



## Permitting for Environmental Results (PER)

# NPDES Profile: Puerto Rico

### PROGRAM RESPONSIBILITY

**EPA Region 2:** NPDES authority for base program, general permitting, federal facilities, pretreatment, biosolids

### Program Integrity Profile

This profile characterizes key components of the National Pollutant Discharge Elimination System (NPDES) program, including program administration and implementation, environmental outcomes, enforcement, and compliance. EPA considers profiles to be an initial screen of NPDES permitting, water quality, enforcement, and compliance programs based on self-evaluations by the States and a review of national data. EPA will use the profiles to identify program strengths and opportunities for enhancements. For more information contact Jeff Gratz, EPA Region 2, at (212) 637-3873.

## Section I. Program Administration

### 1. Resources and Overall Program Management

Puerto Rico does not have, nor has it requested, authority to administer the NPDES program. Historically, NPDES permitting and compliance/enforcement have been done in the EPA Region 2 New York office. However, with the upgrade of the EPA Caribbean Field Office to the Caribbean Environmental Protection Division (CEPD) and completion of a revised re-delegation order empowering the CEPD Director to issue NPDES permits and issue administrative enforcement actions, more work is now being done in EPA's San Juan office. Currently, the Division of Environmental Planning and Protection (DEPP) in New York retains the lead role for NPDES permitting in the Region and issues most of the industrial NPDES permits. CEPD issues some industrial permits and all municipal permits. The Division of Enforcement and Compliance Assistance (DECA) is the compliance/enforcement lead for the Region, but most compliance/enforcement activity in Puerto Rico is done by CEPD. Organization charts are provided at the end of this profile.

EPA's Permit Compliance System (PCS) database shows 81 major permits and 200 minor permits in Puerto Rico. Through an ongoing EPA data clean-up effort, the number of minor facilities is expected to decline as inactive facilities are identified and removed from the active database.

An important element of NPDES permitting in Puerto Rico is the role the Commonwealth plays. The Puerto Rico Environmental Quality Board (EQB) takes an active role in water quality-based permitting through the Clean Water Act Section 401 certification process. EPA reviews applications for completeness and requests Commonwealth certification prior to development of a draft permit. EQB includes water quality-based effluent limits and special conditions in the water quality certificates that are developed. Guidance documents that address freshwater and marine/mixing zone effluent limit development are in place. EQB goes through a public participation process and allows an appeal process

(called “reconsideration”). Certification takes at least a few months, and at times the process can take years (for complex discharges and when reconsideration is sought). Because of EPA’s reliance on EQB’s 401 certification process to address local water quality concerns, the timing of permit issuance is often a function of EQB’s ability to finalize its 401 certification.

EQB spends considerable resources on Clean Water Act (CWA)-related activities (e.g., certifications, surface water and groundwater quality planning, water quality standards, ambient monitoring) which are provided through a Performance Partnership Grant with EPA.

Personnel time expended on Puerto Rico NPDES is estimated as follows: DEPP permit issuance: 3.1 staff, 0.5 senior environmental employee (SEE), 0.4 supervisory; CEPD permit issuance: 2.4 staff, 0.2 supervisory; DECA compliance/enforcement: 2.0 staff, 1.0 supervisory; CEPD compliance/enforcement: 7.6 staff, 0.8 supervisory; total: 7.5 staff, 0.5 SEE, 2.4 supervisory. NPDES permitting resources have remained relatively constant over the near term. In addition, staff are adequately trained and turnover has been low.

Monetary expenditures are modest. Periodic small contractor-supported efforts are completed, although administrative costs (public notices, hearings) are not insignificant (rough estimate: \$50,000/year). In addition, the cost for maintaining one SEE is about \$35,000 per year.

## **2. State Program Assistance**

Puerto Rico is not authorized to administer the NPDES program, nor has it expressed an interest in doing so. However, as discussed above, Region 2 does work closely with the Puerto Rico EQB to ensure coordination (through a Performance Partnership Grant, meetings, and so forth) between its other Clean Water Act-related activities and the Region’s permitting and compliance/enforcement program.

## **3. EPA Activities in Indian Country**

Not applicable, because there are no federally recognized tribes in Puerto Rico.

## **4. Legal Authorities**

EPA Region 2 implements the NPDES program in Puerto Rico using its authorities under the CWA.

## **5. Public Participation**

Region 2 follows applicable regulatory requirements during permit issuance, such as publishing permit notices in one or more newspapers and mailing public notices to interested persons. In certain cases, public notices are published in English and Spanish. In addition, through the implementation of the environmental justice program, Region 2 conducts open public forums or other enhanced public outreach efforts (such as targeted mailing to political and environmental leaders) for selected permits. Twice a year, Region 2 publicizes on its Web site, [http://www.epa.gov/region02/bus\\_ind/permdata.htm](http://www.epa.gov/region02/bus_ind/permdata.htm), the permit actions anticipated over the next year to allow interested persons an opportunity for early involvement.

Permit files are available in New York and San Juan, and public notices for draft permits explain how to access documents and whom to call for more information. Region 2 does not manage any permitting or compliance databases. However, it does post CWA Section 309(g) administrative complaint public notices on its Web site. Permitting and compliance information is provided through links from the Region's Web site to EPA Headquarters' Web site. Although no Puerto Rico permits are now included in the electronic EPA permit database at <http://www.epa.gov/npdes/permitdocuments>, the Region will begin to populate the database with new and reissued permits from this point forward.

## 6. Permit Issuance Management Strategy

Region 2 has participated in the national efforts to evaluate the backlog, develop a strategy to reduce the backlog in Puerto Rico, and track the backlog. Implementation of the backlog reduction plan developed in May 2000 has not been as successful as anticipated. Resource-intensive efforts (such as 301(h) secondary treatment waiver decisions and 316(a) thermal variance decisions) have affected permit issuance activities. In addition, delays in EQB's issuance of 401 water quality certifications have caused additional delays in many permits. As stated previously, because of EPA's reliance on EQB's 401 certification process to address local water quality concerns, the timing of permit issuance is often a function of EQB's ability to finalize its 401 certification. Region 2's policy has been to wait for these certifications prior to issuing draft permits. The Region plans to improve coordination between the two permitting divisions (DEPP and CEPD) and with EQB and to substantially update the backlog strategy plan in January 2005.

**Percentage of Facilities Covered by Current Permits in Puerto Rico**

	2000	Nat'l Avg.	2001	Nat'l Avg.	2002	Nat'l Avg.	2003	Nat'l Avg.
Major Facilities	64%	74%	38%	76%	67%	83%	73%	84%
Minor Facilities Covered by Individual Permits	50%	69%	41%	73%	47%	79%	48%	81%
Minor Facilities Covered by Individual or Non-Stormwater General Permits	N/A	N/A	N/A	N/A	47%	85%	48%	86%

Source: PCS, 12/31/00; 12/31/01; 12/31/02; 12/31/03. (the values in the National Data Sources column of the Management Report, measures #19 and #20, are PCS data as of 6/30/04.)

The Region notes that 16 major permits have been expired more than 2 years and 3 have been expired more than 10 years. For minor facilities covered by individual permits, 30 permits have been expired more than 2 years and 2 have been expired more than 10 years.

## 7. Data Management

Region 2 is a direct user of the PCS to manage the NPDES program for Puerto Rico. In addition, the national notice of intent (NOI) database system is used for stormwater permittees under general permits.

All Water Enforcement National Database (WENDB) data elements are entered. Region 2 uses the NPDES Information Management System (NIMS), a local database, to ensure the quality of data reported on discharge monitoring reports before the information is transmitted to PCS. However, the recent reduction of staff has eliminated the double entry to check on data quality. When entering new permit limits into PCS following issuance of new or reissued permits, data entry staff coordinate with permit writers to check on the accuracy of the new limits being added to PCS.

Region 2 uses PCS as a primary tracking tool to manage basic permit and compliance information for major and minor facilities. Additional information regarding permit status is tracked internally through an Excel database for the purpose of coordination among staff and resource planning. There are no combined sewer overflows in Puerto Rico, and a concentrated animal feeding operation (CAFO) general permit is being drafted. Regarding pretreatment, there is one approved pretreatment program in Puerto Rico, which is tracked by the Region's pretreatment coordinators (in DECA and DEPP). The Region does not issue separate permits for biosolids because the sewage sludge regulations at title 40 of the Code of Federal Regulations (CFR) part 503 are directly enforceable (self-implementing). NPDES permits include a general condition referring to the need to comply with the sewage sludge regulations.

Region 2 is working on a Location Data Improvement Project that covers location data in several EPA program systems. For PCS, analysts use the geographic information system (GIS) ArcView to conduct digital ortho-photo quad interpolation. A map of the facility location and a photo image are digitally overlaid, and shape files containing facility polygons and pipe point locations are created. These shape files are used to create "return files" containing the latitudes and longitudes of pipe locations and facility centroids, which are sent to EPA Headquarters for use in the Location Reference Tables used in Envirofacts. The return files are converted to PCS transaction format and used to update PCS.

In addition, Region 2 is using facility inspections and follow-up correspondence to eliminate a number of inactive applications currently in PCS. The Region has 44 open applications in-house and estimates that 25% should be eliminated. This effort is part of the Region's strategy to reduce its backlog of expired permits and open applications.

All Puerto Rico permit applications require latitude/longitude data for facilities and outfalls. This information is collected and entered into PCS. Region 2's Information Systems Branch has expended some resources to georeference existing outfall locations. Region 2 anticipates that as new permits are issued and existing permits are reissued, the data set will become more robust.

## **Section II. Program Implementation**

### **1. Permit Quality**

Regarding development of technology-based limits, Region 2 ensures quality through the use of experienced staff and management review. Many permits are issued for discharges from publicly owned treatment works (POTWs); such permits can be handled effectively by all staff, using the EPA secondary treatment standards. A limited number of permits (such as those for steam electric and petroleum refining) require the imposition of more complex technology standards. These permits are assigned to experienced staff with knowledge of the industry guidelines. Region 2 permit staff are generally very experienced; turnover is quite low. In addition, all staff are active in seeking advanced permit training opportunities. When difficult issues arise during permit development, permit writers consult each other to ensure that appropriate, defensible conditions are incorporated into the permit. The Region does not have a formal self-review strategy. However, it plans to use a new electronic permitting tool (eNPDES) being developed by EPA. In the interim, fact sheets have been enhanced to include clearer information on permitted outfall locations, the permit writer, and the date the permit was written. EPA may include a monitoring data summary and information on compliance history with the revised permit if the facility's permitting/enforcement history warrants doing so.

Regarding water quality-based permitting, EPA Region 2 generally uses the limits imposed by EQB's Section 401 water quality certificates as water quality-based effluent limits (WQBELs) in NPDES permits. EQB is conservative in its development of numeric limits. Most dischargers are given limits equal to the water quality standards at the end of the discharge pipe, prior to dilution, based on the pollutants identified in the NPDES permit application as present in the discharge. However, dischargers are given the opportunity to apply for less stringent WQBELs that take into account the assimilative capacity of the receiving water. Dischargers to freshwaters may apply for a wasteload allocation (WLA), which is a slightly more conservative WQBEL than that calculated using the approach in the Technical Support Document. Dischargers to saltwater may apply for a mixing zone permit limit, which requires a very detailed application that includes extensive water quality modeling analyses to demonstrate that water quality standards will be met at the edge of the mixing zone. In both cases, the burden is on the discharger to demonstrate the assimilative capacity of the receiving water. It is up to the EQB to decide whether it is necessary to allocate the assimilative capacity of the water body segment, or whether the discharger should be required to meet limits equal to water quality standards at the end of the discharge pipe. Dischargers to impaired waters without a Total Maximum Daily Load (TMDL) would likely be required to meet water quality standards at the end of the discharge pipe. With the conservative methods that EQB includes in its water quality certificates, which are in turn incorporated into EPA's permits, EPA is confident that the permits are protective of water quality.

Region 2 does not have a formal whole effluent toxicity (WET) policy. However, for a number of years, Region 2 and EQB have implemented a toxicity testing program through permits. In general, major dischargers are required to conduct testing. Permit writers have an opportunity to review the test results at the time of permit reissuance. In addition, EQB uses toxicity results in decisions on mixing zone applications. Nevertheless, as a program enhancement, Region 2 has committed to developing and implementing a formal WET policy/strategy in early 2005.

## **2. Pretreatment**

EPA Region 2 provides oversight of pretreatment program implementation for POTWs in Puerto Rico. In 1985 EPA approved the pretreatment program for the Puerto Rico Aqueduct and Sewer Authority (PRASA), which operates the POTWs on the island. This is the only approved pretreatment program in Puerto Rico. Currently, the pretreatment program is implemented in 26 of PRASA's 67 POTWs, of which only 10 plants have an individual design flow greater than 5.0 million gallons per day. The other POTWs do not have significant industrial users (SIUs). PRASA issues control mechanisms that implement applicable pretreatment standards and requirements to the SIUs in the Commonwealth. PRASA regularly updates its industrial user inventory through ongoing activities such as inspections and surveys and through reviews of quarterly service reports for new industries and new hookups to the sewer system. At the time of EPA's 2002 pretreatment audit, there were 169 SIUs.

EPA Region 2 conducts pretreatment audits once every 5 years and pretreatment compliance inspections the other years. PRASA is asked to reply to the audit report within 60 days. EPA issues administrative orders to address deficiencies that remain unresolved at that time. EPA has inspected or audited PRASA's program (the only approved pretreatment program in Puerto Rico) each of the past 5 years.

PRASA submits pretreatment reports quarterly, and Region 2 generally reviews them within 30 days of receipt. Thirty-nine percent (26 of 67) of the POTWs in Puerto Rico are covered by the pretreatment program. No other POTWs in Puerto Rico need a pretreatment program; the plants not covered by the pretreatment program do not have SIUs. The Region does not have any plans to enhance the pretreatment program at this time.

## **3. Concentrated Animal Feeding Operations**

In early 2005 Region 2 will issue a draft CAFO general permit that will be consistent with all current federal CAFO regulations and guidance and will include the nine minimum control measures. In addition, Region 2 has been working with EQB and the USDA Natural Resources Conservation Service (NRCS) to require nutrient management plans through the CAFO general permit. The general permit will contain schedules under which CAFOs must implement nutrient management plans. EQB and NRCS believe that roughly eight facilities will fit the CAFO definition and will be subject to the CAFO general permit. EQB and NRCS maintain that Puerto Rico has a very good animal waste management program. EQB has a non-NPDES regulatory program for animal feeding operations. EPA's draft permit will incorporate the current EQB program, to the maximum extent possible, into the CAFO general permit. The Region recently received a draft water quality certificate from Puerto Rico that will help ensure program integration and acceptance at the local level. The Region is currently evaluating the draft water quality certificate and technical standards to make sure that they are consistent with and at least as stringent as the requirements of the CAFO rule. EQB and NRCS will play an important role in reaching out to the farm community. Depending on the comments EPA receives on the draft permit following the public notice, some additional outreach by EPA might be necessary. Region 2 has one application for a CAFO permit in-house.

## **4. Stormwater**

Industrial and construction general permits are issued (including revision of the construction threshold from 5 acres to 1 acre), but the Phase II general permit for municipal separate storm sewer systems (MS4s) is still under development. Publication of a draft MS4 permit is targeted for March 2005. The delay was due to litigation with local MS4s and environmental groups on the scope of the program and on the interpretation of certain definitions. Those issues have been resolved. In the interim and in anticipation of general permit issuance, MS4s have submitted permit applications to EPA and are developing the required stormwater management plans. EPA Region 2 has provided outreach materials to MS4s in Puerto Rico. Industrial and construction NOIs are processed by the EPA Storm Water Notice Processing Center. EPA Region 2 uses the National NOI Center.

## **5. Combined Sewer Overflows/Sanitary Sewer Overflows**

There are no combined sewer systems in Puerto Rico.

In the event of sanitary sewer overflows (SSOs) or other raw sewage discharges, PRASA notifies the Puerto Rico Department of Health, EPA, and EQB by fax. (Municipalities are not responsible for sanitary sewer systems in Puerto Rico.) Although Region 2 (CEPD) informally tracks an SSO event and any subsequent response, it is not involved in the Commonwealth's public notification procedures. (There is no formal public notification procedure.) As part of a consent decree, PRASA is required to implement mitigation measures, including temporary disinfection; solids control; and, if appropriate, installation of temporary "pump around" facilities to minimize impacts on the community and the environment.

## **6. Biosolids**

EPA Region 2 staff monitor sludge issues and have taken actions as necessary. Every year Region 2 in New York receives an annual sludge report from the Commonwealth, which covers information on biosolids management for 64 POTWs, and receives supplemental reports from 3 of the 64 POTWs with additional information on biosolids management. Of these three, two treat the sludge to meet beneficial use standards and one disposes of its sludge in a sludge-only landfill (under the 40 CFR Part 503 surface disposal requirements). Therefore, 3% of the POTWs in Puerto Rico beneficially use their sludge. During calendar year 2002, Puerto Rico generated 28,986 dry metric tons (DMT) of sludge, of which 3,354 dry metric tons (11.6% of the total sludge generated in Puerto Rico) was beneficially used or land-applied.

Region 2 tracks the submission of annual sludge reports through word processing files and takes appropriate enforcement action for failure to submit the required reports or for failure to comply with the Part 503 sewage sludge regulations. Enforcement actions are also tracked using desktop computer spreadsheets.

NPDES permits generally include a special condition addressing sludge requirements. In addition, the requirements in the Part 503 sewage sludge regulations are self-implementing (directly enforceable).

## **Section III. NPDES Compliance Monitoring and Enforcement Response**

*In a separate initiative, EPA's Office of Enforcement and Compliance Assurance (OECA), EPA Regions, and the Environmental Council of the States have developed a tool for assessing State performance in enforcement and compliance assurance to ensure that States meet agreed-upon minimum performance levels and provide a consistent level of environmental and public health protection nationwide. OECA will use the State profiles to focus these efforts and identify areas needing further discussion and evaluation. Where the State or territory (such as Puerto Rico) is not authorized to implement the NPDES program, OECA will use the above process to evaluate regional performance in implementing the NPDES compliance and enforcement programs.*

### **1. Enforcement Program**

Region 2 prioritizes its enforcement activities by following the EPA policy/guidance memorandum on the priority-setting process, as well as responding to overflows and citizen complaints. The national policy to address violations is the Enforcement Management System (EMS).

Region 2 adheres to the national criteria in response to significant noncompliance (SNC) and follows the escalation policies in the EMS. Penalties are assessed in accordance with national CWA policies regarding penalties and supplemental environmental projects. Region 2's management reviews penalty calculations to ensure adherence to the policies.

Compliance schedules are entered into PCS, and periodic reports of milestones are generated for follow-up. A local system called DATES generates automatic 30-day reminder letters to facilities with compliance schedule events. Inspections and phone calls with facilities are sometimes needed to verify that all required work has been performed.

Puerto Rico's SNC rate went from 4% in FY2001 to 30% in FY2002 and 82% in FY2003, well above the national average. The percent SNC addressed by formal enforcement actions was 0% for FY2001 but increased to 18% in FY2002 and 20% in FY2003. The number of formal enforcement actions is increasing: 22 minor and 41 major facilities in FY2001, 43 minor and 62 major facilities in FY2002, and 51 minor and 56 major facilities in FY2003. There are also several active judicial consent decrees covering multiple facilities owned by various Puerto Rico public authorities. These consent decrees include schedules of compliance for necessary injunctive relief and provisions that assess stipulated penalties for violations under the consent decrees. In addition, Region 2 is working on a number of enforcement initiatives that should significantly lower the SNC universe and will have an impact on the number of formal enforcement actions going forward.

### **2. Record Keeping and Reporting**

The administrative record for individual permits and general permits is maintained in Region 2's New York or Puerto Rico office, according to which EPA office developed the permit. The public notice



indicates the location of the record. PCS data entry and maintenance are performed in Region 2's New York office, and all data are available through Enforcement Compliance and History Online (ECHO).

### **3. Inspections**

Region 2 endeavors to inspect all major facilities and pump stations annually and all minor facilities once every 5 years. However, the Region's inspection totals vary greatly year to year based on the need to respond to bypass or SSO events, and as well as the need to reinspect POTWs or pump stations more frequently. Highest priority is always given to facilities discharging upstream of water supply intakes and to respond to wet-weather events. Every inspection involves a file review.

Region 2 participates in all major national initiatives, regardless of sector, pollutant targeting, and the like. Because Puerto Rico is not authorized to implement the NPDES program, it does not participate in EPA enforcement initiatives.

The total number of inspections conducted by EPA in Puerto Rico was much higher in FY2002 (427) than in FY2003 (187). The elevated FY2002 number was the result of an inspection of all pump stations in Puerto Rico that was conducted as part of a court case. The Region expects that the final FY2004 numbers will be elevated because of the inspection of all PRASA facilities as part of a transition strategy.

### **4. Compliance Assistance**

Region 2, through several initiatives, has attempted to maximize compliance and deter noncompliance using various tools. Notably, the University, Healthcare, and Children's Health initiatives all include combinations of compliance assistance (workshops, seminars, site visits, mass mailings), compliance incentives (audit agreements, self-disclosures), compliance monitoring, and enforcement. Region 2 expects that this innovative approach to environmental protection will be a vital component of its compliance and enforcement program for the foreseeable future. Region 2 has reported compliance assistance data to EPA Headquarters using the Reporting Compliance Assistance Tracking System (RCATS), which has now been converted into ICIS. There have been no NPDES-focused compliance assistance activities in Puerto Rico over the past 5 years, only sector-specific activities (e.g., universities, hospitals).

## **Section IV. Related Water Programs and Environmental Outcomes**

### **1. Monitoring**

EQB has developed a multiyear ambient monitoring strategy. However, in May 2003 new guidance on the elements of a State water monitoring and assessment program was forwarded to the chairman of EQB. The ultimate goal for the new strategy should be to have a monitoring program for all water resources for all uses in 10 years. The Commonwealth is reviewing the guidance within the context of its existing ambient monitoring program. EQB has committed to updating this strategy under its FY2004 Performance Partnership Grant. The goal is to implement the strategy in FY2005 if it is completed.

The Region anticipates that the Commonwealth's comprehensive monitoring strategy will address how it will improve the number of waters assessed in order to enhance the understanding and characterization of surface water quality throughout Puerto Rico.

EPA and EQB have developed a Watershed Protection Strategy to facilitate the issuance of water quality certifications under CWA section 401 and to synchronize permit issuance within a watershed. For WQBELs, dischargers are generally required to meet water quality standards at the point of discharge, prior to dilution. However, dischargers are given the opportunity to apply for less stringent WQBELs that take into account the assimilative capacity of the receiving water. The discharger must complete an application for either a WLA in freshwaters or a mixing zone in marine waters. In both cases, it is up to the discharger to perform the required monitoring and demonstrate the assimilative capacity of the receiving water. This application process ensures that available ambient data are sufficient to calculate a WLA.

### **2. Environmental Outcomes**

Puerto Rico has 102 watersheds, which total 5394.2 stream miles, 3,843 estuarine acres, 18 lakes and 20 lagoons (7,378 acres), and 549.9 miles of coast, including the principal offshore islands of Mona, Vieques, and Culebra. In addition, there are approximately 22,971 acres of tidal wetlands and 79,096 acres of freshwater wetlands. According to the Puerto Rico Water Quality Standards Regulations, the designated uses for these waters are Primary Contact Recreation, Secondary Contact Recreation, Aquatic Life, and Raw Source for Drinking Water.

To perform the water quality assessment, the EQB operates fixed-station monitoring networks. For coastal waters the monitoring network consists of 88 stations distributed around the coastal zone of Puerto Rico. These stations provide monitoring data for 199 miles (36%) of the 549.9 miles of coastal waters. From this monitoring network, EQB reports that 36 stations are specifically placed in areas designated as Special Bathing Zones by the Department of Natural and Environmental Resources. The monitoring stations at Special Bathing Zones are monitored for fecal coliforms bacteria.

Streams and lakes are monitored in Puerto Rico by the U.S. Geological Survey under contract to EQB. The network includes 58 water quality sampling stations in 26 major river basins and 6 major lakes. In addition, EQB samples 12 lakes.

Of the 5394.2 miles of rivers and streams, 321.3 (or 6.0%) have been assessed and support all designated uses. Of the 7,378 acres of lakes and reservoirs, 397 (or 5.3%) have been assessed and support all designated uses. (It should be noted that EQB listed virtually every lake as “impaired” due to low dissolved oxygen. At this time it is uncertain how much of this condition is due to natural eutrophication. If the cause is anthropogenic, the most likely sources are nonpoint and agricultural sources of phosphorus.) There is currently very little monitoring and use support information available for the estuarine environment. Of the 549.9 miles of coastal waters, 172.9 miles (31.4%) have been assessed and fully support designated uses. These and additional data are available in EQB’s 2004 305(b)/303(d) integrated report, which combines Puerto Rico’s list of impaired water bodies prepared under CWA section 305(b) with its water quality inventory prepared under CWA Section 303(d). However, because Puerto Rico does not use the National Assessment Database, the data were not available for the Management Report measures.

### **3. Water Quality Standards**

The EQB adopts water quality standards to protect the designated uses of the waters of Puerto Rico. During the development of these standards, EQB works closely with Region 2 to ensure that they are scientifically defensible and protective of uses. In addition, prior to final approval of any new or revised Puerto Rico water quality standards, EPA Region 2 reviews the proposed standards to ensure that they are protective. EPA has consulted with the Fish and Wildlife Service and National Marine Fisheries Service to ensure that the water quality standards are protective of threatened and endangered species. During the last triennial review EQB adopted numerous water quality standards for toxic parameters based on EPA’s national water quality criteria recommendations. Specifically, EQB completed a water quality standards review/revision in 2003. EPA approved the revisions on June 26, 2003. Following EPA’s publication (in the Federal Register) of its decision to remove Puerto Rico for certain “National Toxics Rule” parameters, the Commonwealth will remain in the National Toxics Rule for about 20 pollutants.

For the vast majority of its waters, Puerto Rico has adopted uses that are consistent with the CWA’s “fishable/swimmable” goals. To protect these uses, Puerto Rico has also adopted numeric and narrative criteria, including numerous numeric criteria for toxic pollutants. For those pollutants for which Puerto Rico has not yet adopted criteria, the Commonwealth is covered by the National Toxics Rule. In 1990 Puerto Rico adopted enterococci criteria consistent with the 1986 EPA recommendations for those Class SB (coastal) waters which are used for primary contact recreation, e.g., Special Bathing Zones (beaches). The remaining Class SB waters, which are not designated bathing beaches, do not include the 1986 criteria.

On January 26, 2004, EPA completed rulemaking to establish a designated use and applicable water quality criteria (including the 1986 recommendations for enterococci) to protect primary contact recreation for all coastal waters classified by Puerto Rico as Class SC. This promulgation did not cover the remaining Class SB waters as described above. Overall, for Puerto Rico to be in full compliance with the criteria and standards requirements of the BEACH Act, it needs to apply the 1986 recommendations

for enterococci to all Class SB waters. EQB is expected to propose additional revisions to the Puerto Rico Water Quality Standards Regulation in the near future that will make enterococci criteria applicable to all coastal and estuarine waters, will fully address the requirements of the BEACH Act, and will allow Puerto Rico to be withdrawn from the November 16, 2004, rule. The Region continues to work closely with EQB in the development of these revisions.

Puerto Rico has also adopted an antidegradation policy to protect high-quality waters, and as part of the January 2005 public notice, the policy will include Puerto Rico's antidegradation implementation methods. These methods are currently spread out over several Puerto Rican statutes and EQB regulations. The objective of this initiative is to consolidate the components of this program into a single document for the benefit of the regulated community. The Commonwealth's standards also include provisions for compliance schedules.

Potential standards implementation issues in Puerto Rico might include the implementation of low-level criteria for bioaccumulative toxics and naturally occurring pollutants that might exceed criteria. To date, use attainability analyses have not been considered in Puerto Rico. The Puerto Rico standards do include provisions for compliance plans as part of the water quality certification process. These standards also include provisions for mixing zones and variances.

There has been no attempt by EPA or EQB to coordinate triennial reviews of water quality standards with the permitting strategy.

EQB is working with the assistance of grant funds from the national nutrient program to collect the data necessary to develop nutrient criteria for both rivers/streams and lakes/reservoirs. The derivation of these criteria will be consistent with the nationally recommended approach.

#### **4. Total Maximum Daily Loads**

EPA Region 2 works collaboratively with EQB in the development of TMDLs. To date, the TMDLs developed and approved have been for fecal coliforms. The identified sources are largely agricultural, so there has not been a need to seek discharge reductions in NPDES permits as a result of the TMDLs that have been established.

Two TMDL packages covering two watersheds (for a total of 28 TMDLs) have been submitted, and EPA has approved both packages. One was approved in 2002, and one was approved in 2003. All the TMDLs were for fecal coliform bacteria.

In 2004 and 2005, Region 2 will continue to focus its efforts on supporting EQB, the Puerto Rico Department of Health, and PRASA and its contractor on the start-up of the PRASA Watershed Stewardship initiative. The initiative is expected to result in watershed-based TMDLs for the Loiza and La Plata watersheds in late 2005 or 2006 and for many more waters in following years. It is also expected to foster a watershed permitting approach in these priority watersheds.

Region 2 will pursue a memorandum of agreement schedule to establish TMDLs and will continue to work and support EQB's effort to establish, on the MOA schedule, TMDLs for waters on its 303(d) list

that are not covered by the PRASA Stewardship Program. The Region believes that these two efforts will significantly increase the number of TMDLs established by EQB.

With respect to TMDLs for NPDES point sources, the PRASA Watershed Stewardship program will address these waters in detail.

Puerto Rico, with EPA's assistance, has established 28 TMDLs established to date<sup>1</sup>. The breakdown is as follows:

- Fourteen TMDLs for fecal coliform bacteria in the Rio Cibuco watershed. Of these, 13 were for waters listed on Puerto Rico's 1998 303(d) list. These 14 TMDLs were submitted on September 9, 2002, and approved by EPA on September 30, 2002.
- Fourteen TMDLs for fecal coliform bacteria in the Rio La Plata watershed. Of these, four were for waters listed on Puerto Rico's 2002 303(d) list. These 14 TMDLs were submitted on September 26, 2002 and approved by EPA on September 30, 2002.

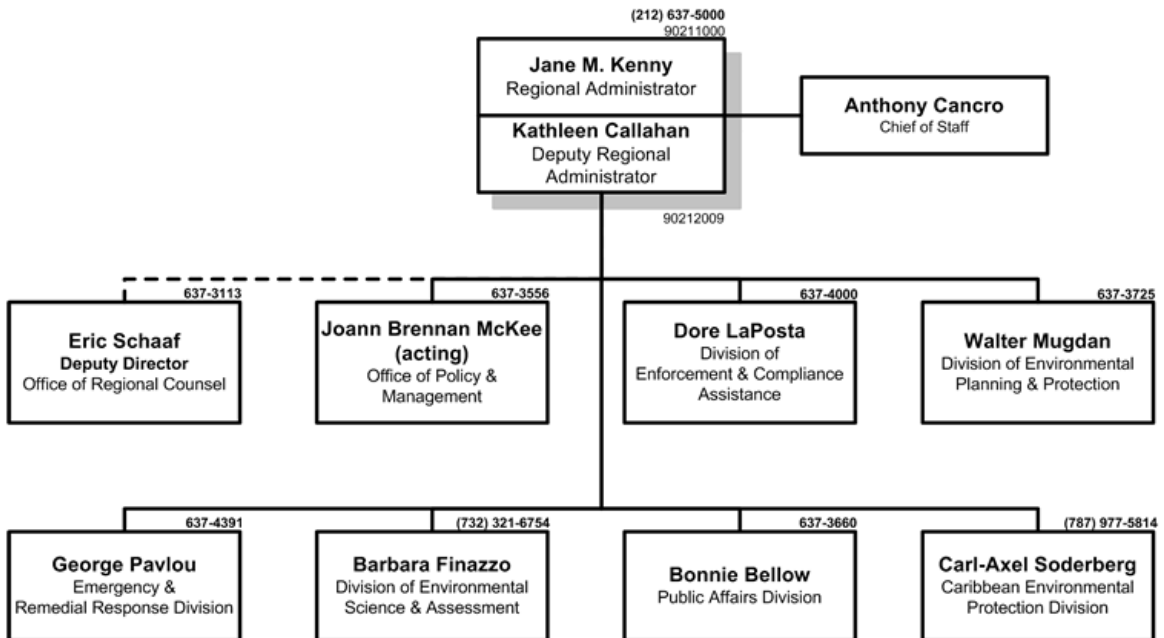
## 5. Safe Drinking Water Act

Drinking water and NPDES permitting/inspection actions will be better integrated and coordinated once the Commonwealth's Source Water Assessment Program is complete (now scheduled for June 2005). Currently, disinfection is generally included in permits and the major groundwater and surface water intakes are considered in the permitting process. However, the Source Water Assessment Program, by delineating all potential sources of contamination to a wellhead or a source water intake, will enhance coordination considerably.

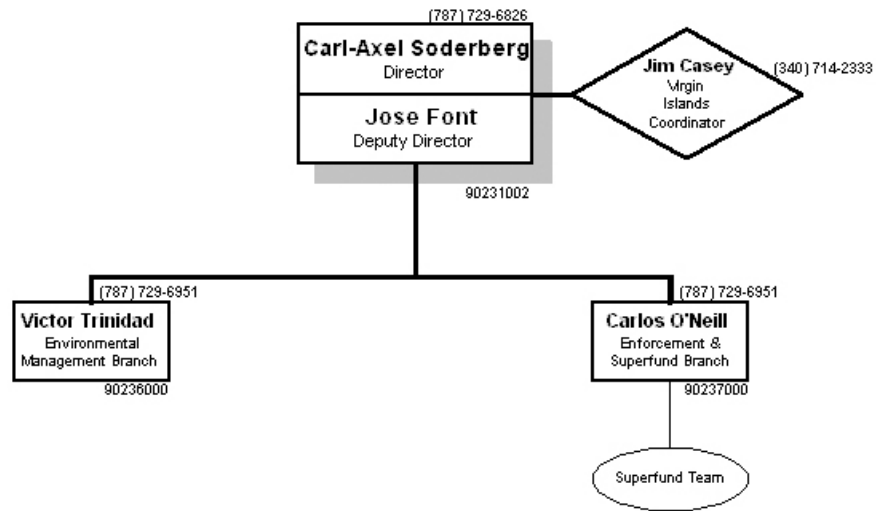
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<sup>1</sup> The National Data Sources column on the Management Report, measure #54, shows 19 TMDLs completed. This number was based on National TMDL Tracking System (NTTS) data as of July 2, 2004. The NTTS tracks only TMDLs done for waters listed on a state's 303(d) list. Of the 28 TMDLs noted above, only 17 were for waters on Puerto Rico's 303(d) lists. (As of July 2, 2004, NTTS erroneously listed 19 TMDLs. This has since been corrected to show 17 TMDLs.) The remaining 11 TMDLs were developed for waters within the two watersheds where, although not on Puerto Rico's 303(d) list, the fecal coliform criteria were determined to have been exceeded.

# U.S. Environmental Protection Agency - Region 2



## Caribbean Environmental Protection Division (CEPD)



# NPDES Management Report, Fall 2004

## Puerto Rico

			National Data Sources			Additional Data	
			Profile Section	GPRA Goal	Nat. Avg.	State Activities	EPA Activities
NPDES Progress							
Universe	1	# major facilities (6,690 total)	I.1		n/a	n/a	81
	2	# minor facilities covered by individual permits (42,057 total)	I.1		n/a	n/a	200
	3	# minor facilities covered by non-storm water general permits (39,183 total)	I.1		n/a	n/a	0
	4	# priority permits (TBD)	I.6			n/a	--
	5	# pipes at facilities covered by individual permits (142,761 total)	I.7		n/a	n/a	451
	6	# industrial facilities covered by individual permits (32,505 total)	I.1		n/a	n/a	191
	7	# POTWs covered by individual permits (15,197 total)	I.1		n/a	n/a	67
	8	# pretreatment programs (1,482 total)	II.2		n/a	n/a	1
	9	# Significant Industrial Users (SIUs) discharging to pretreatment programs (22,158 total)	II.2		n/a	n/a	169
	10	# Combined Sewer Overflow (CSO) permittees (831 total)	II.5		n/a	n/a	0
	11	# CAFOs (current and est. future) (17,672 total)	II.3		n/a	n/a	8
	12	# biosolids facilities (TBD '05)	II.6			n/a	--
NPDES Program Administration	13	State or Region assessment of State NPDES program (none (N)/assessment (A)/profile (P))	I.1	50 states 2004	n/a	n/a	P
	14	% pipes at facilities covered by individual permits w/ lat/long in PCS	I.7		46.3%	n/a	32.8%
	15	State CAFO legal authority expected (mo/yr)	II.3	2005	n/a	n/a	n/a
	16	# Withdrawal petitions/legal challenges (22 total)	I.4		n/a	n/a	n/a
	17	DMR data entry rate	I.7		95%	n/a	98%
	18	# permit applications pending (1,011 total)	I.6		n/a	n/a	44
NPDES Program Implementation	19	% major facilities covered by current permits	I.6	90%	83.7%	n/a	71.6%
	20	% minor facilities covered by current individual or non-storm water general permits	I.6	90% 12/04	87.0%	n/a	48.0%
	21	# major facilities w/permits expired >10 yrs. (56 total)	I.6		n/a	n/a	3
	22	% priority permits issued as scheduled (TBD '05)	I.6	95% 2005		n/a	--
	23	% pretreatment programs inspected/audited during 5 yr. inspection period	II.2		85.3%	n/a	100.0%
	24	% SIUs w/control mechanisms	II.2		99.2%	n/a	99.4%
	25	% of CSO permittees with long-term control plans developed or required	II.5	75% 2008	82.2%	n/a	n/a
	26	% CAFOs covered by NPDES permits	II.3		35%	n/a	0%
	27	% biosolids facilities that have satisfied part 503 requirements (TBD '05)	II.6			n/a	--
	28	# Phase I storm water permits issued but not current (76 total)	II.4		n/a	n/a	0
	29	# Phase I storm water permits not yet issued (5 total)	II.4		n/a	n/a	0
	30	Phase II storm water small MS4 permits current (Y/N/D (draft)) (35 States)	II.4	100% states 2008	n/a	n/a	N
	31	Phase II storm water construction permit current (Y/N/D (draft)) (49 States)	II.4	100% states 2008	n/a	n/a	Y
NPDES Compliance Monitoring and Enforcement Response	32	% major facilities inspected	III.3		71%	38%	68%
	33	(inspections at minors) / (total inspections at majors and minors)	III.3		76%	54%	33%
	34	% major facilities in significant non-compliance (SNC)	III.1		20%	n/a	82%
	35	% SNCs addressed by formal enforcement action (FEA)	III.1		14%	n/a	20%
	36	% SNCs returned to compliance w/o FEA	III.1		70%	n/a	15%
	37	# FEAs at major facilities (666 total)	III.1		n/a	0	51
	38	# FEAs at minor facilities (1,660 total)	III.1		n/a	0	56

### Explanation of Column Headers:

**Profile Section:** For each measure, this column lists the section of the profile where the program area (including any additional data for the measure) is discussed.

**National Data Sources:** The information in these two columns is drawn from two types of sources:

(1) EPA-managed databases of record for the national water program, such as PCS, the National Assessment Database, and the National TMDL Tracking System. NPDES authorities are responsible for populating PCS with required data elements and for assuring the quality of the data. EPA is working to phase in full use of NAD and NTTS as national databases.

(2) Other tracking information maintained by EPA Headquarters for program areas such as CAFOs, CSOs, and storm water.

The [definitions document](#) accompanying this Management Report provides a detailed definition of each data element in the National Data Sources columns.

**Additional Data:** These columns provide additional data in cases where information from other data sources differs from information in the National Data Sources column for reasons such as different timing of the data "snapshot." Additional data should generally adhere to the same narrative definitions as data in the National Data Sources, and should be derived using similar processes and criteria. Our goal is to work with the States on these discrepancies to ensure consistent and accurate reporting. A State contact is available who can respond to queries. The profiles discuss each additional data element.

**State Activities:** Information in these columns reflects activities conducted by the State program. (Shaded cells in these columns indicate that the work may not be entirely the State's responsibility, but a breakdown of the data into EPA and State responsibilities is unavailable.)

**EPA Activities:** Information in these columns reflects activities conducted by the EPA Region within the State.



# NPDES Management Report, Fall 2004

## Puerto Rico

			Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data	
						State Activities	EPA Activities	State Activities	EPA Activities
Water Quality Progress									
Universe	39	River/stream miles (3,419,857 total)	IV.2		n/a	5,394	n/a		
	40	Lake acres (27,775,301 total)	IV.2		n/a	7,378	n/a		
	41	Total # TMDLs in docket at end of FY 2003 (52,795 total)	IV.4		n/a	231	--		
	42	# TMDLs committed to in FY 2003 management agreement (2,435 total)	IV.4		n/a	4	0		
	43	# Watersheds (2,341 total)	IV.2		n/a	--	--		
Water Quality Administration	44	On-time Water Quality Standards (WQS) triennial review completed (42 States)	IV.3		n/a	Y	n/a		
	45	# WQS submissions that have not been fully acted on after 90 days (32 total)	IV.3	<25% submissions	n/a	n/a	0		
Water Quality Implementation	46	State is implementing a comprehensive monitoring strategy (Y/N) (TBD)	IV.1	all states 2005	--	--	--		
	47	% river/stream miles assessed for recreation	IV.2		13.8%	--	n/a		
	48	% river/stream miles assessed for aquatic life	IV.2		22.0%	--	n/a		
	49	% lake acres assessed for recreation	IV.2		49.4%	--	n/a		
	50	% lake acres assessed for aquatic life	IV.2		48.5%	--	n/a		
	51	# outstanding WQS disapprovals (23 total)	IV.3		n/a	0	n/a		
	52	WQS for E. coli or enterococci for coastal recreational waters (12 States)	IV.3	35 states 2008	n/a	N	n/a		
	53	WQS for nutrients or Nutrient Criteria Plan in place (13 States)	IV.3	25 states 2008	n/a	N	n/a		
	54	Cumulative # TMDLs completed through FY 2003 (10,807 total)	IV.4		n/a	19	--	28	
	55	# TMDLs completed in FY 2003 (2,929 total)	IV.4		n/a	14	0		
Environmental Outcomes	56	# TMDLs completed through FY 2003 that include at least one point source WLA (5,036 total)	IV.4		n/a	5	--		
	57	% Assessed river/stream miles impaired for swimming in 2000	IV.2		--	--	n/a		
	58	% Assessed lake acres impaired for swimming in 2000	IV.2		--	--	n/a		
	59	# Watersheds in which at least 20% of the water segments have been assessed and, of those assessed, 80% or more are meeting WQS (440 total)	IV.2	600 2008	n/a	--	--		

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