San Diego County Water Authority

Disclaimer

July 26, 2024

RE: Calendar Year (CY) 2025 Cost of Service Study and Adopted Rates and Charges

On July 25, 2024, the Board of Directors adopted CY 2025 Rates and Charges that are lower than those defined in the Final CY 2025 Cost of Service Report (Final Report). The Final Report was based on the Finance Planning Workgroup's recommendation (Alternative 9 as defined at the May 2024 FPWG meeting) for an 18 percent rate increase, supported an accelerated debt issuance, and provided a clear roadmap to support of the Board's adopted financial targets and policies.

Based on Board discussion and a motion to not increase rates above 14 percent, the Board directed the inclusion of three key measures: (1) include the full financial offset of a noticed $19.4 million grant from the U.S. Bureau of Reclamation in CY 2025; (2) delay of the $7 million Bifurcation Structures capital project by one year; and, (3) direct the General Manager to find $2 million in additional cuts to the Water Authority's FY 2025 Operating Budget. The three defined measures resulted in lower rates and charges than identified in the Final Report and met the 14 percent effective increase target.

The following Final Report **is not** updated to reflect these three implemented measures that resulted in lower rates. Given the nature and application of the measures, it is deemed that the resulting reduction in rates does not result in a material change to ratepayer equity. Once the undefined $2 million in operating budget cuts are known, staff will analyze any potential impacts to the cost of service.

To review the adopted rates and charges, please refer to the July 2024 Board memo starting on page 5 and Ordinance 24-05.

San Diego County Water Authority

San Diego County Water Authority
Cost of Service Study

FINAL
CY 2025 RATES AND CHARGES BASED ON ALTERNATIVE 9

FINAL | JUNE 2024

carollo

Contents

Tables

Section 1

EXECUTIVE SUMMARY

The San Diego County Water Authority (Water Authority or SDCWA) is a public agency serving the San Diego region as a wholesale supplier of water. The Water Authority's mission is to provide a safe and reliable supply of water to its, as of now, 23 member agencies. The Water Authority purchases water from the Metropolitan Water District of Southern California (MWD) and obtains and produces additional supplies pursuant to agreements commonly referred to as the Quantification Settlement Agreement (QSA). The Water Authority also has a water purchase agreement with Poseidon Resources, LLC, for desalinated water produced at Poseidon's Carlsbad Desalination Plant.

Carollo Engineers, Inc. (Carollo) has performed a third-party Cost of Service Study to review, calculate, and validate the Water Authority's proposed water rates and charges annually since CY 2021. Originally, working under a three-year contract (2019), then subsequently entered into a new agreement with Carollo to provide further support for the CY 2024 and CY 2025 cost of service studies as well as an update to the Water Authority's capacity fees. The current effort includes the CY 2025 cost of service analysis and rate review.

This Calendar Year 2025 Cost of Service Study is a FINAL report created for discussion and input by the public and the Board at its May 2024 meeting to set the public hearing. At its April meeting, staff presented eight different alternatives for the Board to consider. Following input by the Board, two additional alternatives were added and shared with the Finance Planning Work Group. After a detailed review, the ten alternatives were narrowed by the Finance Planning Work Group (FPWG) for analysis and inclusion in the FINAL report. The information provided in this report refers to Alternative 9 defined at the May FPWG meeting.

Carollo's review of the cost-of-service methodology and financial review focusses on whether the Water Authority's rates are sufficient to meet revenue requirements and whether they meet cost of service principles including:

- The appropriateness of rates to cover revenue requirements while not exceeding the reasonable cost of service.
- Proper allocation of costs and other revenue requirements to functional categories that relate to why each cost is incurred.
- The equity of the rate structures used to recover allocated revenue requirements from each of the member agencies.

Specifically, Carollo reviewed and updated the existing CY 2025 rate analysis and reviewed the Water Authority's existing cost of service methodology and financial model for compliance with American Water Works Association (AWWA) cost of service standards, industry best practices, Board policies, as described in Report Section 2.3, and California legal requirements, as described in Report Section 2.4. Together, these establish the cost-of-service standard that is referenced throughout this report.

Based on Carollo's third-party review, Carollo has determined that the amount of money anticipated to be generated through the Water Authority's proposed CY 2025 water rates and charges, when combined with

other Water Authority revenues and reserves, is reasonable to recover the costs of the Water Authority's activities.

While Alternative 9's defined rate plan fails to maintain the Rates Stabilization Fund (RSF) above its minimum target, the forecasted Financial Roadmap and projected future increases appear sufficient to replenish the reserves within the 3-years defined in the adopted RSF policy. Alternative 9 also meets or exceeds the targeted senior and subordinate debt coverage ratios of 1.5x and 1.0x, respectively (per the Board's coverage policy) when combined with forecasted draws from the RSF in FY 2024 and FY 2025.

Consistent with the findings of Carollo's previous Cost of Service Reports, it is Carollo's professional opinion that the Water Authority's allocation of rates and charges to each of the member agencies bears a fair, reasonable, and logical relationship to each member agency's burdens on or benefits from Water Authority services. This allocation complies with legal requirements, cost of service standards, industry best practice, and Board policy requirements, as discussed in this report. This report does not opine on the actions or potential actions of credit ratings agencies based on the adopted rates and associated financial projections. Such opinions are outside of the intended scope and are generally under the purview of the Water Authority's financial advisors.

The Water Authority has, in the past, included additional third-party reviews of the rate structure, most recently in for the CY 2023 rates. The CY 2023 cost of service analysis and report was reviewed by the consulting firm HDR, and the findings of the extra review were incorporated into the final CY 2023 rates and charges. Since that time, HDR has continued to assist the Water Authority by moderating the Member Agency Rate Workgroup (MARW) process.

This CY 2025 update largely maintains the same rates and charges structure as the previous studies, with targeted updates as necessary to reflect the recommendations developed by the MARW and later adopted by the Board. Specifically, the CY 2025 rates will implement updates to the collection of the transportation revenue requirement to include both a fixed component and variable rate component. The analysis also reviews and supports the methodologies for the Customer Service, Supply Reliability, and Storage charges to use a 7-year rolling average basis for assessment to the member agencies. All rate and charge calculations are updated to reflect the most recent MWD rates, expense projections, demand forecasts, etc. as of the writing of this report.

1.1 Rates and Charges

The Water Authority imposes several different types of water rates and charges that are collected from the member agencies. These include volumetric commodity rates that are collected monthly per unit of metered water delivered to each agency (supply, transportation, and treatment rates) and service charges that are apportioned among the member agencies according to their respective rolling average of water purchases from the Water Authority. For CY 2025, the rolling averages used to calculate service charges have been standardized to a 7-year period, replacing the previous rolling averages that varied between three and five years. This change more accurately captures the member agencies' use of the system and accounts for hydrological variability in water demands. Volumetric water rates are set as a unit price per acre-foot for actual water delivered.

Customer service and storage charges recover costs for facilities and services that are provided for all customers and are apportioned in a manner that is designed to account for moderate annual fluctuations in

water demands and demand patterns commonly resulting from weather conditions and conservation requirements.[1]

In addition to these water rates and charges, the Water Authority has policy to recover at least 25 percent of fixed annual expenditures through a combination of ad valorem property taxes and water availability standby charges imposed on properties within the Water Authority's service area, and an Infrastructure Access Charge (IAC). The IAC is an annual service charge imposed on member agencies and apportioned based on their respective total connected meter capacity, a measure of an agency's potential to take water from the Water Authority.

The Water Authority also imposes one-time System Capacity and Treatment Capacity Charges on users that obtain new or upsized water meters. These charges fairly and reasonably recover the costs associated with providing system capacity for new users. A description of each water rate and charge category is as follows:

- **Customer Service:** The Customer Service charge is a commodity-based fixed charge set to recover costs that are necessary to support the functions of the Water Authority, develop policies, and implement system-wide programs.
- **Storage:** The Storage charge is a commodity-based fixed charge set to recover costs associated with the Emergency Storage Program (ESP) and Carryover Storage Program (CSP). The ESP and CSP are a system of reservoirs, interconnected pipelines, and pumping stations designed to make water available to the San Diego region in the event of an interruption in imported water deliveries and, in the case of the CSP, provide operational flexibility and drought protection.
- **Supply Reliability Charge:** Set by a Board defined methodology/calculation, the Supply Reliability Charge is a commodity-based fixed charge established to recover a portion of the Carlsbad Desalination Plant and the Imperial Irrigation District (IID) transfer water costs. The charge is set equal to the difference between the supply cost of reliable local sources and a like amount of water purchased at the MWD Supply Rate multiplied by 25 percent and is to be apportioned according to a seven-year rolling average of M&I water purchases.
- **M&I Supply:** The Supply rate is a volumetric charge that recovers the cost of water supply incurred by the Water Authority including the full cost of purchase of water from MWD at the delivery point, payments to the IID for transfer of conserved water, costs associated with obtaining conserved water from the Coachella and All-American Canal Lining Projects, costs of MWD wheeling for non-MWD water supplies (e.g. QSA supply exchange costs), other costs associated with acquisition of supplies and implementation of the QSA, and supply and acquisition costs related to the Poseidon water purchase agreement associated with the Carlsbad Desalination Project.
- **Transportation:** The Transportation charge includes a volumetric rate and a (new to CY 2025) fixed charge set to recover capital, operating, and maintenance costs of the Water Authority's water delivery facilities including all facilities used to physically transport the water to member agency meters.[2] For CY 2025, 60-percent of Transportation charges will be collected through the volumetric rate and 40-percent through the fixed charge.
- **Treatment:** The Treatment rate is a volumetric charge designed to recover the cost of treating water. The Melded Treatment Rate includes the costs of purchasing treated water from MWD, the operating and capital costs associated with the Water Authority's agreement with Helix Water

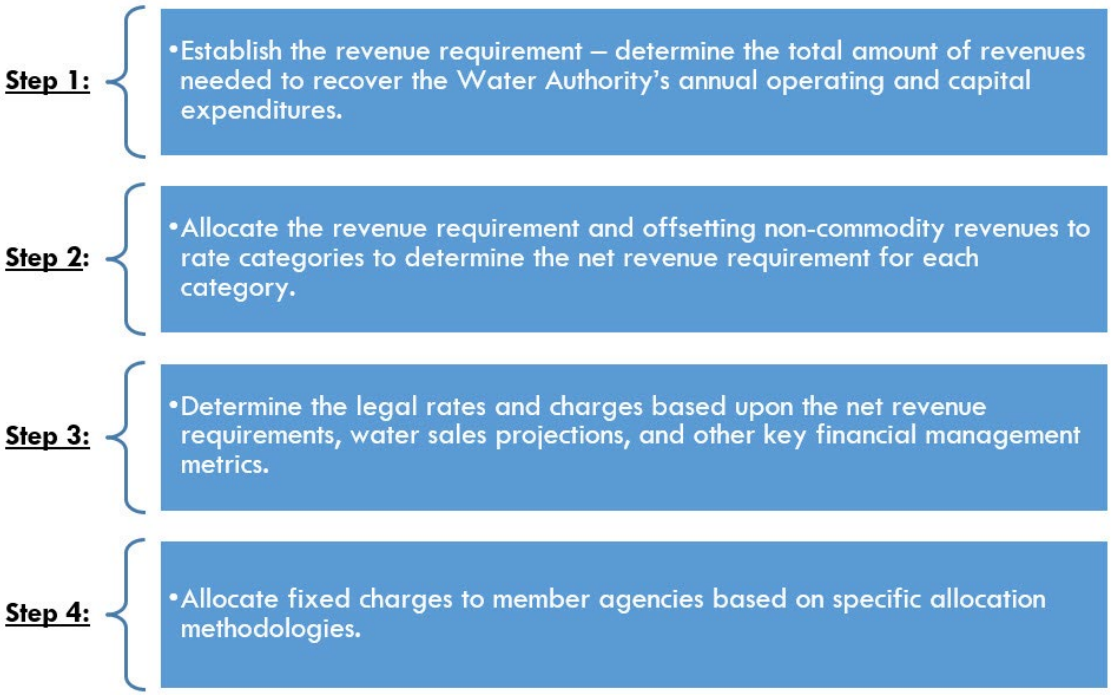
[1] Customer Service Charge allocation excludes member agency wheeled water.
[2] Costs associated with facilities covered by the East County Facility Agreements are not included in Transportation but relate to treatment services in connection with the Helix Water District's Levy Water Treatment Plant and are recovered through the Treatment rate.

District's Levy Water Treatment Plant, operating costs associated with the Olivenhain Treatment Plant, and the operating and capital costs associated with the Twin Oaks Valley Treatment Plant.

- **Permanent Special Agriculture Water Rate (PSAWR):** This special program-based supply rate, defined off the MWD Supply Rate, offers a lower rate to recognize the reduced supply reliability. While the rate is defined through the cost-of-service process, the specific program details and eligibility requirements were developed over a near year long process led by Water Resources.

1.2 Water Authority Rate-Setting Process

The Water Authority develops proposed rates and charges on an annual basis, which it presents to the Board of Directors for adoption, typically in June. Each year, the Water Authority undertakes the following cost of service process to determine water rates and charges:



The Water Authority's methodology and application remain consistent with the AWWA cost of service guidelines, as well as existing Board policies and legal requirements stated herein. Rates are designed to recover all direct, indirect, and other costs of providing water and water services that are not recovered through other revenues such as taxes, assessments, or other charges. Throughout the process, the Water Authority identifies major cost drivers and allocates them to specific rate and charge categories.

1.3 Carollo Third-Party Review Process

Carollo independently performed Steps 1 through 4 above when evaluating the Alternative 9, CY 2025 rates and charges. The purpose of this cost-of-service process is to: (1) identify which costs are recovered through water rates and charges; (2) allocate the Water Authority costs to functional rate categories; (3) update the rates and use of offsetting revenues to fairly and reasonably recover system expenditures from member agencies; and (4) appropriately calculate non-commodity revenues.

To determine the costs to be recovered by water rates and charges, Carollo relied upon cost projections, reserve requirements, and revenue policies provided by the Water Authority. Source data for this review included the Fiscal Years (FY) 2024 and 2025 Budget cost projections provided by the Water Authority's

Finance Department, the 2023 Annual Comprehensive Financial Report (ACFR), debt service schedules and bond official statements, Board policy documents, and the Water Authority's rate model. Additionally, Carollo worked with the Water Authority's Finance staff to review the cost-of-service methodology and process.

In Carollo's previous Cost of Service reviews, Carollo conducted interviews with select divisions within the Water Authority to discuss the functional allocation approach and metrics for assigning operating costs to rate categories. While the overall percentages will change from year-to-year, the Water Authority's allocation approach remains consistent and continues to be valid. As part of the FY 2024 and FY 2025 budget development process, Water Authority staff updated these internal allocations to reflect any forecasted change in service or operations.

The details of this analysis are presented within the body of this report.

1.4 Summary of Findings

The Water Authority has developed a clear and defensible process to allocate system expenditures to rate categories and fairly and reasonably recover those expenditures from member agencies. The analysis performed by Carollo confirms that the Water Authority's cost of service approach and the Alternative 9 CY 2025 rates and charges as determined in this report comply with cost-of-service principles, industry best practices, and applicable legal requirements.

Based on Carollo's independent review and rate development, the Alternative 9 CY 2025 cost of service water rates and charges are illustrated in Table 1 below.

Table 1 Summary of Alternative 9 CY 2025 Water Rates and Charges

Water Rates and Charges	
Customer Service Charge	$30.00M
Storage Charge	$65.00M
Supply Reliability Charge	$53.18M
Melded M&I Supply Rate	$1,430/AF
Melded Treatment Rate	$500/AF
Transportation Rate (Volumetric Component)	$141/AF
Transportation Rate (Fixed Component)	$30.00M
Infrastructure Access Charge	$4.56/MEU, Monthly

Though the Water Authority typically adopts rates one calendar year at a time, its financial planning and rate setting efforts include the review of projections over multiple years. Alternative 9 takes this into consideration by setting rates based on a multi-year recovery to improve the Water Authority's financial position.

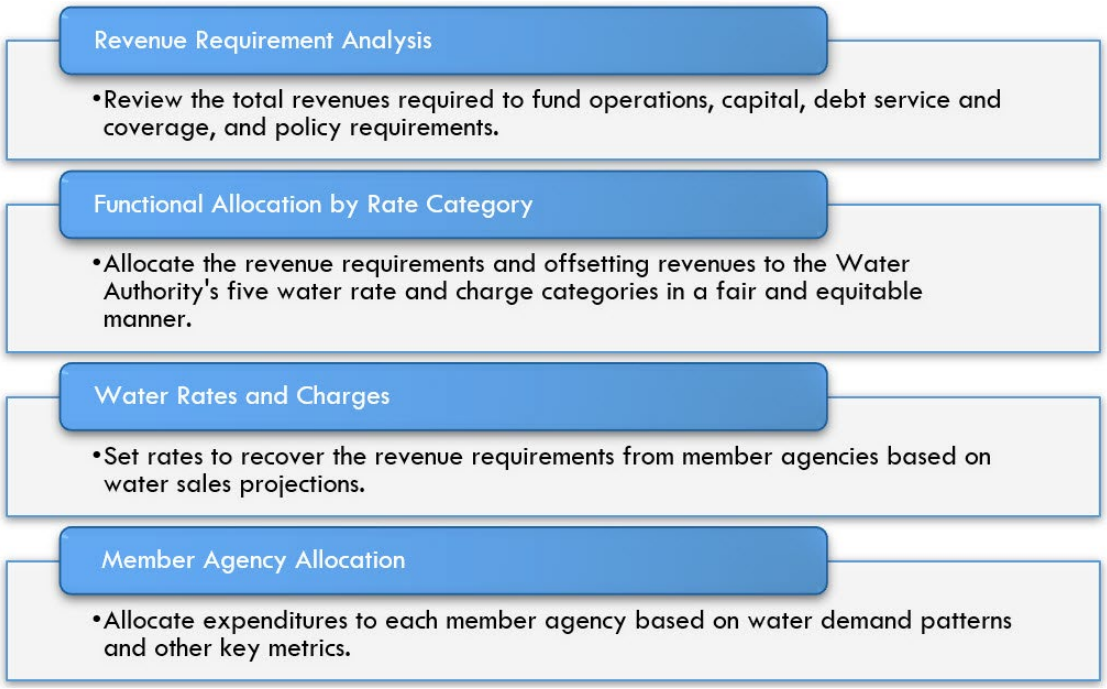
Rates for future years are dependent on the rates adopted for CY 2025 as increases in costs accounted for in the CY 2025 rates are permanent and further cost increases have already been adopted by outside agencies. For example, MWD has already set their calendar year 2026 rates with a 10-percent increase in the Full Service Treated Supply Rate and an 8-percent increase on the Exchange Rate. If the necessary increases for CY 2025 are not adopted in full, then the CY 2026 rate increase would need to be higher to meet full cost recovery.

Section 2

INTRODUCTION

Carollo conducted a third-party review of the Water Authority's CY 2025 water rates and charges. The purpose of this Cost-of-Service Study is to calculate and affirm the proposed CY 2025 water rates and charges consistent with cost-of-service principles and the AWWA M1 guidelines, Board policy, and legal requirements. The results of this study are outlined within the body of this report.

The cost of service and rate development review process consists of the following steps:



Based on this study review and in Carollo's professional opinion, the Water Authority's CY 2025 rates and charges appropriately recover costs from member agencies as described herein and are consistent with AWWA cost of service principles, Board policies, and legal requirements.

2.1 Background on Existing Rates and Charges

The Water Authority sets water rates and charges, which, when combined with other revenues, are sufficient to pay operating expenses, provide for maintenance and repair of facilities, provide for payment of principal and interest on debt, and provide reasonable reserves consistent with bond covenants and sound fiscal management. As a public agency, the Water Authority sets rates and collects other revenues to meet all reasonably anticipated costs of its operations as required by law.

On June 27, 2002, the Water Authority adopted Ordinance No. 2002-03 establishing the current revenue structure, which consists of ad valorem property taxes, including payments of member agencies in-lieu of taxes; a Water Standby Availability Charge levied pursuant to §5.2 of the County Water Authority Act; an

Infrastructure Access Charge imposed on member agencies as a condition of maintaining connections to Water Authority facilities; a capacity charge levied pursuant to §5.9 of the County Water Authority Act; and rates and charges for delivery and supply of water, use of facilities, and provision of other services. This revenue structure is reflected in §5.00.050 of the Water Authority Administrative Code.

The June 2002 Board action unbundled the then uniform commodity rate, creating separate commodity rates and charges for customer service, storage, supply, and transportation. This action was the result of a multi-year work effort involving the member agencies, Water Authority staff, and consultants. The unbundled rates and charges took effect January 1, 2003. With the development of the Twin Oaks Water Treatment Plant, treatment was later added as the final functional rate category in 2006. In March 2015, the Board added a Supply Reliability Charge, as described in this report. In June 2021, the Board adopted a Permanent Special Agricultural Water Rate (PSAWR), offering participants the choice of a lower cost of water and corresponding lower level of water supply reliability.

Over the last 18 months, the Water Authority and the member agencies undertook an extensive effort to explore options for potential rate and charge structure changes through the Member Agency Rate Workgroup. The proposed rates for CY 2025 include the Board adopted modifications to the Transportation charge to include a fixed component and an update to the fixed charge methodologies of Customer Service, Supply Reliability, and Storage from a three- or five-year average calculation to a seven-year in CY 2025. The fixed charges methodology is based on the member agencies' average demands from FY 2017 through FY 2023. Although it is suggested that future or additional modifications are on the horizon, only the Board adopted CY 2025 changes are incorporated in this review.

2.2 Criteria for Findings and Recommendations

To confirm the appropriateness and general application of AWWA cost of service principles, Board policies, and legal requirements, Carollo applied the following framework throughout the review:

- Does the cost allocation approach result in a fair, reasonable, and quantifiable connection between the cost of services made available and the benefits received by each ratepayer?
- Do the rate structures effectively and appropriately recover the allocated costs from each ratepayer?
- Is the allocation approach and methodology consistent with standards established in the AWWA M1 manual, does it meet Board policies, and does it adhere to applicable legal requirements?
- Have the policies and standards been applied consistently by the Water Authority? Is it likely that the allocation approach will be appropriate for use by the Water Authority in the future?
- Are there issues or processes that may be appropriate to highlight for possible financial review?

The review presented in this report applies these criteria to the existing revenue requirement and water rate and charge methodology utilized by the Water Authority.

2.3 Key Governing Board Policies

In setting its rates and charges, the Water Authority must first meet cost of service requirements, in which rates and charges may not exceed the reasonable cost of providing the services, as well as clearly demonstrate the nexus between the costs allocated and services provided to customers. As this requirement is achieved, the rates must also adhere to adopted Board policies, which serve as the basis for the determination of the total revenue requirement as well as the proportion of the revenue requirement to be recovered by fixed charges and variable commodity rates. Several key Board policies are highlighted below

and can be found on the Water Authority's website at: https://www.sdcwa.org/about-us/budgets-financial-reports/

2.3.1 Infrastructure Access Charge

In 1998, under Resolution No. 98-26, the Board established the IAC. The intent of the IAC is to provide the Water Authority with a more appropriate balance of fixed and commodity revenues. Prior to the implementation of the IAC, the Water Authority had a greater dependency on variable revenues that fluctuated with demand and did not adequately align with the existing cost structure. As such, the IAC was designed to be independent of commodity sales and the new business development cycle and generate a minimum 25 percent ratio of fixed revenues to fixed expenditures.

2.3.2 Ordinance No. 2002-03

Following development and implementation of the IAC, the Water Authority reviewed and redesigned the existing rate structure in 2002. Ordinance No. 2002-03 transitioned the rate structure from a historical unit price ("postage stamp") water rate to assigning the revenue requirements to functional categories. The rate structure was split into fixed and variable components. The fixed water rate categories are comprised of the Storage and Customer Service charges. The variable water rate categories encompass the Transportation, Melded Treatment, and Melded M&I Supply rates. This transition further aligned the Authority's expenditure and cost recovery nexus.

2.3.3 Financial Management Amendment (2006/2019)

In 2006, following the recommendations of the Rate Model Workgroup (RMWG) and Administrative and Finance Committee, the Board amended the Water Authority's financial policies regarding the Rate Stabilization Fund (RSF) and Debt Service Coverage Ratio (DSCR). As part of the amendment, the Board's RSF Policy established a target funding level for the RSF that better protects the Water Authority against the financial impact of 2.5 years of wet weather (3.5 years max), where water sales are moderated. In addition, the DSCR policy established a target DSCR of 1.50x, which is above the minimum legal bond covenant of 1.20x.

The overall benefits of the amendment include reduced rate volatility, increased protection against wet weather, a transparent and flexible RSF framework, and increased cash funding of the Capital Improvement Program (CIP). The RSF also provides a mechanism for rate smoothing and source of emergency funding, as necessary. Furthermore, it strengthened key financial ratios—higher debt service coverage ratio, decreased debt ratio, and increased cash days— to support the maintenance of the Water Authority's AA+ credit ratings and access to lower borrowing rates.

Based on a recommendation stemming from the CY 2019 Rate Study, the Water Authority Board Approved Ordinance No. 2018-03 to update the RSF methodology to better align with current water demand conditions and continued improvements in water use efficiency.

2.3.4 Fiscal Sub-Committees

The Board has a long used sub-committees to address fiscal concerns. In 2014, the Board created the Fiscal Sustainability Task Force (FSTF). Over an 18-month collaborative process, the FSTF identified issues related to the long-term fiscal sustainability of the Water Authority. Central to this effort was a detailed review of the Water Authority's revenue structure and evaluating potential enhancements that would further strengthen the Water Authority's future fiscal health.

The resulting and approved recommendations included: (1) the creation of the Supply Reliability Charge, as defined in the A&N Technical Services memorandum to the Water Authority's rate and charge structure; (2) the allocation of non-commodity revenues to all rate and charge categories including treatment, as recommended in the 2014 Cost of Service Report; (3) the permanent application of the debt and equity payments for the Carlsbad Desalination Plant to the Supply Rate; and (4) the extension of the Transitional Special Agricultural Water Rate Program through December 31, 2020. The group was then dissolved at the end of the Board Chair's term.

Financial work groups and task forces serve at the pleasure of each Board Chair. Upon the termination of each Chair's term, active work groups are dissolved, often to be reformed with new members upon the commencement of the next Chair's term. Under this structure, the Water Authority has had a reconstituted Financial Strategy Work Group (2019), Financial Strategy Work Group (2020), and most recently a Finance Planning Work Group (2023).

The financial task forces and work groups have been productive. The groups have recommended an IAC increase, the creation of a Permanent Special Agricultural Water Rate, guided the 2021 Long-Range Financing Plan, a 5-year rate forecast, the most recent budget, updated rate redesign including the fixed Transportation charge, and is continuing with providing direction on additional rate redesign.

2.4 Overview of Legal Cost of Service Requirements

The Water Authority's rates must adhere to California constitutional and statutory requirements. California law requires agencies imposing water rates and charges to demonstrate a nexus between the cost of providing services and the service or benefits received.

Beyond the cost-of-service requirements imposed by the constitution and general statutory law, the Water Authority must also adhere to the County Water Authority Act. Section 7 (j) of the County Water Authority Act states that the "board of directors, so far as practicable, shall fix such rate or rates for water as will result in revenue which will pay the operating expenses of the authority, provide for repairs and maintenance, and provide for the payment of interest and principal of the bonded debt." The revenue requirement (e.g., "costs") described in this report is grounded on this statutory requirement, the Water Authority's General Resolution, and sound fiscal management.

These costs are then apportioned to the member agencies through the allocation of fixed charges and variable rates described in the adopted rate structure according to service function. The apportionment is accomplished in accordance with standards established by California law, including the provisions summarized below, which, while paraphrased, essentially describe the same cost of service standard.

2.4.1 Proposition 26

This proposition was adopted by the voters in November 2010. Among other things, it amended California Constitution article XIII C, Section 1 to add a definition of "tax." As defined by Proposition 26, a tax means "any levy, charge, or exaction of any kind imposed by a local government" with certain enumerated exceptions.

There are two applicable exceptions:

- The exception for a "charge imposed for a specific benefit conferred or a privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege," and

- The exception for a "charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product."

Proposition 26 establishes that: "The local government bears the burden of proving by a preponderance of evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity, and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity."

2.4.2 Government Code Section §50076

This section of the Government Code was adopted in 1979, following the adoption of Proposition 13 in 1978. It provides that special taxes "shall not include any fee which does not exceed the reasonable cost of providing the service or regulatory activity for which the fee is charged."

2.4.3 Government Code Section §54999.7

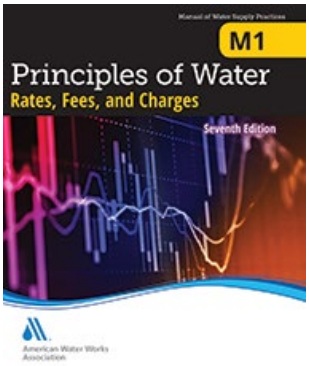
This is another section that grounds public agency rate-setting on cost-of-service principles and states that fees "for public utility service, other than electricity or gas, shall not exceed the reasonable cost of providing the utility service." It also provides that the fees will be "established in consideration of service characteristics, demand patterns, and other relevant factors."

2.4.4 County Water Authority Act Section 5 (13)

This provision of the County Water Authority Act provides that in setting rates, "the board may establish reasonable classifications among different classes and conditions of service, but rates shall be the same for similar classes and conditions of service."

The Water Authority's General Counsel has advised Carollo that this provision requires that rates be non-discriminatory and that differences in rates or rate apportionment be based on service differences, such as with the non-allocation of storage charge to agricultural customers. The General Counsel has also advised that this section may be construed consistently with the Constitutional and statutory cost of service requirements described above.

2.5 Overview of Generally Accepted Rate-Setting Standards



In addition to formal Board policies and objectives, the AWWA established a general set of principles used to guide the development of water rates. These principles were developed and published in the AWWA *M1 Manual – Principles of Water Rates, Fees, and Charges* (M1 Manual). These guiding principles outline a consistent, universal approach and minimum standard that is employed by most agencies when setting rates and charges. The M1 Manual denotes that there is no prescribed single approach for establishing cost-based rates. Rather, agencies must exercise judgment to align rates and charges with local conditions and requirements, as well as applicable state law.

These guidelines, along with applicable California law, the Board's policies, and industry best practices have been utilized within the Water Authority's rate-setting framework to help develop water rates and charges that are cost based and fairly, reasonably, and lawfully quantified and allocated to comply with the legal

requirements outlined in Report Section 2.4. Throughout this report, compliance with industry standards shall refer to the AWWA M1 Manual and industry best practices.

2.6 CY 2025 Rate Drivers and Mitigation Strategies

Various supply and financial components comprise the need to increase rate revenues under the proposed CY 2025 rates, and the Water Authority has instituted numerous levers to mitigate previous increases. Continued increases from MWD, impacts of historical rate smoothing, water sales below historical levels, and notably high inflation continue to be key drivers behind the proposed CY 2025 rates.

The lower water sales are not only a concern to the Water Authority but is also seen as a challenge amongst the rating agencies. In early June 2024, S&P Global revised its outlook on the Water Authority to a negative from stable. They state, "The outlook revision reflects our view of the authority's increasing business risks associated with recent declines in water sales volumes (which are trending below management's prior projections), further challenged by the authority's rising contractual costs and near-term financial metrics that we consider weak relative to those of its peers at the 'AAA' rating level. Given the recent climate whiplash, we anticipate the authority will continue to experience hydrological volatility that influences water sales revenue with a need to adjust to the rising cost-of-service requirements."

Shorter-term rate drivers are specifically associated with costs outside the direct control of the Water Authority, which largely influence the melded supply and treatment rates.

At its April 9th meeting, the MWD Board of Directors adopted rates and charges for calendar years (CY) 2025 and 2026 at 8.5 percent and 8.5 percent respectively. For CY 2025, this results in increases of 1 percent and 11.1 percent to volumetric-sensitive untreated and treated Full Service MWD supplies, respectively. MWD's non-volume sensitive Readiness-to-Serve (RTS) and Capacity Charges, which are passed through to the Water Authority's member agencies, increase by 8.4 percent and 16.1 percent respectively. While MWD's untreated rate is increasing just 1 percent, the components that impact the Water Authority's QSA exchange are increasing 8.9 percent.

The Water Authority's water supply costs related to desalinated water and the contractual QSA water have increased significantly due to rising costs in energy and inflation. Desal water supply costs rose by over 10 percent in CY 2024 and are anticipated to increase by almost 7 percent in CY 2025.

2.6.1 Reserves & Active Financial Management

As the Water Authority desires to maintain "smooth and predictable rates," short-term rate mitigation is balanced aside foreseen long-term rate pressures. These come from a 6-percent or greater forecasted compound annual growth rate (CAGR) for MWD rates and charges, catching up from recent, pro-active draws on the RSF totaling $75 million, modifications to the desalination permanent intake, and changes to member agency demand patterns (e.g., treatment shifts). As these pressures are largely external to the Water Authority, they are unable to fully mitigate through cost controls.

While the RSF targets are designed to be used during times of low demands, the Board directed proactive and significant draws on the RSF during times of drought (normal demand). Now, following back-to-back wet years, the RSF is in a weakened position as FY 2024 ends. The proactive approach was not unwarranted as the Board desired lower increases; however, with larger reactive draws in FY 2024, the RSF is no longer funded sufficiently to further mitigate increases. In fact, the reserve is now a rate-pressure as funds must be replenished (per policy). Maintaining the RSF policy and reserve levels is also mentioned by all three rating agencies and should be incorporated in revenue requirement calculations. S&P Global summarizes it succinctly as "…the rating could be pressured if the authority depletes its RSF beyond the minimum target

level…or fails to implement rate adjustments to maintain financial metrics commensurate with a AAA rating."

The Water Authority's long-term financial management, including budgeting, rate setting, and rate guidance continue to aim for long-term affordability for member agencies and ratepayers. During Fiscal Years 2020 and 2021, the Water Authority's debt management strategy saved ratepayers across the region approximately $130 million due to the execution of five tax-exempt and taxable refunding of outstanding debt. During this same period, the Water Authority implemented mid-term budget savings and cuts, to save approximately $44.5 million in Fiscal Year 2021. This was done through coordinated efforts of deferring capital projects, rescheduling equipment replacement, and maintaining vacant staff positions. Furthermore, recent Water Authority court victories generated $100 million in refunds for member agencies. Additional budget cuts and savings have been identified by staff for incorporation in the Alternative 9. Following discussion with the Board in May, it is anticipated that final budget direction will be provided for incorporation into the June Final Report.

2.6.2 Detachment

Unique to CY 2025, the Water Authority's rates and charges will need to be collected over 22, rather than 24 member agencies. The CY 2025 analysis assumes that by January 1, 2025, that Rainbow Municipal Water District no longer be served by CWA. Earlier this year (on January 1, 2024), Fallbrook Public Utilities District detached and did not contribute any cost recovery to CWA as had been anticipated in the CY 2024 Cost of Service Report and defined CY 2024 rates and charges.

The absence of these two agencies, both in terms of CY 2024 cost recovery and its impact to the remaining members is significant. Despite one-time exit-fees being paid, the timing of the departures (full CY 2024 loss of revenue for Fallbrook and anticipated 3-month loss of Rainbow) as well as the current demand and cost conditions cause these fees determined by San Diego Local Agency Formation Commissions (LAFCO) to be severely deficient. The true impact to the Water Authority and its member agencies is far higher and long-lasting.

While the revenue requirements defined within this report will not be impacted (given the nature of the Authority's fixed costs), the share of these costs (revenue requirement) will increase to account for loss of Rainbow's and Fallbrook's fair share contribution. Staff has calculated that these impacts reflect a one-time four-percent increase to each agency's contribution to the overall revenue requirement. The Water Authority's cost of service approach remains intact, appropriately apportioning each agency's fair and equitable share.

Section 3

REVENUE REQUIREMENTS

A revenue requirements analysis defines the annual system revenue needed to be recovered through water rates and charges. The revenue requirement is typically derived from five components: Operations and Maintenance Expenditures, Annual Debt Service, Policy Requirements and Coverage, Capital Expenditures, and Offsetting Revenues.

Please note that minor differences between the Adopted Budget and pending mid-term budget update are to be expected. As the calendar year rates expand over two fiscal years, numbers are often averaged to ensure smoothing. Additionally, some costs are defined differently in the rate model to ensure the cost is appropriately identified and allocated to its respective revenue component.

Table 2 outlines the Water Authority's CY 2025 revenue requirements.

Table 2 Revenue Requirements Summary (in $ millions)

Revenue Component	CY 2025 Total	Description	Report Section
Operating Costs	$72.28	The Operating Department's Budget funds the day-to-day operations of the Water Authority.	3.1
Equipment & Replacement	4.05	Funds the replacement of equipment such as vehicles or software	3.1
Debt Service (LTD + STD)	154.96	The Water Authority uses debt to fund capital and refund previous debt. Excludes planned cash defeasance	3.3.1
Offsetting Revenues	(113.88)	Additional revenues generated from sources outside traditional water rates and charges are applied as a credit to reduce required rates and charges revenues. Includes the IAC, standby availability charges, system and treatment capacity charges, property taxes, interest earnings, and miscellaneous revenues.	3.4
Operating Rev. Req. Before Coverage	**$117.41**	**Revenue requirements associated with the Water Authority's operating costs, debt service, and offsetting revenues.**	
Misc. Cost Recovery	$21.62	Miscellaneous Cost Recovery includes seepage and evaporation, recovery of working capital for the San Vicente dam raise, local supply development, and Twin Oaks Valley WTP reimbursement	3.2
Rev. Req. Before Coverage	**$139.03**	**Revenue requirements including miscellaneous cost recovery.**	

Revenue Component	CY 2025 Total	Description	Report Section
Remaining Coverage and Reserve Driven Needs	$59.99	Revenue requirements associated with meeting the Water Authority's Financial Management Policies.	3.7
Water Sales Revenue Requirement	**$199.02**	**Total required revenues including coverage and reserve needs.**	

The following section of this report delineates the cost categories included in the Water Authority's annual revenue requirement analysis.

3.1 Operations and Maintenance Costs

As part of the multi-year budget, an operating forecast is developed by the Water Authority's various departments. For the Water Authority, operating budget expenditures account for most of the day-to-day expenditures for operation. The operating budget expenditures include Administrative Services, Colorado River Program, Engineering, Finance, General Counsel, General Manager, Human Resources, MWD Program, Operations and Maintenance, Public Affairs, and Water Resources. For CY 2025, the Water Authority's operating costs are projected to be $72.28 million.

Table 3 Determination of Operating Cost

Operating Costs	FY 2025 and 2026 Expenditures (1)
FY 2025 Operating Budget	$71.21
FY 2026 Operating Budget	73.35
Total FY 2025 and 2026 Operating Costs Used for Rates and Charges	**$144.56**
Calculated CY 2025 Operating Costs (2)	**$72.28**

Notes:
(1) Presented in million dollars, calculations in tables may not sum due to rounding.
(2) CY 2025 Operating Costs are calculated by averaging the Total FYs 2025 and 2026 Operating Costs used for rates and charges, as the calendar year rates will collect half of each fiscal year costs.

In conjunction with the Water Authority's budget development process, departments evaluate and recommend equipment replacement purchases based on a thorough process in which equipment and vehicles are reviewed to evaluate the necessity to the overall operations; suitability with the function being performed; past repair history; anticipated costs to continue maintaining; and options to cost effectively replace (i.e., lease, rental, and/or used purchases). During FY 2019 Water Authority staff performed an Equipment Replacement Fund (ERF) study, created a comprehensive ERF assets list, and adopted a new ERF policy. The updated policy focuses on long range planning and will help moderate the fund balance as well as smooth the impact of replacing expensive equipment such as vehicles or software. For CY 2025, an Equipment Replacement budget of $4.05 million is forecasted and includes updates to the Supervisory Control and Data Acquisition system, computers and servers, and critical vehicle and equipment replacements.

3.2 Miscellaneous Cost Recovery

Miscellaneous Cost Recovery consists of expenses not included in annual Operating Costs and other cost recoveries to the Water Authority. Miscellaneous Cost Recovery is an important element of the Water Authority's annual revenue requirements.

Miscellaneous Cost Recovery totals $21.62 million in CY 2025, which is allocated to rate categories based on the nature of the cost that was incurred. Miscellaneous Cost Recovery includes the following:

- **Emergency Storage Project Evaporation and System Losses:** This cost accounts for the cost of purchased water that is lost due to surface water evaporation or other system losses. As this is a function of storage, the $17.30 million cost has been allocated to the storage rate component and will be recovered through the CY 2025 rates.
- **Local Water Supply Development:** This is the cost to implement local water supply projects within the Water Authority's service area in order to provide a long-term reliable and sustainable supply. The cost is recovered through the Customer Service charge. A total of $0.28 million will be recovered through the CY 2025 rates.
- **Twin Oaks Reimbursement:** This reimbursement reflects a 25-year payback to customer service for the upfront investment in the implementation of the Twin Oaks Valley Water Treatment Plant. This original investment was funded through use of Pay-as-you-Go (PAYGO) funds, which had been historically collected from the non-treatment functional rate categories. The cost is recovered through the treatment charge. A total of $0.74 million will be recovered through the CY 2025 rates.
- **Pumping Costs (SVPS, VCPPS):** This cost is for operational and maintenance costs for the San Vicente and Valley Center Pipeline pump stations. It is recovered through the Transportation rate. A total of $3.30 million will be recovered through the CY 2025 rates.

3.3 Capital Costs

The adopted FYs24&25 CIP Budget is built upon the Water Authority's updated 2023-2027 Business Plan and 2021 Adopted Long-Range Financing Plan, placing primary emphasis of the CIP on repair, replacement, or rehabilitation of the existing system through the Asset Management Program and modification of the Water Authority's infrastructure to optimize system operation.

In order to take advantage of historically low interest rates in 2022 and maintain cash for financial flexibility, the Water Authority issued new debt (2022A) to fund a majority of near-term projects. Funds from that issuance are forecasted to be available for capital projects through FY 25. Alternative 9 assumes a new FY 2026 debt issuance that would continue to fund a majority of the remaining identified CIP for CY 2025 (to FY 2028).

3.3.1 Annual Debt Service

The Water Authority has adopted a comprehensive set of financial policies. The Debt Management Policy sets forth comprehensive guidelines for the issuance and management of the Water Authority's debt.

The Water Authority finances major capital improvements, in part, by issuing debt for two primary reasons. First, given the size of past capital projects, the Water Authority did not have the financial reserves available that would otherwise be required to solely fund the CIP, nor would it have been advisable to increase the water rates and charges in order to cash fund these improvements. Second, spreading the debt service costs for the project over the repayment period provides intergenerational equity by effectively spreading the financial recovery (burden) between both existing and future users of the system. This approach allows the Water Authority to better match the cost of improvements with those benefitting from the improvements.

This methodology is internally consistent with the development of the Water Authority's System and Treatment Capacity Charges.

Finally, as an auxiliary benefit to the use of debt, the cash generated from meeting the Water Authority's coverage requirements provides additional cash that can be used to fund PAYGO projects.

Excluding the Build America Bonds (BABs) subsidy, Helix apportioned debt and planned defeasance, the net FY 2025 and FY 2026 long-term debt service expenditure for allocation are $131.84 million and $144.67 million respectively, resulting in expected long-term debt payments of $138.25 million for CY 2025. This reflects a rebalancing effort after the FY 2021 refunding decisions to front-load savings. Short-term debt service expenditures, excluding Helix, for FY 2025 and FY 2026 are projected at $16.71 million and $16.71 million, respectively, resulting in expected short-term debt service of $16.71 million for CY 2025.

The sum of these debt obligations does not reflect any future debt restructuring nor the Water Authority's ability to take advantage of optimal market conditions to reduce its debt burden. This is done to ensure proper allocation and appropriation of expenses – these actions are reflected in the results and planned use of reserves.

3.3.2 Non-Debt Capital Expenditures

To maintain its targeted capital structure, the Water Authority has historically augmented its use of short and long-term debt by funding a portion of its capital program with cash through its PAYGO Funds. The Water Authority amortizes the cash funds used for capital to reduce the immediate and cyclical impact on rates. In addition, as stated above, excess funds derived from meeting the Water Authority's targeted debt coverage ratio enables cash funding of capital projects. The Water Authority issued the 2022A series to fund a majority of its near-term capital needs. Those proceeds are expected to be expended by June 2025.

Over the last several years, as sales failed to meet expectations, the cash anticipated to fund PAYGO projects never materialized. The rates defined in Alternative 9, coupled with an accelerated FY 2026 and future increases, are designed to generate PAYGO funding as originally contemplated in the 2021 LRFP.

3.3.3 Depreciation and System Replacement

The Water Authority does not adjust rates to recover system depreciation. Rather, the Water Authority operates on a cash basis and the cost to rehabilitate and improve the system is accounted for through direct capital reinvestments. The cost of renewing the system over time is captured in the on-going renewal and replacement related CIP. This approach also creates consistency with the Water Authority's capacity charge methodology, which excludes depreciated asset values from the buy-in cost basis of the charge, and then recovers a proportionate share of the CIP through the charge. It is important to note that once a meter is connected to the system, the user is then obligated to fund a proportionate share of future capital improvements and ongoing debt obligations through the water rates and charges.

3.4 Offsetting Revenues to Reduce Revenue Requirements

Beyond water rates and charges, the Water Authority collects revenues through other funding sources. These revenues provide a credit against the total revenues that must otherwise be collected annually from rates. Offsetting revenues include the IAC, standby availability charges, system and treatment capacity charges, property taxes, interest earnings, and miscellaneous revenues.

Table 4 details the offsetting revenues and provides a brief description of the source of revenue.

Table 4 Offsetting Revenues (in $ millions)

Revenue Component	CY 2025 Revenues	Description
Capital Offsets		
System Capacity Charge	$14.26	The charge is designed to recover a proportionate share of the capital costs associated with providing services to new connections in the Water Authority's service area.
Treatment Capacity Charge	0.40	Helps fund the Water Authority's regional water treatment facility. The charge recovers a portion of the capital costs from the future users of the treatment facility.
Standby Availability Charge	10.71	This fixed charge, which is in the nature of a special assessment, is limited by statute and funds some of the capital costs associated with maintaining the system. It is $10 per acre per year, or $10 for a parcel less than one acre per year. The charge was first established prior to the adoption of Proposition 218 and has been continuously levied pursuant to law at pre-Proposition 218 levels.
PAYGO Earnings	0.56	Interest earnings on the Water Authority's PAYGO Fund.
Operating Offsets		
Property Tax	$17.56	The Water Authority receives a portion of the 1% property tax pursuant to the Revenue and Taxation Code.
IAC	50.73	The IAC is an annual service charge that is imposed on member agencies and apportioned based on all retail water meters within the Water Authority's service area. The IAC maintains a minimum ratio of projected fixed revenues to projected fixed expenditures of 25% in any future fiscal year, excluding fixed water rate revenues.
Interest Earnings	9.24	Interest earnings on operating funds.
Specific Revenues	3.14	Revenues reflect directly allocated revenues for the reimbursement of previous capital outlays or reimbursements. For example, one revenue reflects a 25-year payback to customer service for the upfront investment in the implementation of Twin Oaks Valley Water Treatment Plant.
Misc. Revenue	7.29	Includes other nominal revenues.
Total Offsets	**$113.88**	

3.5 Infrastructure Access Charge

In addition to revenues generated through the five rate and charge categories, the Water Authority has additional revenues used to meet the annual rate revenue requirements. The most significant of these offsetting revenues is the IAC. The IAC was implemented in 1998 by Board policy to reduce financial vulnerability due to fluctuations in annual Water Authority revenues. This is accomplished by increasing the number of fixed expenditures recovered through fixed charges. The IAC was designed to generate a minimum 25 percent ratio of fixed revenues to fixed expenditures.

Consistent with the Board policy, the IAC equals the forecasted four-year average of debt service (long- and short-term debt) plus 80 percent of forecasted four-year average O&M costs, times 25 percent, times 110 percent. Based on the results of an expenditures analysis at the time of implementation, the Water Authority concluded that roughly 80 percent of the agency's operating costs were fixed (e.g., personnel costs) and did not vary based on water sales. Additionally, the level of fixed expenditures to be recovered through the IAC was established to mitigate fluctuations in net revenues due to water sales volatility that the Water Authority had experienced. Finally, in establishing the IAC Policy the Board increased the 25 percent fixed expenditure recovery to 25 percent multiplied by 110 percent. This accounts for potential fluctuations in expenditures and offsetting revenues, as well as costs yet to be identified in the four-year budget forecast.

In CY 2021, the Water Authority completed a ramp-up of the IAC to complement the Water Authority's financial planning efforts. The ramp-up followed the conclusion of Water Authority staff and Carollo, in CY 2020, that the method of funding capital (debt or cash) should not be viewed differently as both are a fixed cost to the agency. As such, a two-year ramp up of IAC was recommended to enable recovery of fixed costs in alignment with Board policy.

The forecasted increased use of PAYGO, as opposed to historically assumed regular debt issuances, better matches the maintenance nature of the CIP (replacing depreciated assets). As detailed in the CY 2020 Cost of Service Study, it was recommended that the IAC reflect the fixed capital costs related to system maintenance and replacement (depreciation) as a fully developed multi-year CIP was not always available at that time, and depreciation can serve as a reasonable, albeit low, proxy for capital funding needs. With the development of a multi-year CIP for inclusion in the 2021 LRFP, the use of depreciation is no longer necessary. However, as the Water Authority develops an update to the Water Authority's Facility Master Plan future changes may be necessary. The projected CIP has been updated to match those presented in the Water Authority's mid-cycled budget updated.

The forecasted four-year average of the Water Authority's Standby Availability Charge and property tax revenues are credited to recognize other fixed revenues. As detailed below, the CY 2025 IAC provides $49.98 million in revenue offsets against the required water rate and charge revenues. The IAC is allocated to each member agency based upon the previous calendar year's total meter equivalents (as reported by the member agencies). A meter equivalent is based on a meter size less than one inch. For CY 2025, the monthly IAC is proposed to increase to $4.56 per household meter equivalent as shown in Table 5.

Table 5 Infrastructure Access Charge Calculation (in $ millions)

	4-Year Average FY 2025 – FY 2028
Long-Term Debt Service	$143.61
Fixed Capital Cost (PAYGO)	36.42
Total Short-Term Debt Service and Costs	16.71
Administration and Maintenance times 80%	59.58
Total Local Supply Development Costs times 80%	0.18
ESP Evaporation and System Losses times 80%	16.79
Desalination FY Pipeline Cost	11.09
Total Fixed Costs	**$284.39**
Total Fixed Costs Times 110% Times 25%	**$78.21**

	4-Year Average FY 2025 – FY 2028
Less:	
Other Tax Receipts	($17.91)
Standby Availability Charge Revenue	(10.70)
Additional Funds for Smoothing IAC	-
Remaining Fixed Cost Need (IAC Revenue)	**$49.58**
Average Number of Meter Equivalents Used in Calculation	907,486
Proposed CY 2025 Monthly IAC Per Meter Equivalent *(in dollars)*	**$4.56/MEU**

3.6 Revenue Sufficiency

Water Authority revenues must be sufficient on a fiscal year basis to meet two tests – (1) cash flow and (2) bond coverage. These sufficiency tests are commonly used to determine the amount of annual revenue that must be generated from an agency's rates.

- **Cash Flow Sufficiency Test:** The cash flow test defines the amount of annual revenues that must be generated in order to meet annual expenditure obligations of the utility. These needs can include direct cash expenditures as well as planned transfers or additions to reserves.
- **Bond Coverage Sufficiency Test:** Bond coverage refers to the collection in revenues to meet all operating expenses and debt service obligations plus an additional multiple of that debt service. The Water Authority has a legally required minimum bond coverage ratio of 1.20x and a policy target of 1.50x. The Water Authority, as do many utilities, established a policy target in excess of legal requirements to retain or attain high bond ratings with correspondingly lower interest costs.

The revenue requirement analysis sets water rate and charge revenues at a level sufficient to pass both tests. Revenue requirements are considered to be driven by either "cash flow" or "coverage" based on the test that requires a greater adjustment.

The Water Authority's annual revenue requirements remain coverage driven – it must generate revenues in excess of its cash needs in order to meet its legal and policy debt requirements. While recent refunding has lessened this driver for FY 2024 and FY 2025, coverage remains the primary driver of revenue sufficiency testing today and into the future. Cashflow generated by coverage is available to fund PAYGO capital projects, non-cash items, and/or reserves.

The identified revenue requirement for Alternative 9 is not sufficient to meet all the identified needs of the system. Instead, the CY 2025 revenue requirement has been restricted (limited) in favor of a multi-year recovery roadmap to restore the Water Authority to a positive net fiscal condition. Any adjustments, through use of reserves, lower than those defined in Alternative 9 would be detrimental to the fiscal integrity of the Authority.

The proposed rates for CY 2025 have been developed with the multi-year recovery in mind and as such rates for future years are dependent on the rates adopted for CY 2025. The proposed CY 2025 rates account for permanent increases in costs that the Water Authority has experienced, and further cost increases have already been adopted by outside agencies. For example, MWD has already set their calendar year 2026 rates with a 10-percent increase in the Full Service Treated Supply Rate and an 8-percent increase on the Exchange Rate. If the necessary increases for CY 2025 are not adopted in full, any structural deficits will carry

forward into CY 2026, and be exacerbated by further cost increases that are largely outside of the Water Authority's control. Ultimately, forgoing or reducing rate increases for CY 2025 would result in the need for higher increases in CY 2026.

3.7 Financial Policies

Rate setting cannot be viewed as a single year process nor in a vacuum. There are many variables that fluctuate from year to year causing changes in demand as well as expenditures. Additionally, there may be known costs in the future that need to be proactively funded to prevent rate shock. Reserve and rate smoothing policies provide a mechanism to normalize and smooth rates over a multi-year process. These policies prevent a whipsaw effect of rates and provide greater predictably to its member agencies.

However, these policies have been fragmented and need to be replenished and stabilized support best fiscal practices. Limits to the proposed revenue requirements would only restrict future actions by the Board and possibly incur greater costs of funds (debt) and capital.

3.7.1 Debt Service Coverage Ratio

The Water Authority has a legally required minimum bond coverage ratio of 1.20x on senior lien debt service.[3] In order to maintain strong bond ratings and mitigate the impacts of annual water demand fluctuations, the Board sets rates to meet a senior lien debt service coverage target of 1.50x, inclusive of RSF transfers, and 1.00x excluding capacity charge revenues. This policy was most recently affirmed in the 2021 LRFP.

The Water Authority has a strong history of meeting the Board policy target of 1.50x. Year-end transfers from the RSF are used reactively to meet the 1.5x target. Prior to a transfer if the coverage is more than 1.5x – deposits maybe made into the fund (lowering coverage). In years where coverage is below 1.5x, a withdrawal can be made to support 1.5x; however, the RSF fund has been proactively drawn, as directed by the Board for rate mitigation – rather than coverage. Given a subsidized rate (from proactive RSF draws) and lower than anticipated sales, nearly $75 million has been withdrawn from the RSF over the last several years. Based on current financials, an anticipated $20 million draw will be required in FY 2024 to support the 1.5x coverage. As the RSF is currently $78.5 million, just above the Board minimum ($78.4 million), any draw will trigger the 3-year replenishment policy. An anticipated draw of this magnitude is not reasonable to recover in one year – especially given the other rate pressures. Future sizable increases, beyond CY 2025, are anticipated.

3.7.2 Rate Stabilization Fund (RSF)

In 2006, the Board strengthened key financial metrics, including establishing a target funding level for the RSF that better protected the Water Authority against the financial impact of reduced water sales. The Board revisited this Policy in 2018 with the adoption of Ordinance No. 2018-03.

The Water Authority sets aside money into the RSF (as available), which, by covenant, may be used to meet the Water Authority's legal bond coverage requirement in a year in which other revenues are insufficient. Use of the RSF is a critical short-term water rate management tool and helps the Water Authority manage weather and timing related revenue risks and stabilize annual revenue needs through rate smoothing.

Reduced water sales were projected assuming 2.5 years of wet weather (3.5 years max). At that time (2006), it was calculated that during a wet weather period, the Water Authority would experience a 25 percent

[3] This requirement is established by the Water Authority General Resolution as amended. This resolution and amendments are available on the Water Authority's website.

reduction in water sales. However, in 2018 Carollo and staff recommended this policy be revised to 15 percent reduction in sales.

This change in the reserve policy was driven by continued improvements in water use efficiency. A 47 percent decline in per capita water use from 1990 to 2017 in the Water Authority's service area is an indicator of increasingly efficient water use practices throughout the region. As water use efficiency continues, regional water demand "hardens," becoming less susceptible to significant demand reduction due to wet weather. Carollo recommended, and the Board adopted, a staggered reduction process to draw down the reserve gradually.

During the next update to its LRFP, Carollo recommends that the Water Authority review this policy to reflect current and forecasted conditions. A similar but more stable funding target is recommended. Discussion on defining policies of when and how funds are used during times of strong sales could be considered. S&P Global also noted in their June 2024 report, "We could revise the outlook to stable if the authority continues to monitor water demand to guard against underperformance while producing a new financial plan that demonstrates stable financial results, which would indicate widening margins that offset rising fixed-cost pressure leading to financial metrics commensurate with those of peers at a 'AAA' level.

3.7.3 Days of Cash

Along with the Board approved policies discussed above, the Water Authority's practices include maintaining prudent reserve levels to support cashflow needs. Specifically, rate setting efforts target cash on hand equal to 150 days of O&M expenses. This level of reserves allows the Water Authority to manage seasonal revenue volatility, debt service payments, and to cover unforeseen changes in operating costs or to fund emergency projects in the event of infrastructure failures or natural disasters. Furthermore, credit rating agencies typically consider cash on hand when evaluating the creditworthiness of water utilities. Thus, planning for and maintaining a prudent cash on hand balance is necessary to receive high credit ratings and ultimately lower borrowing costs. Maintaining a minimum of 150 days of cash supports the Board's policy of maintaining an AA+ credit rating, bolsters critical metrics, and reduces leverage.

3.7.4 Adopted Rates Policy Results

Over the past several years, the Water Authority has worked to moderate rate increases through the use of the rate stabilization reserve, which is projected to be drawn down to $58.5 million (anticipated FY 2024 ending balance), below the minimum target of $78.4 million. Due to the increases in costs and the relatively low current reserves balances, substantial mitigation of rate increases through the use of reserves is not possible for CY 2025. Some rate relief, though less than in recent years, will be provided through the spend down of existing bond proceeds and PAYGO funds to pay for capital projects. The CY 2025 rates include a total use of reserves of $21.6 million. With the projected use of reserves and the proposed rates, the projected year end balances will equate to 106 days of O&M ($254.8 million) for FY 2025 and 123 days of O&M ($317.6 million) for FY 2026. Based on current projections and anticipated increases in CY 2026 and 2027 (defined by Alternative 9), the RSF will rebound above the minimum target in FY 2027 – achieving the 3-year replenishment policy.

For CY 2025, the Water Authority's revenue requirements continue to be coverage driven, though this may shift in the future as the cash need to replenish reserves and to fund PAYGO take over. In order to meet the bond coverage target, the Water Authority must collect roughly an additional $59.99 million above its operating costs and debt service obligations.

Section 4

ALLOCATION OF REVENUE REQUIREMENTS TO FUNCTIONAL CATEGORIES

The purpose of a cost-of-service analysis is to provide a reasonable basis for distributing the full costs of the Water Authority's operations and capital investments to rate categories and then the member agencies in proportion to the demands placed on or benefits received from the system. The Water Authority currently maintains five functional rate categories. These components are developed and designed to mirror the nature in which expenditures are incurred. The Water Authority's operating budget is allocated, by division, to a specific rate category as a part of the development of the two-year budget process. This process is based on clear, concise, and consistent rate and charge category definitions. In the allocation process, if work performed in a department or program is not specifically applicable to one of the five rate categories defined below, it is considered General and Administrative (G&A). This category is applicable to departments that support the internal operations of the Water Authority, such as Finance and Administrative Services.

Debt issuances and the associated annual debt services are allocated to rate categories based on the specific capital improvement projects financed through bond sales. Additionally, the Water Authority utilizes a combination of cash and PAYGO reserves to pay for capital projects. However, in an effort to minimize the immediate impact to rates, the Water Authority amortizes cash expenditures directly to the related rate category. The Water Authority uses its calculated weighted cost of capital as the interest rate on cash used for capital expenditures in each respective year. The Water Authority assumes a 30-year amortization term to calculate the projected annual cash payment stream. The annual cash payments are allocated to rate categories based on the same percentages developed to allocate long-term debt service.

4.1 Allocation Categories

The Water Authority allocates its annual operating budget to the five functional rate categories. As applicable and identifiable, these expenditures are assigned directly to rate categories. For expenditures incurred for the general operations of the Water Authority, costs are allocated to G&A and then redistributed to five functional categories based on their weighted average of directly assignable operating costs. A description of each category is as follows:

4.1.1 Customer Service

The Customer Service charge is set to recover costs that are necessary to support the functioning of the Water Authority, to develop policies, and to implement system-wide programs. Costs recovered through the customer service charge include, but are not limited to, customer billing, public relations, and expenses associated with the Board of Directors.

4.1.2 Storage

The Storage charge is set to recover costs associated with the ESP and CSP. The ESP is a system of reservoirs, interconnected pipelines, and pumping stations designed to make water available to the San Diego region in the event of an interruption in imported water deliveries.

An example of expenditures or programs allocated to this category would be a division which works in support of the ESP projects such as Olivenhain Dam and Reservoir Operations in the Operations and Maintenance Department. Agriculture customers do not benefit from the Storage charge as addressed in Report Section 5.3.

4.1.3 Supply

The Supply rate recovers the cost of water supply incurred by the Water Authority, including the purchase of water from MWD, the IID, and the Coachella and the All-American Canals; costs of MWD wheeling for non-MWD water supplies; desalination water costs; and certain other costs associated with the QSA.

4.1.4 Transportation

The Transportation rate is set to recover capital, operating, and maintenance costs of the Water Authority's aqueduct system, including all facilities used to physically transport the water to member agency meters, excluding certain distribution facilities covered under the East County Treatment Agreement. An example of this category would be the maintenance division in the Operations and Maintenance Department. This division maintains the valves, pipelines, and facilities that are integral to the aqueduct system.

4.1.5 Treatment

The Treatment rate is designed to recover the Water Authority's cost of treating water. The Melded Treatment Rate includes the costs of purchasing treated water from MWD, the operating and capital costs associated with the Water Authority's agreement with Helix Water District's Levy Water Treatment Plant, operating costs associated with the Olivenhain Treatment Plant (if applicable), and the operating and capital (debt service) costs associated with the construction of the Twin Oaks Valley Treatment Plant, as well as desalinated water costs allocated to this rate and may recover certain other costs associated with the delivery of treated water. As treated water is a result of the desalination process, the treatment rate is also used a proxy for deriving the treatment cost associated with production of the desalination supply. The resulting cost is also recovered through the Treatment Rate.

4.1.6 General and Administrative

Expenditures that cannot reasonably be allocated directly to a rate category are assigned to G&A, which supports the general function of the Water Authority. An example of a cost that is assigned to G&A is accounting. As no rate component directly relates to G&A, these costs are reallocated to the other rate components based on the total direct budget allocation to customer service, storage, supply, transportation, and treatment.

4.2 Allocation Summary

As part of the 2014 rate setting process, Carollo held interviews with select departments and divisions to confirm the methodology and the appropriateness of application of cost-of-service principles during the annual budget process. This interview process is completed by staff in parallel with development of each new two-year budget.

The interviews evaluated the methodology and basis of the percentage allocations and developed the reasoning that allocations varied from the previous process, if applicable. In most cases, costs were allocated based on the historical and forecasted employee utilization and direct expenditures.

As a part of the FY 2024 and FY 2025 budget process, the allocations were updated consistent with historical practices; however, the updated allocations include the recent internal reorganization of various departments and divisions. This internal review accounted for changes in processes and day-to-day operations. Based on Carollo's review, the provided allocations appear reasonable and continue to be based on sound and defensible definitions.

The debt service and capital allocations developed in the Cost-of-Service Study reflect the continued shift in CIP efforts towards transportation and away from storage. This shift is amplified by the recent refunding and cash defeasance of debt series largely apportioned to Storage. These adjustments are reflected in each revenue requirement. Relative to CY 2020, the portion of debt-funded capital allocated to customer service and storage decreased, while the allocation to transportation has increased.

4.2.1 Allocation of Operating Costs

Table 6 illustrates the allocation of CY 2025 operating costs to each rate category based upon the total weighted average FY 2025 and FY 2026 expenditure allocation.

Table 6 Allocation of CY 2025 Operating Budget (in $ millions)

CY 2025 Allocation	CY 2025 Expenditures	Customer Service	Storage	Supply	Transportation	Treatment
Operating and Maintenance						
Percent Allocation	100.00%	34.48%	12.81%	16.06%	34.30%	2.35%
Cost Allocation	$72.28	$24.92	$9.26	$11.61	$24.79	$1.70
Equipment Replacement Fund						
Percent Allocation	100.00%	34.48%	12.81%	16.06%	34.30%	2.35%
Cost Allocation	$4.05	$1.40	$0.52	$0.65	$1.39	$0.10
Total Operating Costs	**$76.33**	**$26.32**	**$9.78**	**$12.26**	**$26.18**	**$1.79**

4.2.2 Allocation of Debt Service

For each debt issuance, the Water Authority actively allocates its use of long-term and short-term debt. Each issuance is apportioned to rate components based on specific projects funded. As a result, the Water Authority's debt service is allocated in a defensible and equitable manner. Table 7 provides a summary allocation of the total CY 2025 debt service by functional rate category.

Table 7 Debt Service Allocation Summary (in $ millions)

Revenue Requirement [1]	CY 2025 Total	Customer Service	Storage	Supply	Transportation [2]	Treatment
LTD Service	$112.56	$8.50	$46.35	$10.50	$39.94	$7.27
STD Service	16.71	1.20	6.32	1.36	6.89	0.92
Build America Bonds [3]	25.70	1.94	10.58	2.40	9.12	1.66
Total Debt Service	**$154.96**	**$11.64**	**$63.25**	**$14.26**	**$55.95**	**$9.87**

Notes:

(1) May not sum due to rounding.
(2) Includes Super Subordinate rate for Desalination Pipeline (Transportation – LTD).
(3) Amount is net and includes the associated $10.5M subsidy.

4.2.3 Allocation of Offsetting Revenues

Offsetting revenues provide a credit against rate revenue needs. Operating revenue offsets are allocated to each functional rate category proportionate to the two-year average expenditures by rate category. Table 8 provides the allocation factors that are used to distribute each offsetting revenue.

Table 8 CY 2025 Allocation Factors for Offsetting Revenues

Methodology (1)	Applicable Offsetting Revenues	Customer Service	Storage	Supply	Transportation	Treatment
Capital, Excluding Treatment	System Capacity Charges	7.61%	40.05%	8.68%	43.66%	0.00%
Treatment Only	Treatment Capacity Charge	0.00%	0.00%	0.00%	0.00%	100.00%
Total Capital	Water Standby Charges PAYGO Earning	7.18%	37.81%	8.20%	41.23%	5.58%
Total Expenditures	IAC Property Taxes and In-Lieu Charges Investment Income General Misc. Revenue	16.46%	31.76%	11.52%	35.17%	5.08%

Notes:
(1) These allocation factors do not cover all off-setting revenues, notably those that are allocated to specific functions.

Operating revenue offsets include property taxes, IAC revenue, interest earnings, and miscellaneous revenues. The Water Authority also accounts for system capacity charge revenue, water standby availability charges, and interest earning on PAYGO reserves. These capital related offsets are allocated to the Water Authority's customer service, storage, supply, transportation, and treatment rate components based on its respective share of the total capital expenditures for the two-year budget period. System capacity charge revenue continues to exclude treatment as no treatment costs are recovered in this charge.

Finally, treatment capacity charges are allocated directly to the Water Authority's treatment rate category as a reimbursement for treatment-related capital expenditures.

Some non-rate revenues are directly attributable to a specific function. These specific revenues are thus directly allocated to the function that is receiving the direct benefit or provided the upfront capital outlay to complete the project. This includes, but is not limited to, the Twin Oak Reimbursement, Hydroelectric revenues, and desalination reimbursements.

Table 9 illustrates the offsetting revenues and allocated offsets to each rate component.

Table 9 CY 2025 Offsetting Revenues (in $ millions)

	Total Revenue Offsets	Customer Service	Storage	Supply	Transportation	Treatment
Capital Offset						
System Capacity Charge	$14.26	$1.08	$5.71	$1.24	$6.23	$0.00
Standby Availability Charge	10.71	0.77	4.05	0.88	4.42	0.60
Treatment Capacity Charge	0.40	0.00	0.00	0.00	0.00	0.40
PAYGO Earnings	0.56	0.04	0.21	0.05	0.23	0.03
Operating Offsets						
Property Tax	$17.56	$2.89	$5.58	$2.02	$6.18	$0.89
IAC	50.73	8.35	16.11	5.85	17.84	2.58
Interest Earnings	9.24	1.52	2.94	1.07	3.25	0.47
Specific Revenues	3.14	1.12	0.00	0.34	1.65	0.02
General Misc. Revenue	7.29	1.19	2.32	0.84	2.56	0.37
Total Offsets	**$113.88**	**$16.97**	**$36.91**	**$12.28**	**$42.36**	**$5.36**

4.2.4 Additional Expenses

As described in Report Section 3.1, the Water Authority incurs costs beyond those captured within the core budget, such as expenditures which were initially funded using reserves and then recovered from member agencies over time through rates. When developing the rates and charges, the Water Authority accounts for these additional expenditures separately from the base operating expenditures, allocating these expenditures directly to each rate category based on direct benefit.

Table 10 details the additional expenditures that are incurred by each rate category outside the operating budget.

Table 10 CY 2025 Additional Expenses (in $ millions)

	Total Expense	Customer Service	Storage	Supply	Transportation	Treatment
Twin Oak Reimbursement	$0.74	$0.00	$0.00	$0.00	$0.00	$0.74
Local Water Supply Development	0.28	0.28	0.00	0.00	0.00	0.00
ESP Evaporation and Losses	13.08	0.00	13.08	0.00	0.00	0.00
System Losses	4.22	0.00	4.22	0.00	0.00	0.00
Pumping Costs	3.30	0.00	0.00	0.00	3.30	0.00
Total Expense	**$21.62**	**$0.28**	**$17.30**	**$0.00**	**$3.30**	**$0.74**

4.2.5 Coverage + Reserve Driven Requirements

The bond coverage target is calculated based on net revenues, excluding capital expenses and policy requirements, such as additions to reserves. Although the bond coverage requirement applies to all Water Authority rates and charges revenues in aggregate, the Water Authority establishes rates to separately meet the 1.50x coverage test by rate category, proportionate to its share of overall debt. This approach is designed to recover bond coverage and reserve costs fairly and reasonably by rate category.

Based on the revenue requirements defined above, the Water Authority must generate an additional $59.99 million through rates to achieve a 1.50x debt service coverage ratio and provide funding for reserves. This is illustrated in Table 11.

Table 11 Remaining Coverage and Reserve Allocation Summary (in $ millions)

Revenue Requirement	CY 2025 Total	Customer Service	Storage	Supply	Transportation	Treatment
Remaining Coverage and Reserve Driven Needs	$59.99	$8.74	$11.58	$4.60	$31.93	$3.14

4.2.6 Summary of Allocation

Table 12 provides a summary of the Water Authority's revenue requirements and rate component allocations. The water sales revenue requirements reflect only the portion of water rates and charges related to direct Water Authority operating activities and do not include expenditures such as purchased water costs.

Table 12 Revenue Requirements Summary (in $ millions)

Revenue Requirement	CY 2025 Total	Customer Service	Storage	Supply	Transportation	Treatment
Operating Costs	$72.28	$24.92	$9.26	$11.61	$24.79	$1.70
Equipment Purchase	4.05	1.40	0.52	0.65	1.39	0.10
Debt Service (LTD + STD)	154.96	11.64	63.25	14.26	55.95	9.87
Offsetting Revenues	(113.88)	(16.97)	(36.91)	(12.28)	(42.36)	(5.36)
Operating Rev Req Before Coverage	**$117.41**	**$20.98**	**$36.11**	**$14.24**	**$39.77**	**$6.30**
Additional Expenses	$21.62	$0.28	$17.30	$0.00	$3.30	$0.74
O&M Rev Req Before Coverage	**$139.03**	**$21.26**	**$53.42**	**$14.24**	**$43.07**	**$7.04**
Remaining Coverage and Reserve Driven Needs (1)	$59.99	$8.74	$11.58	$4.60	$31.93	$3.14
Water Sales Rev Req	**$199.02**	**$30.00**	**$65.00**	**$18.85**	**$75.00**	**$10.17**

Notes:
(1) Excludes use of reserves related for smoothing of melded supply or treatment rates (water supply or treatment purchases). These amounts are defined separately in Tables 17 (melded supply rate) and 19 (melded treatment rate).

Section 5

WATER RATES AND CHARGES

Based on the resulting revenue requirements analysis and detailed cost of service allocations, the revenue requirements for each rate and charge category are recovered from the member agencies based on water demand and usage factors. The Water Authority serves two classes of customers: Full Service and Special Agricultural Water Rate (SAWR) customers. As of CY 2022, per Board direction, the former transitional (TSAWR) program has expired and was replaced by the permanent (PSAWR) program. The PSAWR program is reviewed annually during this process to reaffirm the continued nexus between lower supply reliability and a lower cost of service.

In general, the Water Authority's rate setting follows a streamlined approach where each rate component relates back to a single and specific cost allocation category. This methodology is in contrast to that of many retail water agencies who, by virtue of their cost and rate structures, may need to combine revenue requirements from multiple categories into each rate component. The Water Authority's approach allows for each rate to accurately and proportionally reflect the Water Authority's cost to provide each component of its service while providing a high level of transparency in the rate setting process. It also results in a rate structure that can be easily communicated to each agency and incorporated into their respective rate planning efforts. The following section of this report summarizes the proposed CY 2025 water rates and charges.

5.1 Commodity Based Fixed Charges

Fixed revenues are distinguished from variable revenues as they provide a known and predictable annual source of revenue for an upcoming calendar year. The fixed commodity charges are allocated to each agency based on their proportionate share of a seven-year rolling average of water purchases (FY 2017-FY 2023).

This allocation methodology balances the fixed nature of the costs recovered by the fixed charges with the potential for shifting demands of the retail agencies. The rolling average purchase volumes provide a measure of each agency's use of the Water Authority's system that can evolve naturally over time with each agency's retail demands. The use of another fixed allocation methodology, such as MEUs, could sufficiently recover costs but would not account for lasting changes in agency demands i.e., development of local water resources or retail customer growth.

5.1.1 Customer Service Charge

Based on the cost-of-service analysis, $30.00 million must be recovered through the customer service water rate in CY 2025. These costs are recovered as an annual charge, as these costs do not vary based on the current year water demand. Specifically, the costs are allocated among the member agencies based on each agency's seven-year rolling average of all purchases (FY 2017-FY 2023), excluding member agency wheeled water.

Table 13 CY 2025 Customer Service Revenue Requirement (in $ millions)

CUSTOMER SERVICE REVENUE REQUIREMENT	
Capital Expenditures (LTD and STD)	$11.64
Equipment Purchase	1.40
O&M + Share of Agency Operating Expenditures	24.92
Additional Expenses	0.28
Gross Revenue Requirements	**$38.23**
Less: Offsetting Revenues	
Capital Related	($1.89)
Operating Related	(15.08)
RR before Coverage and RSF Support	**$21.26**
Coverage + Reserves	$8.74
Total Revenue Requirement	**$30.00**

5.1.2 Storage

Based on the cost-of-service analysis, $65.00 million is to be recovered through the storage charge in CY 2025. The storage charge is a flat annual charge applied to non-agricultural water deliveries. The storage charge is allocated among the member agencies using a pro rata share of each agency's seven-year rolling average of non-agricultural deliveries (including all users, member agencies, and third-party wheeling throughput). In return for not paying for storage, PSAWR program customers agree to receive a reduced level of service during mandatory water cutbacks or an emergency than that received by the Water Authority's M&I customers.

The Water Authority's ESP and Carryover Projects are designed to make water available to the San Diego region in the event of an interruption in imported water deliveries. Because agricultural users that participate in the PSAWR program agree to reduced or interrupted service during times of water emergencies, they will not receive benefit from the Water Authority's investment in its long-term storage program. It is therefore appropriate to exclude agricultural deliveries from the calculation of the storage rate.

Table 14 CY 2025 Storage Revenue Requirement (in $ millions)

STORAGE REVENUE REQUIREMENT	
Capital Expenditures (LTD and STD)	$63.25
Equipment Purchase	0.52
O&M + Share of Agency Operating Expenditures	9.26
Additional Expenses	17.30
Gross Revenue Requirements	**$90.33**
Less: Offsetting Revenues	
Capital Related	($9.97)
Operating Related	(26.95)
RR before Coverage and RSF Support	**$53.42**
Coverage + Reserves	$11.58
Total Revenue Requirement	**$65.00**

5.1.3 Supply Reliability Charge

Based on recommendations from the A&F Committee and approval of the Board, the Supply Reliability Charge recovers the functional incremental supply costs allocated to enhanced supply reliability. The Committee recognized the importance of equitably recovering the cost of the Water Authority's investments in long-term water supply reliability in accordance with the cost-of-service requirements. The concept of a fixed charge for supply reliability was to balance the impact of the fixed costs on member agencies with the allocation of costs associated with long-term investments in supply reliability to member agencies based on a seven-year rolling average of M&I deliveries (FY 2017-FY 2023). Access to reliable supply benefits all member agencies regardless of whether the agency uses water every day or intermittently.

The approved methodology for determining the Supply Reliability Charge is as follows:

> Supply Reliability Charge
> = [(Desal Water Cost + IID Water Transfer Cost) – MWD Supply Rate Equivalent Cost] *25%

For a full detailing of the calculation, the Supply Reliability Charge Report prepared by A&N Technical Services, Inc. is available on the Water Authority's website. Following this methodology, Table 15 details calculation of the proposed CY 2025 Supply Reliability Charge.

During the adoption of the CY 2025 rates, MWD removed their Tier 2 Supply Rate. In doing so, their formally defined "Tier 1" water is now simply the "Supply Rate." This update does not affect the calculation or nature of the Supply Reliability Charge. However, that does not preclude future revisions being necessary.

Table 15 Proposed CY 2025 Supply Reliability Charge

SUPPLY RELIABILITY CHARGE	
Desal Deliveries (TAF)	42.00
Desal Supply Rate ($/AF)	$3,446/AF
Desal – Reliable Water Cost ($M)	**$144.74**
IID Transfer Deliveries (TAF)	200.00
IID Transfer Cost ($/AF)	$1,443/AF
IID – Reliable Water Cost ($M)	**$288.68**
Desal + IID Total Deliveries (TAF)	242.00
MWD Untreated Rate ($/AF)	$912/AF
MWD Comparison Cost ($M	**$220.70**
Differential [Desal + IID – MWD] ($M)	$212.72
SRC Defined Share of Differential	25%
Supply Reliability Charge ($M)	**$53.18**

As used in the above formula, Desalination deliveries are 42,000 AF/Y and IID Water Transfer Deliveries are 200,000 AF/Y in CY 2025.

The revenue generated from this charge will only be applied to offset the supply revenue requirement prior to determining the volumetric Melded Supply Rate. This charge will be allocated to member agencies based on a seven-year rolling average of applicable historical water deliveries. The calculated Supply Reliability Charge for CY 2025 is $53.18 million, this represents a 22.5 percent increase from the CY 2024 rate – driven by the 8.9% increases to MWD exchange components, relative to its 1% increase in MWD Supply Rate. With

the projected IID deliveries now at their expected long-term levels and minimal expected changes to desalination deliveries, future adjustments to the SRC are dependent on MWD's future rates. Should MWD's Supply Rate escalate beyond the escalation of reliable water, the SRC will decrease. This charge will be zero when MWD's Supply Rate is equal to or greater than the melded Desalination and IID Water Transfer Costs.

The calculated Supply Reliability Charge follows general water industry cost of service-based rate-setting principles. By design, it cannot recover more than the costs allocated to the supply functional costs, as it is calculated as a portion of those functional supply costs. Further, it constitutes a reasonable allocation of functional supply costs in that it better aligns the fixed incremental supply costs incurred by the Water Authority to make highly reliable potable water supplies available to its member agencies with the benefits available to all water customers connected to the Water Authority integrated water system.

As detailed in the A&F findings, the rate addresses fairness by allowing for predictability of incurred charges (based on a rolling seven-year average of historical deliveries) and adjustments to future charges imposed on each member agency as demand requirements change in the future due to local supply development or demand management. As approved, the Water Authority spreads the Supply Reliability cost to member agencies based upon their share of the rolling seven-year average M&I deliveries.

5.2 Commodity Based Variable Rates

The commodity based variable water rates and charges are distinguished from fixed revenues as they are recovered based on monthly water sales.

5.2.1 Supply (Melded M&I Supply Rate)

The Melded Untreated M&I rate is a volume rate assessed on a per acre-foot basis. The rate is a combination of direct and indirect costs. The revenue requirement apportioned to the supply rate component is $18.85 million and is detailed in Table 16.

Table 16 CY 2025 Melded Supply Revenue Requirement (in $ millions)

MELDED SUPPLY REVENUE REQUIREMENT	
Capital Expenditures (LTD and STD)	$14.26
Equipment Purchase	0.65
O&M + Share of Agency Operating Expenditures	11.61
Additional Expenses	0.00
Gross Revenue Requirements	**$26.52**
Less: Offsetting Revenues	
Capital Related	($2.16)
Operating Related	(10.12)
RR before Coverage and RSF Support	**$14.24**
Additional Coverage	$4.60
Total Revenue Requirement	**$18.85**

For CY 2025, M&I supply costs are projected to total $483.49 million. In addition to the cost of water, $18.85 million must be recovered through rates to fund the supply revenue requirements. The Supply Reliability Charge provides a revenue (cost of water) offset of $53.18 million. Finally, an additional $20.30 million in reserves is used to absorb (smooth) immediate rate increases. By dividing the total supply cost of $428.85 million by total water sales, a per acre-foot cost of $1,430 is calculated.

Table 17 Proposed CY 2025 M&I Melded Supply Rate

M&I MELDED SUPPLY RATE	
Acre-Foot Supplies (A/F) (000's)	
MWD Tier I Deliveries for M&I (exc. PSAWR)	0.00
Carlsbad Desalination Water Production	42.00
IID Deliveries	200.00
Canal Water Deliveries	77.70
Operational Storage	(5.64)
Total A/F Supplies for M&I (exc. PSAWR)	**314.06**
Water Purchase Costs ($ Millions)	
MWD Supply Rate Purchases for M&I (exc. PSAWR)	$0.00
Carlsbad Desalination Water Supply Cost	144.74
IID Water Purchases	288.68
Canal Water Purchases	50.06
Subtotal Water Purchase Costs	**$483.49**
Additional Costs ($ Millions)	
Supply Revenue Requirement	$18.85
Pension Liability	0.00
Total Additional Costs	**$18.85**
Offsetting Revenues ($ Millions)	
Supply Reliability Credit	($53.18)
Cash and Reserves (1)	(20.30)
Total Supply Cost (millions)	**$428.85**
M&I Forecasted AF	*298,898*
Proposed Melded Supply Rate	**$1,430/AF**

Notes:
(1) Consists of operating funds and rate stabilization funds.

The proposed increase in the Melded Supply Rate is driven primarily by increases in the cost of water (Desalination, MWD, and QSA). As this rate has been limited (mitigated) over the past several years, the recalibration coupled with continued increases pressures the rate.

5.2.2 Treatment (Melded Treatment Rate)

The Treatment rate is a volumetric rate, assessed on a per acre-foot basis, designed to recover the Water Authority's cost of treating water. The Water Authority's direct revenue requirement related to Treatment is $10.17 million as detailed in Table 18.

In addition, the rate will be set to recover the costs of purchasing treated water from MWD, the Levy and Olivenhain treatment plants, and the Water Authority's Twin Oaks Valley Water Treatment Plant, as well as desalinated water costs allocated to this rate and may recover certain other costs associated with the delivery of treated water.

Table 18 CY 2025 Melded Treatment Revenue Requirement (in $ millions)

MELDED TREATMENT REVENUE REQUIREMENT	
Capital Expenditures (LTD and STD)	$9.87
Equipment Purchase	0.10
O&M + Share of Agency Operating Expenditures	1.70
Additional Expenses	0.74
Gross Revenue Requirements	**$12.40**
Less: Offsetting Revenues	
Capital Related	($1.03)
Operating Related	(4.33)
RR before Coverage and RSF Support	**$7.04**
Additional Coverage	$3.14
Total Revenue Requirement	**$10.17**

Table 19 outlines the Water Authority's forecasted treated acre-foot demand, incurred treatment costs, and corresponding melded treatment rate. Like the melded supply rate, the costs associated with the operation of the Twin Oaks Water Treatment Plant ($10.55 million) will be recovered through the CY 2025 rates outside the revenue requirements outlined in Table 18.

The Water Authority spreads the Melded Treatment costs over the forecasted acre-feet demands. The proposed CY 2025 Melded Treatment rate is $500 per acre-foot an increase of 25 percent. Previously, in CY 2024, reserves were used to mitigate increases in the treatment rate. For CY 2025, approximately $5.02 million in reserves will be used to offset Treatment revenue requirements.

Table 19 Proposed CY 2025 Melded Treatment Rate

MELDED TREATMENT RATE	
Treatment Demands - (AF 000's)	
MWD	32.6
Carlsbad Desalination Production	42.0
CWA (Twin Oaks)	21.7
Helix	15.0
Total Treatment Demands	**111.4**
Treatment Costs ($ Millions)	
MWD	$15.77
Desalination Water	21.00
Treatment Revenue Requirement	10.17
CWA Contract Treatment Cost	10.55
Helix	3.22
Treatment Cost	**$60.71**
Cash and Reserves	($5.02)
Total Revenue Requirement	**$55.69**
Treated Forecast (AF)	111,375
Proposed Melded Treatment Rate	**$500.00/AF**

5.2.3 Transportation

The Transportation charge recovers capital and operating and maintenance costs of the Water Authority's aqueduct system, including all facilities used to physically transport the water to member agency meters. Historically, the Transportation revenue requirements were recovered using a uniform volumetric rate per acre-foot. During the MARW process, representatives from the member agencies and the Water Authority reviewed the rate structure and worked to identify modifications aimed at appropriately recovering a greater share of revenues through fixed charges. Such modifications are necessary given the fixed nature of many of the Water Authority's costs and the increasing volatility of demands in recent years. One of the opportunities identified, and subsequently proposed, is the inclusion of a fixed component to recover a share of transportation costs.

The proposed rates incorporate the changes recommended by the MARW, and adopted by the Board, by allocating the Transportation revenue requirements to be recovered through a volumetric charge and a fixed charge. For CY 2025, the fixed charge is set to recover 40-percent of Transportation revenue requirements with the remaining 60 percent to be recovered using a uniform volumetric rate per acre-foot. With a 3-year phased-in approach, and based on future discussions, the Transportation fixed rate is slated (with further approval necessary) to increase to 60 percent of the revenue requirement.

For CY 2025, the total Transportation revenue requirements are $75.0 million, allocated 60-percent to be recovered through the variable component and 40-percent to be recovered through the fixed charge. The Water Authority spreads the variable component of Transportation costs, $45.0 million, over all forecasted acre-feet demands less water taken directly from MWD, to generate the Transportation rate. The proposed CY 2025 Transportation rate is $141 per acre-foot. The fixed component, $30.0 million, will be recovered from the member agencies based on their proportionate share of the seven-year rolling average demands as agreed to by the MARW. Table 20 outlines the calculation of the Transportation fixed charge and volumetric rate for CY 2025.

Table 20 Proposed CY 2025 Transportation Rate (in $ millions)

TRANSPORTATION RATE	
Capital Expenditures (LTD and STD)	$55.95
Equipment Purchase	1.39
O&M + Share of Agency Operating Expenditures	24.79
Additional Expenses	3.30
Gross Revenue Requirements	**$85.43**
Less: Offsetting Revenues	
Capital Related	($10.88)
Operating Related	(31.48)
RR before Coverage	**$43.07**
Coverage + Reserves	$31.93
Total Revenue Requirement	**$75.00**
Transportation Rate, Fixed (40%)	**$30.00**
Variable Component (60%)	**$45.00**
AF Deliveries Subject to Transportation Rate	320,056
Proposed Transportation Rate	**$141.00/AF**

5.3 Permanent Special Agricultural Water Rate Program

In October 2008, faced with a prolonged drought and rising water costs, the MWD Board voted to terminate the Interim Agricultural Water Program (IAWP) through a five-year phase-out of the program ending December 31, 2012. The IAWP was a discounted rate for surplus system supplies available for the purpose of growing agricultural, horticultural, or floricultural products.

In response to MWD's phase-out of IAWP, in October 2008, the Water Authority Board approved the TSAWR and formed a SAWR Board Workgroup to develop a recommended permanent program. In March 2010, the Board approved the Workgroup recommendation for a permanent TSAWR that would begin January 1, 2013, and only include the storage charge exemption.

On April 26, 2012, the Board voted to extend the TSAWR program for two additional years to provide agricultural customers with additional time to transition to the higher cost of water. On March 26, 2015, the Board again voted to extend the TSAWR program through December 31, 2020.

On March 26, 2015, the Board approved the extension of the TSAWR program through December 31, 2021. Based on the FSTF recommendation, in November 2019, the Board directed staff to develop a permanent program in coordination with the CY 2021 Rate Setting Process. Similar to the existing transitional program, the adopted PSAWR Program lower cost continues to recognize the reduced supply reliability. While the adopted rate is defined through the cost-of-service process, the specific program details and eligibility requirements were developed over a near year long process led by Water Resources.

Under the PSAWR program, agricultural users receiving untreated water are charged the MWD Supply Rate. In CY 2025, this rate is $912 per acre-foot. Agricultural users receiving treated water are also charged the MWD untreated rate plus the Water Authority's Melded Treatment Charge, which is proposed at $500 per acre-foot in CY 2025, as shown above. Transportation and customer service-related costs are recovered through each member agency's Transportation and Customer Service rates.

Table 21 summarizes the projected PSAWR sales, rates, and revenues for CY 2025. As shown, total PSAWR sales are projected at 16,658 acre-feet, generating $22.6 million in revenue. For CY 2025, and possibly beyond, it is projected that PSAWR demands will exceed supply purchases from MWD. While the program is defined based on the cost of MWD supply, it does not preclude the Authority from selling this water below cost as the program is based on potential demand restrictions. However, consistent with the Board action adopting the PSAWR program, a 5-year review is required in CY 2026.

Table 21 Proposed CY 2025 PSAWR Rates and Projected Revenue

PSAWR Sales and Revenues	CY 2025 Total
PSAWR Sales (acre-feet)	
Untreated	1,832
Treated	14,826
Total PSAWR Sales	**16,658**
PSAWR Rates ($ per acre-foot)	
Untreated (MWD Supply Rate)	$912
Treated (MWD Supply Rate plus SDCWA Treatment Rate)	$1,412

PSAWR Sales and Revenues	CY 2025 Total
PSAWR Revenues (Millions)	
Untreated	$1.67
Treated	20.93
Total PSAWR Revenues	**$22.60**

5.4 Capacity Charge Update

Section §5.9 of the County Water Authority Act permits the Water Authority to fix and impose capacity charges on each of its member agencies or upon ultimate users of water delivered by the Water Authority to the member agencies. Capacity charges are a one-time payment for new or upsized meters to fund the cost to construct capacity to serve that meter. These capacity charges may include components for water resources, production, storage, distribution, treatment, and financial reserves. However, the Water Authority must demonstrate a reasonable nexus between the amount of the charge and the cost of capacity to serve new development.

Based on the 2018 Capacity Charge Report, Carollo found that the Water Authority's methods for calculating the System Capacity Charge and the Treatment Capacity Charge continue to be consistent with applicable AWWA and industry standards, Board policy, and applicable legal requirements. Consistent with Ordinance 2018-04, Carollo also recommended that, between studies (every three to five years), the Water Authority continue its policy to escalate the implemented charges by an appropriate inflationary metric. The Water Authority has implemented such inflationary adjustments, based on the Engineering News-Record Construction Cost Index (ENR-CCI) index for the City of Los Angeles in each year since the completion of the 2018 Capacity Charge Report.

The change in the ENR-CCI from December 2022 to December 2023 supports a capacity fee increase of 11.66 percent. The CY 2025 system and treatment capacity charges as shown in Table 21.

The Water Authority is currently completing a Facilities Master Plan (FMP) with expected completion in 2025. Once the FMP is complete, the resulting CIP recommendations and growth projections can be incorporated into an updated comprehensive capacity charge analysis to determine charges for CY 2026 or CY 2027, depending upon the completion date of the FMP.

Table 22 Proposed System and Treatment Capacity Charge Update

Calendar Year	System Capacity Charge ($/new MEU)	Treatment Capacity Charge ($/new MEU)
Existing	$5,700	$159
CY 2025[(1)]	**$6,364**	**$178**
Increase	*$664*	*$19*

Notes:
(1) 11.66% increase reflects ENR-CCI for City of Los Angeles for December 2022 of 13665 and for December 2023 of 15258.

Section 6

FINDINGS

Based on the independent review performed for this rate study, Carollo confirms the Water Authority's existing methodology, cost allocations, rate-setting principles, and proposed CY 2025 rates are reasonable and consistent with the AWWA cost of service principles, Board policies, and California legal requirements. Carollo's finding for this study are as follows:

- Beyond the financial measures identified by the Water Authority, revenue adjustments are necessary.
- Multiple years of adjustments are required to fully recover costs and restore financial metrics.
- A combination of revenue adjustments and RSF utilization are necessary to cover the Water Authority's immediate budget requirements.
- The anticipated RSF utilized will result in a balance below the Board targets and trigger the 3-year replenishment policy.
- The Water Authority has significant detail and a sound basis for existing and proposed water rates and charges.
- The resulting cost of service allocations and existing methodology provide a clear, reasonable, and defensible nexus between the cost of service provided and rates charged.
- The Water Authority rate structures effectively and appropriately recover the allocated costs from each member agency.
- The proposed modifications to the various rolling averages and collection of a fixed transportation rate are reasonable and appropriate.
- Board policies and cost of service guidelines are applied alongside industry best practices and AWWA M1 standards, and the rates and charges adhere to the legal requirements as described within this report.
- The existing methodology yields an appropriate and reasonable method for allocating costs, which continues to be sustained despite changes to cost drivers and changes to demands.
- Draws from the RSF are necessary to meet the Board's policy DSCR target of 1.50x. Coverage may be challenged in future years should sales not materialize.
- Inflationary updates, based on ENR-CCI, to the System and Treatment Capacity Charges for CY 2025 are warranted. It is recommended a complete review be provided following the completion of the Facilities Master Plan.