnel with a particular focus on compliance with lead-based paint requirements.

In the context of EPA's compliance initiatives, the Agency proactively addresses potential significant noncompliance by sending letters to federal agencies highlighting facility noncompliance so facilities can expeditiously take the necessary actions to address the compliance issues. EPA also has issued multiple compliance advisories geared to other federal agencies providing information on the Agency's compliance initiatives.

Superfund Enforcement

EPA coordinates with OFAs in their use of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) enforcement authority. This includes the coordinated use of such authority at individual hazardous waste sites that are located on both non-federal land (EPA jurisdiction) and federal lands (other agency jurisdiction). As required by Executive Order 13016, EPA also reviews and concurs on the use of CERCLA Section 106 authority by other departments and agencies.

EPA coordinates closely with Federal Land Management Agencies (FLMAs), such as the Bureau of Land Management (BLM) and the Unites States Forest Service (USFS), at mixed ownership sites (*i.e.*, those sites located partially on privately-owned land and partially on federally owned land) pursuant to Executive Order 12580. EPA frequently enters into Memoranda of Understanding (MOUs) with FLMAs designed to provide a framework for agencies to coordinate response actions. Most recently, EPA has completed an MOU with FLMAs to improve the efficient and effective use of federal resources to cleanup at mixed ownership mining sites. EPA meets with DOI and USDA as part of the Federal Mining Dialogue, to discuss developments arising out of the CERCLA work at such sites.

EPA also coordinates with DOI, USDA, DOC, DOE, and DOD to ensure that appropriate and timely notices, required under CERCLA, are sent to the Natural Resource Trustees notifying them of potential damages to natural resources. EPA also coordinates with Natural Resource Trustees on natural resource damage assessments, investigations, and planning of response activities under Section 104 of CERCLA. When an enforcement action is initiated at a site where hazardous substances are found to have caused damages to natural resources, EPA coordinates with the Trustees by including them in negotiations with potentially responsible parties concerning the releases that have caused those damages.

EPA's Superfund Federal Facilities Enforcement Program ensures that: (1) all federal facility sites on the NPL have interagency agreements, also known as Federal Facility Agreements (FFAs) with enforceable cleanup schedules; (2) FFAs are monitored for compliance; (3) federal sites are transferred to new owners in an environmentally responsible manner; and (4) compliance assistance is available to the extent possible. This program also ensures that federal agencies

comply with Superfund cleanup obligations "in the same manner and to the same extent" as private entities. To enable the cleanup and reuse of such sites, the Federal Facilities Enforcement Program also has coordinated creative solutions that help restore facilities, so they can once again serve an important role in the economy and welfare of local communities, and the country. EPA also has established a partnership with the Environmental Council of the States (ECOS) and DOE, the DOE Dialogue, to build relationships and tackle enduring challenges at DOE cleanup sites.

International and Tribal Affairs Programs

Supporting Global Policy to Reduce Pollution and Harmful Chemicals
EPA has a strong network of partners working to achieve reductions in global mercury use and emissions, particularly when adverse U.S. impacts would be likely. EPA works closely with the DOS in leading the technical and policy engagement for the U.S. in the Minamata Convention on Mercury and the multi-stakeholder Global Mercury Partnership. In addition to the DOS, EPA collaborates with several federal agencies including USGS and USAID to advance robust implementation of the Minamata Convention by other countries. EPA also continues to share information through the Arctic Council on reducing releases of mercury which disproportionally impact indigenous arctic communities.

Similarly, EPA is engaged in a multi-pronged effort to address the growing global problem of marine litter. Here, EPA works with the DOS, NOAA, USAID, and Peace Corps as appropriate as they return to countries after COVID, to advance policy and technical solutions for marine litter in global fora. EPA also is working with USDA, OMB, and FDA on the on reducing food waste which includes international cooperation on measuring food waste reductions and pilot activities that can create market opportunities for U.S. technologies and innovation.

Tackling the Climate Crisis, Accelerating Environmental and Economic Justice
EPA works with international partners, such as foreign governments and international organizations, to deploy assistance that can strengthen on the ground action to tackle the climate crisis, reduce transboundary pollution that impacts local communities and travels through the environment to impact other communities across the globe, and that strengthen fundamental environmental rule of law. An important example of this work is EPA's engagement in the Group of Seven (G7) and the Group of Twenty (G20) through environment ministerial meetings which negotiate outcomes on key EPA issues such as climate change, food waste, marine litter, resource efficiency, and air quality. EPA's engagement with international financial institutions, United Nations (UN) entities, and the Organization for Economic Cooperation (OECD).

Supporting Environmental Priorities in Global Trade Policy and Implementation of Environmental Cooperation Agreements
Since the 1972 Trade Act mandated USTR engage in interagency consultations, EPA has played a key role in trade policy development. Specifically, EPA is a member of the Trade Policy Staff Committee, the Trade Policy Review Group and relevant subcommittees – interagency mechanisms that provide advice, guidance, and clearance to USTR in the development of U.S. international trade and investment policy.

EPA continues its participation in the North American Commission for Environmental Cooperation (CEC), which provides regional and international leadership to advance

environmental protection, human health, and sustainable economic growth in North America. EPA also will continue work on implementation of the Environment Chapter of the United States-Mexico-Canada Agreement (USMCA) and other free trade agreements. EPA also continues active participation in the United States Trade Representative (USTR)-led Interagency Environment Committee for Monitoring and Environment (IECME) established to promote Mexican and Canadian compliance with their environmental obligations. In addition, EPA continues to work with partners (including the U.S. Treasury, State Department, USAID, and the U.S. International Development Finance Corporation), to improve environmental governance of U.S. funded international development projects.

Addressing Transboundary Pollution

EPA collaborates with countries around the world to address foreign sources of pollution in coordination with DOS, USAID, DOJ, Treasury, and others. EPA works closely with DHHS to advance recognition of environmental risk factors of non-communicable diseases (NCDs) and how to mitigate the risks, including from lead and mercury. In addition, EPA continues to strengthen its activities in the Arctic by working with Alaska, tribes, federal agencies, and the private sector to build international support for U.S. environmental policy objectives through the Arctic Council. These objectives cover a range of topics, including reducing emissions and exposure to mercury. EPA also plays a leadership role with other agencies including NOAA, DOS, and USAID in crafting sound programs to address marine litter globally, ensuring that sound waste management and recycling strategies are advanced in key source countries. Further, EPA collaborates with DOS, the Government of Canada, tribes, federal agencies, and other stakeholders to address transboundary water pollution caused by historic and current mining practices in the Kootenai watershed.

Working in Indian Country

EPA is an active participant in the White House Council on Native American Affairs (WHCNAA). The WHCNNA is an interagency Principals-level council established by President Obama's Executive Order 13647 in June 2013, in response to requests from tribal leaders across Indian country for a Cabinet-level council to uphold treaty and trust obligations, support the Nation-to-Nation relationship, and improve tribal engagement and consultation. The Biden-Harris Administration has reconvened the WHCNAA and established six sub-committees: Climate Change, Tribal Homelands, and Treaties; Health; Education; Economic Development; Energy and Infrastructure; Public Safety and Justice; and International Indigenous Issues.

EPA serves as the co-lead (with DOI and USDA) of the Climate Change, Tribal Homelands, and Treaties Committee. Within this Committee, EPA is a co-lead and lead on two subcommittees, including the Tribal Treaty Rights MOU Subcommittee and the Climate Adaptation Subcommittee. Through this Committee, EPA also signed onto the renewed Sacred Sites Memorandum of Understanding. Additionally, EPA signed on as a supporting agency to the Native Language Memorandum of Agreement (MOA).

EPA also serves as the co-lead (with DOI and the DOS) on the International Indigenous Issues Committee. Within this Committee, EPA is co-lead on three subcommittees, including Human Rights and Environmental Justice, Cross Border Issues, and Climate Crisis.

Additionally, EPA is involved as a participant in the Health Committee.

EPA continues work as a federal partner under the federal interagency Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Tribal Treaty Rights and Reserved Rights, which was signed by the EPA Administrator on August 5, 2021. The revised MOU strongly reaffirms the federal government's duty to protect on and off reservation treaty, reserved rights and other similar rights, such as rights guaranteed by federal statute.

Central Planning, Budgeting and Finance Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA coordinates appropriately with Congress and other federal agencies, such as the U.S. Treasury, the Government Accountability Office (GAO), and GSA. EPA participates and makes active contributions to standing interagency management committees, including:

- the Chief Financial Officers Council, which focuses on improving resources management and accountability throughout the federal government.
- the Performance Improvement Council, which coordinates and develops strategic plans, performance plans, and performance reports as required by law.
- OMB-led E-Government initiatives, such as the Financial Management and Budget Formulation and Execution Lines of Business.
- the Bureau of Census-maintained Federal Assistance Awards Data System.
- the President's Management Council, which oversees developing and implementing Cross- Agency Priority (CAP) goals; and
- the Evaluation Officer Council, which serves as a forum to exchange information with the broader Federal evaluation community.

Provide Government-to-Government Employee Relocation Services

EPA provides government-to-government employee relocation services via interagency agreements through the EPA's Federal Employee Relocation Center (FERC) as a Working Capital Fund (WCF) activity. EPA-FERC provides "one-stop shop" domestic and international relocation services to other federal agencies to increase operational efficiency and save the government money. Relocation services are currently provided internally to all EPA offices, and externally to the Transportation Security Administration (TSA), Alcohol, Tobacco, Firearms, and Explosives (ATF), Department of Labor (DOL), Office of Personnel Management (OPM), United States Patent and Trademark Office (USPTO), Health and Human Services Office of Global Affairs (HHS-OGA), United States Agency of Global Media (USAGM), and Federal Bureau of Prisons (BOP).

Environmental Justice and External Civil Rights Programs

Environmental Justice

Presidential EO 14008 on *Tackling the Climate Crisis at Home and Abroad* enhanced and expanded several important means of interagency coordination and collaboration related to environmental justice. EO 14008 elevated the existing Interagency Working Group on Environmental Justice, formerly chaired by EPA, to the White House Environmental Justice

Interagency Council (IAC), chaired by the CEQ. This executive order also established a White House Environmental Justice Advisory Council (WHEJAC) to provide advice and recommendations to the IAC and CEQ on environmental justice recommendations for the entirety of the executive branch of the federal government. The IAC will be the primary venue for inter-agency coordination of executive branch federal activities related to environmental justice. Through the Justice40 Initiative, also mandated in EO 14008, the IAC will work to achieve the goal that forty percent of federal benefits from certain federal programs flow to disadvantaged communities and will publish an annual public performance scorecard on implementation by federal agencies. The IAC will likewise coordinate recommendations on further updates to EO 12898 and provide leadership to interagency efforts to address current and historic environmental injustices. As stipulated in EO 14008, EPA will provide all support necessary for administration of the WHEJAC and is one of three agencies charged with providing support to CEQ for administration of the IAC. EPA also will play a prominent membership role within the IAC as a participating agency.

Mission Support Programs

Working with Federal Partners on Improving Management and Accountability throughout the Federal Government

EPA provides leadership and expertise to government–wide activities in various areas of human resources, grants management, contracts management, suspension and debarment, and homeland security. These activities include specific collaboration efforts through:

- The Chief Human Capital Officers Council, a group of senior leaders that discuss human capital initiatives across the federal government.
- The Legislative and Policy Committee, a committee comprised of other federal agency representatives who assist OPM in developing plans and policies for training and development.
- The Chief Acquisition Officers Council, the principal interagency forum for monitoring and improving the federal acquisition system. The Council also is focused on promoting the President's specific initiatives and policies in all aspects of the acquisition system.
- The Award Committee for E-Government (E-Gov) provides strategic vision for the portfolio of systems/federal wide supporting both federal acquisition and financial assistance. Support also is provided to the associated functional community groups, including the Procurement Committee for E-Gov, the Financial Assistance Committee for E-Gov, and the Intergovernmental Transaction Working Group.
- The Grants Quality Service Management Office (QSMO) leads efforts to transform the federal grants management process by focusing on standardization and modernization of grants systems to increase efficiency and reduce burden for grant applicants, recipients, and the federal grants workforce; and better leveraging the buying power of the government to access high-quality shared solutions and reduce costs. The Grants QSMO supports the work of OMB's Office of Federal Financial Management and Office of the Federal Chief Information Officer and GSA's Office of Shared Solutions and Performance Improvement.
- The Interagency Suspension and Debarment Committee (ISDC), a representative committee of federal agency leaders in suspension and debarment. The Committee facilitates lead agency coordination, serves as a forum to discuss current suspension and debarment related issues, and assists in developing unified federal policy. Besides participating in the ISDC, EPA: (1) provides instructors for the National Suspension and Debarment Training Program offered

through the Federal Law Enforcement Training Center, and (2) supports the development of coursework and training on the suspension and debarment process for the Inspector General Academy and the Council of the Inspectors General on Integrity and Efficiency.

- The Financial Management Line of Business (FMLoB) has been expanded to also encompass the Grants Management Line of Business. The combined FMLoB, with U.S. Treasury as the managing partner, will more closely align the financial assistance and financial management communities around effective and efficient management of funds. EPA also participates in the Grants.gov Users' Group, as well as the Federal Demonstration Partnership which is designed to reduce the administrative burdens associated with research grants.
- The Interagency Committee on Federal Advisory Committee Management (Committee Management Officer Council) provides leadership and coordination on federal advisory committee issues and promotes effective and efficient committee operations government-wide. In addition to serving on the Council, EPA works with the GSA Committee Management Secretariat to establish and renew advisory committees, conduct annual reviews of advisory committee activities and accomplishments, maintain committee information in a publicly accessible online database, and develop committee management regulations, guidance, and training. Further, EPA participates on the GSA Federal Advisory Committee Act (FACA) Attorney Council Interagency Workgroup to keep abreast of developments in the statutory language, case law, interpretation and implementation of the FACA.
- The Interagency Security Committee (ISC) is the leading organization for nonmilitary federal departments and agencies in establishing policies for the security and protection of federal facilities, developing security standards, and ensuring compliance with those standards. EPA participates in the ISC as a primary member and in sub-committees and workgroups to facilitate EPA's compliance with ISC standards for facilities nationwide.
- The OPM Background Investigations Stakeholder Group (BISG) is a collaborative organization that is derived from the Intelligence Reform and Terrorism Prevention Act of 2004. The BISG is comprised of senior security officials across the federal government who are responsible for the submission, adjudication and/or oversight of personnel security programs. EPA works with this group to discuss topics regarding background investigations, focusing on standardizing and improving the Agency's personnel security program.
- EPA manages the Senior Environmental Employment (SEE) Program's interagency agreements with other federal agencies. The interagency agreements are with the White House/CEQ, the CDC/ATSDR, and the Gulf Coast Ecosystem Restoration Council. SEE enrollees provide administrative, technical, and professional support to these agencies for projects relating to pollution prevention, abatement, and control.
- EPA's Office of Administrative Law Judges (OALJ) partners with other Federal agencies, including the USPTO, NOAA, and the Equal Employment Opportunity Commission, to serve as Presiding Officers for proceedings to adjudicate complaints brought before the partner organizations. This collaboration allows partner organizations the ability to provide constitutionally guaranteed legal due process and review without staffing and supporting their own Offices of Administrative Law Judges, while EPA's judges expand their experience and knowledge in the area of administrative law. The services OALJ provides to other agencies are reimbursed by the borrowing organization.

Work with the Department of Interior's Interior Business Center

In FY 2024, EPA will continue working with DOI's Interior Business Center (IBC), an OPM- and

OMB-approved Human Resources Line of Business shared service center. IBC offers HR transactional processing, compensation management and payroll processing, benefits administration, time and attendance, HR reporting, talent acquisition systems, and talent management systems. EPA also continues its charter membership on the OPM HR Line of Business (LoB) Multi Agency Executive Strategy Committee (MAESC), providing advice and recommendations to the Director of OPM as well as additional government-wide executive leadership, for the implementation of the HR LoB vision, goals, and objectives.

Partnering with GSA on the USAccess *Program*
EPA is partnering with GSA on the *USAccess* Program for Personal Identity Verification cards and identity credential solutions, which provides an efficient, economical and secure infrastructure to support its credentialing needs, and migrations to the Enterprise Physical Access Control System, allowing the Agency to control access in EPA space, including restricted and secure space.

Environmental Information Programs
To support EPA's overall mission, the Agency collaborates with federal, state, and tribal agencies on a variety of initiatives focused on making government more efficient and transparent in protecting human health and the environment. EPA's Environmental Information programs are primarily involved in the information technology (IT), information management (IM), and information security aspects of the projects on which it collaborates.

The Chief Information Officer (CIO) Council
The CIO Council is the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of federal information resources. The Council develops recommendations for IT/IM policies, procedures, and standards; identifies opportunities to share information resources; and assesses and addresses the needs of the federal IT workforce.

The Chief Data Officer (CDO) Council
The CDO Council was established by statute in the Foundations for Evidence-Based Policymaking Act of 2018. The Council's vision is to improve government mission achievement and increase the benefits to the Nation through improvement in the management, use, protection, dissemination, and generation of data in government decision-making and operations.

eRulemaking
The eRulemaking Program is a Federal E-Government shared LoB that manages the Federal Docket Management System (FDMS) and Regulations.gov. The Program provides the public with one-stop access to electronic dockets and the ability to electronically comment on proposed rulemakings and de-regulatory actions for multiple federal agencies.

At the beginning of FY 2020, the Program Managing Organization transitioned from EPA to the GSA. EPA will continue working with GSA as a Partner Agency to improve FDMS and provide the public with access to electronic dockets and the ability to electronically comment on proposed rulemaking and de-regulatory actions.

The National Environmental Information Exchange Network (EN)
EPA's EN Program and CBP are coordinating on using the Automated Commercial Environment

(ACE) system. This coordination will lead to automated processing of over 8 million EPA-related electronic filings needed to clear legitimate imports and exports. With the move from paper filings to electronic filings combined with automated processing through ACE, filing time can be reduced from weeks/days to minutes/days. This significant processing improvement directly impacts the movement of goods into commerce and the economy while helping to ensure compliance with environmental and CBP laws and regulations. It also helps the U.S. Government keep pace with the speed of business.

Automated Commercial Environment/International Trade Data System (ACE/ITDS)
ITDS is the electronic information exchange capability, or "single window," through which businesses will transmit data required by participating agencies for the import or export of cargo. ACE is the system built by CBP to ensure that its customs officers and other federal agencies have the information they need to decide how to handle goods and merchandise being shipped into or out of the United States. It also will be the way those agencies provide CBP with information about potential imports/exports. ITDS eliminates the need, burden, and cost of paper reporting. It also allows importers and exporters to report the same information to multiple federal agencies with single submission and facilitates movement of cargo by automating processing of the import and exports. ITDS provides the capability for industry to consolidate reporting for commodities regulated by multiple agencies. For these consolidated reports, the industry filers will receive the appropriate status response when their filings meet each agency's reporting requirements. Once all agency reporting requirements have been met, filers can receive a coordinated single U.S. government response to proceed into the commerce of the United States.

EPA has the responsibility and legal authority to make sure pesticides, toxic chemicals, vehicles and engines, ODS, and other commodities entering and hazardous waste exiting the country meet its human health and environmental standards. EPA's ongoing collaboration with CBP on the ACE/ITDS effort will improve the efficiency of processing these shipments through information exchange between EPA and CBP and automated processing of electronic filings. As resources permit, EPA will continue to work with CBP to automate the manual paper review process for admissibility so that importers and brokers (referred to collectively as Trade) can know before these commodities are loaded onto an airplane, truck, train, or ship if their shipment meets EPA's reporting requirements. Because of this automated review, Trade can greatly lower its cost of doing business and customs officers at our nation's ports will have the information on whether shipments comply with our environmental regulations. EPA will continue to collaborate with CBP to support regulatory changes and integrate with new ACE capabilities for streamlining the import and export processes for America's businesses.

Geospatial Information
EPA works with 31 federal agencies through the activities of the Federal Geographic Data Committee (FGDC) and the OMB Geospatial Line of Business (Geo LoB). EPA also participates in the FGDC Steering Committee. A key component of EPA's work with FGDC is developing and implementing the National Spatial Data Infrastructure (NSDI) and the National *GeoPlatform*. The key objective of the NSDI is to make a comprehensive array of national spatial data – data that portrays features associated with a location or tagged with geographic information and can be attached to and portrayed on maps – easily accessible to both governmental and public stakeholders. Use of this data, in tandem with analytical applications, supports several key EPA

and government-wide business areas. These include ensuring that human health and environmental conditions are represented in the appropriate contexts for targeting and decision making; enabling the assessment, protection, and remediation of environmental conditions; and aiding emergency first responders and other homeland security activities. EPA supports geospatial initiatives through efforts such as EPA's *GeoPlatform*, EPA's Environmental Dataset Gateway, the Exchange Network, National Environmental Policy Act (NEPA) Assist, *EJScreen*, the EPA Metadata Editor, Facilities Registry System (FRS) Web Services, and *My Environment*. EPA also works closely with its state, tribal, and international partners in a collaboration that enables consistent implementation of data acquisition and development, standards, and technologies supporting the efficient and cost-effective sharing and use of geographically-based data and services.

Federal Executive Boards
The Federal Executive Boards Line of Business will be established in FY 2023. This LoB will replace the current structure and provide more support to regional Federal Executive Board staff members. In line with the Biden Administration's initiatives, the Federal Executive Boards support and strengthen the Federal Workforce, including by serving as a forum for communication and collaboration among Federal agencies outside of Washington, DC.

The Administrator's Office

Regulatory Management and Economic Analyses
EPA's Policy Office (OP) interacts with federal agencies during its rulemaking activities. Per governing statutes and agency priorities, OP submits "significant" regulatory actions to OMB for interagency review prior to signature and publication in the *Federal Register*. In addition, OP coordinates EPA's review of other agency's regulatory actions submitted to OMB for review. Under the Congressional Review Act, rules are submitted to each chamber of Congress and to the Comptroller General of the United States. For regulations that may have a significant economic impact on a substantial number of small entities, OP collaborates extensively with SBA and OMB. OP also collaborates with other federal regulatory and natural resource agencies to collect data used in economic benefit-cost analyses of environmental regulations and policies and to foster improved interdisciplinary research and reporting. Activities include representing EPA on interagency workgroups or committees tasked with measuring the economic benefits and costs of federal policies and programs. Occasionally, OP also provides technical reviews of other agencies research and analyses. In addition, OP's Office of Federal Activities, engages early with the lead federal agency and supports CEQ for significant regulatory actions that require compliance with National Environmental Policy Act via an Environmental Impact Statement (EIS). In so doing, EPA provides technical assistance, as needed, to help scope and develop the draft EIS, recommending ways to avoid and minimize impacts to improve environmental outcomes.

Children's Health
The Administrator of EPA and the Secretary of DHHS co-chair the President's Task Force on Environmental Health Risks and Safety Risks to Children. The Task Force comprises 17 federal departments, agencies, and White House offices. A senior staff steering committee, co-chaired by the Director of EPA's Office of Children's Health Protection (OCHP), coordinates interagency cooperation on Task Force priority areas, including lead, asthma disparities, climate change, emergencies, and disasters. As part of this effort, OCHP coordinates with other agencies to improve government-wide support in implementing children's health legislative mandates and

outreach, including providing children's environmental health expertise on interagency activities and coordinating EPA expertise. OCHP also coordinates with ATSDR to support provision of training and hands on consultations with doctors, nurses, and other medical professionals to address issues of potential exposures of children to environmental contaminants, such as lead and asthma triggers including mold and vermin. OCHP also works the Interagency Policy Council's groups on Maternal Health and Child Development, as well as with other federal agencies to address emerging risks to children's environmental health and supports federal interagency information exchange and cooperation, such as on lead and wildfires. This work supports not only Presidential Executive Order (EO) 13045: *Protection of Children from Environmental Health Risks and Safety Risks,* but also addresses climate change and environmental justice under Presidential EO 14008: *Tackling the Climate Crisis at Home and Abroad.*

Climate Adaptation and Resilience

Presidential EO 14008 on *Tackling the Climate Crisis at Home and Abroad* created the National Climate Task Force which facilitates the organization and deployment of a government-wide approach to combat the climate crisis. A key component of this is to increase resilience to the impacts of climate change and to protect public health; conserve our lands, waters, oceans, and biodiversity. EPA works with FEMA, DOT, DOI, NOAA, HUD, BIA, HHS, NASA, and many other agencies to ensure our programs, infrastructure investments, remedies and communities are resilient to the immediate and long-term impacts of the changing climate both within the task force and through the full breadth of partnership EPA has with Office of Federal Activities. EPA also works with other federal agencies through the U.S. Global Change Research Program's (USGCRP's) Federal Adaptation and Resilience Group to coordinate federal research related to climate resilience and adaptation. In June 2013, the White House Council on Native American Affairs was established by EO. In June 2021, a subgroup on Tribal Climate Adaptation was created, chaired by EPA, to enable a whole-of-government approach to supporting tribes as they anticipate, prepare for, adapt to, and recover from the devastating impacts of climate change.

EPA participates in interagency efforts related to climate change and the Nation's coasts. EPA is engaging the NIST's Climate Resiliency Program to share experiences, expertise, and support areas of mutual interests.

National Climate Task Force

The Administrator of EPA is a member of the National Climate Task Force. The Task Force shall facilitate the organization and deployment of a Government-wide approach to combat the climate crisis. This Task Force shall facilitate planning and implementation of key Federal actions to reduce climate pollution; increase resilience to the impacts of climate change; protect public health; conserve our lands, waters, oceans, and biodiversity; deliver environmental justice; and spur well-paying union jobs and economic growth. As necessary and appropriate, members of the Task Force will engage on these matters with state, local, tribal, and territorial governments; workers and communities; and leaders across the various sectors of our economy.

Community Revitalization and Sustainable Communities

OP participates in several Interagency Working Groups (IWG) and Interagency Policy Committees (IPC), including the Rural Prosperity IPC, Food Strategy IPC, and the Coal and Powerplant Communities IWG. These interagency efforts support improving community outcomes on a range

of issues including climate resilience, economic transition, diversification, prosperity, and environmental protection. These work groups have grown out of recent executive orders and policy initiatives taken on by the Administration. OP works collaboratively with national program offices and EPA regions to support their involvement in these interagency efforts so that the full range of EPA equities are at the table and engaged to advance Administration priorities.

As part of the Coal and Power Communities Interagency Work group (IWG), OP is working closely with the eleven other federal agencies to support coal, oil and gas, and power plant communities to create good-paying union jobs, spur economic revitalization, remediate environmental degradation, and support energy workers. OP is actively participating in the IWG's working group activities, including community engagement, integration, policy, and investments. OP also is supporting the efforts of the IWG by engaging with EPA's regional offices (particularly R3 and R5) as well as national programs to support the Administration's efforts to help coal and power plant communities transition their economies.

The EPA Administrator co-chairs the Extreme Heat IWG and OP's Associate Administrator is co-leading the work group with colleagues from HHS and NOAA with over a dozen federal agencies and White House participation. OP also is working alongside OAR, ORD, and OEJ to contribute knowledge and experience on green infrastructure, effective communication, and climate adaptation approaches to help communities reduce the occurrence and impact of heat islands and extreme heat (advancing both climate adaptation and mitigation).

OP is working with EPA's Offices of Air and Radiation and Mission support, DOT, and DOE to explore interagency approaches that advance the Administration's priorities and Presidential commitments on electric vehicles. This work has a specific emphasis on helping communities distribute charging infrastructure equitably, in low-income neighborhoods in both rural and urban areas.

OP has several inter-agency efforts on priority projects funded through the American Rescue Plan. OP is working with DOT and HUD to ensure that infrastructure funding investments advance communities' visions and priorities. OP also is working with federal partners to advance community-level efforts to simultaneously advance community priorities and climate goals. Both of these projects model the application of a community-driven approach to efficiently advance agencies' mission. They also demonstrate an effective way to advance the goals outlined in EO 14008 on addressing the climate crisis and environmental justice.

OP is the lead on EPA's Memorandum of Agreement with FEMA, which allows the two agencies to work together to help communities become safer, healthier, and more resilient. The agencies collaborate to help communities hit by disasters rebuild in ways that protect the environment, create long-term economic prosperity, and enhance neighborhoods. FEMA and EPA also help communities incorporate strategies, such as green infrastructure, into their hazard mitigation plans and direct development away from vulnerable areas. EPA and FEMA are using the lessons they learn from working together under this agreement and with other federal agencies to better coordinate assistance to communities on hazard mitigation planning, climate adaptation actions, and post-disaster recovery. OP coordinates closely with all 10 Regions and many National Programs on this partnership.

OP is using an interagency agreement with GSA to update the Smart Location Calculator to give the federal government more information to guide decisions about locating new federal investments. GSA and EPA also are collaborating on development and technical assistance around a new site selection support tool to help GSA and other federal agencies make decisions on where to site new government facilities informed by the cost local and state governments would likely incur to provide infrastructure and services. The tool will be based on known relationships between the built environment and the cost to provide infrastructure for a site and related costs for operation and maintenance over time. EPA also has historically coordinated with GSA on their Good Neighbor Program by helping communities leverage major federal investments, such as courthouses or ports of entry, to focus on downtown revitalization.

OP has in the past and continues to coordinate with agencies and departments that work in communities across the country. This has been through formal and semi-formal arrangements like the HUD-DOT-EPA Partnership for Sustainable Communities (PSC) and Strong Cities, Strong Communities (SC2). Further, OP has a number of Interagency Agreements (IA) and Memoranda of Agreements to partner with other agencies on technical assistance in areas like disaster recovery, capacity building at the community level, and economic revitalization that supports improved environmental and human health results. Partnering agencies include and have included: USDA (Rural Development, Forest Service, Agricultural Marketing Service), DOT, FEMA, GSA, HUD, HHS, Appalachian Regional Commission, Northern Border Regional Commission, Delta Regional Authority, and EDA. These agencies often participate in community workshops that OP offers through technical assistance programs such as: Local Foods, Local Places, Building Blocks, and Recreation Economy for Rural Communities.

Interagency Policy Committees
EPA participates in interagency groups and collaborates with federal partners on the implementation of Executive Orders including EO 14017 on *America's Supply Chains*, Climate Innovation, Climate and Economics, and the US-EU Summit on Trade and Technology Council. EPA is working with NSC, NEC, CEQ, DOC, DOE, DOD, State, and other agencies on supply chain issues associated with semiconductors, critical minerals, EV batteries, and other critical materials. EPA also actively participates on the Federal Permitting Improvement Steering Council, the White House Task Force on Worker Organizing and Empowerment and the Interagency Policy Committee (IPC) on Workforce Development and the White House Gender Policy Council.

Interagency Council on Statistical Policy
The Interagency Council on Statistical Policy (ICSP) is the coordinating body for the Federal Statistical System and plays a leading role in implementing the Evidence Act and advancing the Federal Data Strategy. The ICSP sets strategic goals for modernizing agency statistical practices and products and advances those goals through cross-agency collaborations on strategic initiatives. EPA will continue to work with the ICSP to advance the Federal statistics and availability of robust information to support evidence-based policy.

The Inspector General

Work with the Council of Inspectors General on Integrity and Efficiency (CIGIE)
EPA's Inspector General is a member of the Council of Inspectors General on Integrity and

Efficiency (CIGIE), an organization comprised of federal Inspectors General (IGs), GAO, and the FBI. The CIGIE coordinates and improves the way IGs conduct audits, investigations, and internal operations. The CIGIE also promotes joint projects of government-wide interest and reports annually to the President on the collective performance of the IG community.

Activity Coordination, Information Exchange, and Training
EPA's OIG coordinates criminal investigative activities with other law enforcement organizations such as the FBI, Secret Service, and DOJ. In addition, the OIG participates with various inter-governmental audit forums and professional associations to exchange information, share best practices, and obtain or provide training. The OIG also promotes collaboration among EPA's partners and stakeholders in its participation of disaster response and its outreach activities.

Collaborative Work with Inspectors General and Other Partners
EPA's OIG initiates and participates in collaborative audits, program evaluations, and investigations with OIGs of agencies with an environmental mission such as the DOI, USDA, as well as other federal, state, and local law enforcement agencies as prescribed by the IG Act, as amended.

Statutory Duties
As required by the IG Act, EPA's OIG coordinates and shares information with the GAO. EPA's OIG currently serves as the Inspector General of the U.S. Chemical Safety and Hazard Investigations Board (CSB). EPA's OIG will continue to perform its duties with respect to the CSB until otherwise directed.

Environmental Protection Agency
Acronyms for Statutory Authority

The following is not an exhaustive list of [U.S.] statutory authorities but includes those commonly referred to by acronym in this document.

ACE: Air, Climate, and Energy

ADA: Americans with Disabilities Act

ADEA: Age Discrimination in Employment Act

AEA: Atomic Energy Act, as amended, and Reorganization Plan #3

AHERA: Asbestos Hazard Emergency Response Act

AHPA: Archaeological and Historic Preservation Act

AIM: American Innovation and Manufacturing Act of 2019

APA: Administrative Procedures Act

ARP: American Rescue Plan

ARRA: American Recovery and Reinvestment Act

ASHAA: Asbestos in Schools Hazard Abatement Act

ASTCA: Antarctic Science, Tourism, and Conservation Act

AWIA: America's Water Infrastructure Act of 2018

BEACH Act of 2000: Beaches Environmental Assessment and Coastal Health Act

BRERA: Brownfields Revitalization and Environmental Restoration Act

BUILD Act: Brownfields Utilization, Investment, and Local Development Act

CAA: Clean Air Act

CAAA: Clean Air Act Amendments (1970 and 1990)

CARES: Coronavirus Aid, Relief, and Economic Security Act

CCA: Clinger Cohen Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act (1980)

CFOA: Chief Financial Officers Act

CICA: Competition in Contracting Act

CRA: Civil Rights Act

CSA: Computer Security Act

CWA: Clean Water Act (1972)

CWPPR: Coastal Wetlands Planning, Protection, and Restoration Act of 1990

CZARA: Coastal Zone Act Reauthorization Amendments

CZMA: Coastal Zone Management Act

DERA: Diesel Emissions Reduction Act

DPA: Deepwater Ports Act

DREAA: Disaster Relief and Emergency Assistance Act

DWWIA: Drinking Water and Wastewater Infrastructure Act of 2021

ECRA: Economic Cleanup Responsibility Act

EFOIA: Electronic Freedom of Information Act

EISA: Energy Independence and Security Act of 2007

EO: Executive Order

EPAct: Energy Policy Act of 2005

EPAA: Environmental Programs Assistance Act

EPCA: Energy Policy and Conservation Act

EPCRA: Emergency Planning and Community Right to Know Act (1986)

ERDDAA: Environmental Research, Development and Demonstration Authorization Act

ESA: Endangered Species Act

ESECA: Energy Supply and Environmental Coordination Act

FACA: Federal Advisory Committee Act

FAIR: Federal Activities Inventory Reform Act

FASA: Federal Acquisition Streamlining Act (1994)

FAST: Fixing America's Service Transportation Act

FCMA: Fishery Conservation and Management Act

FEPCA: Federal Environmental Pesticide Control Act of 1972, enacted as amendments to FIFRA

FFATA: Federal Funding Accountability and Transparency Act of 2006

FFDCA: Federal Food, Drug, and Cosmetic Act

FFMIA: Federal Financial Management Improvement Act of 1996

FGCAA: Federal Grant and Cooperative Agreement Act

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act (1972)

FISMA: Federal Information Security Modernization Act

FITARA: Federal Information Technology Acquisition Reform Act

FLPMA: Federal Land Policy and Management Act

FMFIA: Federal Managers' Financial Integrity Act (1982)

FOIA: Freedom of Information Act

FPA: Federal Pesticide Act

FPAS: Federal Property and Administration Services Act

FQPA: Food Quality Protection Act (1996)

FRA: Federal Register Act

FSA: Food Security Act

FSMA: Food Safety Modernization Act

FTTA: Federal Technology Transfer Act

FUA: Fuel Use Act

FWCA: Fish and Wildlife Coordination Act

FWPCA: Federal Water Pollution and Control Act (also known as the Clean Water Act [CWA])

GISRA: Government Information Security Reform Act

GMRA: Government Management Reform Act

GPRA: Government Performance and Results Act (1993)

GPRAMA: Government Performance and Results Modernization Act of 2010

HMTA: Hazardous Materials Transportation Act

HSWA: Hazardous and Solid Waste Amendments of 1984, enacted as amendments to RCRA

IGA: Inspector General Act

IIJA: Infrastructure Investment and Jobs Act

IPA: Intergovernmental Personnel Act

IPIA: Improper Payments Information Act

IRA: Inflation Reduction Act

ISTEA: Intermodal Surface Transportation Efficiency Act

IT: Information Technology

ITMRA: Information Technology Management Reform Act of 1996-aka Clinger/Cohen Act

MCRBMA: Mercury-Containing and Rechargeable Battery Management Act

MGT: Modernizing Government Technology Act

MPPRCA: Marine Plastic Pollution, Research and Control Act of 1987

MPRSA: Marine Protection Research and Sanctuaries Act

NAWCA: North American Wetlands Conservation Act

NEEA: National Environmental Education Act

NEPA: National Environmental Policy Act

NHPA: National Historic Preservation Act

NISA: National Invasive Species Act of 1996

ODA: Ocean Dumping Act

OPA: Oil Pollution Act of 1990

OWBPA: Older Workers Benefit Protection Act

PBA: Public Building Act

PFCRA: Program Fraud Civil Remedies Act

PHSA: Public Health Service Act

PIIA: Payment Integrity Information Act of 2019

PLIRRA: Pollution Liability Insurance and Risk Retention Act

PPA: Pollution Prevention Act

PR: Privacy Act of 1974

PRA: Paperwork Reduction Act

PREA: Pesticide Registration Extension Act of 2012 (also known as PRIA 3)

PRIA: Pesticide Registration Improvement Act of 2003

PRIA 4: Pesticide Registration Improvement Extension Act of 2018

PRIRA: Pesticide Registration Improvement Renewal Act

QCA: Quiet Communities Act

RCRA: Resource Conservation and Recovery Act of 1976, enacted as amendments to SWDA

RFA: Regulatory Flexibility Act

RICO: Racketeer Influenced and Corrupt Organizations Act

RLBPHRA: Residential Lead-Based Paint Hazard Reduction Act

SARA: Superfund Amendments and Reauthorization Act of 1986

SBLRBRERA: Small Business Liability Relief and Brownfields Revitalization and Environmental Restoration Act

SBREFA: Small Business Regulatory Enforcement Fairness Act of 1996

SDWA: Safe Drinking Water Act

SICEA: Steel Industry Compliance Extension Act

SMCRA: Surface Mining Control and Reclamation Act

SOS 2.0: Save Our Seas Act 2.0

SPA: Shore Protection Act of 1988

SWDA: Solid Waste Disposal Act

TSCA: Toxic Substances Control Act

UMRA: Unfunded Mandates Reform Act

UMTRLWA: Uranium Mill Tailings Radiation Land Withdrawal Act

USMCA: United States-Mexico-Canada Agreement Implementation Act

USTCA: Underground Storage Tank Compliance Act

VIDA: Vessel Incidental Discharge Act

WIFIA: Water Infrastructure Finance and Innovation Act

WIIN: Water Infrastructure Improvements for the Nation Act

WQA: Water Quality Act of 1987

WRDA: Water Resources Development Act

WSRA: Wild and Scenic Rivers Act

WWWQA: Wet Weather Water Quality Act of 2000

Making Litigation Costs Transparent – Equal Access for Justice Act (EAJA)[7]
FY 2022

Date of final fee agreement or court disposition	Case Name	Court	Case Number	Judge	Amount of Fees and/or Costs Paid	Source of Funds	Was amount negotiated or court ordered?	Recipients	Nature of Case and Findings Basis	Hourly Rate of Attorney[8]	Hourly Rate of Expert Witness
9/6/2022	*Breast Cancer Prevention Partners, et al. v. U.S. Environmental Protection Agency, et al.*	*United States District Court for the Northern District of California Oakland Division*	4:21-cv-07360-HSG	Judge Haywood S. Gilliam, Jr.	$29,699.80	EPA Appropriations	Negotiated	Earthjustice	Unreasonable delay suit regarding finalization of 2000 proposed rule to add diisononyl phthalate (DINP) to the EPCRA section 313 toxic chemical list (i.e., the Toxics Release Inventory). This resulted in a settlement agreement.	N/A	None

[7] In the FY 2019 Explanatory Statement accompanying the Consolidated Appropriations Act, 2019 (P.L. 116-6), the House and Senate Committees on Appropriations requested Department of Interior, EPA, and the Forest Service make publicly available the EAJA fee information as specified in the explanatory statement accompanying Division G of the Consolidated Appropriations Act, 2017 (P.L. 115-31).

[8] In prior reports EPA had erroneously included hourly rates used in the plaintiff's fee requests. Upon further review, as the final Equal Access to Justice Act settlements are negotiated, it is not possible to provide the hourly rates reflected in the actual amounts paid.

FY 2024 Congressional Justification Estimated Resources and FTE for Environmental Justice Program[1]			
Dollar in Thousands			
Appropriation	**Program Activities**	**FY 2024 CJ Estimated Resources[2]**	**FY 2024 CJ Estimated FTE[3]**
EPM	HQ Environmental Justice (EJ) Program Management and Coordination[4]	$115,537.0	107.8
EPM	EJSCREEN	$5,900.0	
EPM	White House (WH) EJ Inter-Agency Council (formerly EJ IWG) Support and EJ coordination with Other Federal Agencies	$3,000.0	
EPM	National EJ Advisory Council/WHEJ Advisory Council Support, and Climate EJ Advisory Council	$4,000.0	
EPM	Environmental Justice Community Grant Program[5,6]	$65,000.0	
EPM	Environmental Justice Government to Government Grant Program[7]	$40,000.0	
EPM	Community-based Participatory Research Grant Program	$15,000.0	
EPM	Environmental Justice Training Program	$10,000.0	
EPM	Environmental Justice Clearinghouse	$5,000.0	
EPM	Environmental Justice Legal Support	$4,000.0	
EPM	Thriving Community Technical Assistance Centers[8]	$71,409.0	151.3
EPM	Regional Resources for Environmental Justice Program	$30,260.0	
Subtotal of EPM Environmental Justice Resources and FTE		***$369,106.0***	***259.1***
Superfund	Superfund Environmental Justice Program Coordination[9]	$5,888.0	5.5
Subtotal of Superfund Environmental Justice Resources and FTE		***$5,888.0***	***5.5***
Total FY 2024 CJ Estimated Resources and FTE for the EJ Program		**$374,994.0**	**264.6**

[1]The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to provide "allocations for each component of funding for environmental justice programs". Please see page 54: https://www.appropriations.senate.gov/imo/media/doc/Division%20G%20-%20Interior%20Statement%20FY21.pdf

[2]Estimated program activity resources include both payroll and non-payroll resources.

[3]Estimated FTE per program activity.

[4]The former Agency Technical Assistance, Research, Training, Education, and Communication program activity has been incorporated into the HQ Environmental Justice (EJ) Program Management and Coordination program activity.

[5]In FY 2022, The Environmental Justice Collaborative Problem-Solving Cooperative Agreement Grants Program was renamed as the Environmental Justice Competitive Grant Program. The Environmental Justice Small Grants Program was renamed as the Environmental Justice Community Grant Program.

[6]In FY 2023, EPA combined the Environmental Justice Competitive Grant Program with the Environmental Justice Community Grant Program.

[7]In FY 2023, EPA renamed the State, Tribes, and Territories Environmental Justice Grants to the Environmental Justice Government to Government Grants.

[8]In FY 2023, EPA renamed the Regional Outreach Centers to the Thriving Community Technical Assistance Centers (TCTACs).

[9]The Superfund Environmental Justice Program Coordination includes resources in support of the Agency's Superfund Program and will include the following: coordination and support for HQ activities that align with or focus on Superfund issues such as: efforts of the NEJAC Superfund working group, collaboration with Superfund on data enhancements for EJScreen and other information tools, collaboration of EJ program staff with the Superfund program on equity and justice efforts, and coordination of regional staff with Superfund staff and Community Involvement Coordinators on place-based EJ and Superfund issues of clean-up, risk communication, engagement, and revitalization.

EPA User Fee Programs

In FY 2024, EPA will have several user fee programs in operation. These user fee programs and proposals are referenced below. EPA will continue to review whether fees should be assessed for programs that provide special benefits to recipients beyond those that accrue to the general public, in accordance with OMB Circular A-25.

Current Fees: Pesticides

Fee collection authority exists under the Federal Insecticide, Fungicide, and Rodenticide Act of 1988, as amended by the Pesticide Registration Improvement Extension Act of 2022 (P. L. 117-328) ("PRIA-5"), which was passed in December 2022. PRIA-5 reauthorizes these fee authorities through fiscal year 2027 and adjusts fee amounts for certain registration activities.

- **Pesticides Maintenance Fee (7 U.S.C. §136a-1(i))**

The Maintenance Fee provides funding for the registration review programs and a certain percentage supports the processing of applications involving inert ingredients and expedited processing of some applications, such as fast track amendments. PRIA-5 reauthorizes collection of this fee through FY 2027 and raises the collection target by $11 million to an average collection of $42 million over five years of PRIA-5 authorization.

- **Enhanced Registration Services (7 U.S.C. §136w-8(b))**

Entities seeking to register pesticides for use in the United States pay a fee at the time the registration action request is submitted to EPA, setting specific timeframes for the registration decision service. This process has introduced new pesticides to the market more quickly. PRIA-5 reauthorizes collection of these fees through FY 2027 and adjusts fee amounts for certain types of registrations. In FY 2024, EPA expects to collect approximately $26 million from this fee program.

Current Fees: Other

- **Clean Air Part 71 Operating Permits Program**

Title 40 CFR Part 71 § 71.9 authorizes and establishes requirements for the Clean Air Part 71 program - a comprehensive Federal air quality operating permit program for air pollution control agencies that do not have a delegated Title V program on charging and collecting user fees, as required by Section 502(b)(3) of the Clean Air Act. All sources subject to the operating permit requirements of Title V shall have a permit to operate that assures compliance with all applicable requirements. The owners or operators shall pay annual fees that are sufficient to cover the permit program costs, in accordance with the procedures described in this section.

- **Service Fees for the Administration of the Toxic Substances Control Act (TSCA Fees Rule)**

On June 22, 2016, the "Frank R. Lautenberg Chemical Safety for the 21st Century Act" (P.L. 114-182) was signed into law, amending numerous sections of TSCA, including providing authority

for the establishment of a new, broader TSCA User Fee program that replaces and expands the former Section 5 Pre-Manufacturing Notification Fee. Section 26 of TSCA authorizes EPA to collect user fees to offset 25 percent of the Agency's full costs for implementing TSCA Sections 4, 5, 6, and 14.[9] Fees are charged for: issuance of Test Orders, Test Rules and Enforceable Consent Agreements under TSCA Section 4; submission of Pre-Manufacturing Notices, Significant New Use Notices and Microbial Commercial Activity Notices and certain submissions for exemptions under TSCA Section 5; and development of EPA-Initiated Risk Evaluations and Manufacturer-Requested Risk Evaluations (MRREs) under TSCA Section 6.

EPA promulgated the TSCA User Fee Rule in October 2018[10] and collected $2.74 million in fee revenue in FY 2019 from Section 5 submissions. In FY 2020, the Agency collected $3.03 million in fee revenue from Section 5 submissions as well as $2.5 million from two Section 6 MRREs for chemicals within the TSCA Work Plan (Di-isodecyl Phthalate [DIDP] and Diisononyl Phthalate [DINP]). In FY 2021, the Agency collected $28.6 million: $3.3 million from Section 5, $24.05 million from 19 of the 20 Section 6 EPA-Initiated Risk Evaluations, and $1.25 million from one Section 6 MRRE for a TSCA Work Plan chemical (Octamethylcyclotetrasiloxane [D4]). (The Agency invoiced $88.2 thousand for Section 4 Test Orders in FY 2020 and FY 2021 but did not start receiving submissions until FY 2022.) Because nearly $17 million of the collections for the 19 Section 6 Risk Evaluations was not due to be paid until September 2, 2021, those funds were not accessible to EPA until early FY 2022. In FY 2022, EPA collected approximately $5.1 million ($1.46 million from the remaining Section 6 EPA-Initiated Risk Evaluations invoices, $3.5 million from Section 5 submissions, and $88.2 thousand from invoiced Section 4 Test Order submissions) and is projected to collect $5.23 million in FY 2023 ($3.65 million in Section 5 submissions, $93.2 thousand from Section 4 Test Order invoices, and an additional amount from one TSCA Section 6 Manufacturer-Requested Risk Evaluation at $1.49 million if the MRRE request is granted) and $35.9 million in FY 2024 ($3.8 million in Section 5 submissions and $32.1 million from the next round of Section 6 EPA-initiated existing chemical risk evaluations), all subject to potential fee level changes. EPA will allocate FY 2021 Section 6 collections over the risk evaluation lifecycle (3-3.5 years). TSCA requires EPA to update the Fees every three years.[11] Fees collected/projected to be collected in FY 2019 through FY 2021 equated to approximately 14 percent of associated expenditures for those three fiscal years, below the 25 percent target. While TSCA allows the Agency to collect up to 25 percent of its costs for eligible TSCA activities via fees, to date, EPA has collected roughly half of that amount due to the insufficiencies of the current fees rule.

EPA proposed revisions to the fee rule in January 2021. Based on public comments received on the proposed rule, as well as stakeholder engagement and an analysis by EPA of its workforce and budget to develop a more accurate estimate of its anticipated costs to implement TSCA, in November 2022 the Agency issued a supplemental proposed rule that modifies and adjusts this earlier proposal. EPA is proposing these changes to ensure that the fees collected will provide the Agency with up to 25 percent of eligible TSCA costs consistent with direction in the FY 2022 appropriations law to consider the "full" implementation costs of TSCA. EPA intends to finalize this proposal before the end of FY 2023. An adjustment of the fees, via the rulemaking, would impact the estimates of fee collections above.

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[9] TSCA, as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, Section 26(b)(1) and (4)
[10] For additional information, please see: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.
[11] For additional information, please see: https://www.epa.gov/tsca-fees/fees-administration-toxic-substances-control-act.

- **Motor Vehicle and Engine Compliance Program Fee**

  This fee is authorized by the Clean Air Act of 1990 and is administered by the Office of Transportation and Air Quality. Fee collections for manufacturers of light-duty vehicles, light- and heavy-duty trucks, and motorcycles began in August 1992. In 2004, EPA promulgated a rule that updated existing fees and established fees for newly regulated vehicles and engines. The fees established for new compliance programs are paid by manufacturers of heavy-duty and nonroad vehicles and engines, including large diesel and gas equipment (earthmovers, tractors, forklifts, compressors, etc.), handheld and non-handheld utility engines (chainsaws, weed-whackers, leaf-blowers, lawnmowers, tillers, etc.), marine (boat motors, watercraft, jet-skis), locomotive, aircraft and recreational vehicles (off-road motorcycles, all-terrain vehicles, snowmobiles) for in-use testing and certification. In 2009, EPA added fees for evaporative emissions requirements for nonroad engines. EPA intends to apply certification fees to additional industry sectors as new programs are developed. In FY 2024, EPA expects to collect approximately $25.3 million from this fee program based upon a projection of the original rulemaking cost study adjusted for inflation.

- **Hazardous Waste Electronic Manifest**

  The Hazardous Waste Electronic Manifest Establishment Act (P. L. 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In accordance with the Act, EPA established the e-Manifest program. EPA finalized the user fee rule, *Hazardous Waste Management System: User Fees for the Electronic Hazardous Waste Manifest System and Amendments to Manifest Regulations*, in December 2017, and the e-Manifest system launched in June 2018.

  In FY 2024, EPA will continue to operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $27 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will fully support the e-Manifest program, including the operation of the system, necessary program expenses, and future development costs.

- **Water Infrastructure Finance and Innovation Program Account (WIFIA) Program Fees**

  The FY 2024 President's Budget requests authorization for the Administrator to collect and obligate fees established in accordance with Title V, subtitle C, Sections 5029 and 5030 of Public Law 113-121, the Water Resources Reform and Development Act of 2014. These funds shall be deposited in the Water Infrastructure Finance and Innovation Program Account (WIFIA) and remain available until expended. WIFIA fee regulations were first promulgated in FY 2017. Fee revenue will be used for the cost of contracting with expert services such as financial advisory, legal advisory, and engineering firms.

The requested WIFIA program fee expenditure authority would be in addition to the $8 million request for administrative and operations expenses. Fee revenue does not take the place of the request for WIFIA administration. The appropriated administrative level and the anticipated fee revenue are both needed to successfully implement the WIFIA program. In FY 2024, EPA estimates that $10 million in WIFIA fees could be collected.

Expected Benefits of E-Government Initiatives

Budget Formulation and Execution Line of Business

The Budget Formulation and Execution Line of Business (BFELoB) allows EPA and other agencies to access budget-related benefits and services. The Agency has the option to implement LoB-sponsored tools, training, and services.

EPA has benefited from the BFELoB by sharing valuable information on how systems and software being developed by the LoB have enhanced work processes. This effort has created a government-only capability for electronic collaboration (Wiki) in which the Budget Community website allows EPA to share budget information internally, with OMB, and with other federal agencies. The Agency also made contributions to the Human Capital Workgroup, participating in development of online training modules for budget activities – a valuable resource to all agency budget staff. The LoB has developed the capability to have secure, virtual online meetings where participants can view budget-related presentations from their workspace and participate in the discussion through a conference line. The LoB provides regularly scheduled symposia as an additional forum for EPA budget employees.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-99-99-99-99-3200-24	$120.0
2023	020-99-99-99-99-3200-24	$120.0
2024	020-99-99-99-99-3200-24	$120.0

eRulemaking

The eRulemaking Line of Business is designed to: enhance public access and participation in the regulatory process through electronic systems; reduce the burden on citizens and businesses in finding relevant regulations and commenting on proposed rulemaking actions; consolidate redundant docket systems; and improve agency regulatory processes and the timeliness of regulatory decisions. EPA has served as the managing partner for this Line of Business; however, in FY 2020, EPA transferred management services to the General Services Administration (GSA). EPA continues to be involved as a partner agency.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2022	020-99-99-99-99-0060-24	$1,330.0
2023	020-99-99-99-99-0060-24	$1,380.0
2024	020-99-99-99-99-0060-24	$1,144.0

Federal Audit Clearinghouse

In FY 2024, the Federal Audit Clearinghouse (FAC) will be transitioning from the U.S. Census Bureau to the General Services Administration and has been added to the E-Gov and LoB initiatives. This LoB supports the ongoing maintenance and modernization of the FAC. The Fac

distributes single audit reporting packages to federal agencies, supports OMB oversight and assessment of federal award audit requirements, and maintains a public database of completed audits.[12]

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022		
2023		
2024	020-99-99-99-99-1400-24	$65.0

Federal Human Resources Line of Business

OPM's Human Resources Line of Business (HR LoB) provides the federal government the infrastructure to support pay-for-performance systems, modernized HR systems, and the core functionality necessary for the strategic management of human capital.

The OPM HR LoB offers common solutions that enable federal departments and agencies to work more effectively, and to provide managers and executives across the federal government an improved means to meet strategic objectives. EPA will benefit by supporting an effective program management activity which evaluates provider performance, customer satisfaction, and compliance with program goals, on an ongoing basis.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-00-01-16-04-1200-24	$69.0
2023	020-00-01-16-04-1200-24	$69.0
2024	020-00-01-16-04-1200-24	$69.0

Federal PKI Bridge

Federal Public Key Infrastructure (FPKI) provides the government with a common infrastructure to administer digital certificates and public-private key pairs, including the ability to issue, maintain, and revoke public key certificates. FPKI leverages a security technique called Public Key Cryptography to authenticate users and data, protect the integrity of transmitted data, and ensure non-repudiation and confidentiality.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-99-99-99-99-0090-24	$46.0
2023	020-99-99-99-99-0090-24	$46.0
2024	020-99-99-99-99-0090-24	$55.0

[12] For additional information, please refer to: https://facweb.census.gov/uploadpdf.aspx.

Financial Management Line of Business

The Financial Management Line of Business (FM LoB) is a multi-agency effort whose goals include achieving process improvements and cost savings in the acquisition, development, implementation, and operation of financial management systems. By incorporating the same FM LoB-standard processes as those used by central agency systems, interfaces among financial systems are streamlined, and the quality of information available for decision-making is improved.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-00-01-01-04-1100-24	$96.0
2023	020-00-01-01-04-1100-24	$96.0
2024	020-00-01-01-04-1100-24	$96.0

Freedom of Information Act Portal

The Freedom of Information Act (FOIA) Improvement Act of 2016 directed the Office of Management and Budget and Department of Justice to build a consolidated online request portal that allows a member of the public to submit a request for records to any agency from a single website. DOJ is managing the development and maintenance of this National FOIA Portal. EPA and other federal agencies were requested to contribute to this effort.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-99-99-99-99-0099-24	$37.0
2023	020-99-99-99-99-0099-24	$36.0
2024	020-99-99-99-99-0099-24	$35.0

Geospatial Line of Business

The Geospatial Line of Business, an intergovernmental project managed by the Department of the Interior, serves to improve the ability of the public and government to use geospatial information to support the business of government and facilitate decision-making. The intent of the initiative is to reduce costs and improves agency operations in several areas. This line of business is the mechanism for coordinating implementation of the Geospatial Data Act and Office of Management and Budget (OMB) guidance on Coordination of Geographic Information and Related Spatial Data Activities and the National Geospatial Platform. The National Geospatial Platform incorporates many national geospatial data and analytical services for federal agencies, their partners, and stakeholders.

A primary benefit to EPA in participating in and contributing to the line of business is access to geospatial data sets known as National Geospatial Data Assets (NDGA) supported by multiple agencies. These datasets and services are easily accessible by federal agencies, their partners, and stakeholders. EPA uses the National Geospatial Platform to obtain data and services for internal analytical purposes as well as to publish outward-facing geospatial capabilities to the public. EPA is expected to contribute to the operation of the National Geospatial Platform in FY 2024. The

intent is to reduce base costs by providing an opportunity for EPA and other agencies to share approaches on procurement consolidation and include shared services for hosting geospatial data, services, and applications.

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-99-99-99-99-3100-24	$225.0
2023	020-99-99-99-99-3100-24	$225.0
2024	020-99-99-99-99-3100-24	$225.0

Grants.gov

The Grants.gov initiative benefits EPA and its grant programs by providing a single location to publish grant opportunities and application packages, and by providing a single site for the grants community to apply for grants using common forms, processes, and systems. EPA believes that the central site raises the visibility of its grant opportunities to a wider diversity of applicants.

The grants community benefits from savings in postal costs, paper, and envelopes. Applicants save time in searching for agency grant opportunities and in learning the application systems of various agencies. In order to streamline the application process, EPA offers Grants.gov application packages for mandatory state grants (i.e., Continuing Environmental Program Grants).

Fiscal Year	Account Code	EPA Contribution (in thousands)
2022	020-00-04-00-04-0160-24	$347.0
2023	020-00-04-00-04-0160-24	$262.0
2024	020-00-04-00-04-0160-24	$259.0

Integrated Award Environment

The Integrated Award Environment (IAE) is comprised of a number of government-wide automated applications and/or databases that streamline the acquisition business process across the government and support EPA's contracting and grants programs. In FY 2012, GSA began the process of consolidating the systems into one central repository called the System for Award Management (SAM). Until the consolidation is complete, EPA leverages some IAE systems via electronic linkages to EPA's Acquisition System (EAS); other IAE systems are not linked directly to EAS but benefit the Agency's contracting staff and vendor community as stand-alone resources.

EAS uses SAM vendor data: contracting officers can download vendor-provided representation and certification information electronically via SAM, which allows vendors to submit this information once rather than separately for every contract proposal. Additionally, contracting officers access the Federal Awardee Performance and Integrity Information System, which contains records on contractor performance, including past performance evaluations, and suspensions and debarments.

Through the IAE, contracting officers also can review Wage Determinations to obtain information required under the Service Contract Act and the Davis-Bacon Act. EAS links to the Federal Procurement Data System (FPDS) and SAM.gov, which includes the Contract Opportunities platform, for submission of contract actions at the time of award. FPDS provides public access to government-wide contract information. The Electronic Subcontracting Reporting System supports vendor subcontracting data submission for contracts identified as requiring this information. EPA publishes notices of proposed contract actions expected to exceed $25 thousand to the Contact Opportunities listing. Vendors use this publicly available information to identify business opportunities in federal contracting.

The IAE houses Assistance Listings (formerly called Catalog of Federal Domestic Assistance (CFDA), which provides a comprehensive description of all federal assistance including information on eligibility, how to apply, and matching requirements for public consumption. Further, EPA's IAE fee supports use of services for standardized obligations and award-related information reporting for all Federal financial assistance and procurement awards as required by the Federal Funding Accountability and Transparency Act of 2006 (FFATA) and the DATA Act of 2014.

Fiscal Year	Account Code	EPA Service Fee (in thousands)
2022	020-00-01-16-04-0230-24	$720.0
2023	020-00-01-16-04-0230-24	$720.0
2024	020-00-01-16-04-0230-24	$650.0

FY 2024 Administrator's Priorities

Funding for the Administrator's priorities are allocated by program project in the FY 2024 President's Budget with a total of $2.375 million in the Environmental and Program Management Account and $125 thousand in the Science and Technology Account.

These funds, which are set aside for the Administrator's priorities, are used to address unforeseen issues that may arise during the year. These funds are used by the Administrator to support critical unplanned issues and the amounts shown in the below table will be reallocated as needed, in accordance with reprogramming limits.

FY 2024 President's Budget Funding for Administrator's Priorities

Appropriation	Program Project	Dollars in Thousands
EPM	Acquisition Management	$150
EPM	Brownfields	$25
EPM	Civil Enforcement	$150
EPM	Civil Rights / Title VI Compliance	$75
EPM	Compliance Monitoring	$100
EPM	Criminal Enforcement	$145
EPM	Drinking Water Programs	$100
EPM	Exchange Network	$75
EPM	Federal Stationary Source Regulations	$100
EPM	Federal Support for Air Quality Management	$130
EPM	Human Resources Management	$25
EPM	International Sources of Pollution	$50
EPM	IT / Data Management	$175
EPM	Legal Advice: Environmental Program	$100
EPM	Legal Advice: Support Program	$75
EPM	NEPA Implementation	$100
EPM	Pesticides: Protect Human Health from Pesticide Risk	$150
EPM	Pesticides: Protect the Environment from Pesticide Risk	$150
EPM	Pesticides: Realize the Value of Pesticide Availability	$100
EPM	RCRA: Waste Management	$25
EPM	Science Advisory Board	$100
EPM	State and Local Prevention and Preparedness	$100
EPM	Surface Water Protection	$50
EPM	TRI / Right to Know	$75
EPM	Tribal - Capacity Building	$50
S&T	Federal Support for Air Quality Management	$25
S&T	Research: Air, Climate and Energy	$50
S&T	Research: Chemical Safety and Sustainability	$50
Total		**$2,500**

FY 2024: Consolidations, Realignments, or Other Transfer of Resources

Environmental Justice and External Civil Rights Compliance as a National Program Manager

The FY 2022 and FY 2023 President's Budgets signaled the Administration's and EPA's intent to establish a new National Program Manager (NPM) for Environmental Justice (EJ). EPA achieved this in September of 2022, with the establishment of the new national program manager, Office of Environmental Justice and External Civil Rights (OEJECR).

Previously, the Office of Environmental Justice (OEJ) was located within the Office of Policy within the Office of the Administrator, and the External Civil Rights Compliance Office (ECRCO) was located within the Office of General Counsel. The reorganization also included EPA's alternative dispute resolution (ADR) program, the Conflict Prevention and Resolution Center (CRPC), which was previously located within the Office of General Counsel. The reorganization elevated EJ, ADR, and external civil rights compliance to the national program level to bolster the integration of EJ considerations, conflict mitigation and collaboration, and civil rights compliance across all EPA policies, programs, and activities; support the efforts of regulatory partners to similarly integrate EJ and fully comply with civil rights requirements; and enhance EPA's ability to meaningfully engage with and directly support communities with EJ and civil rights concerns. This change reflects and helps to bolster EPA efforts to fully achieve the many commitments in the *FY 2022-2026 EPA Strategic Plan*, Goal 2, *Take Decisive Action to Advance Environmental Justice and Civil Rights,* which similarly elevates EJ and external civil rights compliance priorities.

The head of the new NPM is an Assistant Administrator position to be nominated by the President and confirmed by the Senate. EPA appreciates the support Congress has and continues to provide to the newly established OEJECR. In FY 2023 and potentially into FY 2024, OEJECR will evaluate its organizational structure to ensure OEJECR will meet its commitments and critical mission functions in an efficient manner.

Office of Mission Support

The Office of Mission Support (OMS) is considering a reorganization to realign functions and staff within OMS to better position the office to meet critical mission needs from new requirements associated with Executive Orders on climate,[13] supporting underserved communities, and acquisition.[14][14] The reorganization also would realign functions to balance workload across OMS, eliminate organizational layers, and consolidate similar or duplicative functions to better leverage personnel and resources. This proposed reorganization would not affect any other EPA program office or regional office. OMS anticipates completing the reorganization by the end of FY 2023.

Office of Research and Development

The Office of Research & Development (ORD) is implementing a reorganization to realign

[13] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

[14] For additional information, please see: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/.

functions and staff within the Center for Public Health & Environmental Assessment (CPHEA) to better position ORD to meet critical research needs associated with Executive Orders on climate and supporting underserved communities and the recently passed Inflation Reduction Act. The reorganization will realign functions to enable ORD to better address increased demand from internal and external stakeholders for integrated natural and social science research, analyses and assessments related to climate change and associated health and environmental risks and impacts. This reorganization will enhance ORD's ability to deliver assessment products, technical support, and assistance to Regional and Program Office stakeholders for climate adaptation planning and implementation across EPA mission areas and in communities impacted by climate change. This reorganization was approved by Congress in January of 2023 and will not affect any other EPA program office or regional office.

Office of Inspector General

In FY 2023, the Office of Inspector General (OIG) is in the process of reorganizing one organization unit, the Office of Counsel and Congressional and Public Affairs. The reorganization will create two separate offices, Office of Counsel and Office of Congressional and Public Affairs and is anticipated to be completed by the end of FY 2023.

The planned reorganization will allow the Office of Counsel and the Office of Congressional and Public Affairs to independently conduct critical but disparate work in support of the OIG's mission to promote economy, efficiency, and effectiveness in the Agency's programs. The Office of Counsel will provide independent legal and policy advice to the inspector general, senior leadership, criminal investigators, and audit and evaluation teams, as well as management and oversight of the OIG's Ethics Program and Freedom of Information Act Program. The Office of Congressional and Public Affairs will independently coordinate and facilitate requests from the OIG activities involving Congress and the media; edit, publish, and disseminate OIG reports and correspondence; manage the OIG's website, social media platforms, and internal communications; and manage and operate the OIG Hotline.

Current organization title:

- Office of Inspector General, Office of Counsel, Congressional, and Public Affairs

Proposed organization titles:

- Office of Inspector General, Office of Counsel
- Office of Inspector General, Office of Congressional and Public Affairs

FY 2024 STAG Categorical Program Grants Statutory Authority and Eligible Uses (Dollars in Thousands)

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Section 103	Air pollution control agencies as defined in Section 302(b) of the CAA	S/L monitoring and data collection activities in support of the $PM_{2.5}$ monitoring network and associated program costs.	$41,875.0	$43,875.0	$75,000.0
State and Local Air Quality Management	CAA, Section 103	Air pollution control agencies as defined in Section 302(b) of the CAA	S/L monitoring and data collection activities in support of air toxics monitoring.	$8,073.0	$8,300.0	$20,000.0
State and Local Air Quality Management	CAA, Section 103	Air pollution control agencies as defined in Section 302(b) of the CAA	S/L monitoring procurement activities in support of the NAAQS.	$4,204.0	$4,970.0	$7,000.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
State and Local Air Quality Management	CAA, Sections 103, 105, 106	Air pollution control agencies as defined in Section 302(b) of the CAA; Multi-jurisdictional organizations (non-profit organizations whose boards of directors or membership is made up of CAA Section 302(b) agency officers and whose mission is to support the continuing environmental programs of the States); Interstate air quality control region designated pursuant to Section 107 of the CAA or of implementing Section 176A, or Section 184. NOTE: only the Ozone Transport Commission is eligible.	Carrying out the traditional prevention and control programs required by the CAA and associated program support costs, including all monitoring activities, including PM 2.5 monitoring and associated program costs (Section 103 and/or 105); Coordinating or facilitating a multi-jurisdictional approach to carrying out the traditional prevention and control programs required by the CAA (Sections 103 and 106); Supporting training for CAA Section 302(b) air pollution control agency staff (Sections 103 and 105); Supporting research, investigative, and demonstration projects (Section 103).	$171,690.0 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$226,481.0**	$191,254.0 Section 105 grants _____ $639.0 Section 106 grants **Total:** **$249,038.0**	$297,498.0 Section 105 grants _____ $700.0 Section 106 grants **Total:** **$400,198.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Tribal Air Quality Management	CAA, Sections 103 and 105; Tribal Cooperative Agreements (TCA) in annual Appropriations Acts.	Tribes; Intertribal Consortia; State/Tribal College or University	Conducting air quality assessment activities to determine a Tribe's need to develop a CAA program; Carrying out the traditional prevention and control programs required by the CAA and associated program costs; Supporting CAA training for Federally- recognized Tribes.	$10,543.0 Section 103 grants $4,000.0 Section 105 grants **Total:** **$14,543.0**	$11,415.0 Section 103 grants $5,000.0 Section 105 grants **Total:** **$16,415.0**	$18,126.0 Section 103 grants $5,000.0 Section 105 grants **Total:** **$23,126.0**
Radon	TSCA, Sections 10 and 306.	State Agencies, Tribes, Intertribal Consortia	Assist in the development and implementation of programs for the assessment and mitigation of radon.	$8,007.2	$10,995.0	$12,487.0
Multipurpose Grants	Annual Appropriations Acts; all other major environmental legislation including, but not limited to, CAA, CWA, SDWA, and CERCLA.	State Agencies, Tribes	Implementation of mandatory statutory duties delegated by EPA under pertinent environmental laws.	$2,509.0	$0.0	$10,200.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Water Pollution Control (Section 106)	FWPCA, as amended, Section 106; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Interstate Agencies	Develop and carry out surface and ground water pollution control programs, including NPDES permits, TMDLs, WQ standards, monitoring, and NPS control activities.	$225,304.0	$237,000.0	$279,440.0
Nonpoint Source (NPS – Section 319)	FWPCA, as amended, Section 319(h); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement EPA-approved State and Tribal nonpoint source management programs and fund projects as selected by the state.	$169,181.3	$182,000.0	$188,999.0
Wetlands Program Development	FWPCA, as amended, Section 104 (b)(3); TCA in annual Appropriations Acts.	States, Local Governments, Tribes, Interstate Organizations, Intertribal Consortia, Non-Profit Organizations	To develop new wetland programs or enhance existing programs for the protection, management, and restoration of wetland resources.	$17,353.2	$14,692.0	$15,079.0
Public Water System Supervision (PWSS)	SDWA, Section 1443(a); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health.	$110,742.3	$121,500.0	$132,566.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Underground Injection Control (UIC)	SDWA, Section 1443(b); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Implement and enforce regulations that protect underground sources of drinking water by controlling Class I-V underground injection wells.	$11,825.0	$13,164.0	$11,387.0
Beaches Protection	BEACH Act of 2000; TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia, Local Governments	Develop and implement programs for monitoring and notification of conditions for coastal recreation waters adjacent to beaches or similar points of access that are used by the public.	$9,368.0	$10,619.0	$9,811.0
Resource Recovery and Hazardous Waste Grants	Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act § 3011; Consolidated Appropriations Act, 2018 (Public Law 115-141).	States, Tribes, Intertribal Consortia	Develop and implement solid and hazardous waste programs.	$98,146.0	$105,000.0	$108,247.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Brownfields	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA§ 128(a)).	States, Tribes, Intertribal Consortia	Establish and enhance state and tribal response programs which will survey and inventory brownfields sites; develop oversight and enforcement authorities to ensure response actions are protective of human health and the environment; develop ways for communities to provide meaningful opportunities for public participation; and develop mechanisms for approval of a cleanup plan and verification and certification that cleanup is complete.	$47,278.0	$47,195.0	$46,954.0
Underground Storage Tanks (UST)	Solid Waste Disposal Act of 1976, as amended by the Superfund Amendments and Reauthorization Act of 1986, § 2007(f); Energy Policy Act, § 9011.	States	Provide funding for States' underground storage tanks and to support direct UST implementation programs.	$1,475.0	$1,505.0	$1,505.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Pesticides Program Implementation	FIFRA, Sections 23(a)(1); Federal Food, Drug, and Cosmetic Act (FDCA); Food Quality Protection Act (FQPA); Endangered Species Act (ESA).	States, Tribes, Intertribal Consortia	Implement the following programs through grants to States, tribes, partners, and supporters for implementation of pesticide programs, including: Certification and Training (C&T); Worker Protection; Endangered Species Protection Program (ESPP) Field Activities; Pesticides in Water; and Tribal Programs.	$12,691.0 – States formula _____ $1,411.0 HQ Programs: - Tribal: $835.0 - PREP: $285.0 - AAPCO: $165.0 - Pollinator Protection: $17.0 -Regions: $111.0 _____ **Total: $14,102.0**	$12,683.0 – States formula _____ $1,344.0 HQ Programs: - Tribal: $865.0 - PREP: $285.0 - AAPCO: $165.0 -Regions: $29.0 _____ **Total: $14,027.0**	$12,759.0 – States formula _____ $1,268.0 HQ Programs: - Tribal: $818.0 - PREP: $285.0 - AAPCO: $165.0 _____ **Total: $14,027.0**

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Lead	TSCA, Sections 401-412.	States, Tribes, Intertribal Consortia	Aid states, territories, the District of Columbia, and tribes to develop and implement authorized lead-based paint abatement programs and authorized Renovation, Repair, and Painting (RRP) programs. EPA directly implements these programs in all areas of the country that are not authorized to do so, and will continue to operate the Federal Lead-based Paint Program Database (FLPP) of trained and certified lead-based paint professionals.	$11,978.9 404(g) State/ Tribal Certification _____ $2,834.4 404(g) Direct Implementation **Total:** **$14,813.3**	$12,301.0 404(g) State/ Tribal Certification _____ $4,025.0 404(g) Direct Implementation **Total:** **$16,326.0**	$22,653.0 404(g) State/ Tribal Certification _____ $1,986 404(g) Direct Implementation **Total:** **$24,639.0**
Toxic Substances Compliance	Toxic Substances Control Act (TSCA) § 28(a) and 404(g); TCA in annual Appropriations Acts.	States, Federally Recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S.	Assist in developing, maintaining, and implementing compliance monitoring programs for PCBs, asbestos, and Lead Based Paint. In addition, enforcement actions by 1) the Lead Based Paint program and 2) States that obtained a "waiver" under the Asbestos program.	$4,767.9	$5,010.0	$6,877.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
Pesticide Enforcement	FIFRA § 23(a)(1); TCA in annual Appropriations Acts.	States, Federally Recognized Indian Tribes, Intertribal Consortia, and Territories of the U.S.	Assist with implementation of cooperative pesticide enforcement programs.	$23,091.0	$25,580.0	$25,580.0
Pollution Prevention	Pollution Prevention Act of 1990, Section 6605; TSCA Section 10; FY 2000 Appropriations Act (P.L. 106-74); TCA in annual Appropriations Acts.	States, Tribes, Intertribal Consortia	Provides assistance to States and State entities (*i.e.*, colleges and universities) and Federally-recognized Tribes and intertribal consortia to deliver pollution prevention technical assistance to small and medium-sized businesses. A goal of the program is to assist businesses and industries with identifying improved environmental strategies and solutions for reducing waste at the source.	$2,757.0	$4,973.0	$5,775.0
Tribal General Assistance Program	Indian Environmental General Assistance Program Act (42 U.S.C. § 4368b); TCA in annual Appropriations Acts.	Tribal Governments, Intertribal Consortia	Plan and develop Tribal environmental protection programs.	$67,520.0	$74,750.0	$85,009.0

Grant Title	Statutory Authorities	Eligible Recipients	Eligible Uses	FY 2022 Actual Dollars (X1000)	FY 2023 Enacted Dollars (X1000)	FY 2024 President's Budget Dollars (X1000)
National Environmental Information Exchange Network (NEIEN, aka "the Exchange Network")	Reorganization Plan No. 3 of 1970, 84 Stat. 2086, as amended by Pub. L. 98–80, 97 Stat. 485 (codified at Title 5, App.) (EPA's organic statute).	States, U.S. Territories, Federally Recognized Tribes and Native Villages, Interstate Agencies, Tribal Consortia, Other Agencies with Related Environmental Information Activities.	Helps States, U.S. Territories, Tribes, and intertribal consortia develop the information management and technology (IM/IT) capabilities they need to participate in the Exchange Network, to continue and expand data-sharing programs, and to improve access to environmental information.	$3,586.0	$10,836.0	$15,000.0

Agency Response to Office of Inspector General FY 2023 Top Management Challenges Report
October 28, 2022

Below is the agency's response to the Office of Inspector General's FY 2023 Top Management Challenges report, which included issues related to the U.S. Environmental Protection Agency's mission to protect human health and the environment. The EPA agrees there are significant environmental and human health challenges, including but not limited to tackling the climate crisis, taking action to advance environmental justice and civil rights, ensuring safety of chemicals, ensuring scientific integrity and science-based decision making, and managing the agency's infrastructure resources and business operations. These and other priorities are communicated in the agency's FY 2022-2026 Strategic Plan, along with a detailed roadmap for achieving our mission. In addition, as mentioned in the management challenge descriptions, the EPA will request appropriations in the FY 2024 President's Budget to assist in expanding work in a number of these areas and other key priorities. The responses below provide a summary of the major topics.

Challenge 1: Mitigating the Causes and Adapting to the Impacts of Climate Change.

Agency Response: The EPA is working to drive greenhouse gas emission reductions through an integrated approach of regulations, partnerships, and technical assistance. The EPA is also working to strengthen the nation's adaptive capacity and resilience, with a particular focus on advancing environmental justice. The EPA will ensure its programs, policies, regulations, enforcement activities, and operations consider current and future impacts of climate change and how those impacts disproportionately affect certain communities. As directed in Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, the EPA issued a Policy Statement on Climate Change Adaptation in May 2021 and published its 2021 Climate Adaptation Action Plan in October 2021. In FY 2022, the agency published program and regional office *Implementation Plans*, which reported progress to date and identified actions needed to address the agency-wide priorities identified in the Climate Adaptation Action Plan. Program and regional offices will continue to engage with states, tribes, territories, and local communities in implementing their plans.

Responsible Agency Official: Victoria Arroyo, EPA Senior Climate Adaptation Official; Betsy Shaw, Deputy Assistant Administrator, Office of Air and Radiation.

Challenge 2: Integrating and Leading Environmental Justice Across the Agency and Government.

Agency Response: In FY 2022, the EPA took the historic step of creating a new national program Office of Environmental Justice and External Civil Rights incorporating the Office of Environmental Justice with the Office of General Counsel's External Civil Rights Compliance Office, along with OGC's Conflict Prevention and Resolution Center. This new national program will be led by a presidentially appointed Senate confirmed Assistant Administrator, significantly elevating the profile and authority of environmental justice and civil rights compliance across the EPA to a level on par with other programs, such as air, water, and land and emergency management. Together with the increased funding the EPA received in the FY 2022 annual

appropriation for EJ and the investment received through the Inflation Reduction Act for the Environment and Climate Justice block grants, the OEJECR will provide an unprecedented level of support throughout the EPA to engage and support communities; work with and support external partners such as states, tribes, and local government; and bring a stronger structural and systemic ability to integrate EJ and comply with civil rights requirements throughout all of the EPA's policies, programs, and activities.

In the past year, the EPA also finalized its *FY 2022-2026 Strategic Plan*. This plan, for the first time ever, contains a dedicated goal specifically focused on advancing environmental justice and external civil rights compliance throughout the agency. This inclusion not only signals to all parts of the EPA and its partners, such as states, tribes, and local government, the central importance of EJ and civil rights compliance within the EPA's mission, but also puts the new program office on level footing with other priority programs of the agency and its mission of environmental and public health protection.

Inclusion of this goal also enabled the new OEJECR to craft and publish an accompanying National Program Guidance (NPG) to help guide implementation of the strategic plan commitments. Both the strategic plan and the accompanying NPG have focused on tying together the EJ and external civil rights commitments of the strategic plan with the commitments and goals of EPA's Equity Action Plan, crafted and published in accordance with Executive Order 13985, *Advancing Racial Equity and Support for Underserved Communities through the Federal Government*. A highlight of these plans is the commitment to develop and publish a framework for the consideration and integration of cumulative impacts throughout the environmental public health regulatory system, the crafting of guidance and tools to support full compliance with civil rights laws and requirements, and the development of at least ten indicators of disparity reduction as the ultimate measures of achieving beneficial outcomes on the ground for overburdened and vulnerable communities as a result of the efforts of the EPA and its partners.

The EPA also continues to provide direct support to the White House Council on Environmental Quality as it leads implementation of EO 14008. In particular, the EPA supports the management of the White House Environmental Justice Advisory Council and regularly engages and supports CEQ staff in leading the Interagency Council on Environmental Justice as well as providing advice based upon the agency's experience on specific elements such as development of the Climate and Economic Justice Screening Tool and the EJ Scorecard. The EPA is working directly with numerous federal agencies to coordinate and align efforts through the Bipartisan Infrastructure Law, the Inflation Reduction Act, and annual appropriations. This is especially critical as so many agencies, through the Justice40 initiative, look for ways from the top down to ensure the benefits of their programs and investments reach disadvantaged communities. The EPA complements these efforts by providing direct support to build the capacity of those communities to push from the bottom up.

The EPA's resources are essential to support the affected communities. These resources enable them to build the capacity to assess their needs, develop a vision and plan, and leverage collaborative partnerships across the federal government.

Responsible Agency Official: Marianne Engelman-Lado, Acting Principal Deputy Assistant Administrator, Office of Environmental Justice and External Civil Rights.

Challenge 3: Providing for the Safe Use of Chemicals.

Agency Response: The prioritization of review of Pesticide Registration Improvement Act actions with statutory decision timeframes over non-PRIA actions without statutory due dates has led to a decrease in the number of non-PRIA completions in recent years, and the development of a backlog. During this same period of time, the EPA has seen an increase in new submissions for PRIA actions as well as renegotiation of PRIA-fee-for-service actions or the non-PRIA backlog. Currently, there are more than 11,000 non-PRIA pesticide actions from previous years that are still pending completion. Despite completing record numbers of PRIA actions in the past few years, the EPA's FY 2022 renegotiation rate for PRIA actions rose to almost 52 percent for all PRIA applications and to over 70 percent for conventional pesticides. For comparison, 5 years ago in FY 2018 the PRIA renegotiation rate was 17 percent, and at the end of FY 2021 the renegotiation rate was 34 percent. In addition, the scientific and legal complexity of pesticide submissions has increased significantly while the Pesticide program has been losing seasoned and experienced staff and program resources have remained flat over the years. In fact, there are 25 percent fewer staff in the Pesticide program than 15 years ago. Decreased capacity in staffing requires longer time to complete pesticide actions and further contributes to a growing backlog.

The EPA recognizes that greater market predictability around the EPA decision review timeframes is one of the main objectives of PRIA and its reauthorizations. The agency is actively working with its stakeholders to identify process improvements and resource needs in the future to bring the EPA's decision review timeframes back in alignment with statutory timeframes in PRIA, to eliminate the existing backlog of non-PRIA actions, and to improve review timeframes for non-PRIA applications going forward so that a backlog does not again develop.

To address a decades-old challenge of protecting endangered species from pesticides while minimizing regulatory impacts to pesticide users, the first-ever comprehensive workplan, *Balancing Wildlife Protection and Responsible Pesticide Use*, was released to the public in April 2022. The workplan describes new and creative solutions for the EPA to come into compliance with the Endangered Species Act and establishes four overall strategies and dozens of actions to adopt those protections while providing farmers, public health authorities, and others with access to pesticides. The workplan also sets a new vision for a successful ESA-Federal Insecticide, Fungicide, and Rodenticide Act program that focuses on supporting the development of safer technologies to control pests, completing timely FIFRA decisions, and collaborating with other agencies and stakeholders on implementing the plan. The EPA released a workplan update in November 2022, explaining how it will adopt early mitigation for ESA species as part of registration review decisions. In addition to the ESA workplan, the agency requested, for the first time in the FY 2023 President's Budget, an additional $4.9 million and 10 FTE to begin making incremental progress toward meeting ESA mandates and enable the Pesticide program to make progress toward better protection for federally threatened and endangered species from exposure to new active ingredients. In the explanatory statement accompanying the FY 2022 omnibus appropriations act, Congress encouraged the EPA "to properly consider full costs [of implementing the Toxic Substances Control Act] in its deliberations, in line with the Lautenberg Act's intent." To that end, in November 2022 the agency published a supplemental notice of proposed rulemaking on fees for administering TSCA. Though the Lautenberg Act was enacted in 2016, EPA's first fees rule was not finalized until 2018, and no fees were collected until FY 2019. Under

the 2018 rule, the costs of the first 10 risk evaluations were exempted from the fees, and the last Administration did not conduct a budget analysis to calculate the actual costs of implementing the new law to use as its baseline. As a result, only about 13 percent of the artificially low baseline cost estimate for the program were collected under the 2018 fees rule. In addition, the 2021 fees rule proposal excluded the costs of risk management activities for the first 10 chemicals and 20 high-priority substances and the additional resources needed to implement TSCA as Congress intended. The EPA is further working to ensure that the TSCA program is adequately funded by incorporating the Office of Pollutant Prevention and Toxic's most recent workforce analysis to inform its proposals in the FY 2023 President's Budget request. The OPPT is also investing in recruitment and hiring of additional scientists with specialized expertise in various human health risk assessment disciplines to provide internal senior level review (outside of the management chain) of chemical risk assessment products, which are the foundation of sound risk management.

The Office of Chemical Safety and Pollution Prevention is also developing a multi-year collaborative research program in partnership with the agency's Office of Research and Development and other federal entities to improve existing approaches and develop and implement New Approach Methodologies and to ensure the best available science is used in TSCA new chemical evaluations. In addition, the EPA reviewed its risk determinations for the first 10 existing chemical substances evaluated under the Lautenberg Act to assess whether the previous Administration's policy decision to exclude certain exposure pathways (i.e., air, water) from the risk evaluations may have led to failures in identifying potential unreasonable risks from these exposure pathways and appropriately addressing the statutory requirement to evaluate potential exposures to potentially exposed or susceptible subpopulations, including fenceline communities (i.e., communities near industrial facilities).

In October 2021, OCSPP announced several actions to enhance the scientific integrity of its programs, including forming a new internal advisory group to provide advisory support and recommendations on science policy and scientific integrity issues that arise within OCSPP, establishing a new science policy advisor position that provides guidance to the Assistant Administrator for OCSPP on emerging science policy and scientific integrity, and adopting a range of policies, practices, and procedures to ensure sound science and consistent approaches for chemical reviews.

Responsible Agency Official: Rick Keigwin, Deputy Assistant Administrator, Office of Chemical Safety and Pollution Prevention.

Challenge 4: Safeguarding Scientific Integrity Principles.

Agency Response: The EPA's Scientific Integrity Policy has been in effect since February 2012 and is one of the longest standing scientific integrity policies in the federal government. Scientific integrity at the EPA will be further strengthened by updating the Scientific Integrity Policy to meet the Office of Science and Technology Policy's requirements for policy content, implementation, and evaluation. In recognition of EPA's leadership in scientific integrity, OSTP appointed our Scientific Integrity Official as a co-chair of three related White House initiatives that implement the January 2021 Executive Memorandum on scientific integrity and drive scientific integrity policy across federal executive branch agencies.

The EPA is unwavering in its commitment to promptly address scientific integrity concerns and investigate and adjudicate allegations. The EPA will continue to strengthen its robust mechanisms to protect and maintain a culture of scientific integrity and is on target to develop and implement procedures to address allegations, including violations involving high-profile issues or senior officials. The EPA's steadfast commitment to implementing the Scientific Integrity Policy in support of a culture of scientific integrity, enhanced transparency, and the protection of scientists is evidenced by agencywide training and outreach activities that engage employees on scientific integrity. The Agency has recognized the important role of leaders in enhancing a culture of scientific integrity and accordingly added strong language about scientific integrity into the performance plan requirements for its SES, ST, and SL leaders in FY22 and going forward. This language requires these leaders to be responsible for exemplifying firm commitment to principles of scientific integrity in all relevant situations and complying with and advocating for the EPA Scientific Integrity Policy when doing any of the following: conducting, managing, using the results, and communicating about science and scientific activities.

The EPA will continue to maintain scientific integrity's high visibility throughout the agency through regular outreach, including hosting an annual meeting with EPA employees and launching updated training for new employees, to build upon 10 years of the Scientific Integrity Program at EPA.

Responsible Agency Official: Maureen Gwinn, Principal Deputy Assistant Administrator, Office of Research and Development.

Challenge 5: Ensuring Agency Systems and Other Critical Infrastructure Are Protected Against Cyberthreats.

Agency Response: The agency recognizes the importance of enhancing information technology security to combat cyber threats. In addition to addressing recommendations identified in audit reports, the agency continues to make progress towards complying with Executive Order 14028, *Improving the Nation's Cybersecurity*, improving its Federal Information Security Management Act report rating, and improving security at water facilities at a nationwide scale. The agency developed processes to improve compliance with federal requirements and agency policy and metrics to monitor progress towards cybersecurity improvements and has improved internal procedures and roles towards oversight and review of agency cybersecurity initiatives and processes. The agency has been able to improve its cybersecurity posture in part by deploying Continuous Diagnostics and Mitigation software, Privilege Access User Management tools, Endpoint Detection and Response tools, and a next generation Security Incident and Event Management system. The EPA will also continue to work with states, tribes, and territories to improve their cybersecurity surrounding water systems by providing technical assistance, publishing guidance, and work with the Department of Homeland Security to develop sector-specific infrastructure cybersecurity goals.

Responsible Agency Official: Tonya Manning, Acting Director, Office of Information Security & Privacy, Office of Mission Support; Benita Best-Wong, Deputy Assistant Administrator, Office of Water.

Challenge 6: Managing Business Operations and Resources.

Agency Response: Workforce planning and management is a priority for the agency and is integrated into the FY 2022-2026 EPA Strategic Plan and as a part of the EPA's Evidence Act Learning Agenda. The agency is implementing workforce planning and knowledge transfer strategies to support succession planning across the agency and adopting new workforce and workplace innovations to support the future of work. In response to increases in workload resulting from the Infrastructure Investment and Jobs Act and the Inflation Reduction Act, the agency is working to leverage all available hiring authorities to expedite the hiring of new employees followed by timely onboarding and training. The agency has well established internal controls to provide effective oversight for programs and has developed additional training, technical assistance, and internal control plans to ensure that funds directed toward infrastructure improvements through the use of grants, loans, and contracts are utilized as intended. The EPA acknowledges that increases in funding require appropriate oversight and is committed to safeguarding its resources against waste, fraud, abuse, and mismanagement.

In FY 2023, the EPA identified New Grantees of Annual and Supplemental Funds as an Enterprise Risk. Significant new grant funding through legislation such as the Bipartisan Infrastructure Law, the IRA, and Congressionally Directed Spending will result in an increase in the number of new grant applicants, including from underserved communities and those that are first-time applicants. Therefore, grants management is a key focus of the EPA's implementation of IIJA and IRA, with the agency mapping out grants processes to identify potential opportunities to improve the process and tracking the announcements of grants and the awarding of funds internally through our Continuous Improvement process. Without extensive outreach, training, and technical assistance, these new recipients are at risk of not having the capacity to comply with all federal grants management requirements throughout the grant lifecycle. In FY 2023, the agency is developing best practices for grants management and is collaborating with the OIG on providing training to potential grant recipients. This focus as an enterprise risk will allow the agency to implement a coordinated approach to engage with new recipients and provide a suite of tools to help new recipients reduce noncompliance risks and meet federal programmatic, financial, and reporting requirements. These tools include live and recorded training, direct programmatic support and technical assistance, and publishing new policy and guidance to strengthen compliance where needed.

Additionally, the EPA continues to refine and enhance its risk, internal control, fraud, and improper payment management activities, which enable smooth business operations and protection against fraud, waste, and abuse. In FY 2022, the agency engaged in a robust effort to boost its risk and internal control programs by instituting the Enterprise Risk Management Application. Through this tool, risks and associated mitigation strategies were collected and analyzed to allow for a more corporate view of vulnerabilities that could impact the agency's mission. As the inaugural year of this application has ended, the agency is working to leverage the momentum gained and build a more prominent and free-standing fraud detection program.

Responsible Agency Official: Kimberly Patrick, Principal Deputy Assistant Administrator, Office of Mission Support; Carol Terris, Acting Deputy Chief Financial Officer, Office of the Chief Financial Officer.

Challenge 7: Enforcing Compliance and Environmental Laws and Regulations.

Agency Response: Enforcement and compliance activities are critical parts of the agency's mission. Building on a historically strong program, under the current Administration, the EPA has increased its focus on traditional civil and criminal enforcement tools, with particular attention on environmental and public health threats to overburdened communities. This includes identifying strategies and actions to make environmental justice considerations a part of all aspects of the agency's enforcement program. In furtherance of the Administration's priorities, the agency has rescinded several policies that, in part, were responsible for a number of the concerns identified by the OIG. The agency put in place new policies that reflect the current Administration's emphasis on strong enforcement.

There are two challenges identified by the OIG where additional information from the EPA may help clarify the enforcement program's current posture. With respect to the OIG's reference to the challenges faced by the National Enforcement Investigations Center from high rates of attrition from 2014 to 2020, NEIC has been able increase full-time equivalents to 2014 levels. In 2023, NEIC continues to hire additional full-time equivalents to bring NEIC to the highest staffing levels in over a decade (a 20 percent increase over 2014 levels). With respect to the FY 2023 $42 million budget request to support compliance monitoring, these resources are not only intended to modernize our national enforcement and compliance data system, but the resources will also expand compliance monitoring efforts to address: environmental justice issues, including the Compliance Advisor Program; Smart Tools for inspectors; implementation of the Evidence Act; per- and poly-fluoroalkyl substances; and climate change concerns, including reduction in the use of hydrofluorocarbons. The EPA is approaching this challenge from multiple angles and contingent upon additional resources, is committed to getting back to high compliance monitoring levels, similar to the 2010 levels, as quickly as possible.

The agency remains actively engaged with the OIG in developing corrective actions that will respond to concerns raised in a recent report (Report Number: 21-P-0132 - *Resource Constraints, Leadership Decisions, and Workforce Culture Led to a Decline in Federal Enforcement)*. The EPA's Office of Enforcement and Compliance Assurance looks forward to working with colleagues across the agency, as well as state and tribal partners, stakeholders, and the OIG in addressing issues presented in the FY 2023 Top Management Challenges report.

Responsible Agency Official: Mark Badalamente, Director, Office of Administration and Policy, Office of Enforcement and Compliance.

Challenge 8: Managing Increased Investment in Infrastructure.

Agency Response: The enactment of IIJA has greatly increased the amount of resources EPA is responsible for directing into infrastructure investments, and will also increase the number and types of grantees with whom EPA will be working. To provide effective oversight for programs that received infrastructure funding, the agency continues to promote efficiency and ensure compliance with the IIJA provisions. This oversight includes the establishment of a Program Integrity Framework to focus on the agencywide applications of risk management, payment integrity, and internal controls. Senior leadership uses the Program Integrity Framework to assist

in prioritizing and mitigating risks, identifying the agency's enterprise risk, and making critical operations decisions. Additionally, those offices receiving funding received training on technical assistance and internal control plans to ensure that funds directed toward infrastructure improvements through the use of grants, loans, and contracts continue being used as intended. The EPA is continuously enhancing Program Integrity efforts and oversight over infrastructure investments and is committed to safeguarding its resources against waste, fraud, abuse, and mismanagement. Additional agency efforts include:

- Developed performance measures to monitor and report on progress, as outlined in the IIJA Program Implementation Plans.
- Launched several technical assistance programs / initiatives to help communities better access IIJA funding.
- Engaged stakeholders to hold quarterly fraud trainings for agency personnel.
- Implemented additional controls within the agency's financial systems to track infrastructure investments by appropriation, program, etc.
- Conducting OMB Circular A-123, Appendix C risk assessments in FY2023 to ensure protection against fraud, waste, and abuse.
- Implementing a more robust fraud detection and prevention program.
- Employing an industrial engagement strategy for partners with IIJA funding.

Responsible Agency Official: Zealan Hoover, Senior Advisor to the Administrator; Kimberly Patrick, Principal Deputy Assistant Administrator, Office of Mission Support; Carol Terris, Acting Deputy Chief Financial Officer, Office of the Chief Financial Officer.

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

NPM	Major Office	FY 2023 Enacted Budget				FY 2024 President's Budget			
		Pay ($K)	Non-Pay ($K) ($K)	FTE	Total	Pay ($K)	Non-Pay ($K) ($K)	FTE	Total
OA	Immediate Office	$5,801	$2,928	$8,729	31.0	$8,546	$6,482	$15,027	49.0
	Office of Congressional and Intergovernmental Relations	$8,477	$533	$9,009	43.2	$8,504	$882	$9,386	44.2
	Office of Public Affairs	$6,279	$490	$6,769	31.5	$6,031	$333	$6,364	30.5
	Office of Public Engagement	$1,727	$799	$2,526	10.0	$2,152	$12,452	$14,604	13.0
	Office of Policy	$30,389	$7,826	$38,215	150.4	$33,131	$28,381	$61,512	175.6
	Children's Health Protection	$2,777	$2,408	$5,185	13.1	$2,779	$2,445	$5,224	13.1
	Environmental Education	$1,012	$7,047	$8,059	5.2	$1,010	$7,095	$8,105	5.2
	Office of Civil Rights	$4,175	$650	$4,825	20.9	$3,583	$463	$4,047	20.9
	Executive Secretariat	$3,839	$221	$4,060	20.1	$4,068	$152	$4,220	20.1
	Executive Services	$3,094	$366	$3,460	14.9	$3,157	$1,159	$4,316	14.9
	Homeland Security	$2,675	$355	$3,031	11.3	$2,819	$1,619	$4,438	13.3
	Science Advisory Board	$3,846	$436	$4,282	18.7	$3,431	$727	$4,158	18.7
	Small and Disadvantaged Business Utilization	$2,245	$1,299	$3,544	10.7	$2,102	$1,113	$3,215	9.7
	Regional Resources	$44,047	$2,005	$46,052	248.3	$55,178	$48,414	$103,592	296.9
	OA TOTAL	**$120,383**	**$27,363**	**$147,746**	**629.3**	**$136,491**	**$111,716**	**$248,207**	**725.1**
OEJECR	Immediate Office	$3,890	$5,466	$9,356	19.9	$8,390	$87,185	$95,575	45.7
	Office of Resource Management and Communications	$1,553	$33	$1,586	12.0	$2,000	$100	$2,100	12.0
	Office of Community Support	$3,260	$7,199	$10,459	25.0	$7,397	$125,002	$132,399	42.0
	Office of Policy, Partnerships and Program Development	$6,652	$12,474	$19,126	52.3	$11,134	$100,001	$111,135	64.8
	Office of External Civil Rights Compliance	$3,028	$579	$3,607	21.9	$8,993	$2,765	$11,758	48.7
	Regional Resources	$15,217	$52,030	$67,247	110.3	$27,428	$18,369	$45,797	155.5
	OEJECR TOTAL	**$33,601**	**$77,781**	**$111,382**	**241.4**	**$65,342**	**$333,421**	**$398,763**	**368.7**

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

NPM	Major Office	FY 2023 Enacted Budget				FY 2024 President's Budget			
		Pay ($K)	Non-Pay ($K) ($K)	Total FTE		Pay ($K)	Non-Pay ($K)	Total ($K) FTE	
OAR	Immediate Office	$11,693	$150,102	$161,795	62.7	$11,159	$235,683	$246,842	56.9
	Office of Air Quality Planning and Standards	$61,274	$48,772	$110,045	359.0	$86,255	$281,404	$367,660	462.7
	Office of Atmospheric Programs	$44,824	$61,070	$105,894	230.8	$58,159	$217,593	$275,752	308.9
	Office of Transportation and Air Quality	$63,759	$150,343	$214,103	351.0	$78,841	$258,420	$337,261	400.1
	Office of Radiation and Indoor Air	$28,006	$14,570	$42,576	145.0	$39,116	$56,017	$95,132	207.5
	Regional Resources	$105,225	$210,819	$316,044	629.4	$141,204	$207,552	$348,756	777.0
	OAR TOTAL	**$314,781**	**$635,676**	**$950,457**	**1,777.9**	**$414,734**	**$1,256,669**	**$1,671,403**	**2,213.1**
OCFO	Immediate Office	$2,200	$7,032	$9,232	1	$3,370	$10,182	$13,552	1
	Office of Budget	$7,792	$3,233	$11,026	42.5	$7,828	$2,588	$10,416	39.
	Office of Planning, Analysis and Accountability	$4,584	$277	$4,861	2	$4,954	$334	$5,289	2
	Office of Technology Solutions	$8,966	$24,638	$33,604	48.9	$9,414	$25,382	$34,796	47.
	Office of Resource and Information Management	$2,659	$6,697	$9,355	14.5	$3,191	$5,121	$8,312	16.
	Office of the Controller	$24,882	$2,058	$26,940	136.7	$25,508	$3,007	$28,515	127.7
	OCFO eEnterprise	$917	$649	$1,566	5	$991	$559	$1,550	5
	Office of Continuous Improvement	$1,834	$572	$2,406	1	$1,982	$472	$2,454	1
	Regional Resources	$33,723	$2,354	$36,077	203.3	$28,660	$2,497	$31,157	160.0
	OCFO TOTAL	**$87,556**	**$47,511**	**$135,067**	**497.9**	**$85,898**	**$50,142**	**$136,040**	**447.8**
OCSPP	Immediate Office	$3,252	$943	$4,195	17.0	$2,529	$1,391	$3,920	12.2
	Office of Pesticide Programs	$65,009	$26,444	$91,452	353.0	$69,705	$51,670	$121,375	369.0
	Office of Pollution Prevention and Toxics	$60,657	$34,269	$94,926	357.1	$89,946	$64,673	$154,619	477.6
	Office of Program Support	$35,504	$3,661	$39,166	175.0	$37,480	$3,656	$41,136	185.5
	Regional Resources	$23,385	$34,249	$57,634	141.9	$26,229	$45,417	$71,646	151.8
	OCSPP TOTAL	**$187,807**	**$99,566**	**$287,373**	**1,044.0**	**$225,889**	**$166,806**	**$392,695**	**1,196.1**

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

NPM	Major Office	FY 2023 Enacted Budget				FY 2024 President's Budget			
		Pay ($K)	Non-Pay ($K)	Total ($K)	FTE	Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
OECA	Immediate Office	$9,874	$11,841	$21,714	44.9	$7,222	$4,915	$12,136	40.4
	Office of Civil Enforcement	$28,583	$11,244	$39,827	132.8	$34,060	$27,452	$61,512	164.1
	Office of Criminal Enforcement, Forensics, and Training	$66,305	$11,083	$77,388	304.3	$73,040	$14,635	$87,674	332.9
	Office of Compliance	$22,692	$24,200	$46,893	118.2	$24,371	$58,960	$83,331	123.2
	Federal Facilities Enforcement Office	$3,104	$752	$3,855	16.6	$3,267	$1,652	$4,919	16.4
	Office of Site Remediation Enforcement	$14,616	$19,119	$33,736	68.7	$1,449	$682	$2,131	7.5
	Regional Resources	$329,636	$55,548	$385,184	1,865.0	$232,154	$63,980	$296,134	1,284.4
	OECA TOTAL	**$474,810**	**$133,787**	**$608,597**	**2,550.5**	**$375,563**	**$172,275**	**$547,838**	**1,968.9**
OGC	Immediate Office	$1,780	$315	$2,096	8.0	$2,460	$473	$2,933	10.3
	Air and Radiation Law Office	$9,068	$2,057	$11,125	41.0	$10,914	$2,681	$13,595	44.0
	Pesticides and Toxic Substances Law Office	$3,693	$838	$4,531	21.0	$4,713	$1,158	$5,871	19.0
	Solid Waste and Emergency Response Law Office	$3,806	$990	$4,797	17.3	$4,941	$1,414	$6,355	20.7
	Water Law Office	$4,900	$1,162	$6,062	22.0	$6,608	$1,655	$8,263	26.6
	Other Legal Support	$18,985	$3,955	$22,941	88.5	$25,884	$3,963	$29,847	112.4
	Regional Resources	$29,427	$952	$30,379	139.9	$39,128	$1,318	$40,446	174.9
	OGC TOTAL	**$71,661**	**$10,269**	**$81,930**	**337.6**	**$94,647**	**$12,663**	**$107,310**	**408.2**

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

NPM	Major Office	FY 2023 Enacted Budget Pay ($K)	Non-Pay ($K)	Total ($K)	FTE	FY 2024 President's Budget Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
OIG	Immediate Office	$488	$46	$534	2.6	$607	$144	$751	3.2
	Office of Chief of Staff	$488	$46	$534	2.6	$607	$144	$751	3.2
	Office of Strategic Analysis and Results	$2,279	$218	$2,497	12.1	$2,832	$673	$3,505	14.9
	Office of Information Technology	$3,744	$358	$4,102	19.8	$4,653	$1,106	$5,759	24.5
	Office of Counsel and Congressional Public Affairs	$4,233	$405	$4,638	22.4	$5,260	$1,250	$6,510	27.7
	Office of Mission Support	$3,582	$343	$3,925	19.0	$4,451	$1,058	$5,509	23.4
	Office of Audit	$18,071	$1,728	$19,799	95.8	$22,457	$5,336	$27,793	118.3
	Office of Special Review and Evaluations	$8,466	$809	$9,275	44.9	$10,521	$2,500	$13,021	55.4
	Office of Investigations	$9,606	$919	$10,525	50.8	$11,938	$2,835	$14,773	62.9
	OIG TOTAL	**$50,957**	**$4,873**	**$55,830**	**270.0**	**$63,326**	**$15,047**	**$78,373**	**333.5**
OITA	Immediate Office	$1,210	$96	$1,306	6.0	$1,576	$201	$1,777	8.0
	Office of International Affairs	$7,221	$1,939	$9,160	35.8	$10,598	$17,064	$27,662	53.8
	Office of Management and International Services	$2,481	$1,160	$3,642	12.3	$2,561	$2,591	$5,152	13.0
	American Indian Environmental Office	$3,833	$1,343	$5,176	19.0	$7,288	$3,220	$10,508	37.0
	Regional Resources	$11,315	$74,913	$86,228	67.6	$25,181	$87,865	$113,046	141.6
	OITA TOTAL	**$26,061**	**$79,451**	**$105,512**	**140.7**	**$47,204**	**$110,941**	**$158,145**	**253.4**

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

NPM	Major Office	FY 2023 Enacted Budget				FY 2024 President's Budget			
		Pay ($K)	Non-Pay ($K)	Total ($K)	FTE	Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
OLEM	Immediate Office	$9,444	$5,384	$14,828	43.7	$6,504	$2,036	$8,540	30.0
	Federal Facilities Restoration and Reuse Office	$3,150	$1,672	$4,822	16.3	$3,323	$7,466	$10,790	16.2
	Office of Communication, Partnership, and Analysis	$2,759	$1,563	$4,322	13.8	$1,779	$889	$2,668	9.3
	Office of Superfund Remediation and Technology Innovation	$26,902	$69,385	$96,287	143.8	$1,762	$2,195	$3,957	10.1
	Office of Resource Conservation and Recovery	$27,781	$21,397	$49,177	145.7	$29,610	$31,652	$61,262	154.4
	Office of Underground Storage Tanks	$4,413	$2,384	$6,797	21.6	$4,237	$3,251	$7,488	22.6
	Office of Brownfields and Land Revitalization	$3,082	$10,276	$13,358	16.6	$3,073	$13,200	$16,272	16.6
	Office of Emergency Management	$13,237	$28,883	$42,120	64.2	$13,344	$46,566	$59,910	66.0
	Office of Mountains, Deserts, and Plains	$718	$2,067	$2,784	4.0	$0	$0	$0	0.0
	Regional Resources	$284,384	$909,731	$1,194,115	1,632.6	$162,873	$429,872	$592,745	909.7
	OLEM TOTAL	**$375,870**	**$1,052,741**	**$1,428,611**	**2,102.3**	**$226,505**	**$537,127**	**$763,632**	**1,234.9**
OMS	Immediate Office	$14,367	$23,728	$38,095	90.9	$18,840	$61,017	$79,858	92.3
	Environmental Appeals Board	$3,113	$111	$3,225	13.8	$3,498	$163	$3,661	15.0
	Administrative Law Judges	$2,020	$143	$2,163	12.0	$2,327	$161	$2,488	11.0
	Office of Human Resources	$21,521	$7,833	$29,354	93.9	$31,931	$9,839	$41,770	153.7
	Research Triangle Park	$15,401	$35,490	$50,891	101.0	$16,474	$30,213	$46,687	100.0
	Office of Grants and Debarment	$13,093	$8,413	$21,506	69.6	$16,618	$4,317	$20,935	87.0
	Cincinnati	$10,117	$16,941	$27,057	66.0	$11,456	$9,238	$20,694	70.0
	Office of Administration	$18,903	$320,042	$338,945	92.2	$22,822	$395,516	$418,338	102.5
	Office of Acquisition Solutions	$37,889	$8,317	$46,206	214.0	$45,811	$6,576	$52,387	248.1
	Office of Enterprise Information Programs	$8,107	$9,112	$17,219	42.3	$8,292	$7,866	$16,158	40.1
	Office of Information Management	$11,014	$32,927	$43,941	59.7	$12,018	$33,466	$45,484	58.7
	Office of Digital Services & Technical Architecture	$4,800	$2,106	$6,907	24.0	$4,619	$1,655	$6,274	23.0
	Office of Customer Advocacy, Policy & Portfolio Management	$6,157	$3,440	$9,597	34.0	$6,070	$2,076	$8,146	31.0
	Office of Information Security & Privacy	$3,199	$11,956	$15,156	16.1	$3,709	$27,951	$31,660	18.1
	Office of Information Technology Operations	$1,455	$1,230	$2,686	7.1	$2,115	$12,287	$14,402	9.7
	Regional Resources	$85,344	$53,537	$138,881	490.4	$97,655	$55,647	$153,302	534.3

	OMS TOTAL	**$256,501**	**$535,326**	**$791,827**	**1,427.0**	**$304,256**	**$657,988**	**$962,244**	**1,594.5**

EPA Budget by National Program Manager and Major Office

Dollars in Thousands

NPM	Major Office	FY 2023 Enacted Budget Pay ($K)	Non-Pay ($K)	Total ($K)	FTE	FY 2024 President's Budget Pay ($K)	Non-Pay ($K)	Total ($K)	FTE
ORD	ORD Headquarters	$47,811	$74,136	$121,947	257.2	$47,982	$61,788	$109,770	256.4
	Center for Computational Toxicology & Exposure	$44,554	$27,948	$72,502	242.7	$49,737	$37,708	$87,445	265.9
	Center for Environmental Measurements & Modeling	$66,627	$39,116	$105,743	358.9	$74,385	$59,525	$133,911	397.3
	Center for Public Health & Environmental Assessment	$66,818	$37,013	$103,831	356.3	$75,250	$52,846	$128,096	400.6
	Center for Environmental Solutions & Emergency	$45,567	$28,389	$73,956	245.3	$48,449	$37,694	$86,143	260.8
	Office of Science Advisor, Policy and Engagement	$12,324	$84,133	$96,457	66.3	$13,961	$57,801	$71,761	74.6
	Regional Resources	$35,247	$19,800	$55,047	210.9	$19,042	$7,140	$26,182	112.1
	ORD TOTAL	**$318,948**	**$310,535**	**$629,483**	**1,737.6**	**$328,806**	**$314,502**	**$643,308**	**1,767.7**
OW	Immediate Office	$12,395	$8,795	$21,190	63.4	$13,775	$8,794	$22,569	66.2
	Office of Ground Water and Drinking Water	$32,225	$88,723	$120,948	172.5	$45,343	$250,210	$295,553	239.8
	Office of Science and Technology	$22,819	$14,608	$37,427	116.9	$27,784	$53,758	$81,542	137.6
	Office of Wastewater Management	$28,153	$174,502	$202,655	143.3	$40,407	$646,985	$687,393	213.6
	Office of Wetlands, Oceans and Watersheds	$20,290	$28,475	$48,765	107.8	$23,713	$63,373	$87,085	118.3
	Regional Resources	$213,064	$4,170,870	$4,383,934	1,313.2	$244,220	$4,556,953	$4,801,173	1,388.2
	OW TOTAL	**$328,945**	**$4,485,973**	**$4,814,918**	**1,917.1**	**$395,242**	**$5,580,073**	**$5,975,315**	**2,163.7**
	Subtotal Agency Resources	**$2,647,881**	**$7,500,852**	**$10,148,733**	**14,673.3**	**$2,763,903**	**$9,319,370**	**$12,083,273**	**14,675.6**
	Less Rescission of Prior Year Funds			($13,300)				$0	
	Reimbursable FTE				442.3				504.5
	Superfund Tax FTE*								1,897.3
	Total Agency Resources	**$2,647,881**	**$7,500,852**	**$10,135,433**	**15,115.6**	**$2,763,903**	**$9,319,370**	**$12,083,273**	**17,077.4**

*In FY 2024, funding for Superfund Enforcement, Remedial, and Emergency Response and Removal is proposed to be transitioned from annual appropriations to Superfund Tax receipts. In total 1897.3 FTE in Superfund will be funded as reimbursable FTE, including 771.8 FTE in Superfund Enforcement, 874.8 FTE in Remedial, and 250.7 FTE in Emergency Response and Removal.

OECA Travel by Program Project FY 2018-2024*

		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		FY 2023	FY 2024
Appr.	**Program Project**	**Enacted**	**Actuals****	**Enacted**	**Actuals****	**Enacted**	**Actuals****	**Enacted**	**Actuals****	**Enacted**	**Actuals****	**Enacted***	**PresBud*****
EPM													
	43 - Brownfields	$16.0	$10.4	$16.0	$4.2	$16.0	$18.2	$3.0	$0.0	$3.0	$2.3	$3.0	$12.0
	44 - Civil Enforcement	$2,148.0	$1,860.9	$2,216.0	$1,942.2	$2,197.0	$886.2	$742.0	$602.0	$742.0	$1,230.7	$2,932.0	$3,236.0
	50 - Compliance Monitoring	$1,524.0	$1,498.3	$1,529.0	$1,397.2	$1,516.0	$694.8	$567.0	$301.0	$582.0	$658.0	$835.0	$2,016.0
	52 - Criminal Enforcement	$1,522.0	$1,385.7	$1,522.0	$1,458.1	$1,522.0	$748.4	$548.0	$467.0	$548.0	$606.0	$1,518.0	$1,690.0
	57 - Environmental Justice	$186.0	$103.7	$0.0	$5.3	$0.0	$0.0	$0.0	$0.0	$4.0	$148.2	$4.0	$0.0
	63 - Geographic Program: Chesapeake Bay	$20.0	$17.0	$20.0	$24.0	$20.0	$6.9	$20.0	$9.0	$20.0	$18.4	$20.0	$20.0
	90 - NEPA Implementation	$505.0	$251.1	$0.0	$70.5	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
	F2 - Facilities Infrastructure and Operations	$238.0	$503.4	$238.0	$234.5	$238.0	$204.4	$84.0	$132.0	$131.0	$342.4	$207.0	$238.0
Total		**$6,159.0**	**$5,630.5**	**$5,541.0**	**$5,136.0**	**$5,509.0**	**$2,558.9**	**$1,964.0**	**$1,511.0**	**$2,030.0**	**$3,006.0**	**$5,519.0**	**$7,212.0**
S&T													
	62 - Forensics Support	**$260.0**	**$157.8**	**$260.0**	**$193.1**	**$260.0**	**$115.0**	**$141.0**	**$88.0**	**$141.0**	**$170.9**	**$260.0**	**$478.0**
LUST													
	44 - Civil Enforcement	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
OIL													
	44 - Civil Enforcement	$14.0	$16.4	$14.0	$8.1	$14.0	$3.1	$14.0	$6.0	$12.0	$13.4	$12.0	$14.0
	50 - Compliance Monitoring	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total		**$14.0**	**$16.4**	**$14.0**	**$8.1**	**$14.0**	**$3.1**	**$14.0**	**$6.0**	**$12.0**	**$13.4**	**$12.0**	**$14.0**
SUPERFUND													
	50 - Compliance Monitoring	$8.0	$0.0	$8.0	$0.0	$8.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$8.0
	52 - Criminal Enforcement	$468.0	$237.4	$468.0	$236.7	$468.0	$125.8	$468.0	$399.0	$468.0	$547.3	$468.0	$500.0
	62 - Forensics Support	$50.0	$25.5	$50.0	$32.9	$50.0	$17.2	$50.0	$48.0	$50.0	$65.3	$50.0	$57.0
	C7 - Superfund: Enforcement ****	$1,135.0	$798.7	$1,145.0	$995.7	$1,143.0	$445.0	$1,143.0	$155.0	$1,143.0	$461.8	$1,143.0	$0.0
	H2 - Superfund: Federal Facilities Enf	$120.0	$69.0	$120.0	$65.1	$120.0	$81.7	$120.0	$12.0	$120.0	$28.1	$120.0	$120.0
Total		**$1,781.0**	**$1,130.6**	**$1,791.0**	**$1,330.4**	**$1,789.0**	**$669.7**	**$1,781.0**	**$614.0**	**$1,781.0**	**$1,102.5**	**$1,781.0**	**$685.0**
Grand Total		**$8,214.0**	**$6,935.3**	**$7,606.0**	**$6,667.6**	**$7,572.0**	**$3,346.7**	**$3,900.0**	**$2,219.0**	**$3,964.0**	**$4,292.7**	**$7,572.0**	**$8,389.0**

The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to follow guidance as set forth in House Report 116-448. House Report 116-448 directs EPA to provide "requested enforcement travel budget, and budgeted and actual enforcement travel spending for the previous five fiscal years". Please see page 80: https://www.congress.gov/116/crpt/hrpt448/CRPT-116hrpt448.pdf. This report fulfills this requirement.

*In FY 2020 and FY 2021, OECA's travel resources decreased due to the COVID Pandemic travel restrictions. In FY 2023 and FY 2024, the travel resources were brought back to pre-COVID levels to resume in-person travel and inspections.

**Actuals include final obligations of New Obligation Authority (NOA) and Carryover for the Office of Enforcement and Compliance Assurance (OECA).

***EPA will re-evaluate travel as part of the Agency's FY 2024 Operating Plan activities in preparation for the FY 2024 Enacted Budget.

**** In FY 2024, the Budget proposed to transition the Superfund Enforcement program to the Superfund Tax Receipts. As a result, the Superfund Enforcement travel is proposed to be transitioned to the Superfund tax receipts and estimates will be evaluated in FY 2024.

On-Site Inspections and Off-site Compliance Monitoring Compliance Activities from EPA's Integrated Compliance Information System[15]

The table below provides the numbers in EPA's Integrated Compliance Information (ICIS) data system for on-site inspection and off-site compliance monitoring activities from fiscal years (FY) 2018-2022.

Fiscal Year (FY)	On-Site Inspections	Off-Site Compliance Monitoring Activities (*EPA has not set separate targets for this category of activities*)	Total Completed
FY 2018 actual	7,900	2,900	10,800
FY 2019* actual	Target:7,400 Actual: 8,100	2,200	10,329
FY 2020 actual	Target: not set** Actual: 3,600	4,900	8,500
FY 2021 actual	Target: not set** Actual: 3,200	7,600	10,800
FY 2022 actual	Target: not set** Actual: 5,900	8,000	13,900
FY 2023 projection	Target: not set** Actual: TBD		10,000
FY 2024 projection	Target: not set** Actual: TBD		10,000

**In 2019, EPA set targets for on-site inspections only. Previous targets were for combination of on-site inspections and off-site compliance monitoring activities.*
***Targets were not set for on-site inspections in FY 2020 through FY 2023 due to travel restrictions, uncertainty resulting from COVID-19, and rebuilding capacity as the pandemic ends.*

Caveats:

1. Definitions: Nationally consistent definitions of on-site inspections and off-site compliance monitoring activities did not exist for our compliance monitoring program until we issued guidance on April 24, 2020 (and updated in November 2020). As a result, earlier data may include mis-categorized activities. EPA's April 24, 2020 memorandum provided definitions for both on-site and off-site compliance monitoring activities, which creates more consistency in each of the categories.

[15] The Explanatory Statement accompanying the Consolidated Appropriations Act, 2021 instructs EPA to follow guidance as set forth in *House Report 116-448*. *House Report 116-448* directs EPA to provide "separate targets for onsite inspections and offsite compliance monitoring activities, and separate target and actuals data for onsite and offsite compliance monitoring activities for the previous five fiscal years". Please see page 80: https://www.congress.gov/116/crpt/hrpt448/CRPT-116hrpt448.pdf. This report fulfills this requirement.

2. Incomplete Data Entry: Given that EPA has not historically required most types of off-site compliance monitoring activities to be entered into an EPA database, these numbers are likely incomplete. EPA's April 24, 2020, guidance for reporting key off-site compliance monitoring activities establishes expectations for national reporting of these activities, subsequent years' numbers are therefore more reflective of actual activities.

3. COVID-19: Restrictions on travel during the pandemic affected EPA's ability to conduct on- site inspections in FY 2020, FY 2021 and continued partially in FY 2022. While on-site inspection numbers dropped substantially during this time, EPA was able to increase its off- site compliance monitoring activities. In FY 2022, as the pandemic eased, EPA was able to begin increasing the number of on-site inspections again.

4. States Conduct Majority of Inspections: Most inspections are performed by authorized states. For example, states performed about 34,000 National Pollutant Discharge Elimination System (NPDES) inspections - that is just one program.

5. Data Mining: With modern tools, EPA mines data from monitoring reports and manifests. EPA conducts off-site compliance monitoring to try to detect violations, including possible violations of emission and discharge limitations. EPA uses this information to target facilities for on-site inspections. The April 2020 and subsequent November 2020 guidances will help EPA nationally focus and track this important off-site compliance monitoring work.

6. Totals More Reliable Than Subtotals: The sum of the two subtotals (on-site inspections + offsite compliance monitoring activities) is a more reliable value because it smooths out some of the variability in each subtotal. EPA believes definitions of on-site inspections and off-site compliance monitoring activities will help make the subtotal data more reliable going forward.

7. Staffing Levels: The number of inspections EPA completes each year generally correlates with our annual staffing levels. During the time period reported in the table, OECA's number of full-time equivalents (FTEs) has decreased from 2,880 in FY 2016 to 2,439 in FY 2022.

Physicians' Comparability Allowance (PCA) Plan

Department and component:

Environmental Protection Agency

Purpose: The purpose of this document is to describe the Agency's plan for implementing the Physicians' Comparability Allowance (PCA) Program. Per 5 CFR 595.107, the Office of Management and Budget (OMB) must approve this plan prior to the Agency entering into any PCA service agreement. Changes to this plan must be reviewed and approved by OMB in accordance with 5 CFR 595.107.

Reporting: In addition to the plan, each year, components utilizing PCA will include their PCA worksheet in the OMB Justification (OMBJ), typically in September. OMB and OPM will use this data for Budget development and congressional reporting.

Plan for Implementing the PCA Program:

1a) Identify the categories of physician positions the Agency has established are covered by PCA under § 595.103. Please include the basis for each category. If applicable, list and explain the necessity of any additional physician categories designated by your agency (for categories other than I through IV-B). List Any Additional Physician Categories Designated by Your Agency: Pursuant to 5 CFR 595.107, any additional category of physician receiving a PCA, not covered by categories I through IV-B, should be listed and accompanied by an explanation as to why these categories are necessary.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Covered by Agency (mark "x" if covered)	Basis for Category
2	Category I Clinical Position	X	EPA's Office of Research and Development (ORD) clinical physicians oversee the medical care of study subjects. These studies are conducted on the health effects of a variety of common environmental pollutants in many different human subjects. Our primary emphasis is on cardio-pulmonary responses, with recent interest in behavioral responses. The Medical Officer is responsible for the health and well-being of research participants before, during, and after research. Prior to research, the Medical Officer is responsible for clinically evaluating individuals. During research, they are responsible for instituting preventative measures to ensure that any procedure entails the least risk possible. After the research, it is the Medical Officer's responsibility to evaluate an individual's health to determine any clinical changes.
	Category II Research Position		n/a
1	Category III Occupational Health		EPA is establishing a medical staff within the Office of Administration, Safety and Sustainability Division that will serve as a focal point for pandemic planning, occupational medical surveillance, wellness, and will provide medical consultative services supporting the Agency's safety and health, disease response/outbreak, fitness for duty, diver, automated external defibrillator, emergency response, nerve agent antidote, medical countermeasures, lactation, maternal wellness, and other national programs.
	Category IV-A Disability Evaluation		n/a

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Covered by Agency (mark "x" if covered)	Basis for Category
1	Category IV-B Health and Medical Admin.	X	This position serves as the principal medical officer and environmental health scientist for EPA's ORD. The position is responsible for providing leadership, direction, and technical expertise in support of organizational-wide health and environmental planning, policy development and implementation, and oversight of scientific initiatives and research efforts for ORD's Assistant Administrator (AA) or their designee. This includes: Strategic Research Action Plan oversight; prioritization of environmental health research; and counsel and oversight on legislation, regulations and health impact assessments related to Executive Branch agencies on human health, air quality, ecosystem services, toxics and risks, environmental social sciences, and most notably, COVID-19.

Physicians' Comparability Allowance (PCA) Plan (continued)

2) Explain the recruitment and retention problem(s) for each category of physician in your agency (this should demonstrate that a current need continues to persist). § 595 of 5CFR Ch. 1 requires that an agency may determine that a significant recruitment and retention problem exists only if all of the following conditions apply:
- Evidence indicates that the Agency is unable to recruit and retain physicians for the category;
- The qualification requirements being sought do not exceed the qualifications necessary for successful performance of the work;
- The Agency has made efforts to recruit and retain candidates in the category; and
- There are not a sufficient number of qualified candidates available if no comparability allowance is paid.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Recruitment and retention problem
2	Category I Clinical Position	The small population of EPA Clinical Physician positions experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that absent the allowance some EPA physicians would seek employment at federal agencies that provide the allowance.
	Category II Research Position	n/a
1	Category III Occupational Health	The value of the physicians' comparability allowance to EPA is to be used as a recruitment and retention tool. The Agency is told regularly that absent the allowance some EPA physicians would seek employment at federal agencies that provide the allowance.
	Category IV-A Disability Evaluation	n/a
1	Category IV-B Health and Medical Admin.	The small population of EPA Health and Medical Administrative Physician position(s) experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool. The Agency is told regularly that absent the allowance some EPA physicians would seek employment at federal agencies that provide the allowance.

3) Explain how the Agency determines the amounts to be used for each category of physicians.

Number of Physicians Receiving PCAs by Category (non-add)	Category of Physician Position	Basis of comparability allowance amount
2	Category I Clinical Position	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.
	Category II Research Position	n/a
1	Category III Occupational Health	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.
	Category IV-A Disability Evaluation	n/a
1	Category IV-B Health and Medical Admin.	EPA reviews the experience and technical expertise of the candidates. Combined with other salary ranges in the private sector and in review of other federal agencies, the Agency tries to be within a range that allows the Agency to retain the employees.

4) Does the Agency affirm that the PCA plan is consistent with the provisions of 5 U.S.C. 5948 and the requirements of § 595 of 5 CFR Ch. 1?

Yes

Physicians' Comparability Allowance (PCA) Worksheet

1) Department and component:

Environmental Protection Agency

2) Explain the recruitment and retention problem(s) justifying the need for the PCA pay authority.

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*
Historically, the number of EPA Research Physicians is between three and seven positions. This small population experiences modest turnover. The value of the physicians' comparability allowance to EPA is used as a retention tool.
EPA continues to use the PCA to recruit qualified candidates to fill vacancies and to retain these employees. Additionally, EPA will use the PCA in FY 2024 to recruit and retain a physician for the newly formed national health and safety medical staff.

3-4) Please complete the table below with details of the PCA agreement for the following years:

	PY 2022 (Actual)	**CY 2023 (Estimates)**	**BY* 2024 (Estimates)**
3a) Number of Physicians Receiving PCAs	3	4	4
3b) Number of Physicians with One-Year PCA Agreements	0	0	0
3c) Number of Physicians with Multi-Year PCA Agreements	3	4	4
4a) Average Annual PCA Physician Pay (without PCA payment)	$188,100	$193,700	$183,979.33
4b) Average Annual PCA Payment	$19,300	$19,300	$23,333.33

*BY data will be approved during the BY Budget cycle. Please ensure each column is completed.

5) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

(*Please include any staffing data to support your explanation, such as number and duration of unfilled positions and number of accessions and separations per fiscal year.)*
The Agency is told regularly that absent the allowance, some EPA research physicians would seek employment at federal agencies that provide the allowance.

6) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

An agency with a very small number of physician positions and a low turn-over rate among them still needs the allowance authority to maintain the stability of the small population. Those who opt for federal employment in opposition to private sector employment still want the maximum pay available in the federal sector. Were it not for the PCA, EPA would regularly lose some of its physicians to other federal agencies that offer the allowance, both requiring EPA to refill vacant positions and making it more difficult for EPA to fill those positions. Turn-over statistics should be viewed in this light.

U.S. Environmental Protection Agency
FY 2024 Congressional Justification and Annual Performance Plan

Program Projects by Program Area
(Dollars in Thousands)

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Science & Technology				
Clean Air and Climate				
Clean Air Allowance Trading Programs	$8,360	$7,117	$19,983	$12,866
Climate Protection	$6,723	$8,750	$10,724	$1,974
Federal Support for Air Quality Management	$8,494	$11,343	$10,666	-$677
Federal Vehicle and Fuels Standards and Certification	$101,348	$117,341	$179,617	$62,276
Subtotal, Clean Air and Climate	**$124,925**	**$144,551**	**$220,990**	**$76,439**
Indoor Air and Radiation				
Indoor Air: Radon Program	$116	$199	$173	-$26
Radiation: Protection	$2,224	$1,683	$2,349	$666
Radiation: Response Preparedness	$2,928	$3,596	$4,686	$1,090
Reduce Risks from Indoor Air	$136	$278	$183	-$95
Subtotal, Indoor Air and Radiation	**$5,404**	**$5,756**	**$7,391**	**$1,635**
Enforcement				
Forensics Support	$14,815	$15,532	$18,657	$3,125
Homeland Security				
Homeland Security: Critical Infrastructure Protection	$9,941	$10,852	$34,205	$23,353
Homeland Security: Preparedness, Response, and Recovery	$24,536	$25,347	$39,539	$14,192
Homeland Security: Protection of EPA Personnel and Infrastructure	$501	$625	$501	-$124
Subtotal, Homeland Security	**$34,978**	**$36,824**	**$74,245**	**$37,421**
IT / Data Management / Security				
IT / Data Management	$2,799	$3,197	$3,313	$116
Operations and Administration				
Facilities Infrastructure and Operations	$68,347	$67,500	$72,043	$4,543
Pesticides Licensing				
Pesticides: Protect Human Health from Pesticide Risk	$2,854	$2,894	$4,031	$1,137
Pesticides: Protect the Environment from Pesticide Risk	$2,487	$2,334	$2,339	$5

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Pesticides: Realize the Value of Pesticide Availability	$941	$925	$1,002	$77
Subtotal, Pesticides Licensing	**$6,282**	**$6,153**	**$7,372**	**$1,219**
Research: Air, Climate and Energy				
Research: Air, Climate and Energy	$93,402	$100,448	$137,835	$37,387
Research: Safe and Sustainable Water Resources				
Research: Safe and Sustainable Water Resources	$113,427	$116,141	$123,555	$7,414
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$133,808	$137,857	$146,642	$8,785
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$38,740	$39,918	$44,942	$5,024
Research: Chemical Safety for Sustainability				
Endocrine Disruptors	$16,325	$16,353	$17,530	$1,177
Computational Toxicology	$21,349	$21,606	$23,128	$1,522
Research: Chemical Safety for Sustainability (other activities)	$54,679	$54,591	$63,220	$8,629
Subtotal, Research: Chemical Safety for Sustainability	$92,353	$92,550	$103,878	$11,328
Subtotal, Research: Chemical Safety for Sustainability	**$131,092**	**$132,468**	**$148,820**	**$16,352**
Ensure Safe Water				
Drinking Water Programs	$4,177	$5,098	$6,975	$1,877
Congressional Priorities *(previously named Clean and Safe Water Technical Assistance Grants)*				
Congressional Priorities	$7,492	$30,751	$0	-$30,751
Total, Science & Technology	**$740,947**	**$802,276**	**$967,838**	**$165,562**
Environmental Programs & Management				
Clean Air and Climate				
Clean Air Allowance Trading Programs	$15,423	$16,554	$30,535	$13,981
Climate Protection	$100,267	$101,000	$170,512	$69,512
Federal Stationary Source Regulations	$26,821	$30,344	$47,468	$17,124
Federal Support for Air Quality Management	$148,894	$147,704	$356,016	$208,312
Stratospheric Ozone: Domestic Programs	$7,937	$6,951	$72,152	$65,201
Stratospheric Ozone: Multilateral Fund	$8,326	$9,244	$18,000	$8,756
Subtotal, Clean Air and Climate	**$307,667**	**$311,797**	**$694,683**	**$382,886**
Indoor Air and Radiation				

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Indoor Air: Radon Program	$2,966	$3,364	$5,113	$1,749
Radiation: Protection	$8,244	$9,088	$11,638	$2,550
Radiation: Response Preparedness	$2,658	$2,650	$3,143	$493
Reduce Risks from Indoor Air	$12,611	$13,593	$47,389	$33,796
Subtotal, Indoor Air and Radiation	**$26,479**	**$28,695**	**$67,283**	**$38,588**
Brownfields				
Brownfields	$23,716	$26,189	$38,626	$12,437
Compliance				
Compliance Monitoring	$108,996	$112,730	$162,105	$49,375
Environmental Justice				
Environmental Justice	$20,455	$102,159	$369,106	$266,947
Enforcement				
Civil Enforcement	$179,062	$205,942	$242,585	$36,643
Criminal Enforcement	$55,343	$62,704	$66,487	$3,783
NEPA Implementation	$17,177	$20,611	$25,760	$5,149
Subtotal, Enforcement	**$251,582**	**$289,257**	**$334,832**	**$45,575**
Geographic Programs				
Geographic Program: Chesapeake Bay	$90,309	$92,000	$92,094	$94
Geographic Program: Gulf of Mexico	$21,194	$25,524	$25,558	$34
Geographic Program: Lake Champlain	$19,096	$25,000	$25,000	$0
Geographic Program: Long Island Sound	$29,758	$40,002	$40,005	$3
Geographic Program: Other				
Lake Pontchartrain	$1,899	$2,200	$2,200	$0
S. New England Estuary (SNEE)	$6,017	$7,000	$7,078	$78
Geographic Program: Other (other activities)	$4,881	$5,000	$4,934	-$66
Subtotal, Geographic Program: Other	$12,797	$14,200	$14,212	$12
Great Lakes Restoration	$349,157	$368,000	$368,154	$154
Geographic Program: South Florida	$6,917	$8,500	$8,503	$3
Geographic Program: San Francisco Bay	$2,631	$54,500	$54,505	$5
Geographic Program: Puget Sound	$34,746	$54,000	$54,022	$22
Subtotal, Geographic Programs	**$566,606**	**$681,726**	**$682,053**	**$327**
Homeland Security				
Homeland Security: Communication and Information	$4,054	$4,692	$6,051	$1,359
Homeland Security: Critical Infrastructure Protection	$873	$923	$1,023	$100

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Homeland Security: Protection of EPA Personnel and Infrastructure	$4,903	$5,188	$5,158	-$30
Subtotal, Homeland Security	**$9,830**	**$10,803**	**$12,232**	**$1,429**
Cross Agency Coordination, Outreach and Education *(previously named Information Exchange / Outreach)*				
State and Local Prevention and Preparedness	$14,957	$15,446	$23,884	$8,438
TRI / Right to Know	$13,064	$15,052	$14,018	-$1,034
Tribal - Capacity Building	$13,735	$14,715	$34,674	$19,959
Executive Management and Operations	$55,872	$56,160	$67,600	$11,440
Environmental Education	$8,303	$9,500	$23,972	$14,472
Exchange Network	$13,016	$14,995	$14,685	-$310
Small Minority Business Assistance	$2,564	$2,056	$1,996	-$60
Small Business Ombudsman	$1,564	$2,250	$2,227	-$23
Children and Other Sensitive Populations: Agency Coordination	$6,098	$6,362	$6,500	$138
Subtotal, Cross Agency Coordination, Outreach and Education	**$129,173**	**$136,536**	**$189,556**	**$53,020**
International Programs				
US Mexico Border	$2,886	$2,993	$5,088	$2,095
International Sources of Pollution	$7,220	$7,323	$26,044	$18,721
Trade and Governance	$6,252	$5,510	$7,153	$1,643
Subtotal, International Programs	**$16,358**	**$15,826**	**$38,285**	**$22,459**
IT / Data Management / Security				
Information Security	$10,450	$9,142	$23,889	$14,747
IT / Data Management	$90,029	$91,821	$105,868	$14,047
Subtotal, IT / Data Management / Security	**$100,480**	**$100,963**	**$129,757**	**$28,794**
Legal / Science / Regulatory / Economic Review				
Integrated Environmental Strategies	$10,534	$11,297	$71,722	$60,425
Administrative Law	$5,022	$5,395	$6,116	$721
Alternative Dispute Resolution	$1,196	$972	$2,194	$1,222
Civil Rights Program	$10,061	$12,866	$31,462	$18,596
Legal Advice: Environmental Program	$63,795	$60,061	$85,252	$25,191
Legal Advice: Support Program	$18,246	$18,957	$20,322	$1,365
Regional Science and Technology *(proposed to be moved to Operations and Administration)*	$1,345	$1,554	$0	-$1.554
Science Advisory Board	$3,854	$4,155	$4,124	-$31
Regulatory/Economic-Management and Analysis	$16,725	$17,475	$16,930	-$545
Subtotal, Legal / Science / Regulatory / Economic Review	**$130,778**	**$132,732**	**$238,122**	**$105,390**

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Operations and Administration				
Central Planning, Budgeting, and Finance	$82,781	$87,099	$99,812	$12,713
Facilities Infrastructure and Operations	$291,501	$283,330	$305,753	$22,423
Acquisition Management	$36,051	$37,251	$41,609	$4,358
Human Resources Management	$56,709	$51,261	$71,093	$19,832
Financial Assistance Grants / IAG Management	$29,070	$30,188	$34,350	$4,162
Regional Science and Technology *(proposed to be moved from LSRE)*	$0	$0	$4,972	$4,972
Subtotal, Operations and Administration	**$496,113**	**$489,129**	**$557,589**	**$68,460**
Pesticides Licensing				
Science Policy and Biotechnology	$1,185	$1,811	$1,627	-$184
Pesticides: Protect Human Health from Pesticide Risk	$65,333	$62,125	$65,529	$3,404
Pesticides: Protect the Environment from Pesticide Risk	$43,688	$48,704	$75,391	$26,687
Pesticides: Realize the Value of Pesticide Availability	$7,022	$7,637	$8,234	$597
Subtotal, Pesticides Licensing	**$117,227**	**$120,277**	**$150,781**	**$30,504**
Research: Chemical Safety for Sustainability				
Research: Chemical Safety for Sustainability	$178	$0	$0	$0
Resource Conservation and Recovery Act (RCRA)				
RCRA: Corrective Action	$43,061	$40,512	$41,669	$1,157
RCRA: Waste Management	$77,838	$75,958	$90,634	$14,676
RCRA: Waste Minimization & Recycling	$12,603	$10,252	$12,668	$2,416
Subtotal, Resource Conservation and Recovery Act (RCRA)	**$133,502**	**$126,722**	**$144,971**	**$18,249**
Toxics Risk Review and Prevention				
Endocrine Disruptors	$6,629	$7,614	$7,680	$66
Pollution Prevention Program	$11,988	$12,987	$29,009	$16,022
Toxic Substances: Chemical Risk Management	$2	$0	$0	$0
Toxic Substances: Chemical Risk Review and Reduction	$85,218	$82,822	$130,711	$47,889
Toxic Substances: Lead Risk Reduction Program	$12,404	$14,359	$14,437	$78
Subtotal, Toxics Risk Review and Prevention	**$116,242**	**$117,782**	**$181,837**	**$64,055**
Underground Storage Tanks (LUST / UST)				
LUST / UST	$11,807	$12,021	$14,451	$2,430
Protecting Estuaries and Wetlands				
National Estuary Program / Coastal Waterways	$33,958	$40,000	$32,514	-$7,486
Wetlands	$21,103	$21,754	$26,671	$4,917

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Subtotal, Protecting Estuaries and Wetlands	**$55,061**	**$61,754**	**$59,185**	**-$2,569**
Ensure Safe Water				
Beach / Fish Programs	$1,209	$2,246	$2,381	$135
Drinking Water Programs	$117,205	$121,607	$142,583	$20,976
Subtotal, Ensure Safe Water	**$118,414**	**$123,853**	**$144,964**	**$21,111**
Ensure Clean Water				
Marine Pollution	$8,699	$10,187	$12,624	$2,437
Surface Water Protection	$217,125	$224,492	$267,969	$43,477
Subtotal, Ensure Clean Water	**$225,825**	**$234,679**	**$280,593**	**$45,914**
Congressional Priorities *(previously named Clean and Safe Water Technical Assistance Grants)*				
Congressional Priorities	$21,700	$30,700	$0	-$30,700
Total, Environmental Programs & Management	**$2,988,189**	**$3,266,330**	**$4,491,011**	**$1,224,681**
Environmental Programs & Management – No Year				
Alaska Contaminated Lands				
Alaska Contaminated Lands	$0	$20,000	$20,000	$0
Total, Environmental Programs & Management – No Year	**$0**	**$20,000**	**$20,000**	**$0**
Inspector General				
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$48,605	$44,030	$64,526	$20,496
Total, Inspector General	**$48,605**	**$44,030**	**$64,526**	**$20,496**
Building and Facilities				
Homeland Security				
Homeland Security: Protection of EPA Personnel and Infrastructure	$7,049	$6,676	$6,676	$0
Operations and Administration				
Facilities Infrastructure and Operations	$24,681	$42,076	$105,009	$62,933
Total, Building and Facilities	**$31,730**	**$48,752**	**$111,685**	**$62,933**
Hazardous Substance Superfund				

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Indoor Air and Radiation				
Radiation: Protection	$2,011	$2,472	$3,010	$538
Audits, Evaluations, and Investigations				
Audits, Evaluations, and Investigations	$8,706	$11,800	$13,847	$2,047
Compliance				
Compliance Monitoring	$1,278	$1,017	$1,032	$15
Enforcement				
Criminal Enforcement	$8,149	$7,999	$8,644	$645
Forensics Support	$1,676	$1,240	$1,648	$408
Superfund: Enforcement	$169,444	$171,347	$0	-$171,347
Superfund: Federal Facilities Enforcement	$7,263	$8,192	$10,366	$2,174
Subtotal, Enforcement	**$186,532**	**$188,778**	**$20,658**	**-$168,120**
Environmental Justice				
Environmental Justice	$1,065	$5,876	$5,888	$12
Homeland Security				
Homeland Security: Preparedness, Response, and Recovery	$35,026	$34,661	$56,484	$21,823
Homeland Security: Protection of EPA Personnel and Infrastructure	$1,201	$1,029	$1,530	$501
Subtotal, Homeland Security	**$36,226**	**$35,690**	**$58,014**	**$22,324**
Information Exchange / Outreach				
Exchange Network	$1,137	$1,328	$1,328	$0
IT / Data Management / Security				
Information Security	$1,209	$1,062	$7,859	$6,797
IT / Data Management	$16,075	$19,764	$17,727	-$2,037
Subtotal, IT / Data Management / Security	**$17,284**	**$20,826**	**$25,586**	**$4,760**
Legal / Science / Regulatory / Economic Review				
Alternative Dispute Resolution	$698	$791	$880	$89
Legal Advice: Environmental Program	$475	$599	$477	-$122
Subtotal, Legal / Science / Regulatory / Economic Review	**$1,173**	**$1,390**	**$1,357**	**-$33**
Operations and Administration				
Central Planning, Budgeting, and Finance	$29,102	$31,338	$30,207	-$1,131
Facilities Infrastructure and Operations	$76,108	$65,634	$71,540	$5,906
Acquisition Management	$23,550	$27,247	$33,758	$6,511

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Human Resources Management	$7,253	$7,419	$8,751	$1,332
Financial Assistance Grants / IAG Management	$4,188	$4,002	$4,601	$599
Subtotal, Operations and Administration	**$140,202**	**$135,640**	**$148,857**	**$13,217**
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$16,562	$16,937	$17,364	$427
Research: Chemical Safety for Sustainability				
Health and Environmental Risk Assessment	$9,405	$4,901	$5,005	$104
Research: Chemical Safety for Sustainability	$2,579	$8,060	$8,060	$0
Subtotal, Research: Chemical Safety for Sustainability	**$11,984**	**$12,961**	**$13,065**	**$104**
Superfund Cleanup				
Superfund: Emergency Response and Removal	$239,807	$195,000	$0	-$195,000
Superfund: EPA Emergency Preparedness	$9,071	$8,056	$8,445	$389
Superfund: Federal Facilities	$23,911	$26,189	$37,405	$11,216
Superfund: Remedial	$552,089	$618,740	$0	-$618,740
Subtotal, Superfund Cleanup	**$824,879**	**$847,985**	**$45,850**	**-$802,135**
Total, Hazardous Substance Superfund	**$1,249,039**	**$1,282,700**	**$355,856**	**-$926,844**
Leaking Underground Storage Tanks				
Enforcement				
Civil Enforcement	$631	$661	$682	$21
Operations and Administration				
Central Planning, Budgeting, and Finance	$360	$457	$469	$12
Facilities Infrastructure and Operations	$922	$754	$727	-$27
Acquisition Management	$158	$181	$136	-$45
Subtotal, Operations and Administration	**$1,440**	**$1,392**	**$1,332**	**-$60**
Underground Storage Tanks (LUST / UST)				
LUST / UST	$9,707	$9,991	$14,665	$4,674
LUST Cooperative Agreements	$50,294	$55,040	$65,040	$10,000
LUST Prevention	$22,045	$25,780	$26,669	$889
Subtotal, Underground Storage Tanks (LUST / UST)	**$82,045**	**$90,811**	**$106,374**	**$15,563**
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$312	$341	$351	$10
Total, Leaking Underground Storage Tanks	**$84,427**	**$93,205**	**$108,739**	**$15,534**

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Inland Oil Spill Programs				
Compliance				
Compliance Monitoring	$278	$649	$2,152	$1,503
Underground Storage Tanks (LUST / UST)				
LUST / UST	-$1	$0	$0	$0
Enforcement				
Civil Enforcement	$2,660	$2,565	$2,665	$100
Oil				
Oil Spill: Prevention, Preparedness and Response	$17,136	$17,501	$21,412	$3,911
Operations and Administration				
Facilities Infrastructure and Operations	$854	$682	$641	-$41
Research: Sustainable Communities				
Research: Sustainable and Healthy Communities	$782	$675	$681	$6
Total, Inland Oil Spill Programs	**$21,709**	**$22,072**	**$27,551**	**$5,479**
State and Tribal Assistance Grants				
State and Tribal Assistance Grants (STAG)				
Infrastructure Assistance: Alaska Native Villages	$39,605	$39,686	$40,000	$314
Brownfields Projects	$83,758	$100,000	$130,982	$30,982
Infrastructure Assistance: Clean Water SRF	$1,018,013	$1,638,861	$1,638,874	$13
Infrastructure Assistance: Drinking Water SRF	$638,343	$1,126,101	$1,126,105	$4
Infrastructure Assistance: Mexico Border	$28,711	$36,386	$36,386	$0
Diesel Emissions Reduction Grant Program	$48,628	$100,000	$150,000	$50,000
Targeted Airshed Grants	$59,000	$69,927	$69,927	$0
San Juan Watershed Monitoring	$1,578	$0	$0	$0
Safe Water for Small & Disadvantaged Communities	$23,173	$30,158	$80,005	$49,847
Reducing Lead in Drinking Water	$387	$25,011	$182,004	$156,993
Lead Testing in Schools	$14,431	$30,500	$36,500	$6,000
Drinking Water Infrastructure Resilience and Sustainability	$0	$7,000	$25,000	$18,000
Technical Assistance for Wastewater Treatment Works	$12,000	$27,000	$18,000	-$9,000
Sewer Overflow and Stormwater Reuse Grants	$44,935	$50,000	$280,011	$230,011
Water Infrastructure Workforce Investment	$3,322	$6,000	$17,711	$11,711
Technical Assistance and Grants for Emergencies (SDWA)	$0	$0	$35,022	$35,022

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Technical Assistance and Grants for Emergencies, Small Systems	$0	$0	$15,000	$15,000
Source Water Petition Program	$0	$0	$5,000	$5,000
Voluntary Connections to Public Water Systems	$0	$0	$20,004	$20,004
Underserved Communities Grant to Meet SDWA Requirements	$0	$0	$50,030	$50,030
Small System Water Loss Identification and Prevention	$0	$0	$50,019	$50,019
Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability	$0	$5,000	$50,022	$45,022
Indian Reservation Drinking Water Program	$0	$4,000	$50,017	$46,017
Advanced Drinking Water Technologies	$0	$0	$10,000	$10,000
Clean Water Act Research, Investigations, Training, and Information	$0	$0	$75,033	$75,033
Wastewater Efficiency Grant Pilot Program	$0	$0	$20,004	$20,004
Clean Water Infrastructure Resiliency and Sustainability Program	$0	$0	$25,011	$25,011
Small and Medium Publicly Owned Treatment Works Circuit Rider Program	$0	$0	$10,000	$10,000
Grants for Low and Moderate income Household Decentralized Wastewater Systems	$0	$0	$50,022	$50,022
Connection to Publicly Owned Treatment Works	$0	$0	$40,020	$40,020
Water Data Sharing Pilot Program	$0	$0	$15,000	$15,000
Stormwater Infrastructure Technology	$0	$3,000	$5,000	$2,000
Stormwater Control Infrastructure Project Grants	$0	$0	$10,000	$10,000
Alternative Water Sources Grants Pilot Program	$0	$0	$25,009	$25,009
Enhanced Aquifer Use and Recharge	$0	$4,000	$5,000	$1,000
Water Sector Cybersecurity	$0	$0	$25,000	$25,000
Recycling Infrastructure	$0	$6,500	$10,000	$3,500
Wildfire Smoke Preparedness	$0	$7,000	$7,000	$0
Subtotal, State and Tribal Assistance Grants (STAG)	**$2,015,882**	**$3,316,130**	**$4,438,718**	**$1,122,588**
Categorical Grants				
Categorical Grant: Nonpoint Source (Sec. 319)	$169,189	$182,000	$188,999	$6,999
Categorical Grant: Public Water System Supervision (PWSS)	$110,742	$121,500	$132,566	$11,066
Categorical Grant: State and Local Air Quality Management	$226,481	$249,038	$400,198	$151,160
Categorical Grant: Radon	$8,007	$10,995	$12,487	$1,492
Categorical Grant: Pollution Control (Sec. 106)				
Monitoring Grants	$18,585	$18,512	$26,515	$8,003
Categorical Grant: Pollution Control (Sec. 106) (other activities)	$206,719	$218,488	$252,925	$34,437
Subtotal, Categorical Grant: Pollution Control (Sec. 106)	$225,304	$237,000	$279,440	$42,440

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Categorical Grant: Wetlands Program Development	$17,353	$14,692	$15,079	$387
Categorical Grant: Underground Injection Control (UIC)	$11,825	$13,164	$11,387	-$1,777
Categorical Grant: Pesticides Program Implementation	$14,102	$14,027	$14,027	$0
Categorical Grant: Lead	$14,813	$16,326	$24,639	$8,313
Resource Recovery and Hazardous Waste Grants	$98,146	$105,000	$108,247	$3,247
Categorical Grant: Pesticides Enforcement	$23,091	$25,580	$25,580	$0
Categorical Grant: Pollution Prevention	$2,757	$4,973	$5,775	$802
Categorical Grant: Toxics Substances Compliance	$4,768	$5,010	$6,877	$1,867
Categorical Grant: Tribal General Assistance Program	$67,520	$74,750	$85,009	$10,259
Categorical Grant: Underground Storage Tanks	$1,475	$1,505	$1,505	$0
Categorical Grant: Tribal Air Quality Management	$14,543	$16,415	$23,126	$6,711
Categorical Grant: Environmental Information	$3,586	$10,836	$15,000	$4,164
Categorical Grant: Beaches Protection	$9,368	$10,619	$9,811	-$808
Categorical Grant: Brownfields	$47,278	$47,195	$46,954	-$241
Categorical Grant: Multipurpose Grants	$2,509	$0	$10,200	$10,200
Subtotal, Categorical Grants	**$1,072,856**	**$1,160,625**	**$1,416,906**	**$256,281**
Congressional Priorities *(previously named Clean and Safe Water Technical Assistance Grants)*				
Congressionally Mandated Projects	$148	$16,973	$0	-$16,973
Total, State and Tribal Assistance Grants	**$3,088,886**	**$4,493,728**	**$5,855,624**	**$1,361,896**
Hazardous Waste Electronic Manifest System Fund				
Resource Conservation and Recovery Act (RCRA)				
RCRA: Waste Management	$12,482	$0	$0	$0
Operations and Administration				
Central Planning, Budgeting, and Finance	$149	$0	$0	$0
Total, Hazardous Waste Electronic Manifest System Fund	**$12,631**	**$0**	**$0**	**$0**
Water Infrastructure Finance and Innovation Fund				
Ensure Clean Water				
Water Infrastructure Finance and Innovation	$154,098	$75,640	$80,443	$4,803
Total, Water Infrastructure Finance and Innovation Fund	**$31,620**	**$75,640**	**$80,443**	**$4,803**
Subtotal, EPA	**$8,420,261**	**$10,148,733**	**$12,083,273**	**$1,934,540**

	FY 2022 Final Actuals	FY 2023 Enacted Operating Plan	FY 2024 President's Budget	FY 2024 President's Budget v. FY 2023 Enacted Operating Plan
Cancellation of Funds	$0	-$13,300	$0	$13,300
TOTAL, EPA	**$8,420,261**	**$10,135,433**	**$12,083,273**	**$1,947,840**

*For ease of comparison, Superfund transfer resources for the audit and research functions are shown in the Superfund account.
**In addition to annual appropriated resources, the agency expects to receive an estimated $2.5 billion in Superfund tax receipts in FY 2024 not reflected here. These additional government revenues will support continued Superfund cleanup and enforcement.
***Note that the Hazardous Waste Electronic Manifest Program is funded from fee collections.

Eliminated Programs

Eliminated Program Projects[16]

Water Quality Research and Support Grants (also referred to as Congressional Priorities) (FY 2024 President's Budget: $0.0, 0.0 FTE)

This program is proposed for elimination in the FY 2024 President's Budget. Work to advance water quality protection can be accomplished within core statutory programs funded in the Budget request. This program focuses on water quality and water availability research, the development and application of water quality criteria, the implementation of watershed management approaches, and the application of technological options to restore and protect water bodies. For training and technical assistance aspects of the Program, states have the ability to develop technical assistance plans for their water systems using Public Water System Supervision funds and set-asides from the Drinking Water State Revolving Fund (DWSRF). For research and development components of the Program, EPA was instructed by Congress to award grants on a competitive basis, independent of the Science to Achieve Results (STAR) program and give priority to not-for-profit organizations that: conduct activities that are national in scope; can provide a twenty-five percent match, including in-kind contributions; and often partner with the Agency.

San Juan Watershed Monitoring (formerly Gold King Mine Water Monitoring)
(FY 2024 President's Budget: $0.0, 0.0 FTE)

This program is proposed for elimination in the FY 2024 Budget due to project completion. This program was established under Section 5004(d) of the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). EPA and the tribes and states in the San Juan watershed − Arizona, Colorado, New Mexico, Utah, Navajo Nation, Ute Mountain Ute Tribe, and Southern Ute Indian Tribe − work together to monitor water quality and use the best available data and science to identify and implement pollution prevention and restoration projects to improve water quality. Additional programs exist that the states may use to monitor the water quality of the San Juan watershed.

[16] Although not eliminated, funding for Superfund Enforcement, Remedial and Emergency Response and Removal programs is proposed to be transitioned from annual appropriations to Superfund Tax receipts in FY 2024. Work will continue and FTE will be funded through the tax receipts as reimbursable FTE and included in the annual FTE count.

Proposed FY 2024 Administrative Provisions

To further clarify proposed Administrative Provisions that involve more than a simple annual extension or propose a modification to an existing provision, the following information is provided.

Pesticide Licensing Fees

The following proposed statutory language would allow PRIA registration service fees to be assessed and to remain available until expended.

PRIA registration service fees:

The Administrator of the Environmental Protection Agency is authorized to collect and obligate pesticide registration service fees in accordance with section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136w–8): Provided, That such fees collected shall remain available until expended.

Notwithstanding section 33(d)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136w–8(d)(2)), the Administrator of the Environmental Protection Agency may assess fees under section 33 of FIFRA (7 U.S.C. 136w–8) for fiscal year 2024.

Hazardous Waste Electronic Manifest

The Hazardous Waste Electronic Manifest Establishment Act (Public Law 112-195) provides EPA with the authority to establish a program to finance, develop, and operate a system for the electronic submission of hazardous waste manifests supported by user fees. In FY 2024, EPA will operate the e-Manifest system and the Agency anticipates collecting and depositing approximately $27 million in e-Manifest user fees into the Hazardous Waste Electronic Manifest System Fund. Based upon authority to collect and spend e-Manifest fees provided by Congress in annual appropriations bills, the fees will be utilized for the operation of the system and necessary program expenses. Fees will fully support the e-Manifest program, including future development costs. The language to authorize collection and spending of the fees is provided below. Language specifying that e-Manifest fees collected in FY 2024 will remain available until expended would simplify aspects of budget execution.

Propose a modification to the existing provision:

The Administrator of the Environmental Protection Agency is authorized to collect and obligate fees in accordance with section 3024 of the Solid Waste Disposal Act (42 U.S.C. 6939g) for fiscal year 2024, to remain available until expended.

Change to Buildings and Facilities Per Project Threshold

The Building and Facilities threshold was last increased from $150,000 to $300,000 in FY 2023. Since 2013, costs for construction, material, and labor have increased significantly. EPA is proposing to reflect these cost increases by raising the per project threshold from $300,000 to

$350,000. The purpose of this proposed increase is to adjust the threshold to keep it in line with construction and labor costs for smaller-scale construction and repair and improvement projects. The $350,000 threshold will apply to the S&T, EPM, OIG, Superfund, and LUST appropriations and will allow the programs to proceed effectively and efficiently to address immediate, urgent, and smaller-scale facility improvements and will enable the Agency to maintain adequate operations, further mission-critical activities and implement climate sustainability and resiliency enhancements.

Proposed modification to the existing provision:

The Science and Technology, Environmental Programs and Management, Office of Inspector General, Hazardous Substance Superfund, and Leaking Underground Storage Tank Trust Fund Program Accounts, are available for the construction, alteration, repair, rehabilitation, and renovation of facilities provided that the cost does not exceed $350,000 per project.

Student Services Contracting Authority

In the FY 2024 Budget, the Agency requests authorization for the Office of Research and Development (ORD), the Office of Chemical Safety and Pollution Prevention (OCSPP), and the Office of Water (OW) to hire pre-baccalaureate and post-baccalaureate students in science and engineering fields. This authority would provide ORD, OCSPP, and OW with the flexibility to hire qualified students that work on projects that support current priorities, programmatic functions, and the Agency's environmental goals.

Proposed Language to add to FY 2024 Budget**:**

For fiscal years 2024 through 2028, the Office of Chemical Safety and Pollution Prevention and the Office of Water may, using funds appropriated under the headings "Environmental Programs and Management" and "Science and Technology," contract directly with individuals or indirectly with institutions or nonprofit organizations, without regard to 41 U.S.C. 5, for the temporary or intermittent personal services of students or recent graduates, who shall be considered employees for the purposes of chapters 57 and 81 of title 5, United States Code, relating to compensation for travel and work injuries, and chapter 171 of title 28, United States Code, relating to tort claims, but shall not be considered to be Federal employees for any other purpose: Provided, that amounts used for this purpose by the Office of Chemical Safety and Pollution Prevention and the Office of Water collectively may not exceed $2,000,000 per year.

Special Accounts and Superfund Tax Receipts for Aircraft to Support Superfund Response Actions

31 U.S.C. 1343(d) generally states that appropriated funds are not available for aircraft unless "the appropriation specifically authorizes" its use for such purpose. The FY 2022 Consolidated Appropriation Act provided that "Section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9622(b)(3)), shall be applied by inserting before the period: '', including for the hire, maintenance, and operation of aircraft." In the

absence of any indicia of permanency, this provision has been interpreted to only be in effect for fiscal year 2022. Accordingly, EPA proposes to extend this authority.

The Consolidated Appropriations Act 2023 (P.L. 117-328) did not provide a provision for Superfund tax receipts available to carry out CERCLA to be used for the hire, maintenance, and operation of aircraft. EPA proposes to add this authority for FY 2024.

Proposed Language to add to FY 2024 Budget:

For fiscal year 2024, section 122(b)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9622(b)(3)) shall be applied by inserting before the period at the end: ", including for the hire, maintenance, and operation of aircraft".

For fiscal year 2024, amounts appropriated in section 443(b) of title IV of division G of Public Law 117–328 shall be applied by inserting ", including for the hire, maintenance, and operation of aircraft" after "to be used to carry out the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.)".

Title 42 Hiring Authority

EPA is requesting changes to its Title 42 Authority to obtain an extension of this authority through 2030. This also would include a cap of 25 hires for OCSPP and 75 Hires for ORD. ORD currently uses this authority to fill highly competitive, PhD-level positions where recruiting through the GS system is not appropriate. ORD has a robust process for managing the program, including an Operations Manual that provides requirements on recruiting, compensation, ethics, and term renewals. OCSPP faces similar challenges in hiring specialized talent. OCSPP is actively building the infrastructure and taking steps to use its new Title 42 hiring authority. The EPA Title 42 delegation was amended to include OCSPP, and it was approved by the EPA Administrator on October 17, 2022. In accordance with Public Law 117-103, the agency must also consult with the Office of Personnel Management (OPM) before using its Title 42 hiring authority. EPA is currently undergoing consultation with OPM on Title 42. Once we work through this process, EPA can finalize the Title 42 Order and OCSPP can then utilize its new hiring authority.

Proposed Language to add to FY 2024 Budget**:**

The Administrator may, after consultation with the Office of Personnel Management, employ up to 75 persons at any one time in the Office of Research and Development and 25 persons at any one time in the Office of Chemical Safety and Pollution Prevention under the authority provided in 42 U.S.C. 209 through fiscal year 2030.

Working Capital Fund Authority

On December 12, 2017, the Modernizing Government Technology (MGT Act)[17] was signed into law, authorizing CFO-Act agencies to set up information technology (IT) specific WCFs, which

[17] For more information on the MGT Act, please refer to Section G of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115-91): https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf.

allows them to fund IT modernization projects and reinvest savings for additional modernization projects in the future. In the FY 2023 Budget, the Agency requests language be added to clarify and ensure that EPA has the ability to utilize funds deposited into EPA's WCF to modernize and develop the Agency's IT systems. The Agency has a well-established WCF where nearly 80 percent of the current service offerings are IT related. Establishing a separate IT WCF would be duplicative and more costly than to utilize the Agency's existing WCF. By seeking the proposed authorizing language change, EPA will clarify its existing authority and harmonize it with the intent of what Congress envisioned in the passage of the MGT Act.

Proposed Language to add to FY 2024 Budget**:**

The Environmental Protection Agency Working Capital Fund, 42 U.S.C. 4370e, is available for expenses and equipment necessary for modernization and development of information technology of, or for use by, the Environmental Protection Agency.

Other

In order to address the high administrative costs of administering potential congressionally directed spending, EPA is requesting that general provision applicable to all community projects in FY 2024:

For fiscal year 2024, the Administrator may reserve up to 7 percent of the total amount of funds made available for Community Project Funding Items/Congressionally Directed Spending Items in this title in this Act for salaries, expenses, and administration.

062S. 2276 – Good Accounting Obligation in Government Act
Public Law No: 115-414, January 3, 2019

In accordance with the reporting requirements of the Good Accounting Obligation in Government Act, Agencies are to submit reports on outstanding recommendations in the annual budget submitted to Congress.

For the FY 2024 budget justification, the EPA developed a report listing each open public recommendation for corrective action from the Office of the Inspector General, along with the implementation status of each recommendation.

In cooperation with the EPA OIG, the EPA performs a reconciliation and validation process prior to each publication of the EPA OIG's Semiannual Report to Congress (SAR). The reconciliation ensures that agency's Good Accounting Obligation in Government Act reporting aligns with the SAR.

The EPA also developed a report listing the status of each open or closed as unimplemented public recommendation from the Government Accountability Office (GAO).

EPA OIG Open Recommendations and Corrective Actions

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
22-P-0033	3/31/22	1. Develop a policy and implement procedures to reduce the balances of available program income and establish a time frame for recipients to use or return the funds to the EPA.	The EPA will work to maximize the number of older closeout agreements with consistent national closeout terms and conditions, as their workload allows. The Office of Brownfields and Land Revitalization (OBLR) will request that the regions attempt initial contact with Revolving Land Fund recipients of older closeout agreements who do not have an open Revolving Land Fund grant by the provided completion date in order to begin the renegotiation process. However, EPA cannot unilaterally modify older closeout agreements and will need to work with these recipients on bilateral agreements to incorporate the FY 2022 closeout agreements. Status: On track	9/30/27
22-P-0033	3/31/22	2. Implement a method for tracking program income and compliance with post-closeout reporting requirements.	OBLR will make enhancements to the Assessment, Cleanup, and Redevelopment Exchange System (ACRES) software in order to include entries for program income balance and date of latest post-closeout performance report. If required by their closeout agreements, cooperative agreement recipients will begin reporting the program income balance as of September 30th of each fiscal year, along with the date of the latest post-closeout report in ACRES. Project officers will check ACRES for cooperative agreement recipients' entry and review the post-closeout report. For cooperative agreement recipients for whom this is not required, project officers will add the information to ACRES as it becomes available (Information Collection Request approval is required before this can be initiated). Status: On track	12/31/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
22-P-0033	3/31/22	4. Provide training to regional Brownfields Revolving Loan Fund staff and management on the post-closeout tracking and monitoring requirements.	OBLR will provide training to Revolving Land Fund project officers on the "Closeout Procedures" chapter of the Revolving Land Fund Program Manual and discuss their responsibilities for tracking program income and performance reporting under closeout agreements OBLR will provide training to Revolving Land Fund recipients and project officers on ACRES enhancements and requirements for reporting of program income and post-closeout reporting. Status: On track	3/31/23
22-P-0033	3/31/22	5. Expand existing guidance to include a deadline for post-closeout annual report submission.	This action has been completed for closeout agreements executed after June 2021. For Revolving Land Fund recipients of older closeout agreements, OBLR will request that the regions attempt initial contact by the provided completion date to begin the renegotiation process. However, EPA cannot unilaterally modify older closeout agreements and will need to work with these recipients on bilateral agreements to incorporate the FY 2022 Closeout Agreement. Status: On track	9/30/27
22-P-0033	3/31/22	6. Assess whether any of the $46.6 million of program income under closeout agreements should be returned to the government.	Since the FY 2022 Closeout Agreement Template requires that post-closeout reports be submitted by October 31st with program income balances reported as of September 30th, POs will begin conducting annual reviews of post-closeout program income every November for Revolving Land Fund grants in post-closeout status with this closeout agreement requirement. For those who do not have this closeout agreement requirement, project officers will review post-closeout program income information every November as it becomes available. For Revolving Land Funds in post-closeout status that have	9/30/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
			more than $500,000 of program income and no recent subgrant or loan activity, OBLR will encourage the regions to increase their efforts in helping the recipient to use the funds on eligible activities, as regional workload allows. OBLR will review on a case-by-case basis whether additional action is needed, including recovery of program income for deposit into the US Treasury as miscellaneous receipts if necessary. Status: On track	
22-P-0019	3/7/22	1. Require the EPA's Office of Human Resources to train all employees and supervisors who earn, use, or approve religious compensatory time on the U.S. Office of Personnel Management's current regulatory requirements and the EPA's current policy and procedures related to religious compensatory time.	The EPA Office of Mission Support (OMS) Office of Human Resources (OHR) will develop basic training on religious compensatory time and place it in FedTalent. Employees who use religious compensatory time and their first-line supervisor will be required to complete the training. FedTalent will have a record of learning that reflects date of completion. OMS will issue a memorandum to program and regional senior management requiring employees who use religious compensatory time and their first-line supervisor to complete the religious compensatory time training. Status: On track	6/30/23
22-P-0018	2/22/22	1. Develop a standard operating procedure that instructs program offices and regions on tracking and documenting grant flexibilities and exceptions, and their impacts, due to unanticipated events in order to assure consistency in the information needed to manage grants.	Develop a standard operating procedure that instructs program offices and regions on tracking and documenting grant flexibilities and exceptions, and their impacts, due to unanticipated events in order to assure consistency in the information needed to manage grants. Status: On track	12/31/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
22-P-0010	12/8/21	4. Implement controls to comply with federally and Agency-required time frames to install patches to correct identified vulnerabilities in the Pesticide Registration Information System application.	Implement controls to comply with federally and Agency-required time frames to install patches to correct identified vulnerabilities in the Pesticide Registration Information System application. Status: On track	10/31/23
22-P-0001	11/8/21	1. Update policies and procedures to require that Awardee/Recipient Legal Entity Name and Legal Entity Address data elements match SAM.gov at the time of the award and any award modifications for all contracts and grants. At the time of any award modification, update the Agency's contracts or grants management system and the Federal Procurement Data System with any changes to these data elements.	The OMS Office of Grants and Debarment (OGD) will update policies and/or procedures, such as guidance, SOPs, or pre-award checklists, to require that Awardee/Recipient Legal Entity Name and Legal Entity Address data elements match SAM.gov at the time of the award and of any award modifications for all grants. OMS-OGD will require, at the time of any award modification, an update to the Agency's grants management system with any changes to these data elements. OMS-OGD will also incorporate the new requirements in training materials. Status: On track	2/28/23
22-P-0001	11/8/21	3. Update EPA's grants management system to align with the DATA Act data standards, including all parts of data elements reported therein, and to allow input only of the acceptable values outlined for each data element in DATA Act Information Model Schema, Reporting Submission Specification.	OMS-OGD will update Next Generation Grants System to align with the DATA Act data standards including all parts of data elements reported therein and allow input only of the acceptable values outlined for each data element in DATA Act Information Model Schema, Reporting Submission Specification. Status: On track	9/30/23
22-F-0007	11/15/21	5. Implement a system that tracks the dates when accounts receivable source documents need to be submitted and are submitted by the Office of Enforcement and Compliance Assurance to the Cincinnati Finance Center.	Implement a system that tracks the dates when accounts receivable source documents need to be submitted and are submitted by the Office of Enforcement and Compliance Assurance to the Cincinnati Finance Center. Status: On track	4/28/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
22-E-0026	3/30/22	1. Perform a workforce analysis to determine the staff and resources needed to meet the statutory deadlines for residual risk and technology reviews, initial technology reviews, and recurring eight-year technology reviews, as well as to complete any such reviews that are overdue.	The EPA Office of Air and Radiation (OAR) will develop a high-level analysis that will enable the Agency to determine the staff and resources needed to complete future reviews in accordance with statutory deadlines and complete overdue Residual Risk and Technology Reviews (RTRs) and Technology Reviews (TRs). Performing an analysis will enable OAR to identify proper staffing levels for the RTR and TR program to ensure critical competencies are fulfilled, succession planning is well managed, costs are optimized, agility is achieved, and resiliency is retained. OAR will work with Agency partners to develop this high-level analysis. Status: On track	3/31/23
22-E-0026	3/30/22	2. Develop and implement a strategy to conduct (a) residual risk and technology reviews and recurring technology reviews by the applicable statutory deadlines and (b) any overdue residual risk and technology reviews and recurring technology reviews in as timely a manner as practicable. The strategy should take into account the Agency's environmental justice responsibilities under Executive Order 12898 and other applicable EPA and executive branch policies, procedures, and directives.	OAR will develop and implement a strategy to timely meet statutory deadlines for RTRs and TRs and complete all overdue RTRs and TRs. OAR fully supports developing a strategy that integrates the high-level analysis with the Administration's priorities, legal deadlines (e.g., court-ordered deadlines, settlement agreements), risk prioritization, and other factors in an effort to protect human health and the environment. We anticipate much of the strategy development would be reliant on the high-level analysis (e.g., assessment of current operations, prediction of future operations, and evaluation of impact of organizational change based on experience and historical data). Status: On track	3/31/24
22-E-0017	1/12/22	1. Coordinate with EPA regions to provide recurring training on Clean Air Act Title V fee laws and regulations to permitting agencies.	The OAR will develop and conduct training for EPA regional staff on the updated fee guidance developed to address recommendations 3 and 4. Additionally, the OAR will coordinate with regional offices to develop training on title V fee laws and regulations to	6/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
			present to permitting authorities. Status: On track	
22-E-0017	1/12/22	2. In collaboration with EPA regions, develop and implement a plan to address declining Clean Air Act Title V revenues.	The OAR will collaborate with regions, convene a workgroup, and develop and implement strategies to address declining title V fee revenues. The OAR will collaborate with regional staff to convene a workgroup and identify key stakeholders and plan for consultations. We plan to conduct consultations with permitting authorities to determine the scope of fee deficiencies and fee structures and identify current best practices. Status: On track	12/31/23
22-E-0017	1/12/22	3. Update the EPA's guidance documents to require regions to establish time frames for permitting authorities to complete corrective actions in program and fee evaluation reports and clear, escalating consequences if timely corrective actions are not completed.	The OAR will update the 2018 title V fee guidance to establish expectations for how and when to perform fee evaluations and set expectations for completion of corrective actions agreed to as a result of a fee evaluation. Status: On track	3/31/23
22-E-0017	1/12/22	4. Update the Clean Air Act Title V guidance documents to establish criteria for when regions must conduct Title V fee evaluations and require a minimum standard of review for fee evaluations.	The OAR will update the 2018 title V fee guidance to establish expectations for how and when to perform fee evaluations and set expectations for completion of corrective actions agreed to as a result of a fee evaluation. Status: On track	3/31/23
22-E-0017	1/12/22	5. Provide training to EPA regional staff on the updated Clean Air Act Title V fee guidance and how to conduct fee evaluations.	The OAR will develop and conduct training for EPA regional staff on the updated fee guidance developed to address recommendations 3 and 4. Additionally, the OAR will coordinate with regional offices to develop training on title V fee laws and regulations to present to permitting authorities. Status: On track	6/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
22-E-0009	12/1/21	3. Review Resource Conservation and Recovery Act information data entered during the coronavirus pandemic to determine the extent off-site compliance-monitoring activities were incorrectly counted as inspections and correct the inspection data in the system as needed.	The EPA's Office of Enforcement and Compliance Assurance (OECA) will review the inspection data to determine if off-site compliance monitoring activities were incorrectly counted as inspections and correct the inspection data in the system if needed. Status: On track	3/30/23
22-E-0009	12/1/21	4. Work with all EPA regions to determine why the rate of violations was reduced during the coronavirus pandemic and the inspection rate for large quantity generators was below historical levels from October 2020 through February 2021.	OECA will work with Regions to define inspection requirements and flexibilities to optimize the capabilities of authorized state programs in future disaster events. Status: On track	3/31/23
22-E-0009	12/1/21	5. Develop policies that define inspection requirements and flexibilities to optimize the capabilities of authorized state programs in future large-scale pandemic or disaster events. These should include mechanisms, consistent with EPA guidance documents, that allow maintenance of normal Resource Conservation and Recovery Act inspection rates while ensuring the safety of enforcement staff.	OECA will work with EPA regions and states to develop policies for inspection requirements and flexibilities that help optimize the capabilities of authorized state programs in the face of future large-scale pandemic or disaster events. Our considerations will include mechanisms, consistent with EPA guidance documents, that allow maintenance of normal Resource Conservation and Recovery Act (RCRA) inspection rates while ensuring the safety of enforcement staff. Status: On track	3/31/23
22-E-0008	11/17/21	4. Determine and document the conditions or parameters under which the use of remote video to conduct off-site partial compliance evaluations is feasible from a legal, technical, and programmatic perspective.	Finalize the Remote Virtual Partial Compliance Evaluation workgroup standard operating procedures. Status: On track	6/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
22-E-0008	11/17/21	5. Finalize the Remote Video Partial Compliance Evaluation workgroup's standard operating procedures.	Finalize the Remote Virtual Partial Compliance Evaluation workgroup standard operating procedures. Status: On track	6/30/23
22-E-0008	11/17/21	6. Determine whether and how remote video can be used in conjunction with document reviews to qualify as a full compliance evaluation for purposes of the Clean Air Act Stationary Source Compliance Monitoring Strategy and provide instructions to state and local agencies.	Finalize the Remote Virtual Partial Compliance Evaluation workgroup standard operating procedures. Status: On track	6/30/23
21-P-0265	9/30/21	4. Issue addendums to the Resource Management Directive System 2550B travel policy or equivalent to: a. Require approvers to estimate and compare the total cost of temporary change of station versus extended temporary duty travel and authorize the one that is most advantageous for the Agency, cost and other factors considered. b. Require the travel card cancellation and closeout process to occur within a predetermined number of days.	The EPA's Office of the Chief Financial Officer (OCFO) will issue either an addendum or update to the Resource Management Directive System (RMDS) 2550B travel manual to state that cost comparisons on temporary change of station versus extended temporary duty travel must be considered and maintained in the program/regional office. Per the Federal Travel Regulation, only details over six months are considered eligible for a temporary change of station. Detailed language will be added to the travel policy to require a cost comparison to be performed for details over six months. The OCFO will issue either an addendum or an update to the RMDS 2550B travel manual to require explicitly that the travel card cancellation and closeout process occur within 30 days of an employee's departure from the agency. Status: Delayed due to external dependencies	9/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
21-P-0175	7/8/21	1. Update Agency guidance on practical enforceability to more clearly describe how the technical accuracy of a permit limit should be supported and documented. In updating such guidance, the Office of Air and Radiation should consult and collaborate with the Office of Enforcement and Compliance Assurance, the Office of General Counsel, and the EPA regions.	OAR will update Agency guidance on the practical enforceability of limitations, including but not limited to EPA's June 13, 1989, Guidance on Limiting Potential to Emit in New Source Permitting, to describe how the technical accuracy of a permit limit should be supported and documented. Specifically, the updated guidance will address the practical enforceability of limitations on potential to emit. In updating our guidance, we will consult and collaborate with the Office of Enforcement and Compliance Assurance, the Office of General Counsel, and the EPA regions. Status: On track	10/31/23
21-P-0175	7/8/21	2. In consultation with the EPA regions, develop and implement an oversight plan to include: • An initial review of a sample of synthetic-minor-source permits in different industries that are issued by state, local, and tribal agencies to assess whether the permits adhere to EPA guidance on practical enforceability, including limits that are technically accurate; have appropriate time periods; and include sufficient monitoring, record-keeping, and reporting requirements. • A periodic review of a sample of synthetic-minor-source permits to occur, at a minimum, once every five years. • Procedures to resolve any permitting deficiencies identified during the initial and periodic reviews.	In consultation with EPA Regional offices, OAR will develop and implement an oversight plan in accordance with current statutory and EPA regulatory requirements and, as appropriate, including the specific elements identified. Status: On track	10/31/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
21-P-0175	7/8/21	3. Assess recent EPA studies of enclosed combustion device performance and compliance monitoring and other relevant information during the next statutorily required review of 40 C.F.R Part 60 Subparts OOOO and OOOOa to determine whether revisions are needed to monitoring, record-keeping and reporting requirements for enclosed combustion devices to assure continuous compliance with associated limits and revise the regulatory requirements as appropriate.	OAR will assess EPA studies of enclosed combustion device performance and compliance monitoring and other relevant information during the next statutorily required review of 40 C.F.R part 60 subparts OOOO and OOOOa and determine whether revisions are needed to monitoring, record-keeping and reporting requirements for enclosed combustion devices to assure continuous compliance with associated limits and revise the regulatory requirements as appropriate. Status: On track	12/31/24
21-P-0175	7/8/21	4. Revise the Agency's guidance to communicate its key expectations for synthetic-minor-source permitting to state and local agencies.	The agency will revise its guidance to communicate its key expectations for synthetic-minor-source permitting to state and local agencies. This will include an expectation that synthetic minor permit terms and conditions ensure that the potential to emit of the source is less than the applicable major source threshold by meeting legal and practical enforceability criteria. Our work related to this recommendation may, at least in part, be integrated with the updated guidance on practical enforceability in response to OIG Recommendation 1. Status: On track	10/31/24
21-P-0175	7/8/21	5. Identify all state, local, and tribal agencies in which Clean Air Act permit program implementation fails to adhere to the public participation requirements for synthetic-minor-source permit issuance and take appropriate steps to assure the identified states adhere to the public participation requirements.	With EPA Regional office support, OAR will identify state, local and tribal agencies whose program regulations, including but not limited to minor new source review and federally enforceable state operating permit program regulations and corresponding practices, do not meet the public participation requirements contained in the applicable EPA regulations, e.g., 40 CFR 51.161, and guidance with respect to synthetic minor source permitting. For the	12/31/23

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			identified agencies, OAR will take appropriate corrective steps, which may include constructive, informal engagement. Status: On track	
21-P-0131	5/12/21	9. Develop and incorporate metrics on the National Enforcement Investigations Center work environment and culture into Office of Criminal Enforcement, Forensics, and Training senior management performance standards, such as results from the annual Federal Employee Viewpoint Survey, periodic culture audits, or other methods to measure progress.	Measuring this baseline and subsequent quarterly data will continue until the completion of the organizational assessment that will evaluate the veracity of actual issues or concerns while also determining root causes of any concerns identified. Once that data is available, the Office of Criminal Enforcement, Forensics, and Training will evaluate appropriate measures and/or next steps. Status: On track	6/28/24
21-P-0131	5/12/21	10. Develop and incorporate metrics that address work environment and culture into National Enforcement Investigations Center senior management performance standards.	Measuring this baseline and subsequent quarterly data will continue until the completion of the organizational assessment that will evaluate the veracity of actual issues or concerns while also determining root causes of any concerns identified. Once that data is available, the Office of Criminal Enforcement, Forensics, and Training will evaluate appropriate measures and/or next steps. Status: On track	6/28/24
21-P-0130	5/11/21	1. Evaluate the obstacles to implementing the Clean Water Act to control trash in U.S. waterways and provide a public report describing those obstacles.	To evaluate the obstacles to implementing the Clean Water Act to control trash in U.S. waterways, EPA will engage in discussion with states, and will address this recommendation through the development of the "water management" component of the Federal Strategy required under Section 301 of Save Our Seas 2.0. This Strategy will be a public document addressing both the waste and water components related to plastic pollution and will evaluate the requirements and hurdles posed by the Clean Water Act, as well as other regulatory requirements and non-	2/28/24

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			regulatory actions. Status: Delayed due to implementation complexity	
21-P-0130	5/11/21	2. Develop and disseminate strategies to states and municipalities for addressing the obstacles identified in the evaluation from Recommendation 1. These strategies may include guidance regarding how to develop narrative water quality criteria, consistent assessment and measurement methodologies, and total maximum daily loads for trash pollution.	The Office of Wetlands, Oceans and Watersheds agrees to issue, in collaboration with EPA Regions, national 303(d) guidance for States highlighting the requirement to assemble and evaluate all water quality-related data and information and use such data/information to determine if all applicable water quality standards are attained (including narrative criteria that encompass trash). In developing the guidance, OWOW will work with regions and states to seek to identify examples of assessment approaches and address the variability that may be appropriate among states/areas. Status: On track	4/30/23
21-P-0129	5/6/21	2. Conduct new residual risk reviews for Group I polymers and resins that cover neoprene production, synthetic organic chemical manufacturing industry, polyether polyols production, commercial sterilizers, and hospital sterilizers using the new risk values for chloroprene and ethylene oxide and revise the corresponding National Emission Standards for Hazardous Air Pollutants, as needed.	OAR commits to conduct appropriate reviews to ensure that the standards for neoprene production, synthetic organic chemical manufacturing industry, polyether polyols production, and commercial sterilizers continue to provide an ample margin of safety to protect public health and that the standards for hospital sterilizers provide an ample margin of safety to protect public health. Status: On track	9/30/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
21-P-0129	5/6/21	3. Revise National Emission Standards for Hazardous Air Pollutants for chemical manufacturing area sources to regulate ethylene oxide and conduct a residual risk review to ensure that the public is not exposed to unacceptable risks.	Technology-based standards for ethylene oxide have not yet been established for the Chemical Manufacturing Area Sources source category. Therefore, we plan to first evaluate ethylene oxide emissions from the source category, and if ethylene oxide emissions present a public health concern (i.e., by considering risk information), we will regulate ethylene oxide in the Chemical Manufacturing Area Sources rule. Regulation would involve the establishment of technology-based ethylene oxide standards pursuant to either Clean Air Act section 112(d)(5) standards or sections 112(d)(2) and 112(d)(3) standards. Within four years of promulgation, EPA would assess the risks from ethylene oxide emissions from Chemical Manufacturing Area Sources to inform us on whether an earlier review date is appropriate. Status: On track	9/30/28
21-P-0129	5/6/21	4. Conduct overdue technology reviews for Group I polymers and resins that cover neoprene production, synthetic organic chemical manufacturing industry, commercial sterilizers, hospital sterilizers, and chemical manufacturing area sources, which are required to be completed at least every eight years by the Clean Air Act.	OAR plans to conduct overdue technology reviews for commercial sterilizers, hospital sterilizers, Group I polymers and resins, synthetic organic chemical manufacturing, and chemical plant area sources. Status: On track	9/30/24
21-P-0122	4/21/21	4. Review and provide written input on any National Pollutant Discharge Elimination System permit prepared for reissuance by the Minnesota Pollution Control Agency for the PolyMet Mining Inc. NorthMet project, if applicable, as appropriate pursuant to the requirements of	The Minnesota Pollution Control Agency has not transmitted the PolyMet National Pollutant Discharge Elimination System permit to EPA for review, so the status of the recommendation remains unchanged. Status: On track	11/30/23

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		the Clean Water Act, National Pollutant Discharge Elimination System regulations, the Region 5 National Pollutant Discharge Elimination System permit review standard operating procedure, and the memorandum of agreement between EPA Region 5 and the Minnesota Pollution Control Agency.		
21-P-0122	4/21/21	1. Review the modified National Pollutant Discharge Elimination System mining permits issued by West Virginia based on the 2019 revisions to its National Pollutant Discharge Elimination System program to ensure that no backsliding has occurred, including for discharges of ionic pollution, in accordance with EPA Region 3's approval letter dated March 27, 2019. If a permit does not contain record documentation for the reasonable potential analysis or otherwise allows backsliding, alert West Virginia of the permit inadequacies.	Conduct reviews of 5% of the 286 permits, focusing on the presence of reasonable potential analysis and backsliding. We will confirm that the West Virginia Department of Environmental Protection (WVDEP) followed same process for all 286 permits and will ensure that subset of permits would be representative of all 286. If initial review indicates discrepancies in how WVDEP approached modifications, we commit to increasing number of permits reviewed. Through Region 3's Permit Quality Review of West Virginia's National pollutant discharge elimination system permitting program, we will evaluate a minimum of 10 Core permits and 15 additional mining permits. We will add the three permits that were the subject of EPA's July 25, 2019, comment letters. Develop Permit Quality Review report that documents findings and action items to resolve any deficiencies. Status: On track	1/31/23
21-P-0122	4/21/21	2. Review the modified National Pollutant Discharge Elimination System mining permits issued by West Virginia based on the 2019	Develop scope of work for the project. Review data generated from permits with conditions applied as a result of the guidance to determine permits' impact on	1/31/25

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		revisions to its National Pollutant Discharge Elimination System program to determine whether the permits contain effluent limits for ionic pollution and other pollutants that are or may be discharged at a level that causes, has the reasonable potential to cause, or contributes to an excursion above any applicable water quality standard, as required by Clean Water Act regulations. If a permit lacks required effluent limits, take appropriate action to address such deficiencies.	water quality and whether the assumptions underlying that guidance are supported. Where the data shows implementation of guidance is not effective in protecting water quality, provide recommendations to WVDEP and work with WVDEP to modify guidance as appropriate. Using information from data and process analysis, we will take this information into account as we review draft permits that apply WVDEP guidance and provide comment as appropriate. Status: On track	
21-P-0122	4/21/21	3. Develop a formal internal operating procedure to facilitate timely permit reviews and transmission of EPA comments to states.	Implement new permit tracking system, which will update receipt, processing, and management of documentation for permits received for EPA real-time review. Complete development of an internal state oversight real-time permit review process document that will outline roles and responsibilities, definitions, process steps, and timelines. Status: On track	10/31/23
21-P-0114	3/29/21	2. Establish mechanisms to ensure that all required inspections are completed within the required time frame of two years for operating treatment, storage, or disposal facilities and three years for nonoperating treatment, storage, or disposal facilities.	Work with the regions to develop and implement a plan to use the RCRAInfo Closed with Waste in Place Report for monitoring the inspection status of operating treatment, storage, and disposal facilities (TSDFs) with units closed with waste in place. At TSDFs for which required inspections have not been completed and are near the end of their compliance period, conduct inspections to the extent possible within the compliance period, or the following fiscal year. Status: On track	3/29/24

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21-P-0114	3/29/21	4. Develop and implement controls to verify that the Superfund program deferrals to the Resource Conservation and Recovery Act are added to RCRAInfo for further Resource Conservation and Recovery Act attention, as necessary.	The Office of Land and Emergency Management (OLEM) Office of Resource Conservation and Recovery will (1) evaluate the existing policies and process for Superfund deferrals to RCRA; (2) identify gaps; and (3) identify corrective measures, as needed, to meet program needs, such as identifying Superfund program deferrals to RCRA in RCRAInfo. Status: On track	9/30/23
21-P-0114	3/29/21	6. Develop and implement controls to identify and eliminate overlap of environmental indicators between Resource Conservation and Recovery Act Corrective Action and Superfund Programs and include this information in public queries, such as Cleanups in My Community.	OLEM will standardize communications on the Cleanups in My Community webpage regarding the intersection of RCRA Corrective Action and Superfund cleanup programs, including environmental indicator designations at sites. OLEM will implement controls to check between programs when environmental indicators are established in the future to prevent double-counting and inconsistencies. Status: Delayed due to implementation complexity	3/30/23
21-P-0042	12/28/20	2. Provide resources for supervisors, timekeepers, and reservists on their roles and responsibilities related to military leave under the law and Agency policies.	The OMS will update policy and finalize procedures to comply with statutory requirements, and OCFO will provide PeoplePlus training to support roles and responsibilities related to military leave and pay policy. Status: Delayed due to external dependencies	4/30/23
21-P-0042	12/28/20	3. Establish and implement internal controls that will allow the Agency to monitor compliance with applicable laws, federal guidance, and Agency policies, including periodic internal audits of all military leave, to verify that (a) charges by reservists are correct and supported and (b) appropriate reservist differential and military offset payroll audit calculations are being requested and performed.	The OMS will conduct periodic human capital audits to ensure compliance with the updated military leave policy, and the OCFO will work with the Interior Business Center, the EPA's payroll provider, to ensure the necessary timecard corrections identified by the OMS periodic audit were made by the employee and approved by the supervisor in accordance with agency policy. The OCFO will provide a report to the OMS confirming timecard corrections identified by the OMS periodic audit were made by the employee and approved by the supervisor for the OMS	6/30/24

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			to distribute to the appropriate offices. Status: Delayed due to external dependencies	
21-P-0042	12/28/20	4. Require reservists to correct, and supervisors to approve, military leave time charging errors in PeoplePlus that have been identified during the audit or as part of the Agency's actions related to Recommendations 5 and 6.	The OCFO will work with the agency's payroll provider to confirm the necessary time charging errors identified in the audit were corrected by the employee and approved by the supervisor; and the OCFO will then provide a report to the OMS confirming the necessary time charging errors identified in the audit were corrected by the employee and approved by the supervisor for the OMS to distribute to the appropriate offices. Status: Delayed due to external dependencies	7/31/24
21-P-0042	12/28/20	5. Recover the approximately $11,000 in military pay related to unsupported 5 U.S.C. § 6323(a) military leave charges, unless the Agency can obtain documentation to substantiate the validity of the reservists' military leave.	For any unsupported leave charges, the OMS will coordinate with the Interior Business Center (IBC), the agency's payroll provider, to initiate the process to recover the military pay, and where applicable, the OCFO will recover any unsupported leave charges for out-of-service debt. Status: Delayed due to external dependencies	12/30/24
21-P-0042	12/28/20	6. Submit documentation for the reservists' military leave related to the approximately $118,000 charged under 5 U.S.C. § 6323(b) to the EPA's payroll provider so that it may perform payroll audit calculations and recover any military offsets that may be due.	The OMS will work with the EPA's programs and regions to collect documentation related to the identified military leave charges. For any unsupported leave charges, the OMS will coordinate with the IBC to initiate the process to recover any military offsets. The OCFO will recover any unsupported leave charges for out-of-service debt. Status: Delayed due to external dependencies	12/30/24
21-P-0042	12/28/20	7. Identify the population of reservists who took unpaid military leave pursuant to 5 U.S.C. § 5538 and determine whether those reservists are entitled to receive a reservist	The OCFO will provide the OMS with the population of reservists charging military leave. The OMS will conduct a review of this population to determine which items need to be provided to the IBC for audit calculation of whether	9/30/24

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		differential. Based on the results of this determination, take appropriate steps to request that the EPA's payroll provider perform payroll audit calculations to identify and pay the amounts that may be due to reservists.	military offsets were paid accurately. For amounts due to reservists who are no longer EPA employees, the OCFO will coordinate with the IBC on the amounts due. Status: Delayed due to external dependencies	
21-P-0042	12/28/20	8. For the time periods outside of the scope of our audit (pre-January 2017 and post-June 2019), identify the population of reservists who charged military leave under 5 U.S.C. § 6323(b) or 6323(c), and determine whether military offset was paid by the reservists. If not, review reservists' military documentation to determine whether payroll audit calculations are required. If required, request that the EPA's payroll provider perform payroll audit calculations to identify and recover military offsets that may be due from the reservists under 5 U.S.C. §§ 6323 and 5519.	The OCFO will provide the OMS with the population of reservists charging military leave. The OMS will conduct a review of this population to determine which items need to be provided to the IBC for audit calculation of whether military offsets were paid accurately. For any unsupported leave charges, the OMS will coordinate with the IBC to initiate the process to recover any military offsets. The OCFO will recover any unsupported leave charges for out-of-service debt. Status: Delayed due to external dependencies	9/30/24
21-P-0042	12/28/20	9. Report all amounts of improper payments resulting from paid military leave for inclusion in the annual Agency Financial Report, as required by the Payment Integrity Information Act of 2019.	The OCFO will report any paid military leave amounts identified as an improper payment(s) within the annual Agency Financial Report for the applicable fiscal year; and the OCFO also will perform an internal control review on military leave pay during the FY 2021 A-123 Internal Review period and report any identified improper payment amounts in the FY 2021 Annual Financial Report. Status: Delayed due to external dependencies	12/1/25

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21-P-0032	12/3/20	2. Develop and implement a supplement to Region 2's emergency response plan to describe and address the specific geographic, logistical, and cultural norms applicable to disaster response in Puerto Rico and the U.S. Virgin Islands. This supplement should include local EPA staff roles and responsibilities, as well as address the likely limitations to transportation, communications, and power in the aftermath of disasters.	The Region 2 emergency response program has initiated the development / implementation of plans to respond to emergency and disaster responses in the Caribbean. Discussions include the development and scope of a training, workshop and exercise program to better coordinate and integrate local personnel into the region's response structure. This initiative would include training on EPA's various roles, responsibilities, and procedures, as well as identification of ways to effectively utilize Caribbean Environmental Protection Division personnel capabilities and expertise, especially during the early stages of a response to address limitations to transportation, communications, and power in the aftermath of disasters. Further development of cultural awareness guidance developed during the response to Hurricanes Irma and Maria and strategies for addressing language barriers would also be addressed and included in deployment materials. Status: On track	6/30/23
21-P-0032	12/3/20	3. In coordination with the Office of Water, implement America's Water Infrastructure Act in Puerto Rico and the U.S. Virgin Islands by: a. Developing and implementing a strategy to provide training, guidance, and assistance to small drinking water systems as they improve their resilience. b. Establishing a process for small drinking water systems to apply for America's Water Infrastructure Act grants. This process should include (1)	EPA Office of Water will be promoting and conducting a series of America's Water Infrastructure Act section 2013 virtual workshops aimed at systems serving 3,301- 49,999 people, including a workshop focused on Region 2 water systems, to include Puerto Rico and U.S. Virgin Islands. Small water systems and technical assistance providers in Puerto Rico and the U.S. Virgin Islands are welcome to attend these workshops to assist them in developing risk and resilience assessments and emergency response plans. EPA plans to publish guidance for systems serving less than 3,300 people. EPA also plans to publish a Spanish version of this guidance to make it more accessible to small systems and	12/31/23

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		implementing the EPA's May 2020 guidance provided to small drinking water systems regarding resilience assessments and (2) establishing a public information campaign to inform small drinking water systems of the America's Water Infrastructure Act grant opportunity, qualifying requirements, and application deadlines.	technical assistance providers in Puerto Rico. Status: On track	
21-E-0264	9/29/21	3. Mindful that the EPA has substantial work to complete before publishing final numeric water quality criteria recommendations for nitrogen and phosphorus under the Clean Water Act for rivers and streams, establish a plan, including milestones and identification of resource needs, for developing and publishing those criteria recommendations.	EPA will develop a strategic plan, including milestones and identification of resource needs, to gather nationally consistent data (e.g.,The National Aquatic Resource Surveys monitoring); evaluate the scientific information and conduct exploratory stressor-response analyses on the available data; determine if the science supports new or revised numeric nutrient criteria recommendations. Status: On track	4/30/23
21-E-0264	9/29/21	4. Assess and evaluate the available information on human health risks from exposure to cyanotoxins in drinking water and recreational waters to determine whether actions under the Safe Drinking Water Act are warranted.	EPA will continue evaluating the risks to human health from exposure to cyanotoxins and will develop Health Effects Support Documents (HESDs) for new toxins (e.g., saxitoxins and nodularin). EPA intends to develop health advisories and recreational criteria for these toxins when sufficient health data are available. EPA will re-evaluate the human health risks to previously evaluated toxins as new toxicological exposure studies and systematic reviews of peer-reviewed scientific literature are	12/31/25

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			completed. EPA will determine whether additional regulatory or nonregulatory actions are appropriate under the Safe Drinking Water Act (SDWA), using the above health effects information, Unregulated Contaminant Monitoring Rule 4 and other cyanotoxins occurrence data, and additional information. Status: On track	
21-E-0254	9/27/21	3. Develop and implement a plan to prioritize and address the recommendations identified in the 2019 file review for Region 9. (Region 9)	Region 9 committed to developing a plan to prioritize and address the recommendations identified in EPA headquarters' file review for Region 9. Status: On track	9/30/23
21-E-0254	9/27/21	5. Develop a workforce analysis to address staff workload and the skills needed for the direct implementation of the tribal drinking water program. (Region 9)	Region 9 committed to developing a workforce analysis to address staff workload and the skills needed for the direct implementation of the tribal drinking water program. The R9 workload analysis was completed on 08/08/2022. Region 9 will finalize the staffing plan before 09/30/2023. Status: On track	9/30/23
21-E-0186	7/28/21	1. Issue Tier 1 test orders for each List 2 chemical or publish an explanation for public comment on why Tier 1 data are no longer needed to characterize a List 2 chemical's endocrine-disruption activity.	The Office of Chemical Safety and Pollution Prevention (OCSPP), with input from the Office of Research and Development and the Office of Water, will publish for comment a List 2 Action Plan, which may include a combination of test orders, explanations as to why test orders are not needed, or a reprioritization of the order of Endocrine Disruption Screening Program (EDSP) evaluations. Following notice and comment, OCSPP will initiate the process to issue test orders for List 2 substances, as appropriate. Status: On track	9/30/25
21-E-0186	7/28/21	2. Determine whether the EPA should incorporate the Endocrine Disruptor Screening Program Tier 1 tests (or approved new approach	OCSPP will make a determination on the inclusion of the EDSP Tier 1 tests into the pesticide registration process as mandatory data requirement under 40	9/30/24

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		methodologies) into the pesticide registration process as mandatory data requirements under 40 C.F.R. § 158 for all pesticide use patterns.	C.F.R. part 158 for all pesticide use patterns. Status: On track	
21-E-0186	7/28/21	3. Issue List 1–Tier 2 test orders for the 18 pesticides in which additional Tier 2 testing was recommended or publish an explanation for public comment on why this Tier 2 data are no longer needed to characterize the endocrine-disruption activity for each of these 18 pesticides.	OCSPP will make a determination on the need for List 1-Tier 2 data. OCSPP will also provide an explanation, which will be published for public comment, for any of the 18 pesticides for which it is determined that Tier 2 data is no longer needed. Following publication and comment, OCSPP will initiate the process to issue any Tier 2 test orders for List 1 determined to be needed. Status: On track	9/30/24
21-E-0186	7/28/21	4. Issue for public review and comment both the Environmental Fate and Effects Division's approach for the reevaluation of List 1–Tier 1 data and the revised List 1–Tier 2 wildlife recommendations.	OCSPP will issue for public review and comment any reevaluation of List 1–Tier 1 data and any revisions to the List 1–Tier 2 wildlife recommendations. Status: On track	12/31/23
21-E-0186	7/28/21	5. Develop and implement an updated formal strategic planning document, such as the Comprehensive Management Plan.	OCSPP, with input from the Office of Research and Development and the Office of Water, will develop an EDSP Strategic Plan. OCSPP expects to update this document on an as needed basis. Status: Delayed due to leadership change	6/30/23

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21-E-0186	7/28/21	6. Develop performance measures, with reasonable time frames, to document progress toward and achievement of milestones or targets. Specifically, the Endocrine Disruptor Screening Program should consider at least one performance measure that tracks progress in testing pesticides for human endocrine disruptor activity.	OCSPP will develop short-term performance measures, such as scientific publications, number/type of accepted new approach methods, and exemptions granted. Short-term performance measures will be developed and tracked. OCSPP will develop longer-term performance measures, including at least one measure to track progress in testing pesticides for human endocrine disruptor activity. Long-term performance measures including at least one that tracks progress in the evaluation and testing of pesticides for human endocrine disruptor activity will be developed and tracked by October 1, 2024. Status: On track	10/1/24
21-E00186-164	7/28/21	7. Conduct annual internal program reviews of the Endocrine Disruptor Screening Program.	OCSPP will conduct the first annual internal program review of the EDSP and provide a briefing and report out to the OCSPP Assistant Administrator on EDSP progress, especially as it relates to the Corrective Actions in this Report and progress developing the EDSP Strategic Plan. Status: Delayed due to leadership change	6/30/23
21-E-0146	5/24/21	3. Annually conduct and document training for all staff and senior managers and policy makers to affirm the office's commitment to the Scientific Integrity Policy and principles and to promote a culture of scientific integrity	Complete the fifth annual Scientific integrity training by March 31, 2026. Status: On track	3/31/26
21-E-0124	4/16/21	1. Update information security procedures to make them consistent with current federal directives, including the National Institute of Standards and Technology Special Publication 800-53 Revision 5, Security and Privacy Controls for Information Systems and Organizations.	The majority of the EPA IT Security policies and procedures are consistent with current federal directives. All current security assessments, implementations, and actions are completed in accordance with NIST SP 800-53r4. EPA, like other federal agencies are allowed one year from the release of NIST Special Publications to update internal policies and procedures.	11/15/23

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			The EPA has created a detailed project schedule to transition its current policies and procedures to NIST 800-53 Rev 5. This detail schedule includes Enterprise collaboration and inputs across all Information Security stakeholders. Status: Delayed due to implementation complexity	
20-P-0173	5/20/20	6. In coordination with the assistant administrator for Mission Support, complete the development and implementation of the electronic clearance system for scientific products across the Agency.	OMS, ORD Office of Scientific Information Management (OSIM), and the Scientific Integrity Committee will coordinate to complete modification and Agency-wide implementation of ORD's Scientific & Technical Information Clearance System to an agency-wide electronic clearance system for scientific products across the Agency. The system will be consistent with the Scientific Integrity Policy and our Best Practices document and with the Agency's Plan to Increase Access to the Results of EPA-Funded Scientific Research. Status: Delayed due to external dependencies	6/30/24
20-P-0173	5/20/20	7. With the assistance of the Scientific Integrity Committee, finalize and release the procedures for addressing and resolving allegations of a violation of the Scientific Integrity Policy, and incorporate the procedures into scientific integrity outreach and training materials.	The Agency will release the Procedures document. It will be posted on the Agency's website. The Scientific Integrity Program will create and release appropriate outreach materials to ensure EPA employees and their managers understand these procedures. Status: Delayed due to external dependencies	3/31/23
20-P-0173	5/20/20	8. With the assistance of the Scientific Integrity Committee, develop and implement a process specifically to address and resolve allegations of Scientific Integrity Policy violations involving high-profile issues or senior officials, and specify when this process should be used.	EPA will amend the procedures document referenced in recommendation 7, to include a process to adjudicate allegations of Scientific Integrity Policy violations involving high-profile issues or senior officials in the Agency for which the Scientific Integrity Official or Scientific Integrity Committee does not feel it can adequately adjudicate via existing procedures and include an indicator for when the process should be	3/31/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
			used. Status: Delayed due to external dependencies	
20-P-0146	4/22/20	1. Implement a system that is accessible to both the EPA and the applicants to track the processing of all tribal-New-Source-Review permits and key permit dates including application received, application completed, draft permit issued, public comment period (if applicable), and final permit issuance.	OAR's Office of Air Quality Planning and Standards has already begun work on the Electronic Permit System (EPS), which will include a module to receive and process applications for the EPA-issued tribal new source review permits. Specifically, this module will allow sources to submit electronic applications for tribal minor NSR permits and then allow the EPA staff to process those applications in EPS. The system will allow the EPA staff to update the status of the application and permit to reflect when the application is complete, the draft permit is issued, the beginning and ending of the public comment period, and the issuance of the final permit and response to public comments document. Status: Delayed due to resource constraints	9/30/23
20-P-0146	4/22/20	2. Establish and implement an oversight process to verify that the regions update the permit tracking system on a periodic basis with the correct and required information.	Upon completion of the EPS, the Office of Air Quality Planning and Standards will work with the Regional offices to establish an oversight process to ensure complete, consistent, and timely entry of data into the EPS. Status: Delayed due to resource constraints	9/30/23
20-E-0333	9/28/20	1. Develop and implement a plan to coordinate relevant Agency program, regional, and administrative offices with the External Civil Rights Compliance Office to develop guidance on permitting and	The External Civil Rights Compliance Office (ECRCO) will issue guidance to clarify the agency's interpretations of legal requirements and expectations to stakeholders. Status: Delayed due to staffing constraints	10/1/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
		cumulative impacts related to Title VI.		
20-E-0333	9/28/20	2. Develop and implement a plan to complete systematic compliance reviews to determine full compliance with the Title VI program.	ECRCO will conduct 1 or more compliance reviews to determine compliance with Title VI, with the number depending on complexity and resources. ECRCO will conduct and complete additional compliance reviews to determine compliance with Title VI, as well as other federal civil rights laws and EPA's nondiscrimination regulation in each FY going forward, as resources allow. Status: Delayed due to staffing constraints	12/30/23
20-E-0333	9/28/20	4. Verify that EPA funding applicants address potential noncompliance with Title VI with a written agreement before the funds are awarded.	ECRCO plans to use a revised 4700-4 pre-award process, the EPA General Terms and Conditions, which are binding on recipients and sub-recipients of funds, to implement this Recommendation. EPA has developed modifications to its pre-award review process intended to achieve the goal of compliance by applicants recommended for competitive and non-competitive funding by EPA program offices, while also serving the goal of efficiency, given limitations in resources. The revised 4700-4 Process will be launched with the issuance of the Dear Colleague and Guidance documents clarifying expectations. These documents will provide for an initial six-month grace period. ERCO will train all EPA staff involved in the Form 4700-4 review process, develop a post-award audit protocol, initiate representative audit process, and effectuate the revised 4700-4 Process. Status: Delayed due to staffing constraints	1/1/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
20-E-0333	9/28/20	5. Determine how to use existing or new data to identify and target funding recipients for proactive compliance reviews, and develop or update policy, guidance, and standard operating procedures for collecting and using those data.	ECRCO will be determining how to use data to identify and target funding recipients for proactive compliance reviews, as discussed in response to Recommendation 2, and, also, will develop or update policy, guidance, and SOPs, as appropriate, for the collection and use of data by recipients. ERCO will develop and release Foundational Nondiscrimination Program Guidance, which includes section on data collection and reporting; release technical assistance video, and release data analytics guidance. Status: Delayed due to staffing constraints	10/1/24
20-E-0333	9/28/20	6. Develop and deliver training for the deputy civil rights officials and EPA regional staff that focuses on their respective roles and responsibilities within the EPA's Title VI program.	ECRCO will provide training to all EPA staff involved in the form review process and will release a technical assistance video. ECRCO will provide additional training courses to EPA staff on civil rights topics and issues on a regular basis. For example, in addition to training in FY22 on the Form review process, ECRCO will offer training in FY23 as ECRCO issues guidance and works with national media programs and regional offices to ensure Title VI compliance is integrated into agency-wide oversight activities. Status: Delayed due to staffing constraints	9/30/23
19-P-0318	9/25/19	5. Update and revise the 2010 Revised State Implementation Guidance for the Public Notification Rule to include: a. Public notice delivery methods that are consistent with regulations. b. Information on modern methods for delivery of public notice.	The EPA will revise the State Implementation Guidance per OIG's recommendation. Status: Delayed due to staffing constraints	9/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
19-P-0318	9/25/19	6. Update and revise the 2010 Public Notification Handbooks to include:a. Public notice delivery methods that are consistent with regulations.b. Information on modern methods for delivery of public notice. c. Public notice requirements for the latest drinking water regulations.d. Procedures for public water systems to achieve compliance after violating a public notice regulation.e. Up-to-date references to compliance assistance tools.f. Additional resources for providing public notice in languages other than English.	The EPA will revise the Public Notification Handbook per OIG's recommendation. Status: Delayed due to staffing constraints	9/30/23
19-P-0207	6/27/19	1. Develop and implement electronic checks in the EPA's Emissions Collection and Monitoring Plan System or through an alternative mechanism to retroactively evaluate emissions and quality assurance data in instances where monitoring plan changes are submitted after the emissions and quality assurance data have already been accepted by the EPA.	The Clean Air Markets Division (CAMD) has implemented a post-submission data check that is run at the end of each reporting period. In the long term, the CAMD will implement an additional check in the Emissions Collection and Monitoring Plan (ECMPS) forcing retroactive span record changes to require the reevaluation and resubmission of any affected quality assurance tests and hourly emissions records. CAMD has initiated the process of re-engineering ECMPS. In order to minimize additional expenditures on the current version of ECMPS, CAMD will focus on adding the check to the new version of ECMPS. Status: On track	3/31/25
19-P-0195	6/21/19	2. Complete the actions and milestones identified in the Office of Pesticide Programs' PRIA Maintenance Fee Risk Assessment document and associated plan regarding the	OCSPP's Office of Pesticide Programs will complete the actions and milestones identified in the Office of Pesticide Programs' Pesticide Registration Improvement Act Maintenance Fee Risk Assessment document and associated plan regarding the fee payment and	1/31/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
		fee payment and refund posting processes.	refund posting processes. Status: Delayed due to external dependencies	
19-P-0002	11/15/18	3. Complete development of the probabilistic risk assessment tool and screening tool for biosolids land application scenarios.	OW is working to complete the screening tool and probabilistic risk assessment framework for biosolids land application scenarios. OW anticipates releasing the screening tool first, followed by the probabilistic modeling framework, after peer and public review. Status: Delayed due to implementation complexity	3/31/23
19-P-0002	11/15/18	4. Develop and implement a plan to obtain the additional data needed to complete risk assessments and finalize safety determinations on the 352 identified pollutants in biosolids and promulgate regulations as needed.	OW will continue reviewing environmental fate and effects information to incorporate into risk assessments for pollutants in biosolids. OW will prioritize using the screening tool to determine which pollutants warrant a more refined (i.e., probabilistic) risk assessment and take into consideration the 61 chemicals identified as hazardous under other statutes as identified by the OIG. Status: Delayed due to implementation complexity	3/30/23
18-P-0240	9/5/18	4. Build capacity for managing the use of citizen science, and expand awareness of citizen science resources, by:a. Finalizing the checklist on administrative and legal factors for agency staff to consider when developing citizen science projects, as well as identifying and developing any procedures needed to ensure compliance with steps in the checklist;b. Conducting training and/or marketing on the EPA's citizen science intranet site for	ORD will consult with the Office of General Counsel and other relevant EPA programs and regions to finalize the checklist on administrative and legal factors for agency staff to consider when developing citizen science projects. ORD will conduct training and marketing for program and regional staff. Finally, ORD will have an active communication and outreach strategy that will include communications materials highlighting project successes and how EPA has used results of its investment in citizen science. Status: Delayed due to external dependencies	3/31/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
		program and regional staff in developing projects; andc. Finalizing and distributing materials highlighting project successes and how the EPA has used results of its investment in citizen science.		
18-P-0240	9/5/18	2. Through appropriate EPA offices, direct completion of an assessment to identify the data management requirements for using citizen science data and an action plan for addressing those requirements, including those on sharing and using data, data format/standards, and data testing/validation.	The agency concurs with this recommendation and will complete an assessment and action plan to identify and address data management requirements for citizen science. Status: Delayed due to external dependencies	12/31/23
18-P-0221	7/19/18	6. Provide regular training for EPA drinking water staff, managers and senior leaders on Safe Drinking Water Act tools and authorities; state and agency roles and responsibilities; and any Safe Drinking Water Act amendments or Lead and Copper Rule revisions.	OECA continues to hold regular SDWA section 1431/1414 trainings for staff and managers and to conduct consultations with the regions regarding specific potential emergency drinking water situations. The PowerPoints from the trainings are on the National Drinking Water Enforcement SharePoint site for 24/7 access. OCE will re-evaluate training needs. OCE has provided and will continue to provide regular training nationally to staff and managers about SDWA tools and authorities, like Sections 1414 and 1431, and various NPDWRs, including the Lead and Copper Rule (LCR). EPA will also make these trainings available to senior leaders. Status: Re-opened by OIG follow-up audit	12/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
18-P-0221	7/19/18	8. Create a system that tracks citizen complaints and gathers information on emerging issues. The system should assess the risk associated with the complaints, including efficient and effective resolution.	Identify potential enhancements to existing systems and/or identify new system requirements that can support tracking of citizen complaints. In 2019, OW developed a "Protocol for Addressing Water Quality Concerns from the Public" to address this OIG recommendation. This protocol was shared with the OIG in March 2021. Status: Re-opened by OIG follow-up audit	4/28/23
18-P-0080	2/15/18	1. The Assistant Administrator for Chemical Safety and Pollution Prevention, in coordination with the Office of Enforcement and Compliance Assurance, shall develop and implement a methodology to evaluate the impact of the revised Agricultural Worker Protection Standard on pesticide exposure incidents among target populations.	OCSPP will: (1) collect and review data related to the extent to which agricultural workers obtain knowledge through trainings; (2) collect and review incident data; and (3) after reviewing training and incident data, analyze the need to collect additional information to help evaluate the impact of the revised Worker Protection Standard. Status: On track	12/31/23
17-P-0368	8/23/17	1. Develop a policy to reduce balances of available program income of Brownfields Revolving Loan Funds being held by recipients. The policy should establish a timeframe for recipients to use or return the funds to the EPA.	The Office of Brownfields Land and Revitalization will work with the regions to develop a policy regarding monitoring of accumulated program income on the cooperative agreement. The policy will also establish actions to be taken in certain timeframes to reduce balance of program income or require return of funds to EPA as appropriate. Status: Re-opened by OIG follow-up audit	9/30/27
17-P-0368	8/23/17	8. Develop and implement required training for all regional Brownfields Revolving Loan Fund staff. Have the training include all program policy and guidance relating to maintaining a Brownfields Revolving Loan Fund after the cooperative agreement is closed if program income exists.	OBLR will work with the Regions to develop and deliver a series of training sessions to regional Brownfields Revolving Loan Fund staff. The training will cover all program policies and guidance related to the management of Brownfields Revolving Fund after closeout with a focus on cooperative agreements that have program income after closeout. OBLR will use various formats to deliver training to project	3/31/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
			officers, e.g., during regularly scheduled meetings, webinars, SharePoint site, and in-person training etc. Status: Re-opened by OIG follow-up audit	
17-P-0368	8/23/17	14. Develop and implement a method for the Office of Brownfields and Land Revitalization to track closed cooperative agreements with pre- and post-program income.	OBLR will work with the regions to develop and implement a method such as a tool, a spreadsheet, or a database, to track pre- and post-close out program income until termination of the closed out cooperative agreements in accordance with the reporting requirements listed under the closeout agreement. Status: Re-opened by OIG follow-up audit	12/31/23
17-P-0368	8/23/17	16. Create a method for the Office of Brownfields and Land Revitalization, and EPA regional managers, to track compliance with reporting requirements for closed cooperative agreements.	OBLR will work with the regions to create a method to track compliance with reporting requirements for closed cooperative agreements. The tracking tool will be distributed to the regions. Status: Re-opened by OIG follow-up audit	9/30/27
17-P-0053	12/12/16	3. Conduct an assessment of clearance devices to validate their effectiveness in detecting required clearance levels, as part of the Office of Pesticide Programs ongoing re-evaluation of structural fumigants. The program will implement this corrective action in two phases: 3a.OCSPP anticipates that phase one will consist of revised mitigation measures to be reflected in a Final Interim Re-entry Mitigation Measures Memorandum. 3b. In phase 2, OCSPP will revise sulfuryl labels.	Based on the comment content and the time needed to review the new data, the timeframe for responding and publishing a revised document outlining required sulfuryl fluoride label changes will be delayed from OCSPP's original plan and will likely involve phased implementation (label requirements) for some of the measures. OCSPP anticipates that revised mitigation measures will be reflected in a Final Interim Re-entry Mitigation Measures Memorandum to be issued by 3/31/23. OCSPP anticipates that the mitigation measures will be reflected in revised and accepted sulfuryl fluoride labels by 9/30/23. Status: Delayed due to implementation complexity	9/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
16-P-0333	9/27/16	3 - 3. Develop training on the proper use of Religious Compensatory Time and require all managers approving, and employees using, Religious Compensatory Time to complete the course.	Develop training on the proper use of Religious Compensatory Time and require all managers approving, and employees using, Religious Compensatory Time to complete the course. Status: Re-opened by OIG follow-up audit	6/23/23
16-P-0275	8/18/16	2. Complete the anti-backsliding study on the air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act.	EPA has already taken a number of steps that are important prerequisites for the anti-backsliding study. There are multiple intermediate research steps that still need to be completed before OAR can plan, fund, and conduct a comprehensive anti-backsliding study. These steps include development of baseline, current, and projected scenarios for how renewable fuels have and might be produced, distributed, and used to fulfill the Renewable Fuel Standard requirements, generation of emissions inventories, and air quality modeling, all of which are time-consuming and resource intensive. Status: On track	9/30/24
16-P-0275	8/18/16	3. Determine whether additional action is needed to mitigate any adverse air quality impacts of the Renewable Fuel Standard as required by the Energy Independence and Security Act.	OAR acknowledges the statute's requirement to determine whether additional action is needed to mitigate any adverse air quality impacts in light of the anti-backsliding study. That study, discussed in Corrective Action 2, would need to be completed prior to any such determination taking place. Status: On track	9/30/24
16-P-0104	3/11/16	1. Implement management controls to complete the required TSDF inspections.	OECA will work with the regions to monitor TSDF inspection frequency, develop and implement a plan to identify TSDFs not yet inspected near the end of the required inspection cycle, and conduct inspections to the extent possible within the compliance period or the following fiscal year. Status: Re-opened by OIG follow-up audit	12/29/23
14-P-0109	2/4/14	3. Direct COs to require that the contractor adjust all its	Region 6 agrees to require the contractor to adjust all of its past billings to reflect	9/30/24

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
		billings to reflect the application of the correct rate to team subcontract ODCs.	the application of the composite rate to team-subcontractor other direct costs that were arranged for and paid for by the team-subcontractor. We intend to implement the corrective action when final indirect cost rates are established. Therefore, the contract officer will be directed to defer past billing adjustments until the DCAA audits the indirect cost rates and the EPA Financial Administrative Contracting Officer negotiates, approves, and issues a Final Indirect Cost Agreement for the past billing periods (i.e., Years 2007 to 2013). Status: On track	
11-P-0215	5/3/11	4. Develop short-term, intermediate, and long-term outcome performance measures, and additional output performance measures, with appropriate targets and timeframes, to measure the progress and results of the program. Rec. 4a: Short term performance measures will be developed and tracked. Rec. 4b: Long term performance measures, including testing for EDSP activities in pesticides will be developed and tracked.	Short term performance measures will be developed by and tracked. Long term performance measures, including at least one measure that tracks progress in the evaluation and testing of pesticides for human endocrine disruptor activity, will be developed and tracked by October 1, 2024. Status: On track	10/1/24
11-P-0215	5/3/11	5. Develop and publish a comprehensive management plan for EDSP, including estimates of EDSP's budget requirements, priorities, goals, and key activities covering at least a 5-year period.	OCSPP, with input from the Office of Research and Development and the Office of Water, will develop an EDSP Strategic Plan. OCSPP expects to update this document on an as needed basis. Status: Delayed due to leadership change	6/30/23
11-P-0215	5/3/11	6. Annually review the EDSP program results, progress toward milestones, and achievement of performance measures, including	OCSPP will conduct the first annual internal program review of the EDSP and provide a briefing and report out to the OCSPP Assistant Administrator on EDSP progress, especially as it relates to	6/30/23

OIG Report Number	Report Issue Date	OIG Recommendation	EPA Corrective Action and Status	Target Date
		explanations for any missed milestones or targets.	the Corrective Actions in this Report and progress developing the EDSP Strategic Plan. Status: Delayed due to leadership change	
10-P-0224	9/14/10	2-2. Develop a systematic approach to identify which States have outdated or inconsistent MOAs, renegotiate and update those MOAs using the MOA template, and secure the active involvement and final, documented concurrence of Headquarters to ensure national consistency.	EPA has completed the review of all the EPA-State Memorandums of Agreement (MOAs). Ten authorized National pollutant discharge elimination system states were identified as being problematic. EPA Regions and States have completed actions to update MOAs to satisfy concerns identified in the corrective action plan for three states: Iowa, Missouri, and Virginia. At this time, seven MOAs are still in the process of being corrected. Status: Delayed due to implementation complexity	9/30/23

EPA GAO Open Recommendations and Recommendations Closed as Unimplemented

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO 06-148	2006-01-04	The Administrator, EPA, should take a number of steps to further protect the American public from elevated lead levels in drinking water. Specifically, to improve EPA's ability to oversee implementation of the lead rule and assess compliance and enforcement activities, EPA should ensure that data on water systems' test results, corrective action milestones, and violations are current, accurate, and complete.	The agency continues to work on modernizing the Safe Drinking Water Information System and has made significant progress towards its schedule (expected to be available for states to begin transitioning to the system by end of 2024). In establishing data quality goals for monitoring violation and other information, the agency plans to engage the primacy agencies.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-08-440	2008-03-07	To develop timely chemical risk information that EPA needs to effectively conduct its mission, the Administrator, EPA, should require the Office of Research and Development to re-evaluate its draft proposed changes to the IRIS assessment process in light of the issues raised in this report and ensure that any revised process periodically assesses the level of resources that should be dedicated to this significant program to meet user needs and maintain a viable IRIS database.	Implementation is complete. The EPA requested closure of this recommendation in February 2023.
GAO-11-381	2011-06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should resume data verification audits to routinely evaluate the quality of selected drinking water data on health-based and monitoring violations that the states provide to EPA. These audits should also evaluate the quality of data on the enforcement actions that states, and other primacy agencies have taken to correct violations.	The agency continues to work on modernizing the Safe Drinking Water Information System and has made significant progress towards its schedule (expected to be available for states to begin transitioning to the system by end of 2024). In establishing data quality goals for monitoring violation and other information, the agency plans to engage the primacy agencies.
GAO-11-381	2011-06-17	To improve EPA's ability to oversee the states' implementation of the Safe Drinking Water Act and provide Congress and the public with more complete and accurate information on compliance, the Administrator of EPA should work with the states to establish a goal, or goals, for the completeness and accuracy of data on monitoring violations. In setting these goals, EPA may want to consider whether certain types of monitoring violations merit specific targets. For example, the agency may	The agency continues to work on modernizing the Safe Drinking Water Information System and has made significant progress towards its schedule (expected to be available for states to begin transitioning to the system by end of 2024). In establishing data quality goals for monitoring violation and other information, the agency plans to engage the primacy agencies. Estimated Completion Date: December 2024.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
		decide that a goal for the states to completely and accurately report when required monitoring was not done should differ from a goal for reporting when monitoring was done but not reported on time.	
GAO-12-42	2011-12-09	To better ensure the credibility of IRIS assessments by enhancing their timeliness and certainty, the EPA Administrator should require the Office of Research and Development, should different time frames be necessary, to establish a written policy that clearly describes the applicability of the time frames for each type of IRIS assessment and ensures that the time frames are realistic and provide greater predictability to stakeholders.	EPA continues to discuss with GAO approaches to communicate timeframe expectations to the public. As noted by GAO, content in the more recently developed Integrated Risk Information System IRIS assessment plans helps identify the extent of the evidence and key science issues. EPA has included preliminary metrics on how long some systematic review steps used in assessment development (e.g., study screening; data extraction) typically require on a per-study basis.
GAO-13-145	2013-08-08	To improve EPA's management of the conditional registration process, the Administrator of EPA should direct the Director of the Office of Pesticide Programs to complete plans to automate data related to conditional registrations to more readily track the status of these registrations and related registrant and agency actions and identify potential problems requiring management attention.	The agency met with GAO in November 2022 to discuss the changed landscape since this 2013 report. The EPA plans to request closure in FY 2023.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-14-80	2013-12-05	To enhance the likelihood that TMDLs support the nation's waters' attainment of water quality standards and to strengthen water quality management, the Administrator of EPA should develop and issue new regulations requiring that TMDLs include additional elements--and consider requiring the elements that are now optional--specifically, elements reflecting key features identified by NRC as necessary for attaining water quality standards, such as comprehensive identification of impairment and plans to monitor water bodies to verify that water quality is improving.	The agency asserts that extensive actions taken to implement this recommendation are sufficient to merit closure as implemented.
GAO-14-413	2014-05-22	To ensure the effective management of software licenses, the Administrator of the Environmental Protection Agency should employ a centralized software license management approach that is coordinated and integrated with key personnel for the majority of agency software license spending and/or enterprise-wide licenses.	Implementation is complete. The agency requested closure of this recommendation in December 2022.
GAO-16-79	2015-11-19	To better monitor and provide a basis for improving the effectiveness of cybersecurity risk mitigation activities, informed by the sectors' updated plans and in collaboration with sector stakeholders, the Administrator of the Environmental Protection Agency should direct responsible officials to develop performance metrics to provide data and determine how to overcome challenges to monitoring the water and wastewater systems sector's cybersecurity progress.	The agency continues to develop and implement activities in support of the water and wastewater sector's cybersecurity, such as a cyber-attack risk assessment tool and cybersecurity training for sector partners. The effort is challenged because disclosure of metric data in this area is voluntary for water sector facilities. Dialogue with GAO is ongoing.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, once EPA's new performance system is in place, to ensure that the Office of Water adopts software tools, as appropriate, to electronically transfer relevant data on program results from program-specific databases to EPA's national performance system.	Implementation is complete. The agency requested closure of this recommendation in December 2022.
GAO-16-530	2016-07-14	The EPA Administrator should direct OGD and program and regional offices, as appropriate, as part of EPA's ongoing streamlining initiatives and the development of a grantee portal, to expand aspects of EPA's policy for certain categorical grants, specifically, the call for an explicit reference to the planned results in grantees' work plans and their projected time frames for completion, to all grants.	**CLOSED - NOT IMPLEMENTED** GAO and EPA agreed that, due to changed circumstances since issuance of the recommendation and implementation of a new EPA grants management system with built-in quality controls, the recommendation would be closed as unimplemented.
GAO-17-424	2017-09-01	The Assistant Administrator for Water of EPA's Office of Water and the Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a statistical analysis that incorporates multiple factors--including those currently in SDWIS/Fed and others such as the presence of lead pipes and the use of corrosion control--to identify water systems that might pose a higher likelihood for violating the LCR once complete violations data are obtained, such as through SDWIS Prime.	The agency is working to provide an update on Safe Drinking Water Information System modernization or other data plans for identifying data associated with water systems that might pose a higher likelihood for violating the Lead and Copper Rule. FY25 implementation is anticipated.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-18-453	2018-07-19	The EPA Region 10 Administrator should work with the management conference on future updates to the CCMP to help prioritize among the indicators that currently lack measurable targets and ensure that such targets are developed for the highest priority indicators where possible.	In August 2022, the agency approved a new Puget Sound Comprehensive Conservation and Management Plan, called the 2022-2026 Action Agenda. The agency agreed to develop additional medium-term targets and reengage GAO regarding closure.
GAO-18-93	2018-08-02	The Administrator of the Environmental Protection Agency should ensure that the agency's IT management policies address the role of the CIO for key responsibilities in the six areas we identified.	The agency has fully implemented 10 of the 18 responsibilities identified by GAO. A further 5 are partially met, and 3 are not yet met. The agency anticipates requesting closure by the end of CY23.
GAO-19-280	2019-07-08	EPA's Designated Agency Ethics Official should direct EPA's Ethics Office, as part of its periodic review of EPA's ethics program, to evaluate--for example, through audits or spot-checks - the quality of financial disclosure reviews for special government employees appointed to EPA advisory committees.	Implementation is complete. The agency requested closure of this recommendation in February 2023.
GAO-19-280	2019-07-08	The EPA Administrator should direct EPA officials responsible for appointing advisory committee members to follow a key step in its appointment process--developing and including draft membership grids in appointment packets with staff rationales for proposed membership--for all committees.	Implementation is complete. The agency requested closure of this recommendation in February 2023.
GAO-19-384	2019-07-25	The Administrator of EPA should establish a process for conducting an organization-wide cybersecurity risk assessment.	The agency is engaged with a third party to help develop an organizational wide cybersecurity risk assessment. Completion of implementation is anticipated by the end of FY23.
GAO-19-384	2019-07-25	The Administrator of EPA should fully establish and document a process for coordination between cybersecurity risk management and	The agency is working internally to update current processes that exist regarding enterprise risk management and cybersecurity risk assessment to build out a single enterprise risk management program. Completion of

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
		enterprise risk management functions.	implementation is anticipated by the end of FY23.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, should develop guidance for agencies on what they should include in their environmental justice strategic plans.	In January 2021, the White House issued Executive Order 14008 "Tackling the Climate Crisis at Home and Abroad." It includes sections to achieve environmental justice through a number of actions. One of the actions was to create a White House Environmental Justice Interagency Council chaired by the Council on Environmental Quality (CEQ). As such, implementation is the responsibility of the CEQ. GAO is monitoring their efforts and stated they will close the recommendation upon completion.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, should develop guidance or create a committee of the working group to develop guidance on methods the agencies could use to assess progress toward their environmental justice goals.	In January 2021, the White House issued Executive Order 14008 "Tackling the Climate Crisis at Home and Abroad." It includes sections to achieve environmental justice through a number of actions. One of the actions was to create a White House Environmental Justice Interagency Council chaired by the Council on Environmental Quality (CEQ). As such, implementation is the responsibility of the CEQ. GAO is monitoring their efforts and stated they will close the recommendation upon completion.
GAO-19-543	2019-09-16	The Administrator of EPA, as chair of the working group, and in consultation with the working group, should clearly establish, in its organizational documents, strategic goals for the federal government's efforts to carry out the 1994 Executive Order.	In January 2021, the White House issued Executive Order 14008 "Tackling the Climate Crisis at Home and Abroad." It includes sections to achieve environmental justice through a number of actions. One of the actions was to create a White House Environmental Justice Interagency Council chaired by the Council on Environmental Quality (CEQ). As such, implementation is the responsibility of the CEQ. GAO is monitoring their efforts and stated they will close the recommendation upon completion.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-20-129	2019-10-30	The Administrator of the Environmental Protection Agency should ensure that the agency fully implements each of the eight key IT workforce planning activities it did not fully implement.	Implementation is complete. The EPA requested closure of this recommendation in December 2022.
GAO-20-126	2019-12-12	The Administrator of EPA should update security plan for the selected operational system to identify a description of security controls, and the individual reviewing and approving the plan and date of approval.	Implementation is complete. The EPA requested closure of this recommendation in December 2022.
GAO-20-126	2019-12-12	The Administrator of EPA should update the security assessment report for the selected operational system to identify the summarized results of control effectiveness tests.	Implementation is complete. The EPA requested closure of this recommendation in December 2022.
GAO-20-126	2019-12-12	The Administrator of EPA should update the list of corrective actions for the selected operational system to identify the specific weakness, estimated funding and anticipated source of funding, key remediation milestones with completion dates, changes to milestones and completion dates, and source of the weaknesses.	Implementation is complete. The EPA requested closure of this recommendation in December 2022.
GAO-20-126	2019-12-12	The Administrator of EPA should prepare the letter authorizing the use of cloud service for the selected operational system and submit the letter to the FedRAMP program management office.	Implementation is complete. The EPA requested closure of this recommendation in December 2022.
GAO-20-126	2019-12-12	The Administrator of EPA should develop guidance requiring that cloud service authorization letter be provided to the FedRAMP program management office.	Implementation is complete. The EPA requested closure of this recommendation in December 2022.

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GAO-20-24	2020-01-16	The Director of Water Security of EPA, as Chair of the Water Sector Government Coordinating Council, should work with the council to identify existing technical assistance providers and engage these providers in a network to help drinking water and wastewater utilities incorporate climate resilience into their projects and planning on an ongoing basis.	The agency continues to work with its wide-ranging, existing technical assistance providers and coordinates with its stakeholders including the Water Sector Coordinating Council (WSCC) to improve and build drinking water and wastewater utility resilience. Implementation is challenged because the participation of the water sector and of other federal agencies in helping these utilities is voluntary.
GAO-20-95	2020-01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should clearly document in guidance to the regional offices how they should use the definition of informal enforcement actions to collect data on these actions.	The agency is currently amending 2019 guidance for consistency with Executive Order 13892 and will provide it to GAO once finalized. The guidance includes a definition of informal enforcement actions. 2023 release is planned.
GAO-20-95	2020-01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should clearly document in guidance to the regional offices that they should collect data on compliance assistance activities and specify which mechanism to use to maintain the data, such as ICIS.	The agency is currently amending 2019 guidance for consistency with Executive Order 13892 and will provide it to GAO once finalized. The guidance includes a definition of informal enforcement actions. 2023 release is planned.
GAO-20-95	2020-01-31	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should include the known limitations of data in its annual reports and provide information on the intended use of EPA's data.	The agency is currently amending 2019 guidance for consistency with Executive Order 13892 and will provide it to GAO once finalized. The guidance includes a definition of informal enforcement actions. 2023 release is planned.
GAO-20-597	2020-09-28	The Assistant Administrator of the Office of Water should develop an agreement with HHS's Offices of Child Care and Head Start on their roles and responsibilities in implementing the Memorandum of Understanding on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities. For example, these agreements may include the ways in which guidance	The agency has awarded WIIN Act grants, receiving annual grantee reports, and holding a three-part webinar series on reducing lead in drinking water in schools and childcare facilities in June and July 2022. Implementation is ongoing.

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		and information will be shared with states and Head Start grantees, such as through webinars or email, and how frequently.	
GAO-20-597	2020-09-28	The Assistant Administrator of the Office of Water should direct the Office of Water to specify how it will track progress toward the outcomes of the Memorandum of Understanding on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities and determine how it will regularly monitor and update the MOU. For example, the Office of Water could develop performance measures for each of the MOU's outcomes. In addition, the Office of Water could submit annual reports on progress toward achieving the MOU's outcomes or it could plan to update the agreement at specific intervals. (Recommendation 4)	The agency has taken additional steps to implement the Memorandum of Understanding, including developing tools for childcare facilities to assist them with lead testing and remediation efforts. Implementation is ongoing.
GAO-21-150	2020-10-20	The Associate Administrator of EPA's Office of Congressional and Intergovernmental Relations should update Performance Partnership Grant (PPG) best practices guidance for tribes to clarify, for EPA and tribal staff, how PPGs operate, including that tribes may use PPG funds for any activity that is eligible under any grant eligible for inclusion in PPGs.	The agency is revising the Best Practices Guide for Tribal PPG Implementation. In addition, the EPA plans to include more foundational guidance related to PPGs in its fiscal year 2023-2024 National Program Guidance and cite the best practices guide in this national program guidance. Implementation is ongoing.
GAO-21-150	2020-10-20	The Principal Deputy Assistant Administrator of EPA's Office of Air and Radiation, the Assistant Administrator of EPA's Office of Water, and the Director of EPA's American Indian Environmental	The agency submitted an update with request for closure to GAO on 11/9/22.

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		Office should update and nationally distribute guidance for project officers and tribes that clarifies documentation requirements and eligibility definitions for quality assurance project plans and the Indian Environmental General Assistance Program.	
GAO-21-164SU	2020-10-27	Restricted Report: Recommendation language not publicly available.	Restricted Report - Not Publicly Available Implementation is complete, and the agency requested closure in December 2022.
GAO-21-164SU	2020-10-27	Restricted Report: Recommendation language not publicly available.	Restricted Report - Not Publicly Available Implementation is complete, and the agency requested closure in December 2022.
GAO-21-164SU	2020-10-27	Restricted Report: Recommendation language not publicly available.	Restricted Report - Not Publicly Available Implementation is complete, and the agency requested closure in December 2022.
GAO-21-164SU	2020-10-27	Restricted Report: Recommendation language not publicly available.	Restricted Report - Not Publicly Available Implementation is complete, and the agency requested closure in December 2022.
GAO-21-38	2020-11-12	The Assistant Administrator of EPA's Office of Air and Radiation, in consultation with state and local agencies, should develop, make public, and implement an asset management framework for consistently sustaining the national ambient air quality monitoring system. Such a framework could be designed for success by considering the key characteristics of effective asset management described in our report, such as identifying the resources needed to sustain the monitoring system, using quality data to manage infrastructure risks, and targeting resources toward assets that provide the greatest value.	The agency continues to work with state, local, and tribal partners. Implementation is ongoing.
GAO-21-38	2020-11-12	The Assistant Administrator of EPA's Office of Air and Radiation, in consultation with state and local agencies and other relevant federal agencies, should develop and make	EPA will continue to work with stakeholders to establish an approach, goals, and priorities for an air quality monitoring modernization plan. Implementation is ongoing.

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		public an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public. Such a plan could address the ongoing challenges in modernizing the national ambient air quality monitoring system by considering leading practices, including establishing priorities and roles, assessing risks to success, identifying the resources needed to achieve goals, and measuring and evaluating progress.	
GAO-21-82	2020-12-09	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should communicate final guidance for future national initiative cycles to all states before the effective date of the national initiatives.	EPA has begun the FY24 – FY27 National Enforcement and Compliance Initiatives selection process and recently engaged the Environmental Council of States prior to release of the public Federal Register Notice.
GAO-21-82	2020-12-09	The Assistant Administrator for EPA's Office of Enforcement and Compliance Assurance should incorporate lessons learned from the initial effort to engage earlier and more continuously with states when developing the office's plan for how EPA will work with states on future national initiatives.	EPA has begun the FY24 – FY27 National Enforcement and Compliance Initiatives selection process and recently engaged the Environmental Council of States prior to release of the public Federal Register Notice.
GAO-21-156	2020-12-18	The Administrator should direct the Assistant Administrator of the Office of Research and Development to provide more information publicly about where chemical assessments are in the development process, including internal and external steps in the process, and changes to assessment milestones.	The agency submitted documentation related to the IRIS website that address GAO concerns and submitted a request for closure in February 2023.
GAO-21-156	2020-12-18	The Administrator should direct the Assistant Administrators of program offices and Regional Administrators to develop and make available guidance for chemical assessment	The EPA and GAO continue to discuss avenues to close out this recommendation. The agency's Office of Research and Development is discussing how to assist other EPA program and regional offices in determining which

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		nominations. Such guidance could include information such as how to select chemicals for IRIS assessment nomination or for high priority needs, criteria explaining how Assistant and Regional Administrators determine which nominations to support and which they may choose not to support, and how to document these decisions.	chemicals are best suited for evaluation by the IRIS Program.
GAO-21-156	2020-12-18	The Administrator of EPA should include in ORD's strategic plan (or subsidiary strategic plans) identification of EPA's universe of chemical assessment needs; how the IRIS Program is being resourced to meet user needs; and specific implementation steps that indicate how IRIS will achieve the plan's objectives, such as specific metrics to define progress in meeting user needs.	The EPA provided a briefing in 2022 to GAO to describe the Office of Research and Development's research planning process, including specifics of resource and research planning for the Health and Environmental Risk Assessment (HERA) National Research Program. The briefing articulated how IRIS contributes to the broader objectives of the HERA research program and describes how HERA and CPHEA (the ORD Center that houses the IRIS Program) undertake workforce planning activities focused on addressing those objectives.
GAO-21-78	2020-12-18	EPA's Assistant Administrator for Water should develop guidance for water systems that outlines methods to use ACS data and, where available, geospatial lead or other data to identify high-risk locations in which to focus lead reduction efforts, including tap sampling and lead service line replacement efforts.	The Agency developed Guidance for Developing and Maintaining a Service Line Inventory. The document includes factors for when a system may want to prioritize investigations at locations served by unknown service lines. Implementation is ongoing.
GAO-21-78	2020-12-18	EPA's Assistant Administrator for Water should develop a strategic plan that meets the WIIN Act requirement for providing targeted outreach, education, technical assistance, and risk communication to populations affected by the concentration of lead in public water systems, and that is fully consistent with leading practices for strategic plans.	EPA continues to be in disagreement with the recommendation and believe that the agency met the Water Infrastructure Improvements for the Nation Act (WIIN) requirement. Furthermore, EPA developed a strategic plan for targeted outreach to populations affected by lead. The plan outlines the new WIIN requirements and identifies the roles and responsibilities for EPA, states, and Public Water Systems. The plan establishes procedures for ensuring that communities are provided with:

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			(1) An explanation of potential adverse effects on human health of drinking water that contains a high level of lead; (2) The steps that the public water system is taking to lower the concentration of lead; and (3) The possible need for homeowners to seek another water source until the lead level can be lowered. In addition. in December 2021, EPA announced its efforts to strengthen the regulatory framework on lead in drinking water. EPA identified priority improvements for the LCRI: proactive and equitable lead service line replacement (LSLR), strengthening compliance tap sampling to better identify communities most at risk of lead in drinking water and to compel lead reduction actions, and reducing the complexity of the regulation through improvement of the action and trigger level construct. EPA has begun development of a proposed National Primary Drinking Water Regulation, Lead and Copper Rule Improvements (LCRI) to address key issues and opportunities to protect all Americans from lead in drinking water. EPA intends to promulgate the LCRI prior to October 16, 2024.
GAO-21-78	2020-12-18	EPA's Assistant Administrator for Water should incorporate use of (1) ACS data on neighborhood characteristics potentially associated with the presence of lead service lines and (2) geospatial lead data, when available, into EPA's efforts to address the Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.	The Agency has developed Guidance for Developing and Maintaining a Service Line Inventory. In the document there is a section on "Inventory Planning" that discusses various approaches that can be used to establish lead service line inventories. While the LCRR does not require a specific format for the service line inventory, the guidance includes a section titled "How to Make the Data Publicly Available" including recommendations on web-based map applications. Implementation is ongoing.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-21-87	2020-12-18	The Director of EPA's Office of Resource Conservation and Recovery should develop an implementation plan for conducting a study and developing recommendations for administrative or legislative action regarding the effect of existing public policies, and the likely effect of modifying or eliminating such incentives and disincentives, upon the reuse, recycling, and conservation of materials, as required by RCRA.	The EPA initiated an analysis that examines the impacts of different policies, incentives, and disincentives on driving a circular economy. This analysis includes a literature review of existing domestic and international policies related to recycling. The final report will include recommendations on effective policies or administrative actions. EPA completed drafts of the final report and anticipates releasing the report by June 30, 2023.
GAO-21-87	2020-12-18	The Director of EPA's Office of Resource Conservation and Recovery should develop an implementation plan for conducting a study and developing recommendations for administrative or legislative action regarding the necessity and method of imposing disposal or other charges on packaging, containers, vehicles, and other manufactured goods to reflect the cost of final disposal, the value of recoverable components of the item, and any social costs associated with nonrecycling or uncontrolled disposal, as required by RCRA.	On November 15, 2021, EPA released its final National Recycling Strategy. This strategy committed EPA to conducting a study on reflecting environmental and social costs in product prices. Per the strategy, the agency will develop an implementation plan with more specificity about this action and the organizational lead. The EPA completed a draft of the study, and it is currently undergoing review. Release of the study is anticipated by June 30, 2023.
GAO-21-87	2020-12-18	The Director of EPA's Office of Resource Conservation and Recovery should, while EPA finalizes and implements its national recycling strategy, incorporate desirable characteristics for effective national strategies, including (1) identifying the resources and investments needed, and balancing the risk reductions with costs; (2) clarifying the roles and responsibilities of participating entities; and (3) articulating how it will implement the strategy and integrate new activities into existing programs and activities.	EPA released the National Recycling Strategy on November 15, 2021. EPA completed the implementation plan online platform. Since then, EPA has undertaken several efforts to implement the Strategy. GAO is reviewing the implementation plan.

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GAO-21-63	2021-01-15	The Director for EPA's Office of Pesticide Programs should, in the agency's guidance, on its website, or through another mechanism, explain EPA's expectations about the appropriate use of the pesticide information obtained by a designated representative, including describing potential misuse of such information.	In December 2021, the agency completed an assessment to determine whether the designated representative provision is fulfilling its intended purpose and how EPA can support understanding and compliance with the provision. The EPA now expects to implement this recommendation by December 2023.
GAO-21-291	2021-03-26	The Assistant Administrator for EPA's Office of Water should develop definitions for all utility ownership types for regional offices and states to use when entering data on ownership type in EPA's Safe Drinking Water Information System and should verify and correct the data as needed.	The modernized Safe Drinking Water Information System is expected to be available for states to begin transitioning to the system by end of 2024 and the length of transition period will depend on states and their available resources to transition. EPA expects the definition development will be in the later part of the SDWIS development when additional fields will be added.
GAO-21-291	2021-03-26	The Assistant Administrator for EPA's Office of Water should conduct another Community Water System Survey to establish an updated, accurate baseline of drinking water utility information for rulemaking and other purposes.	The Agency has initiated work to conduct another Community Water System Survey. Implementation is ongoing.
GAO-21-290	2021-07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should revise its guidance to select files for its State Review Framework assessments of state-reported data to incorporate statistically valid probability sampling.	Based on recommendations from EPA's National Center for Environmental Economics on statistical methods, the agency will research randomization tools to pilot for all Clean Water Act Direct Implementation State Revolving Fund File Selection lists during State Review Framework. Full implementation is planned for FY23.
GAO-21-290	2021-07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should ensure that consolidated, complete, and updated information on all data limitations is disclosed on the State Water Dashboard.	The agency held discussions with stakeholders to identify and map what website content requires modification and how best to implement them. Implementation includes but is not limited to consolidation and editing of website content and editing to improve clarity. Full implementation is planned for FY23.

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GAO-21-290	2021-07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a plan to determine the overall accuracy and completeness of the permit limit and discharge monitoring report data recorded in its national database.	The agency will continue to work with states to identify and correct problems that prevent proper transfer of discharge monitoring report data to the Integrated Compliance Information System National Pollutant Discharge Elimination System. Additionally, the agency will work to maximize the amount of discharge monitoring report data and all necessary permit limit data in the system. The EPA will develop a methodology to examine the accuracy of the discharge monitoring report and permit limit data received by the Integrated Compliance Information System National Pollutant Discharge Elimination System from authorized states. Full implementation is planned for completion by the end of FY25.
GAO-21-290	2021-07-12	The Assistant Administrator of EPA's Office of Enforcement and Compliance Assurance should develop a performance measure to track the reduction in pollutant discharges resulting from enforcement actions for facilities in significant noncompliance and disclose any limitations.	The EPA will identify trends in this measure over time to assess whether agency and state compliance work is positively impacting the average pollutant load over limit per permit. The agency will continue to report annually the Estimated Water Pollutants to be reduced resulting from enforcement actions (Estimated Water Pollutants Reduced, Treated or Eliminated for the Clean Water Act National Pollutant Discharge Elimination System Program). The page will also identify data limitations. Additionally, the EPA will develop a methodology and outcome measure for tracking the extent to which the significant noncompliance national compliance initiative achieves reductions in illegal pollutant discharges. Actions are ongoing.
GAO-21-103181	2021-09-21	The Administrator of EPA should fully describe available public comment data, including any limitations, to external users of the data. This should include coordination with GSA, as the manager of Regulations.gov, as appropriate.	Implementation is complete. The EPA requested closure of this recommendation in December 2023.

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GAO-22-104677	2021-10-14	The Administrator of the Environmental Protection Agency should evaluate the effectiveness of steps taken to improve SBIR award timeliness and take any necessary additional steps in order to consistently meet SBA award timeliness guidelines.	Agency actions are complete. However, GAO requires outyear data to confirm consistent implementation. Closure is anticipated after an additional cycle.
GAO-22-104153	2021-12-15	The Administrator of EPA should work with the Coast Guard and other agencies to conduct assessments, such as biological assessments or ecological risk assessments, and examining the potential effects of the subsurface use of dispersants on ocean ecosystems in regions where this is considered a viable response option.	The agency plans to provide support to the Coast Guard and coordinate with the National Oceanic and Atmospheric Administration and other agencies to identify assessment methodologies and examine potential effects of the subsurface use of dispersants on ocean ecosystems for select regions. Implementation has external dependencies, so a firm estimate for completion is not yet available.
GAO-22-104637	2021-12-15	If Congress extends the refined coal production tax credit, the Administrator of the EPA should coordinate with Treasury, IRS, and DOE to review the performance of the credit in achieving its intended purpose and identify and implement, as appropriate, any improvements towards achieving that intended purpose, such as adjustments to allowable emissions testing methods.	Congress elected not to include the refined coal tax credit when renewing similar energy tax credits in the Inflation Reduction Act - a precondition of the recommendation. The agency requested closure of the recommendation.
GAO-22-104494	2022-02-28	The Assistant Administrator of the Office of Enforcement and Compliance Assurance should design an information system to track common deficiencies found during inspections, including any related to natural hazards and climate change, and use this information to target compliance assistance.	The agency intends to develop a written business process to identify common deficiencies and to use this process to target compliance assistance efforts. Completion is anticipated by mid-2023.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-22-104494	2022-02-28	The Assistant Administrator of the Office of Enforcement and Compliance Assurance and Director of the Office of Emergency Management should develop a method for inspectors to assess the sufficiency of RMP facilities' incorporation of risks from natural hazards and climate change into risk management programs and provide related guidance and training to inspectors.	The agency is working on a proposal to revise the Risk Management Plan (RMP) regulations and after the final rule is published, we intend to incorporate methods and/or materials related to assessing the sufficiency of RMP facilities' incorporation of risks from natural hazards and climate change into the Risk Management Program Inspector Training course. Completion is anticipated by the end of FY23.
GAO-22-104494	2022-02-28	The Assistant Administrator of the Office of Enforcement and Compliance Assurance, working with officials at regional offices, should incorporate vulnerability of RMP facilities to natural hazards and climate change as criteria when selecting facilities for inspection.	The agency is working on a proposal to revise the RMP regulations and will look for opportunities to incorporate risks from climate change into the National Compliance Initiative goals and inspection selection criteria, as well as refine its approach after the final rule is published. Completion is anticipated by the end of FY23.
GAO-22-104494	2022-02-28	The Assistant Administrator of the Office of Enforcement and Compliance Assurance and Director of the Office of Emergency Management should develop a method for inspectors to assess the sufficiency of RMP facilities' incorporation of risks from natural hazards and climate change into risk management programs and provide related guidance and training to inspectors.	The agency is working on a proposal to revise the RMP regulations. After the final rule is published, the agency intends to incorporate methods and/or materials related to assessing the sufficiency of RMP facilities' incorporation of risks from natural hazards and climate change into the Risk Management Program Inspector Training course. Completion is anticipated by the end of FY23.
GAO-22-104494	2022-02-28	The Assistant Administrator of the Office of Enforcement and Compliance Assurance and Director of the Office of Emergency Management, together with EPA officials at regional offices, should provide additional compliance assistance to RMP facilities related to risks from natural hazards and climate change.	Progress on this recommendation is contingent on the final rule being published, so EPA does not expect to develop the additional materials to assist regulated entities in complying with the updated RMP regulations until after the final rule is published.

GAO Report Number	Report Issue Date	GAO Recommendation	EPA Implementation Status
GAO-22-104494	2022-02-28	The Director of the Office of Emergency Management should issue regulations, guidance, or both, as appropriate, to clarify requirements and provide direction for RMP facilities on how to incorporate risks from natural hazards and climate change into their risk management programs.	EPA published the proposed rule ahead of schedule in August 2022. It includes amendments to the PHA and hazard review provisions that would explicitly require RMP facilities to consider the risks of external events such as natural hazards, including those caused by climate change or other triggering events that could lead to an accidental release. Completion is anticipated by the end of FY23.
GAO-22-104276	2022-03-17	The Director of the Office of Emergency Management at EPA should develop a formal lessons learned process with written guidelines for disaster responses, including responses to Stafford Act disasters, that incorporates the key practices of a lessons learned process.	The agency is on track to complete this action by the end of CY23.

Working Capital Fund

In FY 2024, the Agency will be in its 28th year of operation of the Working Capital Fund (WCF). The WCF is a revolving fund authorized by law to finance a cycle of operations in which the costs for goods or services provided are charged to the users. The WCF operates like a commercial business within EPA where customers pay for services received, thus generating revenue. Customers include EPA program and regional offices and other federal agencies. The WCF mechanism provides an efficient method for a full cost approach to agency programs. EPA's WCF was implemented under the authority of Section 403 of the Government Management Reform Act of 1994 and the Omnibus Consolidated Appropriations Act of 1997. EPA received permanent WCF authority in the Department of Interior and Related Agencies Appropriations Act of 1998.

EPA's Chief Financial Officer (CFO) initiated the WCF in FY 1997 as part of an effort to: 1) be accountable to agency offices, the Office of Management and Budget, and Congress; 2) increase the efficiency of the administrative services provided to program offices; and 3) increase customer service and responsiveness. The Agency has a WCF Board which provides policy and planning oversight and advises the CFO regarding the WCF financial position. The Board, chaired by a management representative within the Office of the Chief Financial Officer, is comprised of 23 voting members from program and regional offices.

In FY 2024, there will be 15 core agency activities provided under the WCF. These are the Agency's information technology services, agency postage, Cincinnati voice services, background investigations, enterprise human resources, Information and Technology (IT) services, and facilities alterations managed by the Office of Mission Support; financial and administrative systems, employee relocations, and a budget formulation system managed by the Office of the Chief Financial Officer; the Agency's Continuity of Operations (COOP) site managed by the Office of Land and Emergency Management; regional information technology service and support managed by EPA Region 8; legal services managed by the Office of General Counsel; and multimedia services, EPA Action Management System (EAMS) and agency servicing contracts managed by the Office of the Administrator.

The Agency's FY 2024 budget request includes resources for these 15 core activities in each National Program Manager's submission, totaling approximately $463 million. These estimated resources may be adjusted during the year to incorporate any program office's additional service needs during the operating year. To the extent these increases are subject to Congressional reprogramming notifications, the Agency will comply with all applicable requirements. In FY 2024, the Agency will continue to perform relocation services for other federal agencies, delivering high quality services external to EPA.

The Agency anticipates that there may be minor increases and decreases in FY 2024 due to several IT improvements, including increased cloud computing, improved network infrastructure, cybersecurity requirements, continuous diagnostic and mitigation program implementation, and discovery services. Other funding shifts have been included in the FY 2024 WCF plan that relate to the necessary telecommunications and computer support needed by every employee. As part of an overall review and rebalancing of these costs, funds have been shifted across programs to reflect FTE changes as well.

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