



# Biennial Budget

Fiscal Years  
2024/25 – 2025/26



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**Metropolitan Water District of Southern California  
California**

For the Biennium Beginning

**July 01, 2022**

*Christopher P. Morill*

Executive Director



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# MWD AT A GLANCE

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## ORGANIZATION

**Authority:** The Metropolitan Water District Act (California Statutes 1927).

**Incorporated:** Dec. 6, 1928.

**First Board Meeting:** Dec. 29, 1928.

**Mission:** To provide Metropolitan's service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

**Imported Water Sources:** Colorado River and California State Water Project.

**Service Area:** About 5,200 square miles in Los Angeles, Orange, San Diego, Riverside, San Bernardino and Ventura counties.

**Population Served:** Approximately 19 million.

**Member Agencies:** 26.

**Founding Cities (December 1928):** Anaheim, Beverly Hills, Burbank, Colton\*, Glendale, Los Angeles, Pasadena, San Bernardino\*, San Marino, Santa Ana and Santa Monica.  
\* Withdrew in 1931.

**Subsequent Member Agency Cities:** Cities of Fullerton (joined 1931), Long Beach (1931), Torrance (1931), Compton (1931), and San Fernando (1971).

**Municipal Water Districts:** West Basin MWD (1948), Inland Empire Utilities Agency (1950), Three Valleys MWD (1950), Eastern MWD (1951), MWD of Orange County (1951), Foothill MWD (1953), Central Basin MWD (1954), Western MWD (1954), Calleguas MWD (1960), Las Virgenes MWD (1960), and Upper San Gabriel Valley MWD (1963), **County Water Authority:** San Diego (1946).

## GOVERNANCE

**Board of Directors:** 38. Each member agency is entitled to at least one director; additional directors are based on the agency's assessed valuation. Board meetings are generally held on the second Tuesday of each month. Check [www.mwdh2o.com](http://www.mwdh2o.com) for meeting times and agendas.

## FACILITIES

**Colorado River Aqueduct:** 242 miles from Lake Havasu to Lake Mathews, Riverside.

**Construction:** Began 1933, completed 1939; CRA and regional distribution system operational 1941.

**Capacity:** 1.3 million acre-feet<sup>†</sup> annually.

**Pumping Plants (east to west):** Whitsett Intake (lift 291 ft.); Gene (303 ft.); Iron Mountain (144 ft.); Eagle Mountain (438 ft.); Julian Hinds (441 ft.); Total lift 1,617 feet.

**Siphons:** 144, totaling 29 miles.

**Tunnels:** 29, totaling 92 miles.

**Canals:** 63 miles.

**Conduits and Pipeline:** 58 miles.

**Design Capacity:** 1,605 cubic feet per second.

**Water Treatment Plants:** Joseph Jensen, Granada Hills (capacity 750 million gallons per day); Robert A. Skinner, Winchester (350 mgd); F.E. Weymouth, La Verne (520 mgd); Robert B. Diemer, Yorba Linda (520 mgd); and Henry J. Mills, Riverside (220 mgd)

**Reservoirs:** Diamond Valley Lake, Hemet, capacity 810,000 AF; Lake Mathews, Riverside, 182,000 AF; Lake Skinner, Winchester, 44,000 AF; Copper Basin, Gene, 24,200 AF; Gene Wash, Gene, 6,300 AF; Live Oak, La Verne, 2,500 AF; Garvey, Monterey Park, 1,600 AF; Palos Verdes, Rolling Hills, 1,100 AF; and Orange County, Brea, 212 AF.

**Total Reservoir Storage Capacity:** 1,072,000 AF

**Distribution System:** 830 miles of pipelines and tunnels; about 400 connections to member agencies.

**Hydroelectric Plants:** 15; nameplate capacity 130 megawatts.

**State Water Project:** Metropolitan participates in the State Water Project, with rights to use the facilities and an allocation for water.

## SUPPLY, DELIVERIES AND WATER TRANSACTIONS

**Average Daily Delivery:** 4,000 AF (5-year avg. calendar years 2019 to 2023)

**Record Daily Delivery:** 9,872 AF on June 28, 1994.

**Record Annual Water Transactions:** 2.5 million AF in 1990.

**Unit Price (full service):** Effective Jan. 1, 2024, rates are \$1,256 per AF for treated water, and \$903 per AF for untreated water. Effective Jan. 1, 2025, rates are \$1,395 per AF (treated) and \$912 per AF (untreated), and effective Jan. 1, 2026, rates are \$1,528 per AF (treated) and \$984 per AF (untreated).

**Budgeted Water Transactions Assumption:** 1.34 MAF for CY 2024/25 and 1.34 MAF in CY 2025/26.

## FINANCE AND ADMINISTRATION

**Water Revenue Bond Ratings:** Standard & Poor's AAA; Moody's Aa1; Fitch AA+.

**Budget:** July 1, 2024 – June 30, 2025: \$2,386 billion  
July 1, 2025 – June 30, 2026: \$2,397 billion

**Capital Projects:** \$312 million (FY 2024/25)  
\$324 million (FY 2025/26)

**Employees:** 1,965 budgeted regular employees FY 2024/25 (full-time equivalent positions); 1,965 employees (FTEs) FY 2025/26

**Fund Sources:** Water rates and charges, 66%; fund withdrawals, 11%; taxes, 13%; hydroelectric sales and miscellaneous income, 2%; other, 9% (Biennial Budget FY 2024/25, FY 2025/26).

**Uses of Funds:** State Water project payments, 26%; operations & maintenance, 26%; debt service, 13%; construction, 15%; fund deposits, 11%; demand management programs, 2%; supply programs, 3%; and Colorado River power, 3%; other, 0% (Biennial Budget FY 2024/25, FY 2025/26).

<sup>†</sup>Acre-foot=325,851.4 gallons

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# GENERAL MANAGER'S TRANSMITTAL LETTER

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July 2024

Metropolitan is pleased to present the adopted fiscal year (FY) 2024/25 and FY 2025/26 Biennial Budget and associated Ten-Year Financial Forecast.

The last biennial budget occurred on the heels of a worldwide pandemic and amid a protracted drought, and this budget comes about during a transformational period when critical investments are being studied to address water supply volatility driven by climate change. Extreme weather conditions in recent years have presented Southern Californians with an unsettling preview of the challenges ahead. To ensure the continued reliability of water supplies for the communities we serve, Metropolitan is developing a Climate Adaptation Master Plan for Water (CAMP4W) that will provide a framework to guide future capital investments as we adapt to our new climate reality in the years and decades ahead. In concert with the development of the CAMP4W, Metropolitan's Board has embarked on a process to review and update Metropolitan's business model, one that currently relies heavily on variable revenue streams, which challenges the district's financial stability during periods of low water sales.

These strategic planning processes began during the current biennium, and as they are completed, future biennial budgets will need to align with the priorities and direction adopted by the Board through the CAMP4W process, the adoption of business model adjustments, and the long-term financial plan. Notably, the biennial budget for FY 2024/25 and FY 2025/26 does not presume or budget for large infrastructure development projects being reviewed and evaluated, such as Pure Water Southern California or East-West conveyance.

On February 12, 2024, staff presented the Proposed Biennial Budget to the Finance, Audit, Insurance, and Real Property (FAIRP) Committee, including the proposed rates and charges for CYs 2025 and 2026, the cost of service (COS) report, Capital Investment Plan (CIP), and Ten-Year Forecast. The original revenue requirements for FYs 2024/25 and 2025/26, which are derived from the Biennial Budget and offset by other revenues, such as property taxes, investment income, and other miscellaneous income, led to overall rate increases of 13 percent in CY 2025 and 8 percent in CY 2026. Based on Board feedback, staff prepared budget and rate alternatives that also included different assumptions for property taxes, water transactions, supplemental revenue, and operating and maintenance (O&M) expenditures.

The Finance and Asset Management (FAM) Committee (formerly FAIRP) held a total of four workshops that focused on budget analyses, the development of the CIP, staff responses to Board questions, and multiple proposed rate alternatives. Additionally, staff presented the proposed budget and rate alternatives to the member agencies and their respective managers at meetings held at Metropolitan and at member agency locations. While the four workshops were public meetings open to public comment, the Board also held a public hearing on March 12, 2024, for the public to provide comments on the proposed budget, rates, and charges.

Through these actions, staff sought to provide a balanced and fiscally responsible budget that meets the region's challenges and allows Metropolitan to deliver the services necessary to ensure safe and reliable water supplies. Realizing and appreciating the impact of rate increases, staff sought to balance reduced expenditures, reduced water transactions, and increased revenues outside of rates, while providing stable funding. After an extensive and transparent budget process, the Board was presented with three budget and rate options for consideration, all of which include, as directed by the Board:

- Decrease planned water transactions.
- Make additional cuts to expenditures.
- Commit to discuss the treatment surcharge in the upcoming business model review process.
- Continue conservation funding.



- Take steps to fully recover Metropolitan’s revenue requirements.
- Offer a range of possible increases in the ad valorem tax rate.
- Pursue new revenues through management of stored water.

On April 9, 2024, Metropolitan Water District’s Board of Directors voted to adopt a two-year budget that will allow the agency to continue delivering safe, reliable water supplies to Southern California, while managing challenges brought by climate change and rising costs due to inflation. To ensure the continued sustainability of Metropolitan’s water system, the \$2.4 billion (B) annual budget includes water rate increases of 8.5 percent on Jan. 1, 2025, and 8.5 percent on Jan. 1, 2026, and included an increase in the voter-approved Ad Valorem (AV) property tax rate. To avoid raising rates further, the budget also includes significant cost containment measures, including reducing departmental expenditures across various categories. In addition, Metropolitan is pursuing additional revenues through state and federal grants and new miscellaneous revenues through management of stored water to help shore up our financial reserves.

Detailed information, including the budget, rates, and charges, cost of service analysis, and cost of service report, was made available to the public on our website during the process and was considered by the Board and the FAM (formerly FAIRP) Committee and member agencies. In addition, Metropolitan received written communications from numerous individuals and organizations, as well as public comments at its meetings and workshops.

## BIENNIAL BUDGET

The adopted budget appropriates \$2.39B for FY 2024/25 and \$2.40B for FY 2025/26, requiring revenue from rates and charges of \$1.55B and \$1.69B in each year, respectively. The budget appropriations represent the total anticipated costs, while revenue requirements represent the amount to be recovered from rates and charges, after the application of property taxes, investment income, and other sources of revenue. The adopted budget funds the expenses necessary to support Metropolitan’s core mission during a transformational period when critical investments are being planned to address water supply volatility driven by climate change.

The adopted budget includes strategic investments in critical areas of the organization, including Metropolitan’s apprenticeship training program, which adds workforce capacity to operations; Capital Investment Plan (CIP) infrastructure improvements and upgrades; and 19 new positions to support critical functions, including Equal Employment Opportunity (EEO), the Office of Sustainability, Resilience, and Innovation (SRI), cybersecurity and grants management. Our workforce development efforts are focused on building a robust, qualified, diverse pipeline of talent to ensure a water workforce that can meet current and future needs for Metropolitan and beyond. Towards that end, the adopted budget fully funds the Apprenticeship Program, which has been revamped for the upcoming biennium budget by allowing Integrated Operations Planning and Support Services to hire apprentices without using vacancy savings which tied up positions in the past. The apprenticeship program provides the critical training and ramp-up needed in the face of an ever-changing workforce.

In response to Metropolitan’s current financial circumstances, staff has taken a prudent approach to reduce expenditures and control rate increases needed to fund operations in fiscal years 2024/25 and FY 2025/26. Highlights of cost saving measures include: (1) not fully funding departmental budget requests, and (2) proactive actions taken by Metropolitan to generate new revenues (i.e., grants) or realize cost savings. Rising commodity prices, energy costs, personnel costs, including pension and medical care, and aging infrastructure are consistent with trends across the industry and require increases in water rates and charges to maintain operational integrity. Facing historic inflation pressures, the need to maintain critical infrastructure, and the impacts of increasingly extreme climate conditions, Metropolitan has drawn upon financial reserves to keep rate increases as low as possible. However, the lack of revenues from water sales due to drought conditions, and recent record precipitation prevents Metropolitan from continuing to rely on reserves otherwise used to buffer such revenue losses. To maintain minimum levels of reserve funding – which are necessary for emergencies as well as to maintain debt capacity and affordability – it was imperative to increase revenue.

The Board approved the FY 2024/25 and FY 2025/26 Biennial Budget and water rates and charges on April 9, 2024, and authorized the following actions as summarized in Table 1:

- Appropriate \$3.45B for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct (CRA), State Water Contract (SWC) operations, maintenance, power, and replacement costs, and SWC capital charges, demand management programs including the local resources and conservation program, and costs associated with supply programs, for FYs 2024/25 and 2025/26;
- Appropriate as a continuing appropriation, \$693.9 million for (FY 2024/25 and FY 2025/26) debt service on Metropolitan general obligation and revenue bonds;
- Bond financing \$129.6 million of the budgeted Supply Program expenditures over the biennium and \$48.2 million of the budgeted Conservation Program expenditures over the biennium;
- Authorize the use of \$350.0 million in operating revenues to fund the PAY-GO Capital Investment for FY 2024/25 and FY 2025/26; the appropriation of \$636.5 million to fund the CIP for FY 2024/25 and FY 2025/26 was approved by the Board on April 9, 2024; and,
- Adopt an overall rate increase of 8.5 percent effective January 1, 2024, and an additional 8.5 percent increase effective January 1, 2025.

Table 1: FY 2024/25 and FY 2025/26 Operating and Capital Appropriations, \$ millions

<b>Adopted Budget</b>	<b>FY 2024/25</b>	<b>FY 2025/26</b>	<b>Total Biennium</b>
Operating Budget	\$1,619.3	\$1,656.1	\$3,275.4
Debt Service	340.4	353.5	693.9
Capital Investments*	426.6	387.7	814.3
<b>Grand Total</b>	<b>\$2,386.3</b>	<b>\$2,397.3</b>	<b>\$4,783.6</b>

\*Capital Investments include debt financed Supply and Conservation Programs.

The adopted budget continues to fund the Board’s key priorities, including:

- Departmental labor budgets reflect negotiated wage increases and allowable merit adjustments, as well as increased benefit costs for pensions, active medical, other post-employment benefits, and the addition of 19 new essential staffing positions.
- Capital Investment Plan spending is projected to be \$636.5 million for the biennial period. The CIP Appendix in the budget book includes a ten-year outlook, along with program and project details for the biennium.
- The budget includes Board-approved Delta Conveyance Project (DCP) planning costs of \$11.6 million in FY 2024/25 but does not assume any additional funding beyond the Board-approved appropriations.
- The budget includes continued support for demand management programs, including an increase in funding for the Conservation Program to \$54.1 million and \$44.2 million in FY 2024/25 and 2025/26, respectively. To minimize short-term rate impacts, staff proposes to fund \$25 million per year on a PAYGO basis and bond finance the remaining \$48.2 million over the biennium. If Metropolitan’s financial condition improves, staff may decide not to issue bonds and opt to use cash for all conservation expenditures. The Board authorization to issue bonds maintains financial flexibility for Metropolitan’s financial planning. Metropolitan has been awarded over \$40 million in recent conservation grants and continues to pursue other grant opportunities. Most of these grants require 50 percent matching funds, which is the primary reason for the conservation budget increase.

- The budget assumes funding provided by the federal Inflation Reduction Act for conservation agreements in California. The funding aims to reduce water demand on the Colorado River and leave water in Lake Mead as system water to help the reservoir from dipping to critically low levels. The budget includes \$47.3 million annually for FY 2023/24 through 2025/26 to offset Palo Verde Irrigation District and Bard Water District following program costs in the respective fiscal years.
- Metropolitan has a revenue charge coverage policy target of 2.0 times to help ensure Metropolitan has sufficient annual operating revenues to pay its operating expenses and meet its debt service obligations on its revenue bonds and other senior debt. Metropolitan is not projected to achieve its revenue bond target during the biennium but is projected to be close at 1.9 times by the second year of the budget.

## Water Transactions

Given recent trends in water transactions and Metropolitan's susceptibility to revenue volatility arising from a rate structure that predominantly generates revenue from volumetric rates, directors requested budget options that reflect a more conservative transactions projection. The selection of a demand forecast requires a trade-off between rate increases and risk to reserves. At the March 26, 2024 Budget Workshop, the Board consensus was to only consider rate options that are based on 1.34 million acre feet (MAF), a 100 thousand acre feet (TAF) reduction from the originally proposed budget. The impact of this Board guidance is significant and supports financial stability. A lower water transaction forecast increases the likelihood that revenues will come in at or above the budget, increases the likelihood that cash reserves will be at or above target levels, moderates downside risk from lower than expected water transactions, demonstrates commitment to financial stability to rating agencies, and reduces the likelihood of an emergency rate increase.

## Ad Valorem (AV) Property Tax

The board-approved budget assumes an AV tax rate increase from .0035 percent to .007 percent. Metropolitan has the statutory authority to levy property taxes to pay its expenses pursuant to the Metropolitan Water District Act (MWD Act). MWD Act, § 124. Since its creation, voters in Metropolitan's service area have approved the use of property taxes to pay for Metropolitan's major system investments and improvements, including for the Colorado River Aqueduct (CRA), other improvements, and for Metropolitan's participation in the State Water Project (SWP). More recently in Metropolitan's history, Section 124.5 of the MWD Act was enacted to limit Metropolitan's ad valorem property taxes unless the Board of Directors determines that it is essential to Metropolitan's fiscal integrity to collect property taxes in excess of that limit. Based on a comprehensive analysis, this Board determined on April 12, 2022, that it is essential to Metropolitan's fiscal integrity to collect State Water Project ad valorem property taxes (SWP AV taxes) in fiscal years 2022/23 through 2025/26 (June 30, 2026) in excess of the Section 124.5 limit.

Section 124.5 limits property taxes to the amount needed to pay: (1) Metropolitan's general obligation bonded indebtedness (GO bonds), and (2) Metropolitan's portion of bonds used to finance the construction of SWP facilities for the benefit of Metropolitan (Burns-Porter bonds). However, the Section also provides that "the restrictions contained in this Section do not apply if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district," and written notice is provided to the Legislature in the manner specified therein. The Section 124.5 limitation, if applicable, does not affect the collection of property taxes to pay Metropolitan's general obligation bonds. If applicable, the Section does limit collection of property taxes to pay Metropolitan's SWC obligations for the SWP. Since FY 2013/14, the Board has determined that it was essential to Metropolitan's fiscal integrity to collect property tax revenues in excess of the Section 124.5 limit and has maintained the current 0.0035 percent property tax rate to ensure payment of the SWC obligations in excess of the statutory limit. The rate of 0.0035 percent was the lowest property tax rate ever collected by Metropolitan.



## Treatment Surcharge Considerations

During the budget review process, several member agencies expressed concerns about the increases in the Water Treatment Surcharge (TS). The TS is a system-wide volumetric rate element charged on water treated by Metropolitan. The TS recovers the cost of treating water, including commodity, demand, and standby-related costs as determined in the COS for all five treatment plants. The Board directed staff to work with member agency staff and the CAMP4W Task Force to understand and analyze the treatment surcharge and specifically address issues that arise from that analysis including but not limited to modifying the way the charge is calculated. A final method will be prioritized as part of the new business model discussion and recommended for adoption as soon as possible thereafter but no later than approval of the new business model.

## Revenue Opportunities Given Record Storage

In part due to a long-standing and successful conservation program, Metropolitan water storage has hit an all-time high of 3.4 MAF. This water will increase system reliability in preparation for the next drought. Metropolitan is also pursuing new revenues through management of stored water to help shore up our financial reserves. For example, preliminary discussions for generating revenues from stored water in the Colorado River system are ongoing; however, staff believes the \$60 million per year revenue assumption over the biennium is reasonable considering recent actions that have produced net revenues under similar, albeit not exact, circumstances.

## Additional Expenditure Reductions in FY 2024/25 and FY 2025/26

The adopted budget includes \$18 million per year expenditure reductions, where possible, in FY 2024/25 and FY 2025/26. These reductions will be prioritized to minimize the impact on Metropolitan's core mission of providing high-quality water to its member agencies.

## TEN-YEAR FINANCIAL FORECAST

The Biennial Budget establishes the foundation for a 10-year forecast of water transactions, expenditures, revenues, projected rate increases, and financial indicators. Incorporating a 10-year forecast within the biennial budget process helps ensure the long-range financial plan is regularly updated every two years to reflect any changes in underlying assumptions and/or financial policies. This approach is well suited to the dynamic operating environment of Metropolitan.

In response to requests from member agencies, included below are tables and charts presenting the 10-Year Financial Forecast under two different scenarios – one with the full-scale Pure Water Southern California (PWSC) project and one without the full-scale PWSC project. Figure 1 reflects the addition of PWSC, which is assumed—for this financial forecasting purpose—to begin construction in FY 2026/27 and affect the 2027 to 2034 rates and charges. The allocation of the PWSC costs to the rates and charges is based on preliminary information and might substantially change as a result of ongoing discussions on how to recover the project costs, Metropolitan's business model discussions, and updated project cost estimates. In addition, the 10-year Financial Forecast does not include funding for any other large projects that will be considered in the Climate Adaptation Master Plan for Water process like Sites Reservoir, Regional Conveyance, or the Delta Conveyance Project. Figure 2 reflects the financial forecast without the full-scale PWSC project. It was noted during the workshops that even if PWSC does not advance to full construction, for the sake of long-term rate and financial projections, it is reasonable to expect that other significant investments would need to be made to achieve additional supplies in lieu of PWSC.

Key financial indicators of the 10-Year Financial Forecast are summarized in Figure 1.

Figure 1: Projected Rate Increases, Reserves, and Financial Indicators **with** PWSC

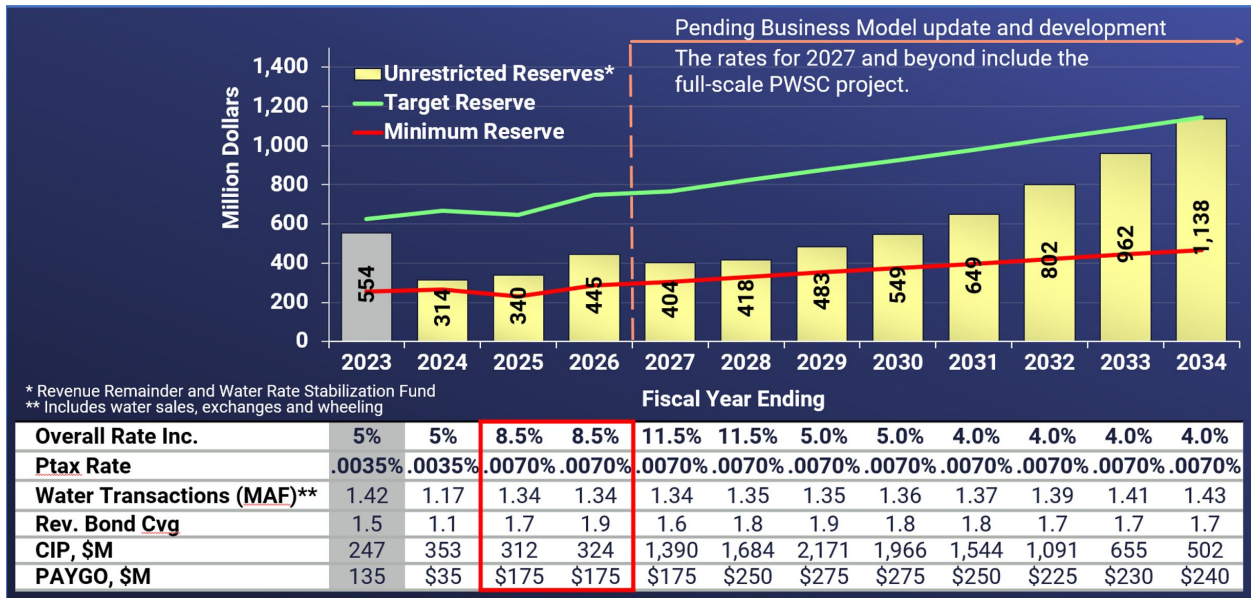
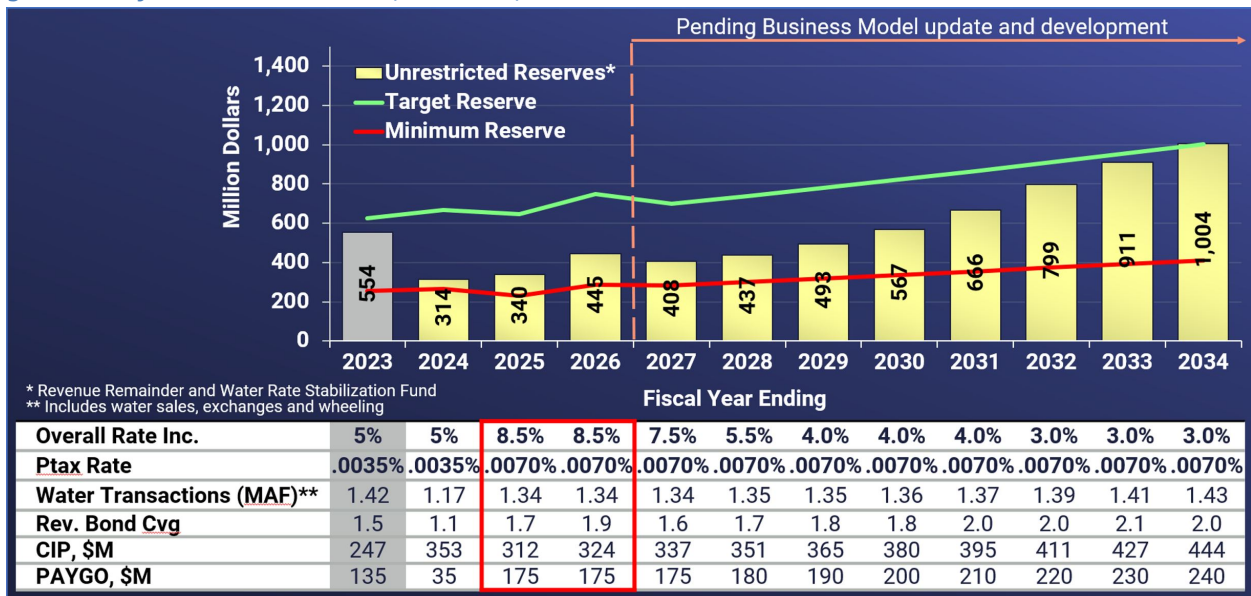


Figure 2: Projected Rate Increases, Reserves, and Financial Indicators **without** PWSC



Both 10-Year Financial Forecast scenarios assume the following:

- Water transactions are forecasted to climb gradually over the forecast period, from 1.34 FY 2024/25 to 1.43 MAF in FY 2033/34;
- As part of the rate mitigation measures adopted by the Board, the forecast assumes that Metropolitan will generate \$20 million annually from grants through FY 2033/34, in addition to the \$47.3 million per year of IRA Bucket 1 funding and \$60 million per year of miscellaneous revenue in the biennium;
- Demand management and local supply programs continue to be funded to reduce the need to transport water into the Metropolitan service area, to maintain capacity within Metropolitan’s distribution system, and help Metropolitan’s member agencies and their retail water subagencies achieve water use efficiency targets in compliance with state policy; and

- No funding of any other large projects like Sites Reservoir, East-West Conveyance, or the Delta Conveyance Project are included in the forecasts.

Additional detail is contained in the 10-Year Financial Forecast section of this Biennial Budget Document.

## RESERVES

Fund balances are budgeted to be \$1.2B on June 30, 2025. Of that total, \$894.5 million is restricted by bond covenants, contracts, or board policy, and \$339.8 million is unrestricted. Fund balances are budgeted to be \$1.3B on June 30, 2026. Of that total, \$859.7 million is restricted by bond covenants, contracts, or board policy, and \$445.4 million is unrestricted.

On June 30, 2025, the targets for the minimum and target reserve funds are estimated to be \$228.8 million and \$644.6 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the Water Rate Stabilization Fund (WRSF) and Revenue Remainder Fund will total about \$339.8 million, about \$111 million over the minimum level.

On June 30, 2026, the targets for the minimum and target reserve funds are estimated to be \$285.9 million and \$749.8 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$445.4 million, about \$159.5 million over the minimum level.

## LOOKING FORWARD

During the Biennial Budget period, Metropolitan will be continuing the CAMP4W process, reviewing Metropolitan's business model, and identifying critical adaptations to ensure system resiliency. The Biennial Budget funds the expenditures necessary to Metropolitan operations, and, as these key processes are completed, future biennial budgets will reflect the priorities and directions the Board adopts. Currently, the budget strikes a balance between funding Metropolitan's current strategic priorities, addressing variable water supply conditions, maintaining financial robustness, and moderating rate impacts.

We look forward to working with the Board to prudently manage Metropolitan's financial health to support Metropolitan's mission of delivering reliable, high-quality water now and into the future in an environmentally and economically responsible way.



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Deven Upadhyay

Interim General Manager



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Katano Kasaine

Assistant General Manager/  
Chief Financial Officer



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# DISTRICT OVERVIEW

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## District Profile

The Metropolitan Water District of Southern California (Metropolitan) is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (the Act)). Metropolitan has 26 member public agencies and its primary purpose is to provide its members with a reliable wholesale water supply service for domestic and municipal uses. To do so, Metropolitan imports water from the Colorado River and Northern California. Metropolitan also has water resource management projects and programs in partnership with its member agencies to develop or increase water conservation, recycling, storage and other local resource programs.

Metropolitan is authorized to develop, store, and distribute water for domestic and municipal purposes and other beneficial uses if excess water is available, and may provide, generate, and deliver electric power within or outside the state for the purpose of developing, storing, and distributing water. All powers, privileges and duties vested in or imposed upon Metropolitan are exercised and performed by and through its Board of Directors. Metropolitan is governed by a 38-member Board of Directors representing the 26 member agencies. Metropolitan directors are selected by their respective member agencies and some of those directors also serve on the governing body of their member agency. Board and committee meetings are open to the public and are broadcast on the Internet through Metropolitan's website, [www.mwdh2o.com](http://www.mwdh2o.com). During the COVID-19 pandemic, the Board and its committees met virtually and made virtual participation, observation, viewing, and listening options available to the public meetings. Metropolitan continues to make those options available to the public after the pandemic. A schedule of Board and committee meetings, as well as current and archived Board materials, is available at the same website.

Metropolitan was established to obtain an allotment of Colorado River water and to construct and operate the 242-mile Colorado River Aqueduct (CRA), which runs from an intake at Lake Havasu on the California-Arizona border, to an endpoint at Metropolitan's Lake Mathews reservoir in Riverside County. Metropolitan owns and operates an extensive portfolio of capital facilities including the CRA, 16 hydroelectric facilities, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants.

In 1960, Metropolitan, followed by other public agencies, signed a long-term contract with the state Department of Water Resources (DWR) to participate in the State Water Project (SWP) following the approval of voters within its service area. The SWP is the largest state-built, user-financed water supply and transportation project in the country. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement (OMP&R) costs of the SWP, as the State Water Contracts are the basis for all SWP construction and ongoing operations and DWR manages and operates the SWP. As the largest of the now 29 contractors, Metropolitan is entitled to slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California.

To secure additional supplies, Metropolitan also has groundwater banking partnerships and water transfer arrangements within and outside of its service area. Metropolitan also provides financial incentives to its member agencies for local investments in water management projects and programs. An increasing percentage of Southern California's water supply comes from these local resources, including conservation, water recycling and recovered groundwater.

To pay for its costs, the Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates for services; collect charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

## Mission

The mission of Metropolitan is to provide its 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

## Vision

Metropolitan's Vision is to be the industry leader in water delivery with unparalleled commitment to our people, partners and planet with no one left behind.

## Values

Metropolitan's Values are:

- Safety - Promote physical and psychological well-being of people
- Trust - Act in ways that demonstrate integrity and build genuine connection
- Accountability - Deliver solutions and drive shared success
- Respect - Treat others as they would want to be treated and be a good steward of the planet
- Teamwork - Think "we over me"

## Metropolitan Service Area

Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies. Historically, Metropolitan has provided between 40 and 60 percent of the water used annually within its service area.

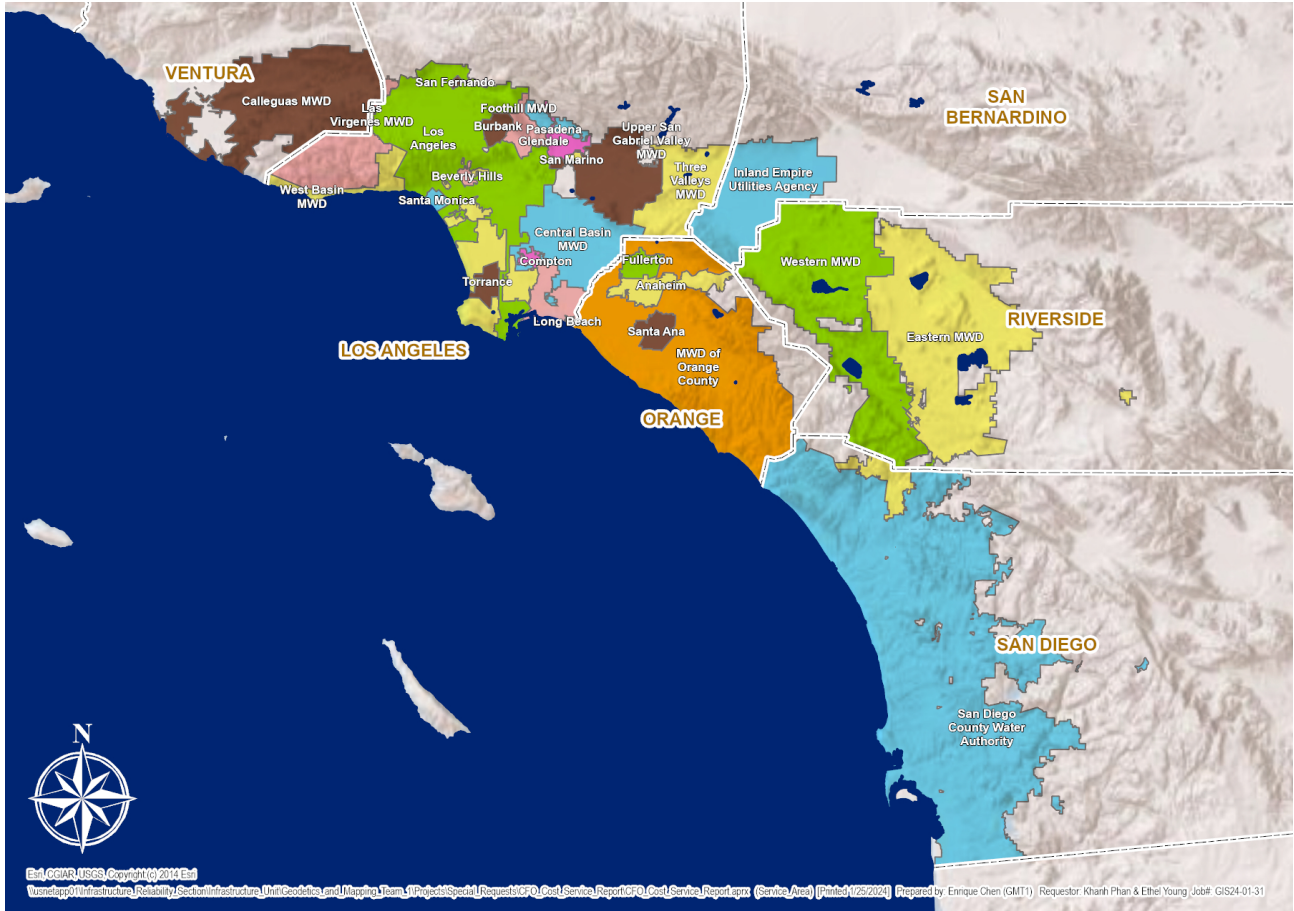
The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California. Metropolitan estimates that approximately 18.6 million people lived in the service area in 2022, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG). Since 2020, the region has experienced a 1.1 percent loss in population due mostly to housing shortages and high cost of living throughout Southern California. Recent population projections were prepared by the Center for Continuing Study of the California Economy (CCSCE) in 2020, which were based on SCAG studies and used as the base data for the development of population for Metropolitan's 2020 Integrated Water Resources Plan's planning scenarios. CCSCE projected approximately 12 percent growth from 2019 (18.8 million) to 2035 (21.1 million). CCSCE's projection is consistent with the Census Bureau's national baseline projections, extrapolated for Metropolitan's service area.

The economy of Metropolitan's service area is exceptionally diverse. In 2022, the economy of the Six County Area was larger than all but thirteen nations of the world. The Six County Area economy ranked between South Korea (\$1.67 trillion) and Mexico (\$1.4 trillion), with an estimated gross domestic product ("GDP") of \$1.57 trillion. The Six County Area's gross domestic product in 2022 was larger than all U.S. states except California, Texas and New York.

The climate in Metropolitan’s service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Since 2000, annual rainfall has ranged from approximately 4 to 21 inches along the coastal area, 6 to 38 inches in foothill areas and 5 to 22 inches inland areas.

### Service Area Map

The map below shows the area served by Metropolitan. It includes parts of six of the ten counties that comprise Southern California (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all of the area within each of the six counties.



### Summary of Recent Trends and Outlook for the Six County Area Economy

The national economy posted job growth through 2023 and continuing through February 2024. At the same time, consumer price increases slowed in 2023 while increasing a bit in the first two months of 2024 indicating that inflation was still a concern. The national unemployment rate rose to 3.9% in February 2024 but has remained below 4% for 25 consecutive months.

The federal funds rate remained at the range of 5.25%-5.50% in the Federal Reserve Bank meeting in March 2024 unchanged since the July 2023 meeting. The Bank announced that future rate cuts would depend on continued declines in the inflation rate. The March 2024 UCLA Anderson School (“UCLA”) economic forecast has the federal funds rate falling toward the end of 2024 and averaging 4.4% in 2025 and 2026.



While the job and inflation data have been positive in recent months, national and world threats remain. Conflicts in Ukraine and Gaza continue and Congress has not reached a long-term decision on the budget or federal debt limit or border policies and funding of Ukraine and Israel.

Six County Area job growth slowed in 2023 largely as a result of the actors and writers strikes and declines in port activity in the middle of the year. Monthly job gains have returned since the low in July 2023. Modest gains are expected in 2024 and beyond as shown in the UCLA forecast. Six County Area unemployment rates increased in 2023 and are expected to increase again in 2024 before declining in 2025 and 2026 and then matching the national unemployment rate.

The UCLA economic forecast released on March 13, 2024 shows the State underperforming the nation in 2023 and 2024 and outperforming the nation in 2025 and 2026. The UCLA forecast no longer anticipates a recession during the forecast period. Job growth in California is forecast at 1.4% in 2024 compared to 1.5% for the nation but the State is forecast for much higher job growth compared to the nation in 2025 (1.7% vs 1.1%) and 2026 (1.2% vs 0.6%). UCLA forecasts continued growth in tech jobs and a rebound in port and Hollywood related jobs

The Six County Area has outpaced the nation in nonfarm wage and salary job growth since 2000. The Six County Area job growth outpaces the nation in periods of economic growth such as the 2015 through 2019 period and 2022. The Six County Area lags the nation in job growth during recession periods such as the 2007 through 2010 period and 2020. Recent growth forecasts through 2050 from the Southern California Association of Governments (“SCAG”) and the San Diego Association of Governments (“SANDAG”) have job growth in the Six County Area slightly outpacing the nation during this timeframe.

The Six County Area economy maintains several areas of long-term economic strength and competitive advantage. One area of strength is the connection to Pacific Rim trade and tourism. Though trade volumes fell in 2023, the causes of the decline have been resolved and trade volumes are growing again and have supported long-term job growth in warehousing, wholesale trade and trucking. The Los Angeles region accounted for a record \$24.1 billion in new venture capital (“VC”) funding in 2021 supporting a growing tech sector. VC funding declined temporarily in the nation and Six County Area in 2023. The VC funding and growth in the life sciences sector in San Diego County is expected to provide new jobs in professional and information services and manufacturing.

Tourism has benefited from the Six County Area’s Pacific Rim location and continuing expansion and renovation in the Area’s leading tourist sites. Air travel in 2023 and the first 2 months of 2024 in the Six County Area was growing but still below pre-pandemic highs. All of the major airports in the Six County Area have expanded capacity and airport access in anticipation of long-term growth. The elimination of restrictions on international travel and the opening to travel to and from China has started to boost international and total air travel.

Annual population growth slowed more to an average of 92,600 between 2010 and 2020 according to the revised California Department of Finance (“DOF”) estimates, and growth turned negative in 2021, 2022 and 2023 as birth and immigration levels fell, deaths increased from the COVID-19 pandemic, and out-migration increased. The Six County Area had 21.7 million residents in 2023, approximately 56% of the State’s population. Population growth is projected to resume with a return to higher immigration though the extent of growth will depend on success in increasing housing as described below.

In response to the rising home prices and shortage of new housing units, the State legislature has passed legislation and financial assistance to expand the housing supply statewide. In addition, the California Department of Housing and Community Development gave SCAG and SANDAG goals to substantially increase annual housing construction. The amount of success in meeting these housing goals will affect the rate of future growth in the Six County Area and is one of the long-term risks for the Six County Area economy.

For more demographic and economic information for Metropolitan’s service area or the Six County Area, please refer to the Service Area Economy section, which includes information on:

- Job growth trends
- Construction activity
- Housing trends
- Assessed valuation
- International Trade
- Income & Wages
- Population
- Economic structure and long term prospects

## Strategic Priorities

The General Manager submits to the Board of Directors an annual business plan containing the General Manager's key priorities for the coming year.

Five strategic priorities support Metropolitan's mission for fiscal years 2024/25 and 2025/26, focusing on areas of change and opportunity that will strengthen the organization and its readiness for coming century.:

**Strategic Priority #1:** Empower the Workforce and Promote Diversity, Equity and Inclusion

**Strategic Priority #2:** Sustain Metropolitan's Mission with a Strengthened Business Model

**Strategic Priority #3:** Adapt to Changing Climate and Water Resources

**Strategic Priority #4:** Protect Public Health, the Regional Economy, and Metropolitan's Assets

**Strategic Priority #5:** Partner with Interested Parties and the Communities We Serve

For more detail on the General Manager's strategic priorities, please refer to the Board Report of August 22, 2023 located on Metropolitan's website at <https://mwdh2o.legistar.com/View.ashx?M=F&ID=12232583&GUID=51CCBF2D-F065-4165-84D2-305A53ACFEA3>

The General Counsel, General Auditor and Ethics Officer also submit to the Board of Directors business plans containing their respective department's key priorities for the coming year.

## Performance Indicators

Metropolitan has developed a series of key performance indicators (KPIs) that are used to measure and evaluate mission-critical processes as well as support internal decision making. These KPIs include financial, water quality, human resource, legislative, operational, outreach, and other measures that are closely aligned with Metropolitan's business plans, key priorities and objectives.

Please see the Operating Expenditures section for Metropolitan's performance measures including fiscal year results and targets.

# Organization Structure

## Member Agencies

The following table lists the 26 member agencies of Metropolitan which include 11 municipal water districts, 14 cities and one county water authority.

Municipal Water Districts	Cities	County Water Authority
Calleguas	Anaheim	San Diego
Central Basin	Beverly Hills	
Eastern	Burbank	
Foothill	Compton	
Inland Empire Utilities Agency	Fullerton	
Upper San Gabriel Valley	Glendale	
Western of Riverside County	Long Beach	
Las Virgenes	Los Angeles	
Orange County	Pasadena	
Three Valleys	San Fernando	
West Basin	San Marino	
	Santa Ana	
	Santa Monica	
	Torrance	

## Board of Directors

Metropolitan is governed by a 38-member Board of Directors (Board), made up of representatives from all of Metropolitan's member agencies. Each member agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member agency. Accordingly, the Board may, from time to time, have more than 38 directors. There are also limits on reductions in the number of directors. Changes in relative assessed valuation do not terminate any director's term. Additionally, as a result of California Assembly Bill 1220 (Garcia) enacted in 2019, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019."

The Board includes business, professional, and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the Administrative Code), which the Board adopted in 1977. The Board periodically amends the Administrative Code to reflect new policies or changes in existing policies that occur from time to time.

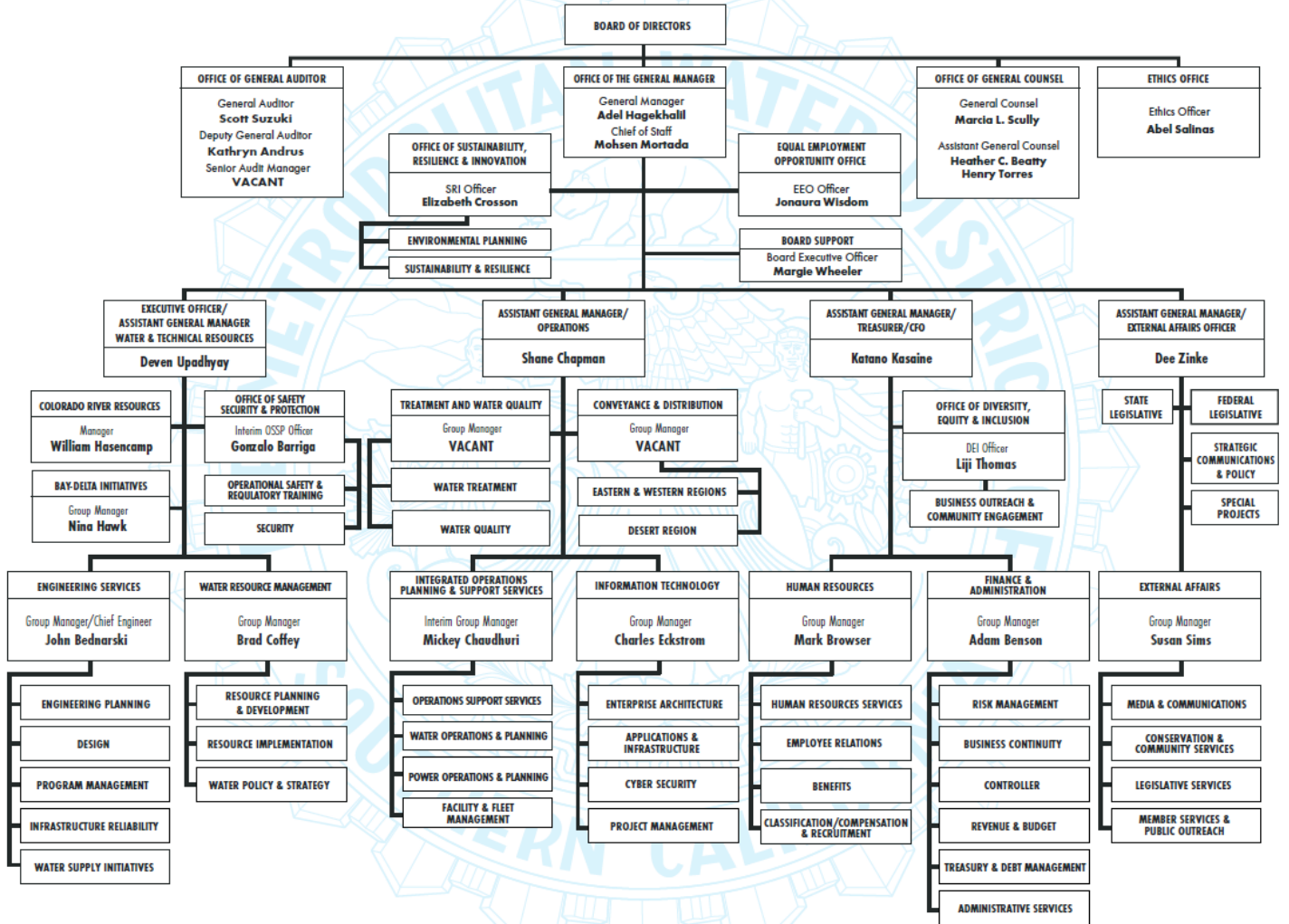
Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor, and Ethics Officer.



# Organization Chart

A larger version is provided on the inside back cover of the Biennial Budget document.

## METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



Updated: January 29, 2024

## Metropolitan Executive Management

Adel Hagekhalil	General Manager
Marcia Scully	General Counsel
Scott Suzuki	General Auditor
Abel Salinas	Ethics Officer
Mohsen Mortada	Chief of Staff
Deven Upadhyay	Executive Officer and Assistant General Manager/Water and Technical Resources
Shane Chapman	Assistant General Manager/Operations
Katano Kasaine	Assistant General Manager/Treasurer/CFO
Dee Zinke	Assistant General Manager/External Affairs Officer

## Workforce

Metropolitan's budget is for 1,965 regular full-time employees as of July 1, 2024. Most Metropolitan employees are represented by the American Federation of State, County and Municipal Employees (AFSCME), Local 1902; the Management and Professional Employees Association (MAPA), Local 1001; the Supervisors Association; and the Association of Confidential Employees (ACE). The four bargaining units represent approximately 99 percent of Metropolitan's employees. The remaining one percent is unrepresented.

## Offices

Metropolitan's headquarters are located at 700 N. Alameda St., Los Angeles, California 90012. Metropolitan has legislative offices in Sacramento and Washington D.C.



# Financial Organization

## Fund Structure and Descriptions (from Metropolitan's Administrative Code)

To provide for accountability of public moneys in accordance with applicable federal and state law and regulations and Board policies, the following active or prospectively active funds have been established in the Treasury of the District:

- **General Fund** (Fund No. 1001, established 1929).
  - Moneys not specifically allocated or appropriated may be placed in this fund and used for general purposes of the District.
  - Expenditures for reimbursable work and water conservation capital and indirect costs under the contract with Imperial Irrigation District are paid from this fund.
- **Replacement and Refurbishment Fund** (Fund No. 5001, established 1988).
  - Used to fund certain capital program expenditures from current revenues in accordance with Section 5109, subject to the conditions contained in Section 5202(b).
- **State Contract Fund** (Fund No. 5701, established 1960).
  - Used for the payment of capital charges under the State Water Contract, including the capital charges for off-aqueduct power facilities, subject to the conditions contained in Section 5201(e).
- **Special Tax Fund** (Fund No. 5702, established 1951).
  - Annexation fees (cash payments and special tax collections) are deposited in this fund and transferred to the State Contract Fund to pay a portion of State Water Contract capital charges.
- **Water Revenue Fund** (Fund No. 1002, established 1975).
  - Receipts from water sales are deposited in this fund and are transferred to various other funds in accordance with revenue bond covenants and Board resolutions to pay in order of priority:
    1. Operation and maintenance expenditures;
    2. The interest on and bond obligation of Water Revenue Bonds and Parity Obligations issued pursuant to Master Resolution 8329 (the Master Resolution or Senior Debt Resolution) adopted by the Board on July 9, 1991 and any Supplemental Resolutions thereto, and any other obligations on a parity with the Water Revenue Bonds;
    3. All other payments required for compliance with the Master Resolution, and any Supplemental Resolutions;
    4. The interest on and bond obligation of Subordinate Water Revenue Bonds and Parity Obligations issued pursuant to Master Subordinate Resolution 9199 (the Master Subordinate Resolution) adopted by the Board on March 8, 2016 and any supplemental Resolutions thereto, and any other obligations on a parity with the Subordinate Water Revenue Bonds;
    5. All other payments required for compliance with the Master Subordinate Resolution, and any Supplemental Resolutions;

6. Principal of and interest on Commercial Paper Notes and other amounts due a provider of a liquidity facility;
  7. Deposits into the Water Standby Charge Fund in accordance with resolutions imposing such charges; and
  8. Any other obligations which are charges, liens, or encumbrances upon or payable from net operating revenues.
- Moneys remaining at the end of each month, after the foregoing transfers, are transferred to the Revenue Remainder Fund.
- **Operation and Maintenance Fund** (Fund No. 1003, established 1975).
    - Used to pay all operation and maintenance expenditures, including State Water Contract operation, maintenance, power and replacement charges, subject to the conditions contained in Section 5201(g).
  - **Revenue Remainder Fund** (Fund No. 1004, established 1975).
    - Used to maintain working capital and may be used for any lawful purpose by the District, subject to the conditions contained in Section 5202.
  - **Water Rate Stabilization Fund** (Fund No. 5501, established 1987).
    - Used to reduce future water revenue requirements or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
  - **Water Treatment Surcharge Stabilization Fund** (Fund No. 5502, established 1988).
    - Used to mitigate required increases in the surcharge for water treatment or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
  - **Revolving Construction Fund** (Fund No. 5003, established 1988).
    - Capital expenditures made from this fund are to be reimbursed from proceeds of security sales to the extent such expenditures are authorized uses of debt proceeds under the Act, subject to the conditions and restrictions contained in Section 5201(h).
  - **Iron Mountain Landfill Postclosure Maintenance/Corrective Action Trust Fund** (Fund No. 6005, established 1990).
    - Used as a trust fund to maintain moneys sufficient to cover the costs of postclosure maintenance and/or corrective action of the District's solid waste landfill facility at Iron Mountain, in accordance with regulations of the California Integrated Waste Management Board, and subject to the conditions contained in Section 5201(m).
  - **Water Standby Charge Fund** (Fund No. 1005, established 1992).
    - Used to separately hold revenues attributable to water standby charges; amounts deposited in this fund are used exclusively for the purpose for which the water standby charge was authorized.



- **Water Transfer Fund** (Fund No. 1007, established 1995).
  - Used for moneys set aside for the purchase of water through transfers or similar arrangements, and for the costs of filling the Eastside Reservoir Project.
- **Self-Insured Retention Fund** (Fund No. 1008, established 1999).
  - Used to separately hold amounts set aside for emergency repairs and claims against the District as provided in Section 5201(p).
- **Lake Matthews Multi Species Reserve Trust Fund** (Fund 6101, established 1997).
  - Used as set forth in agreement between Metropolitan and the Riverside County Habitat Conservation Agency for the Multi Species Reserve.
- **Other Funds to be established for bond issues, notes or other obligations of the District**
  - There shall be established in the Treasury of the District such funds and accounts as are required pursuant to bond covenants, tax and non-arbitrage certificates, bond counsel letters of instruction and related documents, to provide for accountability of District funds and compliance with applicable federal and state law and regulations. Such funds and accounts shall be established for each issue of bonds, notes or other obligations of the District as required in the respective bond or note resolution and closing documents.

## Financial Reporting

Metropolitan prepares its financial reports in conformity with generally accepted accounting principles (GAAP). The Office of the Chief Financial Officer prepares, at the conclusion of each fiscal year, the Annual Comprehensive Financial Report in compliance with principles and standards for financial reporting set forth by the Governmental Accounting Standards Board (GASB).

## Budgetary and Accounting Basis

The budget is prepared and monitored on a cash basis. Cash basis accounting recognizes revenues when received and expenses when paid. Under accrual accounting, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the timing of related cash flows. However, while Metropolitan's budget is on a cash basis, it operates as a utility enterprise and prepares its basic financial statements using accrual accounting.

## Financial Planning

In conjunction with the development of the Biennial Budget, Metropolitan prepares a ten-year forecast (Ten-Year Financial Forecast). The Ten-Year Financial Forecast supports long range resource, capital investment and operational planning. It includes a forecast of future costs and the revenues necessary to support operations and investments in infrastructure and resources that are derived from the most recent Integrated Resources Plan and other planning processes.

To support Metropolitan's Biennial Budget, Ten-Year Financial Forecast, and financial planning, revenue requirements are evaluated to determine the level of rate adjustments required for the upcoming budget year. To the extent possible, increases in rates are adjusted to avoid large fluctuations.

## Budget Process

The budget process provides an opportunity to align shorter-term objectives and actions in the department and group level business plans to Metropolitan's longer-term Mission, Values, and Strategic Priorities and the needs of our member agencies. Each even numbered year, under the direction of the General Manager, a Biennial Budget is prepared for Metropolitan operations covering the following two fiscal years. Between budget cycles, the Board has the opportunity to amend the budget as it sees fit to changing fiscal and climatic conditions.

The budget is presented to the Board for consideration and adoption in April in order to align it with the adoption of water rates also approved in April. This permits the incorporation of approved O&M budget expenditures into the Revenue Requirements process, which facilitates the setting of water rates. The Board and member agencies will conduct extensive reviews of, and provide significant input to, the budget over three months from January to April. This year's budget review process includes board workshops on February 12, 2024, February 27, March 12, March 26, a public hearing on March 12, and several other presentations and caucuses with member agencies. Public testimony will be provided and considered at the public workshops, the public hearing, the Finance and Asset Management (FAM) Committee meeting on April 9, 2024, as well as the Board meeting on April 9, 2024, when the Board considers adoption of the Biennial Budget.

The O&M budget is presented in an organizational format and is described in terms of its scope of work, personnel requirements, and allocation by expense category. The budget serves to identify the resource requirements for the actions and tasks each group will engage in to support the General Manager's Business Plan. The overall emphasis, consistent with Metropolitan's mission, has been on providing high quality and reliable water supplies at a fair and competitive price and in an environmentally and economically responsible way.

## Balanced Budget

Metropolitan considers the budget to be balanced when the sources of funds equals the uses of funds. That is, budgeted operating revenues, and on occasion the use of water rate stabilization funds, are equal to or greater than budgeted operating expenditures including debt service, and ending fund balances meet minimum policy levels. Rates and charges are set to ensure that revenues are sufficient to recover the total cash needs in a given fiscal year.

## Budget Calendar

Due Date	Activity
April - November	Identification of major maintenance and capital projects and CIP Evaluation Team review of new and continuing projects.
June – October	Budget instructions issued to all groups. Personnel complements are developed including full-time, part-time, temporary, and overtime estimates. Group managers bring proposed budget presentations to senior management.
November	CIP Evaluation Team completes review of project proposals for the CIP. O&M budgets, CIP estimates, and operating equipment budgets are developed. Senior management reviews and makes final recommendations on group budgets.
December - January	Group budgets are revised as necessary. Proposed budget is finalized and materials and presentations are developed for presentation to the Board of Directors.
February – April	Proposed budget is presented to the Board of Directors and member agency managers. Proposed group and department budgets are presented to the relevant Board committees. Proposed annual budget workshops are conducted with the full Board and budget estimates are revised as necessary.
April	Finance and Insurance Committee recommends action on the Biennial Budget. Board of Directors takes action on adoption of the Biennial Budget.

Starting approximately one year prior to budget adoption, each group identifies any needed major maintenance and new capital projects as well as develops the associated cost estimates. In June, the budget guidelines outlining major budget priorities consistent with the General Manager’s Business Plan, staffing and operational objectives and a calendar of budget process deadlines are issued to group, assistant group, and section managers by Budget and Financial Planning staff.

The development phase begins with overall program formulation and identification of individual projects, staffing, and equipment needs. Personnel budgets, including requests for temporary and part-time help, are then prepared and professional services requirements are identified. All requests for personnel, equipment purchases, and projects must be submitted with formal justifications, which address a standard set of questions developed by Budget and Financial Planning staff. Each organization is required to identify the extent to which its proposed budget supports the General Manager’s strategic priorities as outlined in the Business Plan. This information is later used to update the Business Plan in the late spring in an iterative process.

The procedures for preparation of each element of the budget are outlined below.

### Labor and Professional Services Budget

The labor budget consists of regular full-time payroll, overtime, premium pay, and part-time and temporary employees. The professional services budget consists of planned payments to outside consultants for specialized skills. Personnel components reflect the staffing of on-going work with regular employees rather than temporary employees or consultants. In addition, each group provides detailed information on consultant, overtime, and temporary employee usage. Senior management examines this information for the level and types of resources being committed toward the stated business plan and strategic priorities. Through this process, senior management makes appropriate recommendations for the allocation of labor resources.

Adjustments to the proposed budget are made following the review by senior management and the General Manager.

## Equipment Budgets

Operating equipment is any equipment, machine, vehicle, tool, or other item that is portable, costs more than \$5,000, and has an anticipated useful life of at least five years. Expensed equipment is similar to operating equipment except that it costs less than \$5,000. All operating equipment is tracked, while the tracking of expensed equipment is required for only certain classes of equipment (e.g., workstation/laptop computers, communications equipment, etc.).

The justification for equipment requests includes a description of the item, where it will be used, what it will be used for, and whether or not the item is new or a replacement. If the item is a replacement, the frequency of downtime and cost of repair of the old item versus purchasing a new one must be provided. If the item is required equipment for expanded functions or additional personnel, this must also be explained. A cost/benefit analysis is performed for equipment costing more than \$40,000.

Depending on the nature of the equipment, the requests may be evaluated by several groups. For example, each group manager and the fleet equipment coordinator review vehicle requests.

## Finance & Administration Group Responsibilities

### Treasury and Debt Management

- Recommend procedures for revenue collection, payment of approved demands, reporting and other actions associated with the prudent management of Metropolitan's financial resources.
- Provide for the issuance of debt to fund the capital investment plan.

### Controller and Accounting Operations

- Prepare monthly expenditure and revenue reports.
- Prepare periodic reports on the status of expenditures, revenues, investments and actions taken to ensure the financial stability of Metropolitan.
- Prepare and present information on financial trends to facilitate evaluation of Metropolitan's financial position and identify conditions requiring management attention.

### Budget and Financial Planning

- Support the development of the Strategic Plan that includes projections of short range and long range financial needs, and recommend methods for meeting those needs.
- Support the development of annual water rates and charges, Metropolitan's biennial operating and capital investment plan and ten-year forecast.
- Prepare Metropolitan's proposed biennial operating budget and budget documents.
- Prepare budget performance reports on a monthly, quarterly, semi-annual and annual basis.
- Develop procedures and controls to monitor and assure compliance with the budget.
- Assist departments throughout the year with their budgets and financial issues.
- Prepare financial projections, schedules of rates and charges, tax rate proposals and other financial materials.



## Other Department Responsibilities

### Engineering

- Prepare Metropolitan's Capital Investment Plan (CIP) and CIP budget document.

## General Manager Responsibilities

- Review and present to the Board of Directors long range plans, budgets and revisions, schedules of rates and charges, payments of financial demands and other financial transactions, as necessary.
- Prepare annual business plan containing General Manager's key priorities for the coming year.
- Implement emergency financial procedures within approved limits, when necessary.

## Budgetary Controls

Budget requests are evaluated at several management levels. Managers and staff review budget requests during each phase of the budget process. Each request for a new project, additional personnel, or piece of operating equipment is scrutinized by each group and further reviewed by Budget and Financial Planning staff during the budget process.

All budget submittals are reviewed collectively by the group and section managers. Only those items that are deemed appropriate to support the initiatives of the General Manager's Business Plan are included in the budget recommendation.

Once the budget is completed, the expenditures for each group are monitored on a monthly basis to ensure that the groups do not exceed the authorized operating budget for the fiscal year or biennial period, unless approved by the General Manager.

## Budget Adjustments

The budget may be amended in the mid-cycle biennial review or when overall expenditures are anticipated to significantly exceed estimates. A report outlining the reasons for increasing the budget appropriation is prepared and submitted to the Board of Directors for consideration. The Board of Directors must approve any increases in the overall budget appropriations.

## Capital Investment Plan (CIP)

The Capital Investment Plan (CIP) communicates the capital priorities of Metropolitan's CIP projects for the next two fiscal years. Within the Ten Year Financial Forecast, the CIP projects have been carefully reviewed, scored and prioritized to support water supply and infrastructure reliability, water quality, and safety while meeting all regulatory requirements.

### Structure

The CIP is structured into three levels for clear planning and reporting in the following format:

1. Program
2. Project Group
3. Project

The highest level of the CIP structure is Program. Programs are comprised of one or more Project Groups.

There are 10 capital programs which include:

- Climate Adaptation
- Colorado River Aqueduct
- Dams & Reservoirs
- Distribution System
- Drought Mitigation – SWP (State Water Project) Dependent Areas
- Information Technology & Control Systems
- Minor Capital Projects
- Other Facilities & Systems
- Prestressed Concrete Cylinder Pipe
- Water Treatment Plants

Definitions of the 10 capital programs can be found in the Capital Investment Plan Section of this budget book.

### Preparation

The Capital Investment Plan (CIP) is prepared as part of Metropolitan's biennial budget process. This plan provides information on all capital programs and projects that have been proposed, evaluated and included in the budget forecast to begin or continue during and after the two budget years. Scope, accomplishments, objectives, and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the individual program summaries.

When the need for a project is recognized, a CIP proposal is prepared which provides information regarding scope, justification, alternatives, schedule, impacts of rescheduling work for a later time, impact on operation and maintenance costs, and estimate of total project cost. All projects are reviewed and prioritized on a biennial basis by the CIP Evaluation Committee working closely with project sponsors and management.

Capital projects include new facilities, betterments, and replacements that cost at least \$50,000 and have an anticipated useful life of at least five years. In the case of information technology computer software capital projects, the cost must exceed \$250,000 and the resulting asset must have an anticipated useful life of at least three years.

The projects that comprise the CIP have been identified from many Metropolitan studies of projected water needs as well as ongoing monitoring and inspections, condition assessments, and focused vulnerability studies. Staff continues to study operational demands on aging facilities and has made recommendations for capital projects that will maintain infrastructure reliability and ensure compliance with all applicable water quality regulations, and building, fire, and safety codes. Staff has also studied business and operations processes and projects that will improve efficiency and provide future cost savings. Additionally, several projects have been identified and prioritized to provide flexibility in system operations to address uncertain supply conditions from the Colorado River and the State Water Project.

Capital projects can be further differentiated into two general categories: major capital and minor capital projects. Major capital projects cost at least \$400,000 and are described in the CIP under their respective Programs. Projects described in the CIP are funded and authorized to proceed under the General Manager's authority unless Board approval is otherwise required in accordance with Metropolitan's Administrative Code. Minor capital projects cost between \$50,000 and \$400,000 and are not individually described in the CIP. Minor capital projects are identified throughout each fiscal year and are funded and implemented under the General Manager's authority.

Additional information on project budgeting can be found in the Capital Investment Plan Section of this budget book.

# BIENNIAL BUDGET SUMMARY

## APPROPRIATIONS

The FY 2024/25 appropriation of \$2,386.3 million is comprised of \$1,619.3 million or 67.9% percent for operations expense, \$340.4 million or 14.3% percent for debt service expense, and \$426.6 million or 17.9% percent for the Capital Investment Plan expenses (CIP). The FY 2025/26 appropriation of \$2,397.3 million is comprised of \$1,656.1 million or 69.1% percent for operations expense, \$353.5 million or 14.7% percent for debt service expense, and \$387.7 million or 16.2% percent for the CIP expenses. The table below provides a comparison of FY 2024/25 and FY 2025/26 and illustrates the total appropriations for the operating, debt service and CIP expenses.

FY 2024/25 and FY 2025/26 Operating and Capital Appropriations, \$ millions

<b>Adopted Budget</b>	<b>FY 2024/25</b>	<b>FY 2025/26</b>	<b>Total Biennium</b>
Operating Budget	\$1,619.3	\$1,656.1	\$3,275.4
Debt Service	340.4	353.5	693.9
Capital Investments*	426.6	387.7	814.3
<b>Grand Total</b>	<b>\$2,386.3</b>	<b>\$2,397.3</b>	<b>\$4,783.6</b>

\*Capital Investments includes Capital Investment Plan plus debt financed Supply Programs and Conservation

The Biennial Budget for FY 2024/25 and FY 2025/26 provides funding for Metropolitan’s strategic priorities while meeting most financial policy guidelines, with overall rate increases of 8.5 percent in CY 2025 and 8.5 percent in CY 2026 of the Biennial Budget. The overall rate increases of 8.5 percent and 8.5 percent are higher than previously forecasted due to lower projected water transactions, increased costs, and carryforward impact of 2024 rates not fully recovering costs.

The budget is prepared and monitored on a cash basis. Cash basis accounting recognizes revenues when received and expenses when paid. Under accrual accounting, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the timing of related cash flows. However, while Metropolitan’s budget is on a cash basis, it operates as a utility enterprise and prepares its basic financial statements using accrual accounting.



## FUND SUMMARY

The following tables show projected fund balance, and projected revenues and expenditures for Metropolitan for each fiscal year of the Biennial Budget.

### FY 2024/25 Fund Summary, \$ millions

Fiscal Year Ending June 30th, 2025

(\$ in Millions)	All Funds	Operating Funds	Debt Service and Construction Funds	Reserve Funds (1)	Other Funds (2)
<b>Projected Beginning of Year Balance</b>	<b>1,295.6</b>	<b>558.1</b>	<b>363.6</b>	<b>313.8</b>	<b>60.1</b>
<b>USES OF FUNDS</b>					
<b>Expenditures</b>					
State Water Contract	700.6	700.6	—	—	—
Supply Programs (cash funded portion)	94.0	94.0	—	—	—
Colorado River Power	84.5	84.5	—	—	—
Debt Service	340.4	3.2	337.1	—	—
Demand Management (cash funded portion)	58.6	58.6	—	—	—
Departmental O&M	625.6	625.6	—	—	—
Treatment Chemicals, Sludge & Power	46.4	46.4	—	—	—
Operating Equipment	9.6	9.6	—	—	—
Sub-total Expenditures	1,959.7	1,622.5	337.1	—	—
<b>Capital Investments</b>	<b>426.6</b>	<b>—</b>	<b>426.6</b>	<b>—</b>	<b>—</b>
<b>Fund Deposits</b>					
R&R and General Fund (PAYGO)	175.0	—	175.0	—	—
Interest for Construction & Trust Funds	7.4	—	5.3	—	2.1
Increase in Required Reserves	—	—	—	—	—
Increase in Rate Stabilization Fund	63.8	—	—	63.8	—
Sub-total Fund Deposits	246.2	—	180.3	63.8	2.1
<b>TOTAL USES OF FUNDS</b>	<b>2,632.4</b>	<b>1,622.5</b>	<b>944.0</b>	<b>63.8</b>	<b>2.1</b>
<b>SOURCES OF FUNDS</b>					
<b>Revenues</b>					
Taxes	316.5	314.6	2.0	—	—
Interest Income	57.7	25.9	15.0	14.7	2.1
Power Sales	20.9	20.9	—	—	—
Fixed Charges (RTS & Capacity Charge)	213.8	213.8	—	—	—
Water Revenue (1)	1,399.6	1,399.6	—	—	—
Miscellaneous Revenue	30.8	30.8	—	—	—
New Grants	20.0	20.0	—	—	—
IRA Bucket 1 Funding	47.3	47.3	—	—	—
Stored Water Sales	60.0	60.0	—	—	—
Bond Proceeds	158.4	—	158.4	—	—
Sub-total Revenues	2,325.0	2,132.8	175.4	14.7	2.1
<b>Fund Withdrawals</b>					
R&R and General Fund (PAYGO)	175.0	—	175.0	—	—
Bond Funds for Construction	93.2	—	93.2	—	—
State Funding SWRCB	28.9	—	—	—	28.9
Decrease in Required Reserves	10.4	(9.7)	(17.7)	37.8	—
Decrease in Rate Stabilization Fund	—	—	—	—	—
Sub-total Fund Withdrawals	307.4	(9.7)	250.5	37.8	28.9
<b>TOTAL SOURCES OF FUNDS</b>	<b>2,632.4</b>	<b>2,123.1</b>	<b>425.8</b>	<b>52.5</b>	<b>31.0</b>
<b>Inter-Fund Transfers</b>	<b>—</b>	<b>(500.6)</b>	<b>518.2</b>	<b>11.3</b>	<b>(28.9)</b>
<b>Projected End of Year Balance</b>	<b>1,234.4</b>	<b>567.8</b>	<b>293.4</b>	<b>339.8</b>	<b>33.3</b>

Totals may not foot due to rounding.

(1) includes water sales and exchange

FY 2025/26 Fund Summary, \$ millions

Fiscal Year Ending June 30th, 2026

(\$ in Millions)	All Funds	Operating Funds	Debt Service and Construction Funds	Reserve Funds (1)	Other Funds (2)
<b>Projected Beginning of Year Balance</b>	<b>1,234.4</b>	<b>567.8</b>	<b>293.4</b>	<b>339.8</b>	<b>33.3</b>
<b>USES OF FUNDS</b>					
<b>Expenditures</b>					
State Water Contract	703.9	703.9	—	—	—
Supply Programs (cash funded portion)	90.9	90.9	—	—	—
Colorado River Power	93.3	93.3	—	—	—
Debt Service	353.5	2.9	350.7	—	—
Demand Management (cash funded portion)	61.1	61.1	—	—	—
Departmental O&M	649.7	649.7	—	—	—
Treatment Chemicals, Sludge & Power	47.1	47.1	—	—	—
Operating Equipment	10.1	10.1	—	—	—
Sub-total Expenditures	2,009.6	1,658.9	350.7	—	—
<b>Capital Investments</b>	<b>387.7</b>	<b>—</b>	<b>387.7</b>	<b>—</b>	<b>—</b>
<b>Fund Deposits</b>					
R&R and General Fund (PAYGO)	175.0	—	175.0	—	—
Interest for Construction & Trust Funds	2.8	—	2.0	—	0.8
Increase in Required Reserves	88.9	24.5	7.3	57.1	—
Increase in Rate Stabilization Fund	48.5	—	—	48.5	—
Sub-total Fund Deposits	315.1	24.5	184.3	105.6	0.8
<b>TOTAL USES OF FUNDS</b>	<b>2,712.5</b>	<b>1,683.4</b>	<b>922.7</b>	<b>105.6</b>	<b>0.8</b>
<b>SOURCES OF FUNDS</b>					
<b>Revenues</b>					
Taxes	333.8	331.8	2.0	—	—
Interest Income	48.2	22.2	10.5	14.7	0.8
Power Sales	17.6	17.6	—	—	—
Fixed Charges (RTS & Capacity Charge)	230.4	230.4	—	—	—
Water Revenue (1)	1,510.7	1,510.7	—	—	—
Miscellaneous Revenue	31.6	31.6	—	—	—
New Grants	20.0	20.0	—	—	—
IRA Bucket 1 Funding	47.3	47.3	—	—	—
Stored Water Sales	60.0	60.0	—	—	—
Bond Proceeds	168.4	—	168.4	—	—
Sub-total Revenues	2,468.0	2,271.6	180.9	14.7	0.8
<b>Fund Withdrawals</b>					
R&R and General Fund (PAYGO)	175.0	—	175.0	—	—
Bond Funds for Construction	44.3	—	44.3	—	—
State Funding SWRCB	25.1	—	—	—	25.1
Sub-total Fund Withdrawals	244.5	—	219.3	—	25.1
<b>TOTAL SOURCES OF FUNDS</b>	<b>2,712.5</b>	<b>2,271.6</b>	<b>400.2</b>	<b>14.7</b>	<b>25.9</b>
<b>Inter-Fund Transfers</b>	<b>—</b>	<b>(588.2)</b>	<b>522.5</b>	<b>90.9</b>	<b>(25.1)</b>
<b>Projected End of Year Balance</b>	<b>1,305.1</b>	<b>592.3</b>	<b>258.4</b>	<b>445.4</b>	<b>9.0</b>

Totals may not foot due to rounding.

# SOURCES OF FUNDS

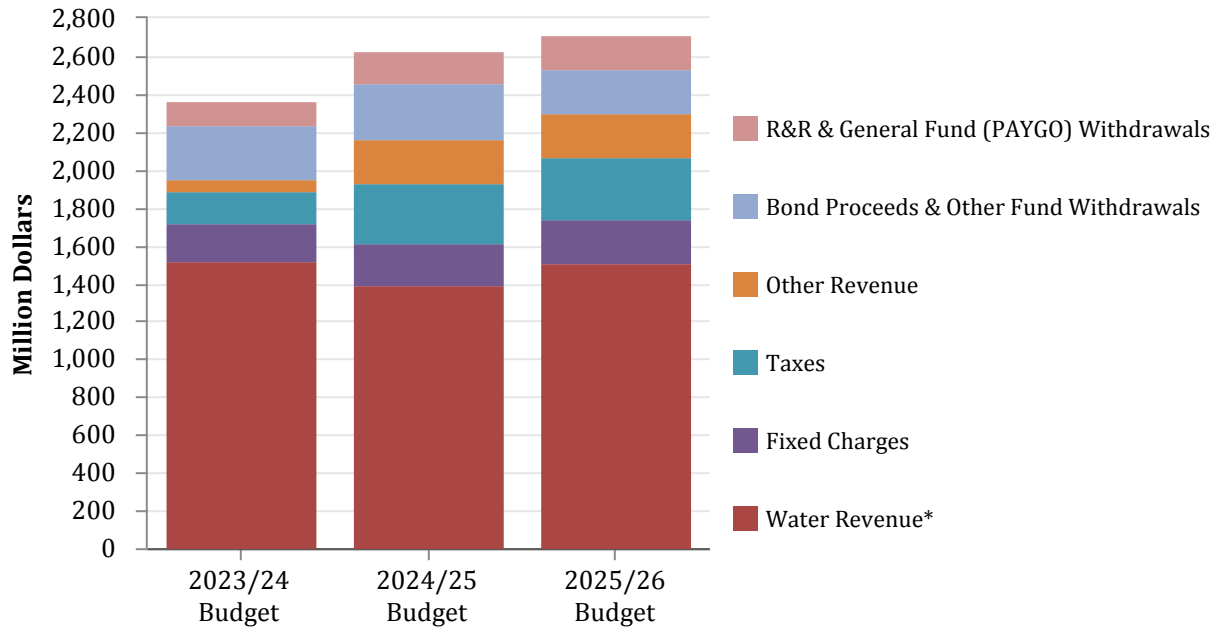
Total Sources of FY 2024/25 and FY 2025/26 Funds, \$ millions

	2023/24 Budget	2024/25 Budget	2025/26 Budget	2023/24 Budget Compared to 2024/25 Budget	2024/25 Budget Compared to 2025/26 Budget
<b>SOURCES OF FUNDS</b>					
Revenues					
Taxes	168.3	316.5	333.8	148.2	17.3
Interest Income	10.0	57.7	48.2	47.7	(9.5)
Power Sales	14.2	20.9	17.6	6.7	(3.3)
Fixed Charges (RTS & Capacity Charge)	195.7	213.8	230.4	18.1	16.6
Water Revenues (1)	1,522.2	1,399.6	1,510.7	(122.6)	111.1
Miscellaneous Revenue	46.6	30.8	31.6	(15.9)	0.8
New Grants	—	20.0	20.0	20.0	—
IRA Bucket 1 Funding	—	47.3	47.3	47.3	—
Stored Water Sales	—	60.0	60.0	60.0	—
Bond Proceeds	159.2	158.4	168.4	(0.8)	10.0
<b>Sub-total Revenues</b>	<b>2,116.2</b>	<b>2,325.0</b>	<b>2,468.0</b>	<b>208.8</b>	<b>143.0</b>
Fund Withdrawals					
R&R and General Fund (PAYGO)	135.0	175.0	175.0	40.0	—
Bond Funds for Construction	69.8	93.2	44.3	23.4	(48.8)
State Funding SWRCB	—	28.9	25.1	28.9	(3.8)
Decrease in Required Reserves	—	10.4	—	10.4	(10.4)
Decrease in Water Rate Stabilization Fund	48.9	—	—	(48.9)	—
<b>Sub-total Fund Withdrawals</b>	<b>253.7</b>	<b>307.4</b>	<b>244.5</b>	<b>53.8</b>	<b>(63.0)</b>
<b>TOTAL SOURCES OF FUNDS</b>	<b>2,369.8</b>	<b>2,632.4</b>	<b>2,712.5</b>	<b>262.6</b>	<b>80.1</b>

Totals may not foot due to rounding.

(1) includes water sales and exchange

Sources of Funds FY 2024/25 and FY 2025/26, \$ millions



\* includes member agency water sales and exchanges

## OPERATING REVENUE

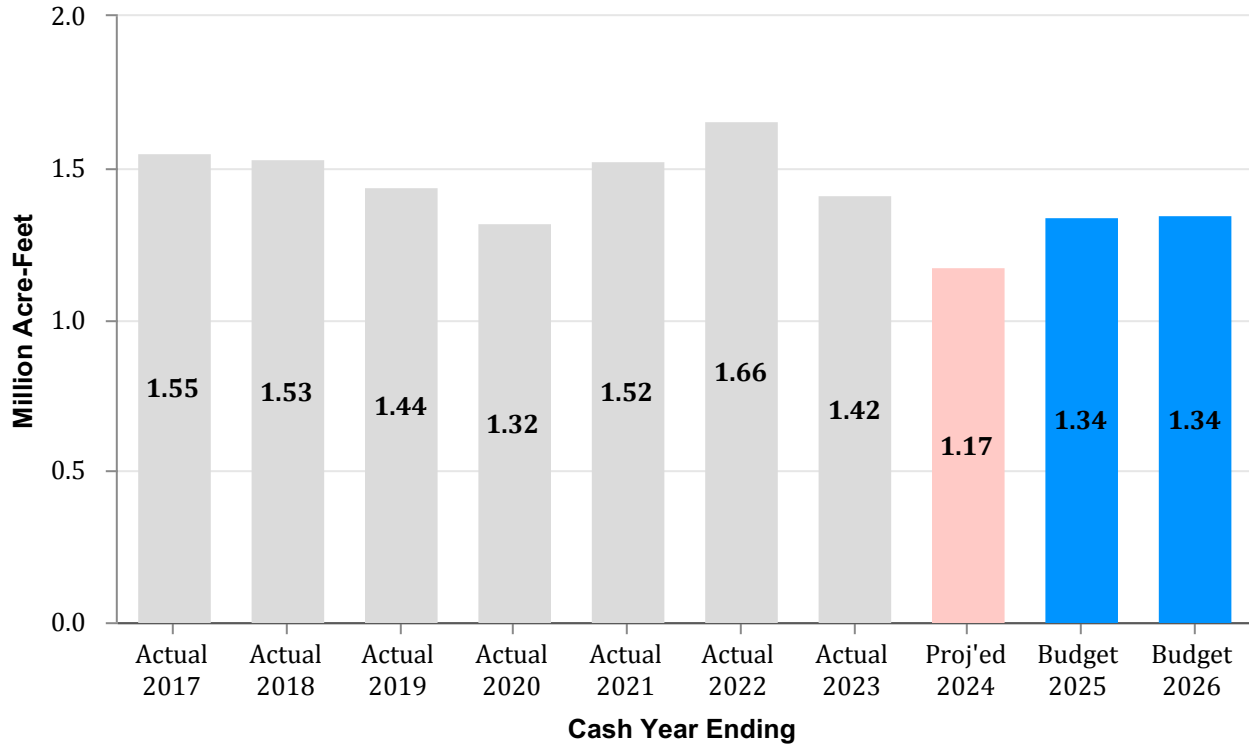
Estimated revenues from water rates, fixed charges (Readiness-To-Serve Charge and Capacity Charge), taxes and annexation fees, and other miscellaneous income (interest income, power recovery, etc.) are projected to be \$2.04 billion for FY 2024/25 and \$2.17 billion for FY 2025/26. For FY 2024/25, this is \$82.3 million more than the FY 2023/24 budget, and for FY 2025/26, this is \$133.0 million more than FY 2024/25. The increase in revenues for FY 2024/25 is due to increases in property tax and miscellaneous revenues, in addition to higher water rates and charges in calendar year 2025. For FY 2025/26, the revenue is higher due primarily to higher water rates and charges in calendar year 2025 and calendar year 2026. In addition, the forecast assumes the ad valorem tax rate is increased from 0.0035 percent to 0.0070 percent of assessed valuations. A description of each revenue source is included in the Glossary of Terms.

### Water Revenues

Revenues from water transactions are budgeted at \$1,399.6 million in FY 2024/25 and \$1,510.7 million in FY 2025/26. Water rates and charges are to increase by 8.5 percent overall, effective January 1, 2025 and 8.5 percent overall, effective January 1, 2026. Water transactions are estimated to be 1.34 million acre-feet (MAF) in Cash Year<sup>1</sup> 2024/25 and 1.34 MAF in Cash Year 2025/26, reflecting a decrease of 202 thousand acre-feet (TAF) from the FY 2023/24 budget of 1.54 MAF. However, projected water transactions for FY 2023/24 are trending toward 1.17 MAF, the lowest water transactions Metropolitan has experienced over the last 50 years. Expectations of lower demands on Metropolitan are mostly due to an improved outlook on local water supply production from favorable hydrologic conditions, the projected operation of new local PFAS treatment facilities restoring groundwater production in affected groundwater basins, and lower retail demands resulting from consumer response to current conditions and regional conservation initiatives.

<sup>1</sup> Water transactions delivered from May to April generate water revenues (cash receipts) in the fiscal year period (July - June)

## Water Transactions Trend, MAF



The Cash Year 2024/25 water transactions include 1.06 MAF of full-service sales, of which 720 TAF are treated water sales and 339 TAF are untreated water sales, and 278 TAF of exchange transactions with San Diego County Water Authority (SDCWA) pursuant to the 2003 Amended and Restated Exchange Agreement (exchange transactions). The Cash Year 2025/26 water transactions include 1.07 MAF of full-service sales, of which 685 TAF are treated water sales and 381 TAF are untreated water sales, and 278 TAF of exchange transactions. No wheeling transactions are projected in the biennium period. The figure above shows the historical actual for cash year ending 2017 to 2023, projected for cash year ending 2024, and proposed member agency water transactions for the biennium.

## Property Taxes and Annexation Fees

Revenues from property taxes, which will be used to pay voter-approved debt service on general obligation bonds and a portion of the voter-approved SWC expenditures, are estimated to be \$316.5 million in FY 2024/25 and \$333.8 million in FY 2025/26.

The ad valorem property tax rate is assumed to increase from the current level of 0.0035 percent to 0.0070 percent of assessed value in both fiscal years; assessed valuations are projected to increase by 4.0 percent each fiscal year.

## Fixed Charges

Fixed charges include the Capacity Charge and Readiness-to-Serve Charge. In FY 2024/25, these charges are estimated to generate \$39.8 million and \$174.0 million, respectively. In FY 2025/26, these charges are estimated to generate \$45.9 million and \$184.5 million, respectively. In total this represents a \$18.1 million increase from the FY 2023/24 to FY 2024/25 budget, and a \$16.6 million increase from the FY 2024/25 to the FY 2025/26 budget.



## All Other Revenue

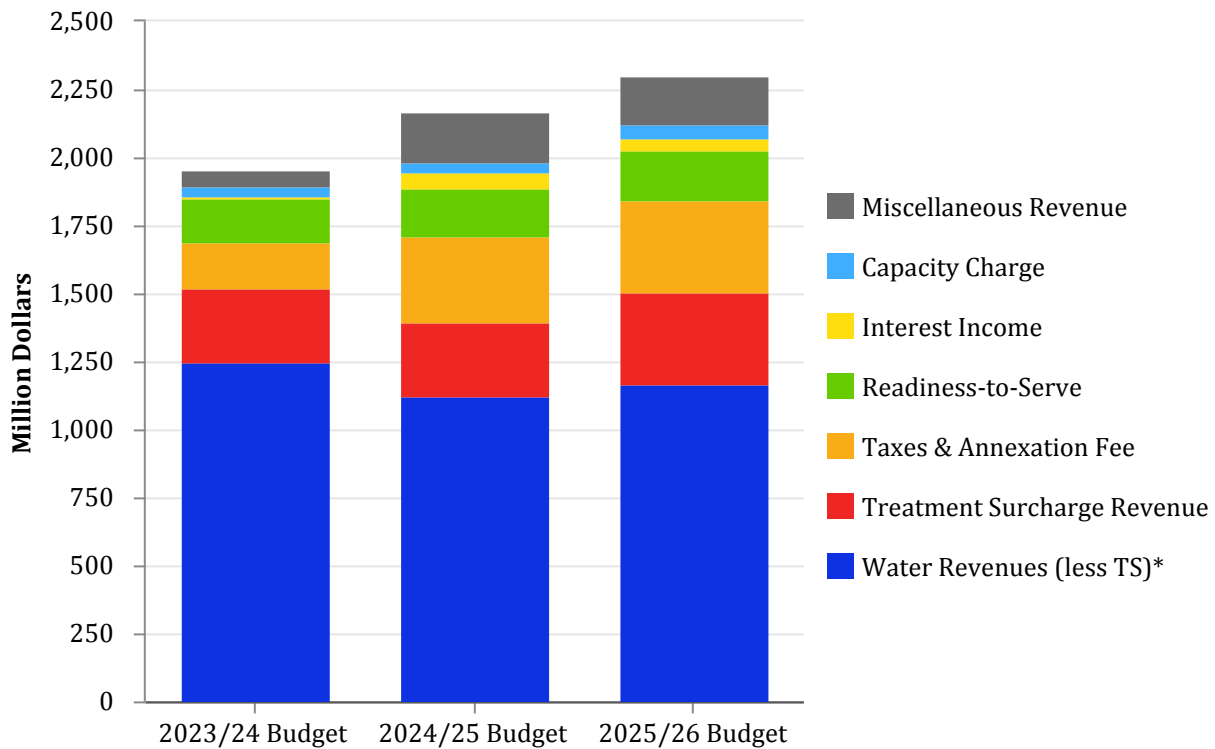
Revenues from hydroelectric and CRA power sales are estimated to be \$20.9 million for FY 2024/25 and \$17.6 million for FY 2025/26. FY 2024/25 is higher than the FY 2023/24 budgeted amount of \$14.2 million due to increased projected CRA deliveries.

The budget assumed receipt of funding provided by the Inflation Reduction Act (IRA) for conservation agreements in California to reduce water demand on the Colorado River and leave water at Lake Mead as system water. The budget includes the projected financial benefits: IRA bucket 1 funding of \$47.3 million annually for FY 2023/24 through 2025/26 to offset PVID and Bard supply program costs in the respective fiscal years.

Miscellaneous revenues, which include items such as interest income, lease revenues, and water transactions with non-member agencies, are estimated to total \$88.5 million for FY 2024/25 and \$79.8 million for FY 2025/26, higher than the FY 2023/24 budgeted amounts of \$56.6 million, mainly due to the higher interest rates for interest incomes and assumed IRA Bucket 1 funding to offset water supply programs per year over the biennium.

A summary of operating revenues is shown in the graph below.

### Operating Revenues, \$ millions



\* includes member agency water sales and exchanges

## CAPITAL FUNDING

The FY 2024/25 and FY 2025/26 Capital Investment Plan (CIP) will be funded with bond proceeds and current operating revenues (PAYGO). It is anticipated that Metropolitan will issue new revenue bonds of \$280 million over the biennium to fund a portion of the CIP. The remaining CIP expenditures will be funded with revenue funded capital of \$175 million in FY 2024/25 and \$175 million in FY 2025/26.

In FY 2024/25 and FY 2025/26 the Supply Programs include capital expenditures related to the development of the AVEK High Desert Water Bank program. These expenditures will be recorded as participation rights and are to be funded by debt. Remaining project costs, currently estimated at, total \$177.9 million may be covered by a single debt issuance in FY 2023/24 or by multiple issuances over the biennium.

In FY 2024/25 and FY 2025/26 the Conservation Program is to be funded at \$54 million and \$44 million, respectively. To minimize short-term rate impacts, the Conservation Program is funded by \$25 million per year on a PAYGO basis and the remaining \$48.2 million is bond financed over the biennium.

Please refer to the section on debt financing for additional details on debt funding of capital projects.

## Capital Funding Source Descriptions

### New Bond Issues

Metropolitan has the ability to issue long-term bonds to fund its capital programs. The proceeds of the bond sales can be used to pay for capital expenses over a few years. The repayment of the bonds is generally over 30 years and is paid from water revenues.

### Revenue Funded Capital

Annual capital expenditures that are not paid from debt funding, grants, or loans must be paid from revenues, either from current year revenues or from the R&R fund, if funds exist.

## USES OF FUNDS

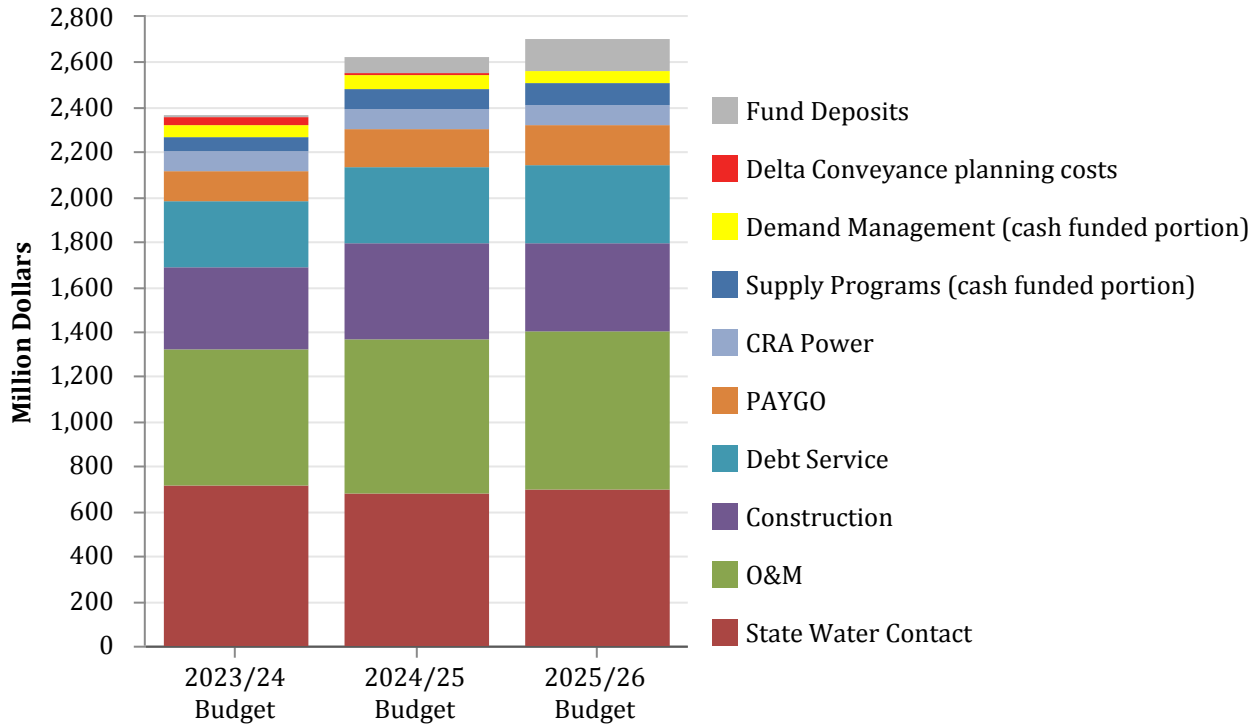
Total uses of funds are \$2.6 billion for FY 2024/25 and \$2.7 billion for FY 2025/26. The table and graph below show the breakdown of expenditures and other obligations that make up the Uses of Funds.

### Total Uses of FY 2024/25 and FY 2025/26 Funds, \$ millions

	2023/24 Budget	2024/25 Budget	2025/26 Budget	2024/25 Budget Compared to 2023/24 Budget	2025/26 Budget Compared to 2024/25 Budget
<b>USES OF FUNDS</b>					
Expenditures					
State Water Contract	726.7	689.0	703.9	(37.8)	14.9
Supply Programs (cash funded portion)	64.1	94.0	90.9	29.9	(3.2)
Delta Conveyance planning costs (net of CWF refund)	34.5	11.6	—	(22.9)	(11.6)
Colorado River Power	85.6	84.5	93.3	(1.1)	8.8
Debt Service	301.0	340.4	353.5	39.3	13.2
Demand Management (cash funded portion)	49.1	58.6	61.1	9.5	2.5
Departmental O&M	553.6	625.6	649.7	72.0	24.1
Treatment Chemicals, Sludge & Power	34.9	46.4	47.1	11.5	0.7
Operating Equipment	10.8	9.6	10.1	(1.2)	0.5
<b>Sub-total Expenditures</b>	<b>1,860.4</b>	<b>1,959.7</b>	<b>2,009.6</b>	<b>99.3</b>	<b>49.9</b>
Capital Investments	364.0	426.6	387.7	62.6	(38.8)
Fund Deposits					
R&R and General Fund (PAYGO)	135.0	175.0	175.0	40.0	—
Treatment Surcharge Stabilization Fund	3.1	—	—	(3.1)	—
Interest for Construction & Trust Funds	0.4	7.4	2.8	7.0	(4.6)
Increase in Required Reserves	7.0	—	88.9	(7.0)	88.9
Increase in Water Rate Stabilization Fund	—	63.8	48.5	63.8	(15.3)
<b>Sub-total Fund Deposits</b>	<b>145.5</b>	<b>246.2</b>	<b>315.1</b>	<b>100.7</b>	<b>68.9</b>
<b>TOTAL USES OF FUNDS</b>	<b>2,369.8</b>	<b>2,632.4</b>	<b>2,712.5</b>	<b>262.6</b>	<b>80.1</b>

Totals may not foot due to rounding.

Total Uses of FY 2024/25 and FY 2025/26 Funds, \$ millions



State Water Contract

State Water Contract (SWC) expenditures, not including the Delta conveyance planned contribution described below, are budgeted at \$689.0 million for FY 2024/25 and \$703.9 million in FY 2025/26. This is based on Metropolitan's deliveries to MWD's service area of 820 TAF in FY 2024/25 and 795 TAF in FY 2025/26. SWP power costs are expected to be \$245.2 million for FY 2024/25 and \$242.5 million for FY 2025/26.

The forecasted amount for SWP expenditures reflects incorporation of rate management credits into the forecast. Rate management credits result from a provision of the State Water Contract that provides for the reduction of capital charges based on differences between the Department of Water Resources' collections from the SWP contractors and the actual amounts paid for capital-related charges.

The total State Water Contract expenditure budget of \$700.6 million for FY 2024/25 and \$703.9 million for FY 2025/26 includes Metropolitan's planned contributions of \$11.6 million in FY 2024/25 and none in FY 2025/26, for Delta conveyance project planning activities. The budget only includes Board-approved Delta Conveyance Project (DCP) planning costs and does not assume any additional funding beyond the Board-approved amount.

Please refer to the section on the SWP for additional details on this expenditure.

Colorado River Aqueduct Power

CRA power costs are projected to be \$84.5 million in FY 2024/25 and \$93.3 million in FY 2025/26 based on diversions of approximately 750 TAF in FY 2024/25 and 760 TAF in FY 2025/26. FY 2024/25 is \$1.1 million higher than the FY 2023/24 budget due to higher market power rates and anticipated rules charges for Resource Adequacy obligations. FY 2025/26 is \$8.8 million higher than FY 2024/25 due to higher CRA diversions and anticipated lower power generations at Hoover and Parker plants.

Please refer to the section on the CRA for additional details on this expenditure.

## Supply Programs

Metropolitan's two principal sources of supply draw from two different watersheds. This has allowed Metropolitan to draw more heavily on one source in the event the other is experiencing a drought. To further ensure regional supply reliability, Metropolitan has developed a portfolio of additional supply programs on both watersheds and locally. Total expenditures paid from current year revenues are budgeted at \$94.0 million for FY 2024/25 and \$90.9 million in FY 2025/26. Additional spending on Participation Rights for the AVEK High Desert Water Bank Program of \$85.5 million in FY 2024/25 and \$44.1 million in FY 2025/26 will be funded by debt. Additional funding of Colorado River programs comes from IRA Bucket 1.

Please refer to the section on the Supply Programs for additional details on this expenditure.

## Demand Management Costs

Demand management includes conservation programs, programs to incentivize the development of local water resources, Future Supply Actions Program, and the Stormwater Pilot Program. Metropolitan provides financial incentives to its member agencies for the development of local projects such as water recycling and groundwater recovery projects through the Local Resource Program (LRP). Metropolitan also provides financial incentives for the development of conservation programs. Demand Management paid from current year revenues is budgeted at \$58.6 million for FY 2024/25 and \$61.1 million in FY 2025/26. To minimize short-term rate impact, the additional \$48.2 million in Conservation Program costs will be funded by debt over the biennium.

Please refer to the section on Demand Management for additional details on this expenditure.

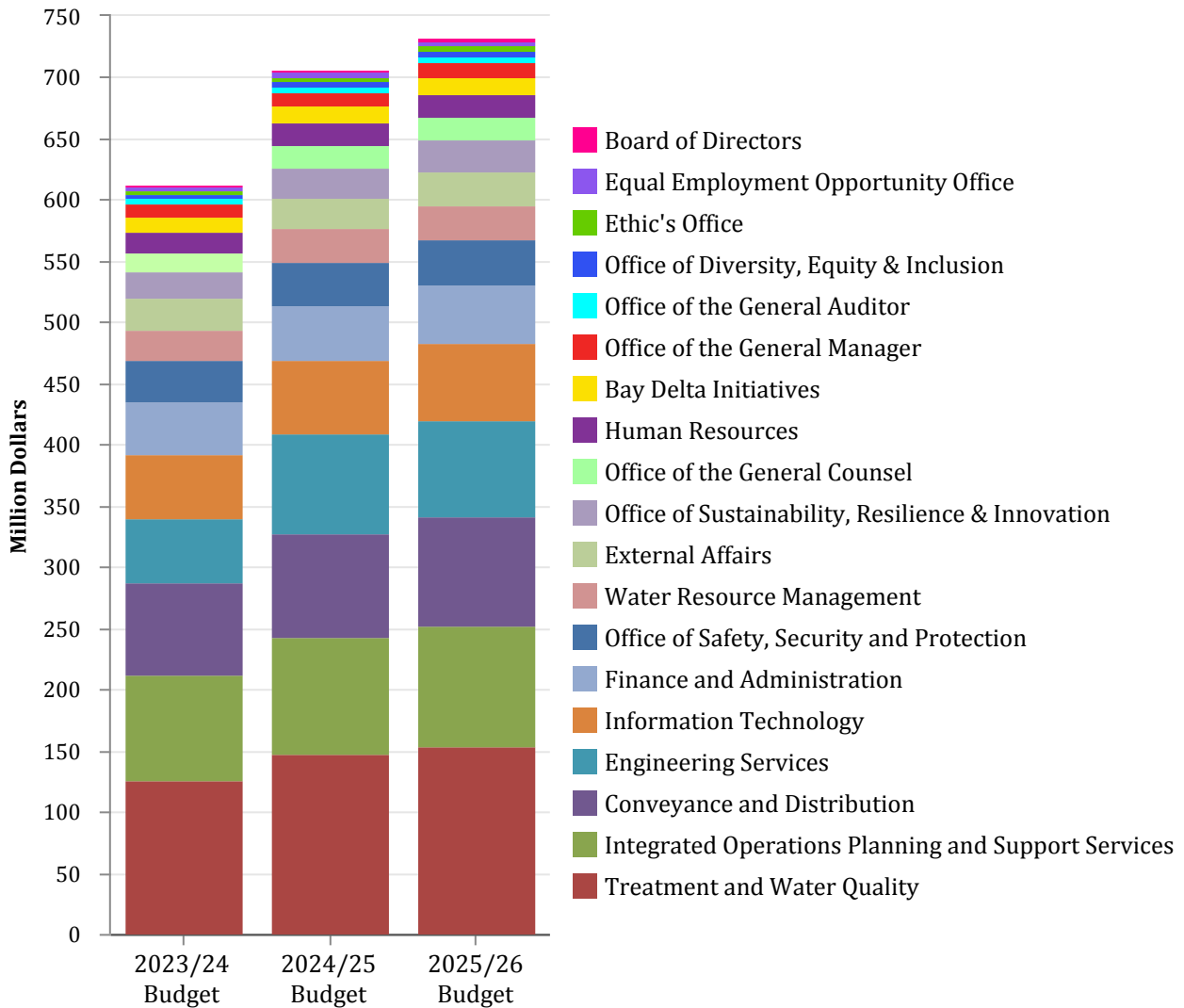
## Pure Water Southern California Planning Costs

The FY 2024/25 and FY 2025/26 budget includes funding for planning costs for the potential Pure Water Southern California at \$28.9 million and \$25.1 million, respectively, for preparation of a programmatic environmental impact report. The departments have budgeted for the PWSC planning costs as a major O&M project with their budgets. These planning costs will be funded out of the \$80M grant from State Water Resource Control Board (SWRCB) received in May 2023 to offset the respective departmental O&M costs. This is the next step before the Board will be fully informed and ready to make a decision on whether to proceed with further investments in this potential project.

# OPERATIONS AND MAINTENANCE

The FY 2024/25 O&M budget, including operating equipment purchases, is \$681.6 million. This is \$81.8 million, or 13.6 percent, higher than the FY 2023/24 budget of \$599.8 million. The FY 2025/26 O&M budget is \$706.9 million, an increase of \$25.3 million, or 3.7 percent, over the FY 2024/25 budget.

Departmental Budget by Organization (without operating equipment, \$18 million expense reduction and overhead credit), \$ millions





Operations and Maintenance Budget by Organization, \$ thousands

Departmental Units	2023/24 Budget	2024/25 Budget	2025/26 Budget	2023/24 Budget vs. 2024/25 Budget	% Change	2024/25 Budget vs. 2025/26 Budget	% Change
Office of the General Manager <sup>1</sup>	10,806.5	11,130.0	11,489.4	323.5	3.0%	359.4	3.2%
Treatment and Water Quality w/o Variable Treatment	91,360.8	102,166.0	106,327.3	10,805.2	11.8%	4,161.3	4.1%
Integrated Operations Planning and Support Services	86,866.7	94,811.5	99,886.2	7,944.7	9.1%	5,074.7	5.4%
Conveyance and Distribution	75,011.0	85,233.2	89,273.6	10,222.2	13.6%	4,040.4	4.7%
Engineering Services <sup>2</sup>	51,676.5	81,288.0	78,585.0	29,611.6	57.3%	(2,703.0)	(3.3%)
Information Technology	52,425.8	59,807.2	63,152.7	7,381.4	14.1%	3,345.6	5.6%
Finance and Administration	43,629.1	44,422.9	46,652.4	793.8	1.8%	2,229.6	5.0%
Office of Safety, Security and Protection	33,299.8	35,687.6	37,041.2	2,387.8	7.2%	1,353.6	3.8%
Water Resource Management	25,870.1	27,008.8	28,046.5	1,138.7	4.4%	1,037.7	3.8%
External Affairs	25,607.9	25,743.2	26,923.7	135.3	0.5%	1,180.5	4.6%
Office of Sustainability, Resilience & Innovation	21,012.2	24,675.8	26,348.2	3,663.6	17.4%	1,672.4	6.8%
Human Resources	15,877.0	18,054.7	19,315.0	2,177.7	13.7%	1,260.3	7.0%
Bay Delta Initiatives	12,532.5	13,497.4	13,778.5	964.9	7.7%	281.1	2.1%
Office of Diversity, Equity & Inclusion	3,832.9	4,448.6	4,749.9	615.7	16.1%	301.3	6.8%
Equal Employment Opportunity Office	2,820.4	3,388.8	3,720.2	568.4	20.2%	331.4	9.8%
Board of Directors <sup>3</sup>	1,787.7	2,612.9	2,724.0	825.2	46.2%	111.1	4.3%
<b>Subtotal - General Manager's Department</b>	<b>554,416.8</b>	<b>633,976.6</b>	<b>658,014.0</b>	<b>79,559.8</b>	<b>14.4%</b>	<b>24,037.3</b>	<b>3.8%</b>
Ethic's Office	2,837.8	3,504.2	3,719.4	666.4	23.5%	215.2	6.1%
Office of the General Auditor	4,546.7	4,952.2	5,421.6	405.5	8.9%	469.4	9.5%
Office of the General Counsel	16,289.3	18,366.8	18,640.1	2,077.5	12.8%	273.4	1.5%
Overhead Credit from Construction	(21,958.2)	(17,193.2)	(18,068.1)	4,765.0	(21.7%)	(874.9)	5.1%
\$18 Million Expense Reduction <sup>4</sup>	—	(18,000.0)	(18,000.0)	(18,000.0)	(100.0%)	—	—%
<b>Total Department Budget</b>	<b>556,075.3</b>	<b>625,606.7</b>	<b>649,727.0</b>	<b>69,531.4</b>	<b>12.5%</b>	<b>24,120.3</b>	<b>3.9%</b>
Operating Equipment	8,837.0	9,599.8	10,115.8	762.7	8.6%	516.0	5.4%
Variable Treatment	34,883.3	46,409.2	47,095.2	11,525.9	33.0%	686.0	1.5%
<b>GRAND TOTAL</b>	<b>599,795.6</b>	<b>681,615.6</b>	<b>706,938.0</b>	<b>81,820.1</b>	<b>13.6%</b>	<b>25,322.3</b>	<b>3.7%</b>
Pure Water Southern California (PWSC) Program	—	28,889.3	25,121.4	28,889.3	100.0%	(3,767.9)	(13.0%)
<b>GRAND TOTAL without Pure Water Southern California (PWSC) Program</b>	<b>599,795.6</b>	<b>652,726.3</b>	<b>681,816.6</b>	<b>52,930.8</b>	<b>8.8%</b>	<b>29,090.3</b>	<b>4.5%</b>

Totals may not foot due to rounding

- Office of General Manager: The FY 2023/24 Budget includes the Succession Planning Labor Pool budget of \$2M. Beginning in FY 2024/25, Succession Planning Labor Pool budget is distributed in multiple groups.
- Engineering Services: Increase in FY 2024/25 of 57.3% mainly driven by Pure Water Southern California (PWSC) program operating expenses paid with the \$80 million in grant funding from the State Water Resource Control Board
- Board of Directors: Increase in FY 2024/25 of 46.2% mainly driven by labor and benefits from transfer of 2 full-time positions in with no new positions
- The Board approved an across-the-board expenditure reduction of \$18M million per year across all our expenditures including cuts to departmental O&M.

The table above depicts the distribution of the departmental O&M by organization without the overhead credit, \$18 million expense reduction, and operating equipment. The table also depicts the cost of the Pure Water Southern California (PWSC) program of \$28.9 million for FY 2024/25 and \$25.1 million for FY 2025/26 and the total costs excluding the PWSC costs due to the state grant funding. During the course of the budget workshops, \$18 million of budget expenditures per year were reduced to help offset the projected increased rates. This budget reduction will be evaluated and identified within each fiscal year. Including treatment costs, the Water System Operations (which is comprised of the Conveyance and Distribution, Treatment and Water Quality, and Integrated Operations Planning and Support Services Groups) group accounts for 48 percent of the total departmental budget for FY 2024/25 and FY 2025/26. Engineering Services is the second largest departmental expenditure area, accounting for 12 percent of the total departmental budget for FY 2024/25 and FY 2025/26. Succession Planning Labor Pool has been distributed to the organization along with the updated Apprenticeship Program within the Integrated Operations Planning and Support Services organization. The table below

summarizes the O&M budget by expenditure type. A more detailed discussion of significant factors impacting the O&M budget follows.

FY 2024/25 and FY 2025/26 Operations & Maintenance Annual Budget by Expenditure Type, \$ thousands

	2023/24 Budget	2024/25 Budget	2025/26 Budget	2023/24 Budget vs. 2024/25 Budget	2024/25 Budget vs. 2025/26 Budget
Salaries & Benefits	396,064.8	432,990.2	456,115.1	36,925.4	23,125.0
Chemicals, Sludge and Power	34,883.3	46,409.2	47,095.2	11,525.9	686.0
Outside Services	65,208.7	103,690.1	100,277.8	38,481.4	(3,412.3)
Materials & Supplies	36,802.0	45,250.4	48,129.2	8,448.4	2,878.9
Other	57,999.7	43,676.0	45,204.8	(14,323.8)	1,528.8
Operating Equipment	8,837.0	9,599.8	10,115.8	762.7	516.0
<b>Grand Total</b>	<b>599,795.6</b>	<b>681,615.6</b>	<b>706,938.0</b>	<b>81,820.1</b>	<b>25,322.3</b>
Pure Water Southern California (PWSC) Program	—	28,889.3	25,121.4	28,889.3	(3,767.9)
<b>Grand Total without Pure Water Southern California (PWSC) Program</b>	<b>599,795.6</b>	<b>652,726.3</b>	<b>681,816.6</b>	<b>52,930.8</b>	<b>29,090.2</b>

Totals may not foot due to rounding

FY 2024/25 O&M Budget Highlights

The FY 2024/25 O&M budget includes \$681.6 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is \$81.8 million, or 13.6 percent, higher than the FY 2023/24 budget of \$599.8 million. This increase is primarily due to negotiated labor increases, escalating the level of support for Pure Water Southern California program, anticipated inflationary pressures for chemicals, fuels, and other materials and enhanced maintenance efforts. The FY 2024/25 O&M budget for Pure Water Southern California is \$28.9 million and excluding this from the total budget for FY 2025/26 would be \$652.7 million which is \$52.9 million or 8.8 percent higher than FY 2023/24 budget.

**Salaries and Benefits:** Labor costs funded through operating revenues are \$433.0 million. This is \$36.9 million, or 9.3 percent, higher than the FY 2023/24 budget of \$396.1 million. Key factors contributing to the growth include salary increases (\$23.8 million), anticipated overtime & premium pays (\$1.2 million), and benefit costs (\$7.1 million). Benefit cost pressures continue to escalate faster than inflation, including costs for pension, active medical and retiree medical expenses. Other factors contributing to the growth in the salaries and benefits category include the addition of 19 new positions (\$1.8 million) and funding of the apprenticeship program (\$2.7 million). The average vacancy rate was increased to be more in line with current experience and expected conditions.

The FY 2024/25 budget includes 1,965 regular full-time positions which are increasing by 19 net positions from the FY 2023/24 budget and 59 district temporary full-time equivalents (FTEs) which are increasing by 10 net positions for a total of 2,024 authorized positions.

The 19 new regular full-time positions are being added to support board initiatives of Equal Employment Opportunity (EEO), Sustainability, Innovation & Resilience (SRI), as well other critical district needs in engineering assessments and risk management, managing increasing CIP projects, benefits, employee relations, compensation and recruitment, medical accommodations, safety and technical training, financial management and grant services, cybersecurity, and financial systems. Along with the new positions added, both existing and new positions have been realigned to Capital and O&M projects based on operational priorities for the upcoming budget. In addition, a total of 7 district temporary positions will be added over the biennium to support General Counsel, Bay Delta Initiatives (BDI), Equal Employment Opportunity (EEO), Sustainability, Innovation &

Resilience (SRI), and to accommodate enhanced security, planning and acquisition, business systems support, Human Resources efforts and ongoing succession planning and education efforts.

The budget recognizes the importance of sound succession planning and continued training and development of the workforce with a \$1.6 million and \$1.8 million succession planning labor pool included in FY 2024/25 and FY 2025/26 respectively. An additional \$4.7 million and \$7.3 million for FY 2024/25 and FY 2025/26 respectively is included in Integrated Operations Planning and Support Services' budget to fund the apprenticeship program. The apprenticeship program has been revamped for the upcoming biennium budget by allowing Integrated Operations Planning and Support Services to hire apprentices without using vacancy savings which tied up positions in the past. Moving forward, the new process will fund the apprenticeship program using budgeted dollars which will account for 26 apprentices in FY 2024/25 and 39 apprentices in FY 2025/26 as we look to hire apprentices each year to provide the critical training and ramp-up needed in the face of an ever changing work force.

**Outside Services:** Outside Services are anticipated to increase by \$38.5 million primarily because of escalating the level of support for Pure Water Southern California program, anticipated environmental planning including Webb Tract Multi-Benefit Mosaic Landscape Project, and implementation of new operating guidelines on the Lower Colorado River. Also included is monitoring of the cyber security operations center, and implementation of the National Security Council Safety recommendations. In addition, the budget includes a significant increase in repair and maintenance costs required to support the Desert Housing and Recreation Interim Action Plan and other housing improvements, expansion of Metropolitan network infrastructure, replacement of hardware equipment coming off warranty, and increased property maintenance such as fencing and encroachment removal, weed abatement and graffiti remediation.

**Materials & Supplies:** Materials & Supplies is increasing by \$8.4 million primarily as a result of anticipated inflationary pressures for chemicals, fuels and other materials and supplies, increases in software license and maintenance fees (e.g., Automation Data Acquisition System, LP Tracker, Bentley ProjectWise), and support for the Pure Water Southern California. In addition continued transformation to cloud computing and increased consumption of cloud services and inflationary pressure anticipated on mechanical fluids and other materials and supplies, in support of aging equipment including an aging and worn vehicle fleet.

**Other O&M and Operating Equipment:** Chemicals, solids, and power reflect the cost of the water treatment process and are anticipated to increase by \$11.5 million in FY 2024/25, driven by an increase in chemical and power costs. Chemical costs are increasing by \$12.0 million as chemical commodity prices continue to rise. The FY 2024/25 budget reflects an increase in power costs of \$0.8 million due to the rapidly changing energy market and climatic conditions.

Operating equipment is higher by \$0.8 million primarily due to the replacement of critical aging vehicles and equipment that is at the end of its useful life and inflationary pressures in pricing. Upon completion and approval of the Zero Emission Vehicle (ZEV) purchasing plan over the next biennium, the FY 2024/25 budget could be amended which could increase the operating equipment budget accordingly.

**Pure Water Southern California (PWSC) Program Planning Costs:** The budget for the PWSC Planning Costs is \$28.9 million and is reflected in Departmental O&M as major O&M Projects. \$23.9 million of the total is for professional services and \$3.8 million is for salaries and benefits. \$1.2 million is primarily for materials and supplies, advertising, and taxes and permits. A total of 17 regular full-time positions have been allocated to the program. This program is entirely funded by the \$80M PWSC Grant with no rate impact.

## FY 2025/26 O&M Budget Highlights

The FY 2025/26 O&M budget is \$706.9 million, an increase of \$25.3 million, or 3.7 percent, compared to the FY 2024/25 budget. This increase is primarily due to negotiated wage increases, anticipated inflationary pressures for chemicals, fuels, and software licensing/support agreements, offset by a reduction in outside services related to the Pure Water Southern California program as the environmental planning process for the program is

completed. The FY 2025/26 O&M budget for Pure Water Southern California is \$25.1 million and excluding this from the total budget for FY 2025/26 would be \$681.8 million which is \$29.1 million or 4.5 percent higher than FY 2024/25 budget.

**Salaries and Benefits:** The FY 2025/26 O&M labor budget is about \$23.1 million or 5.3 percent higher than the FY 2024/25 budget. Key factors contributing to the growth in budgeted expenditures include salary increases (\$12.3 million) and benefit costs (\$8.2 million) for pensions and health care premiums. In addition to these cost increases, the FY 2025/26 budget includes an additional \$2.6 million for the apprenticeship program and captures the full-year cost of adding 19 additional positions.

The FY 2025/26 budget includes 1,965 regular full-time positions which remains flat from the FY 2024/25 budget and 56 district temporary full-time equivalents (FTEs) which are decreasing by 3 net positions for a total of 2,021 authorized positions.

**Outside Services:** Outside Services are anticipated to decrease by \$3.4 million of which \$4.3 million is due to the decrease in the level of support for the environmental planning phase of the Pure Water Southern California program. This is offset by increases related to IT support for critical on-call services for key IT strategic priorities, increase in environmental planning work required for the Pure Water Southern California program, and non-professional services increase predominately due to labor increases.

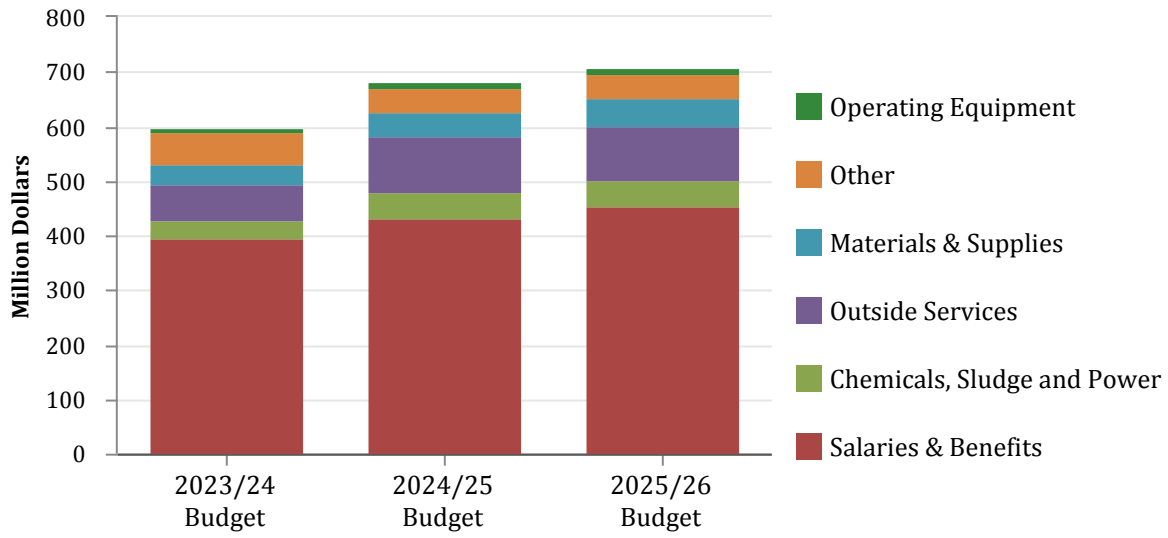
**Materials & Supplies:** Materials & Supplies is increasing by \$2.9 million. Increases for software licensing/support agreements, as well as new software costs from CIP projects transferring over to Operations and Maintenance and anticipated inflationary pressures for chemicals, fuels, and other materials and supplies.

**Other O&M and Operating Equipment:** The cost of chemicals, power, and sludge disposal incurred in the water treatment process is anticipated to increase by \$0.7 million in FY 2025/26 due to a minor reduction in chemical costs offset by an increase in power utilities costs. The cost of utilities is higher by \$1.1 million because of expected electrical rates due to continuing rapidly changing energy market and climatic conditions, as well as pumping at the Greg Avenue facility under low SWP allocation. The budget reflects an unchanged O&M hazardous waste abatement cost from the Weymouth Basin Remediation capital project and other facility projects.

Operating equipment is higher by \$0.5 million from FY 2024/25 due primarily to increase in trucks and heavy equipment for construction and maintenance needs. Upon completion and approval of the Zero Emission Vehicle (ZEV) purchasing plan over the next biennium, the FY 2025/26 budget could be amended which could increase the operating equipment budget accordingly.

**Pure Water Southern California (PWSC) Program Planning Costs:** The budget for the PWSC Planning Costs is \$25.1 million and is reflected in Departmental O&M as major O&M Projects. \$19.6 million of the total is for professional services and \$4.4 million is for salaries and benefits. \$1.1 million is primarily for materials and supplies, advertising, and taxes and permits. A total of 17 regular full-time positions have been allocated to the program. This program is entirely funded by the \$80M PWSC Grant with no rate impact.

Departmental Budget by Expenditure Type, \$ millions



The figure above summarizes the total departmental O&M budget by expenditure type, of which about 64 percent is for salaries and benefits in both FY 2024/25 and FY 2025/26.

## Staffing Plan

FY 2024/25 and FY 2025/26 total authorized positions which include district temporary positions, are 2,024 and 2,021 positions, respectively. The 19 new regular full-time positions are being added to support board initiatives of Equal Employment Opportunity (EEO), Sustainability, Innovation & Resilience (SRI), as well other critical district needs in engineering assessments and risk management, managing increasing CIP projects, benefits, employee relations, compensation and recruitment, medical accommodations, safety and technical training, financial and grant management services, cybersecurity, and financial systems. Along with the new positions added, both existing and new positions have been realigned to Capital and O&M projects based on operational priorities for the upcoming budget. In addition, a total of 7 district temporary positions will be added over the biennium to support General Counsel, Bay Delta Initiatives (BDI), Equal Employment Opportunity (EEO), Sustainability, Innovation & Resilience (SRI), and to accommodate enhanced security, planning and acquisition, business systems support, Human Resources efforts and ongoing succession planning and education efforts.

The number of regular full-time positions allocated to the Pure Water Southern California (PWSC) Planning Costs budget over the biennium has remained constant at 17 from the FY 2023/24 Budget.

The personnel complement is shown in the following tables.

### Regular and Temporary Positions

	2022/23 Budget	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Regular Full-Time Positions	1,929	1,946	1,965	19	1,965	—
District Temporary Positions	47	49	59	10	56	(3)
<b>Total</b>	<b>1,976</b>	<b>1,995</b>	<b>2,024</b>	<b>29</b>	<b>2,021</b>	<b>(3)</b>

### O&M and Capital Staffing Levels

	2023/24 Budget	2024/25 Budget	2025/26 Budget
<b>O&amp;M Positions</b>			
Regular Full-Time Positions	1,677	1,677	1,677
District Temporary Positions	48	59	56
<b>Total O&amp;M</b>	<b>1,725</b>	<b>1,736</b>	<b>1,733</b>
<b>Capital Positions</b>			
Regular Full-Time Positions	269	288	288
District Temporary Positions	1	—	—
<b>Total Capital</b>	<b>270</b>	<b>288</b>	<b>288</b>
<b>GRAND TOTAL</b>	<b>1,995</b>	<b>2,024</b>	<b>2,021</b>



## CAPITAL INVESTMENT PLAN

Estimated expenditures for the Capital Investment Plan (CIP) which includes Minor Capital Projects are \$637 million for FY 2024/25 and FY 2025/26. They are funded by current operating revenues (PAYGO) and revenue bond proceeds. The FY 2024/25 CIP expenditures are \$12 million higher than the FY 2023/24 budget, while the FY 2025/26 is \$12.5 million higher than the FY 2024/25 budget. The largest areas of expenditures in the Biennial Budget are infrastructure refurbishment and replacement and infrastructure upgrades.

The CIP is discussed in more detail in the CIP appendix.

### Cash Funded Capital

The CIP is anticipated to be funded 56 percent by current operating revenues (PAYGO) in FY 2024/25 and in FY 2025/26, the CIP is anticipated to be funded 54 percent by PAYGO. The PAYGO funding for FY 2024/25 is budgeted at \$175 million and in FY 2025/26, the PAYGO funding is budgeted at \$175 million.

### Debt Funded Capital

The CIP is anticipated to be funded 44 percent by revenue bond proceeds in FY 2024/25 and in FY 2025/26, the CIP is anticipated to be funded 46 percent by revenue bond proceeds. New debt issues of \$280 million are planned over the biennium to fund the CIP. Given construction funds expected to be available at the beginning of the biennial budget period and planned PAYGO amounts, these bond issues should provide sufficient funds to meet CIP expenditures over the two years.

### Debt Service

For FY 2024/25 and FY 2025/26, Metropolitan plans to issue new revenue bond debt as described above. Debt service payments in FY 2024/25 are budgeted at \$340.4 million and \$353.5 million in FY 2025/26.

Please refer to the section on Capital Financing for additional details on this expense.

## FUND BALANCES AND RESERVES

Metropolitan operates as a single enterprise fund for financial statements and budgeting purposes. Through its Administrative Code, Metropolitan identifies a number of accounts, which are referred to as funds, to separately track uses of monies for specific purposes as summarized in the table below.

The FY 2024/25 budget forecasts a \$26.0 million increase in reserves by June 30, 2025 and includes the Water Rate Stabilization Fund (WRSF) and the Revenue Remainder Fund. In addition, the Treatment Surcharge Stabilization Fund (TSSF) balance is projected to be at \$0.0 million.

The FY 2025/26 budget forecasts a \$105.6 million increase in reserves by June 30, 2026 and includes the WRSF and the Revenue Remainder Fund. In addition, the TSSF balance is projected to be at \$0.0 million.

Fund balances are budgeted to be \$1.23 billion at June 30, 2025. Of that total, \$894.7 million is restricted by bond covenants, contracts, or board policy, and \$339.8 million is unrestricted. Fund balances are budgeted to be \$1.31 billion at June 30, 2026. Of that total, \$859.8 million is restricted by bond covenants, contracts, or board policy, and \$445.4 million is unrestricted.

On June 30, 2025, the minimum and target levels for the reserve funds are estimated to be \$228.8 million and \$644.6 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$339.8 million, about \$111.0 million over the minimum level.

On June 30, 2026, the minimum and target levels for the reserve funds are estimated to be \$285.9 million and \$749.8 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$445.4 million, about \$159.5 million over the minimum level.

Projected Fund Balances, \$ millions

	Restricted	Unrestricted	Total
<b>2024/25 Budget</b>			
Operating Funds	502.8	—	502.8
Debt Service Funds	219.6	—	219.6
Construction Funds	73.8	—	73.8
Reserve Funds (1)	—	339.8	339.8
Treatment Surcharge Stabilization Fund	—	—	—
Trust and Other Funds	98.3	—	98.3
<b>Total June 30, 2025</b>	<b>894.6</b>	<b>339.8</b>	<b>1,234.4</b>
<b>2025/26 Budget</b>			
Operating Funds	527.3	—	527.3
Debt Service Funds	226.9	—	226.9
Construction Funds	31.5	—	31.5
Reserve Funds (1)	—	445.4	445.4
Treatment Surcharge Stabilization Fund	—	—	—
Trust and Other Funds	74.0	—	74.0
<b>Total June 30, 2026</b>	<b>859.7</b>	<b>445.4</b>	<b>1,305.1</b>

Totals may not foot due to rounding

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

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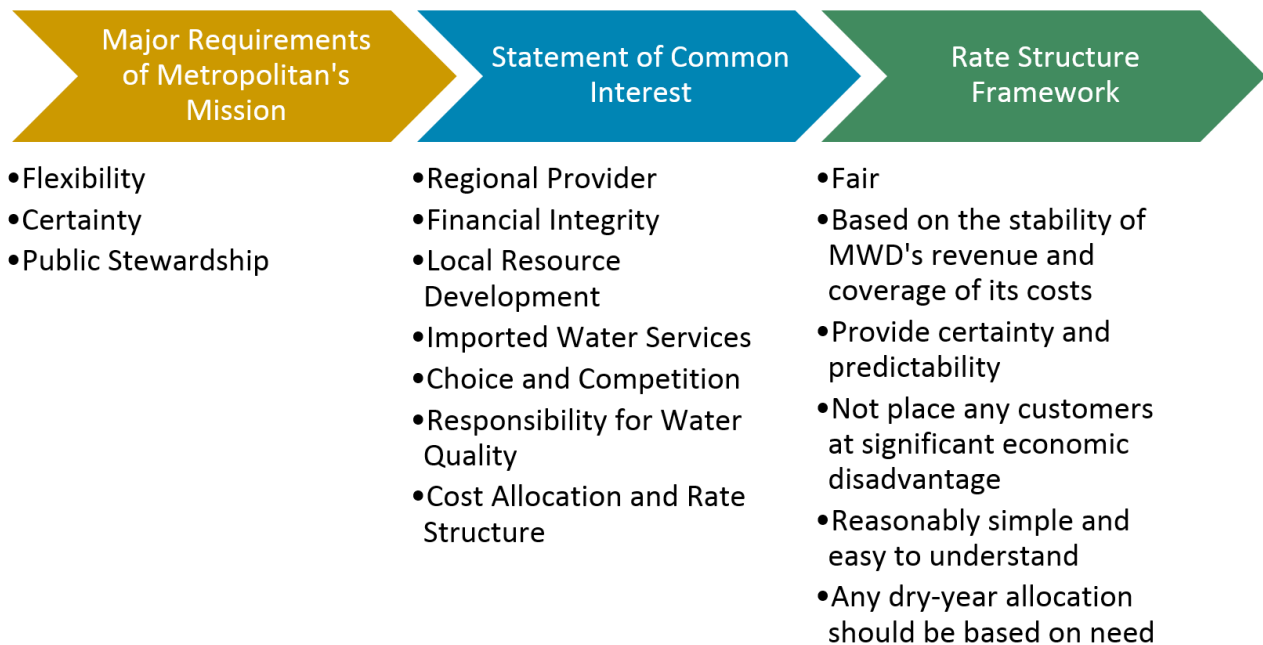
# RATE STRUCTURE OVERVIEW

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## Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in the following figure, the first step of the process was to identify the “Major Requirements of Metropolitan’s Mission,” which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of Metropolitan’s strategic plan to address these mission requirements. One of the most important common interests was “Cost Allocation and Rate Structure.” In determining the most appropriate Cost of Service (COS) and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined Metropolitan’s Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

### Development of the Rate Structure Framework



The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

## Major Requirements of Metropolitan's Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its Metropolitan vision statement - flexibility, certainty, and public stewardship, which it described as:

- **Flexibility.** Metropolitan is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through Metropolitan's conveyance systems is an essential element of Southern California's developing market.
- **Certainty.** The certainty that Metropolitan's water supply is reliable and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship.** As public stewards of much of Southern California's water supply, Metropolitan and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.

## Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the Metropolitan strategic plan, described as:

- **Regional provider.** This area includes the concerns of protecting regional infrastructure and providing service during drought periods. Regional water must be provided to meet the needs of the member agencies, and water supplies must be equitably allocated during drought periods based on the Water Surplus and Drought Management Plan principles.
- **Financial integrity.** It is a common interest of the members for Metropolitan to assure the financial integrity of the agency in all aspects of its operations.
- **Local resource development.** Metropolitan supports local resources development by working in partnership with its member agencies and by providing member agencies with financial incentives for water conservation and for local projects.
- **Imported water service.** Metropolitan is responsible for providing imported water to meet the committed needs of its member agencies.
- **Choice and competition.** After Metropolitan provides imported water for the member agencies' committed demands, a member agency can choose the most cost-effective additional water supplies for its customers. These choices include either Metropolitan, local resource development, market transfers, or some combination of these secondary options. Metropolitan and its member agencies can decide how to provide these additional supplies collaboratively while balancing local, imported, and market opportunities with affordability.
- **Responsibility for water quality.** Metropolitan must advocate for source water quality and implement in-basin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.

- **Cost allocation and rate structure.** The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.

## Rate Structure Framework

A major element of common interest was “*Cost Allocation and Rate Structure.*” In addressing this element a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the *Rate Structure Framework*. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

- The rate structure should be *fair*;
- It should be based on the *stability* of Metropolitan’s revenue and coverage of its costs;
- It should provide certainty and predictability;
- It should not place any customers at *significant economic disadvantage*;
- It should be reasonably *simple and easy to understand*; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework. That COS process and rate structure remain today, with the exception of recent modifications by the Board. First, in August 2020, the Board repealed the pre-set wheeling rate for short-term wheeling service to member agencies. As a result, charges for short-term wheeling to member agencies is now subject to contractual negotiations on a case-by-case basis, as has been the case with long-term wheeling arrangements for member agencies, all wheeling for third parties, and all exchange transactions. In December 2019, the Board directed staff (1) to incorporate the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed FYs 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rate or charge to recover demand management costs, with the proposed rate and charges for CYs 2021 and 2022. In November 2021, the Board directed staff to allocate all demand management costs to Metropolitan’s supply rate elements, and no Water Stewardship Rate or other demand management recovery charge is included in the rate structure after 2022.

At the November 14, 2023 FAIRP meeting, staff presented to the Board the status of the 2014 Purchase Order, which will end on December 31, 2024. Based on the information provided at that meeting, staff proposes to not renew the 2014 Purchase Order. As a result, Tier 2 rate will not be included in the proposed rates. No Tier 2 revenue has been included in past recent budgets, and therefore, the exclusion of Tier 2 does not impact the present budget. Metropolitan can revisit Purchase Order commitments and structure as needed during the business model review through the CAMP4W process.

## RATE STRUCTURE DESIGN

The elements of the rate structure, and the rates and charges for calendar year 2024, 2025, and 2026 are summarized in Table 14.

Table 14. Rate Elements

Rate Design Elements	Functional Costs Recovered	Type of Charge	2024	2025	2026
Supply Rate	Supply, Drought Storage, and Demand Management	Volumetric (\$/af)	\$332*	\$290	\$313
System Access Rate	Conveyance/Distribution (Average Capacity), portion of Regulatory/Emergency Storage	Volumetric (\$/af)	\$389	\$463	\$492
System Power Rate	Power on CRA and SWP	Volumetric (\$/af)	\$182	\$159	\$179
Treatment Surcharge	Treatment	Volumetric (\$/af)	\$353	\$483	\$544
Capacity Charge	Peak Distribution Capacity, portion of Regulatory Storage	Fixed (\$/cfs)	\$11,200	\$13,000	\$14,500
Readiness-to-Serve Charge	Available Conv. & Dist. Capacity, Emergency Storage	Fixed (\$M)	\$167	\$181	\$188

Rates and Charges effective January 1st

\*based on Tier 1 for 2024

### Supply Rate

#### Purpose

The rate structure recovers supply costs through supply rate.

#### Supply Rate

The Supply Rate is a volumetric rate charged on Metropolitan’s water sales. The Supply Rate supports a regional integrated approach through the uniform, postage stamp rate. The Supply Rate is calculated as the amount of the total revenue requirement functionalized as supply divided by the estimated amount of water sales. Per Board direction in December 2021, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the supply rate.

#### Implementation

All system water delivered will be billed at the Supply Rate.

#### Benefits

Supply rate benefits include: (1) support of a regional approach; (2) provides a clear linkage between costs and benefits; and (3) establishes a simple approach to recovering the costs of supply, drought storage and demand management functions.



## System Access Rate (SAR)

### Purpose

The SAR recovers the costs of Conveyance, Distribution, and Storage that is used on an average annual basis through a uniform, volumetric rate. All member agencies pay the SAR for the conveyance and distribution capacity associated with deliveries of full-service water.

### Implementation

The SAR is charged for each acre-foot of water transported by Metropolitan to its member agencies and delivered as a full-service water transaction.

### Benefits

The SAR benefits include: (1) support of a regional approach; (2) accommodates a water transfer market that does not unfairly advantage one user over another; (3) provides a clear linkage between costs and benefits; and (4) establishes a simple approach to recovering the costs of conveyance and distribution functions.

## System Power Rate (SPR)

### Purpose

The SPR recovers the costs of energy required to pump water to Southern California through the SWP and CRA. The cost of power is recovered through a uniform, volumetric rate.

### Implementation

The SPR is applied to all deliveries of Metropolitan water to member agencies.

### Benefits

The primary benefit of the SPR is that it clearly identifies Metropolitan's average cost of power.

## Treatment Surcharge

### Purpose

The Treatment Surcharge recovers all of the costs of providing treatment capacity and operations through a uniform, volumetric rate per acre-foot of treated water transactions.

### Implementation

The Treatment Surcharge is charged to all treated water transactions.

### Benefits

There are several benefits provided by the treatment surcharge, including that (1) only treated water users pay for the costs of treatment, and (2) by averaging the costs of providing treated water service over the entire system the regional economies of scale are preserved.

## Capacity Charge

### Purpose

The Capacity Charge recovers the costs incurred to provide peak capacity within the Distribution System. The Capacity Charge also provides a price signal to encourage agencies to reduce peak demands on the Distribution System and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period, resulting in more efficient utilization of Metropolitan's existing infrastructure and deferring capacity expansion costs.

### Implementation

Each member agency will pay the Capacity Charge per cubic feet per second (cfs) based on a three-year trailing peak (maximum) day demand, measured in cfs. Each member agency's peak day is likely to occur on different days; therefore this measure approximates peak week demands on Metropolitan.

### Benefits

The Capacity Charge provides several benefits including (1) increasing the overall efficiency of water use, (2) improving the fair allocation of costs among member agencies based upon the demand imposed by each agency, and (3) providing a source of fixed revenue.

## Readiness-To-Serve Charge (RTS)

### Purpose

The RTS recovers the cost of the portion of system that is available to provide emergency service and available capacity during outages and hydrologic variability.

### Implementation

The RTS is a fixed charge that is allocated among the member agencies based on a ten-fiscal-year rolling average of firm demands. Water transfers and exchanges are included for purposes of calculating the ten-year rolling average. The SDCWA Exchange Water transactions are excluded from the calculation of the ten-year rolling average per the terms of the Amended and Restated Agreement between the Metropolitan Water District of Southern California and the San Diego County Water Authority for the Exchange of Water. The Standby Charge is collected at the request of some member agencies that have elected to use the charge as a direct offset to the member agency's RTS obligation.

### Benefits

The RTS provides two major benefits, which includes (1) a better matching of costs and benefits, and (2) a SAR that recovers only those costs associated with providing average annual service.

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# UNDERSTANDING THE LAYOUT OF THE DEPARTMENTAL BUDGET

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## DEPARTMENTAL/GROUP BUDGET

The Departmental Section provides detailed information about the Operations and Maintenance (O&M) budget of each group and department and consists of the following:

### Mission

Describes, at a high level, the scope of the organization's functions.

### Programs

Describes the organizations roles and responsibilities by program or section and provides a summary organizational chart.

### Goals & Objectives

Summarizes the goals & objectives each organization proposes to accomplish in the upcoming fiscal years.

### O&M Financial Summary

Provides a summary of the organization's O&M budgets. For FY 2024/25 and FY FY 2025/26, O&M expenditures are identified by expense categories such as salaries and benefits, professional services, and "other" expenditures and incorporate the group objectives.

### Expense Category

Category	Description
<i>Salaries and Benefits</i>	Labor costs and fringe benefits for Metropolitan's regular, district temporary, and agency temporary employees. Total salaries and benefits, direct charges to capital, and O&M salaries are shown.
<i>Professional Services</i>	All costs associated with work performed by outside contractors and consultants.
<i>Operating Equipment</i>	Costs associated with the purchase of capitalized portable equipment, including automobiles, trucks, servers, and other applicable portable equipment.
<i>Other</i>	Cost of purchasing chemicals, materials and supplies, reprographics, travel, telephone, and other necessary items for effective operation of Metropolitan. A breakdown has been provided to itemize those expense categories that are five percent or more of the "other" category.

## O&M Budget by Section

Provides a summary of the organization's O&M budget and personnel count by section or program.

## Personnel Summary

Provides a breakdown for the organization of total personnel involved in O&M and capital work.

## Budget Highlights

Identifies the major factors of the budget variance over the biennium as well as any significant changes by budget year.

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# OFFICE OF THE GENERAL MANAGER

The Office of the General Manager manages and administers all Metropolitan activities except those functions specifically delegated by statutes and Board order to the General Counsel, General Auditor, or Ethics Officer.

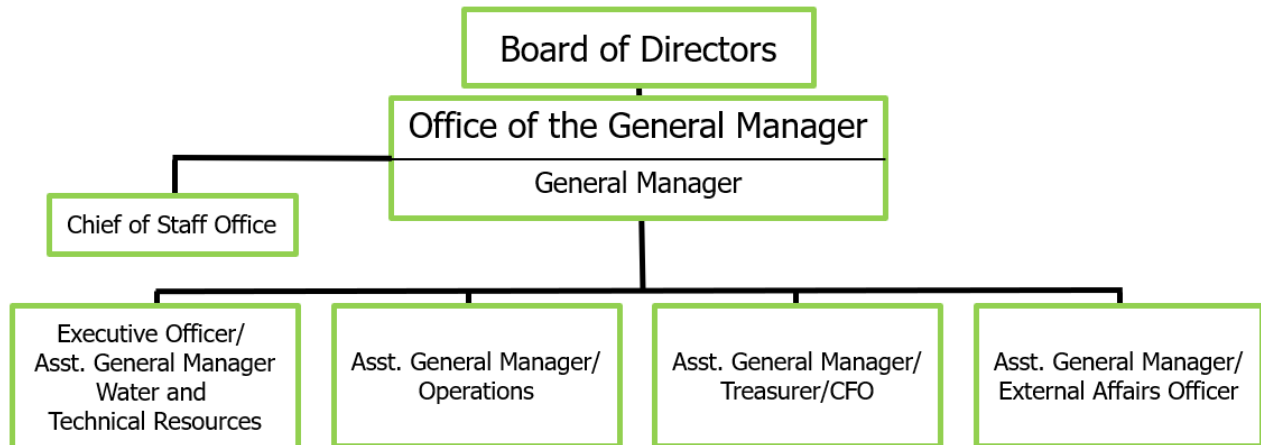
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## PROGRAMS

The Office of the General Manager is responsible for the management and administration of Metropolitan's activities including the management of all matters pertaining to the business of the Board and research on actions and policies of the Board by staff for directors, member agencies, and the public.

The reporting structure of the Office of the General Manager is reflected below.

The Board of Directors provides policy and direction as the governing body of the Metropolitan Water District.



## GOALS AND OBJECTIVES

The following strategic priorities in the General Manager's Business Plan reflect the funding emphasis in the budget and highlight items that will be the focus of Board and staff attention over the next two years.

**Strategic Priority #1:** Empower the Workforce and Promote Diversity, Equity and Inclusion

Build a safe, inclusive, and accountable workplace where all employees feel valued, respected, and able to meaningfully contribute to decisions about their work to fulfill Metropolitan's Mission.

- Renovate desert housing and update plans for future housing.
- Reestablish Metropolitan’s Vision and Values, along with a communication plan to reach all of the Metropolitan community.
- Timely closure of EEO complaints within 90 business days.
- Increase employee awareness of and access to EEO.
- Implement the National Safety Council recommendations.
- Partner with department heads on issues affecting the District.

Prepare and support the workforce by expanding training and skill development and updating strategies to recruit and retain diverse talent at a time when Metropolitan’s needs are evolving and employee expectations about the workplace are changing.

- Update recruitment processes and shorten recruitment timeline.
- Expand and enhance a District wide workforce development program.
- Grow staff development and training in key areas.

### Strategic Priority #2: Sustain Metropolitan’s Mission with a Strengthened Business Model

Develop revenue and business model options that support the needs of the member agencies as well as Metropolitan’s financial sustainability and climate adaptation needs.

- In conjunction with the Climate Adaptation Master Plan for Water process, complete the Phase 1 Long-Range Financial Plan and a review of Business Model/revenue options.
- Provide equity and fairness in rates and the business model.

Manage rate pressure on member agencies through attention to programmatic costs, organizational efficiencies and efforts to secure external funding for projects with broad and multi-purpose benefits.

- Establish a centralized grants office to ensure more consistent and coordinated pursuit of external funding.
- Complete the organizational assessment and implement key recommendations to improve efficiency and effectiveness.

- Secure Inflation Reduction Act funding that supports Colorado River water use objectives.

### Strategic Priority #3: Adapt to Changing Climate and Water Resources

Provide each member agency access to an equivalent level of water supply reliability through the development of a Climate Adaptation Master Plan for Water (CAMP4W) that integrates water resource, financial and climate adaptation planning.

- Provide the Board with a decision-making framework and evaluative criteria to identify investments toward climate adaptation and related supply and system resilience.
- Complete technical analyses and resource program improvements to inform resource options for consideration in CAMP4W.
- Enhance long-term water supply reliability for the State Water Project dependent areas.

Advance the long-term reliability and resilience of the region’s water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate.

- Advance multiple strategies toward sustainable Colorado River supplies and toward broad agreement in long-term compact negotiations.
- Implement and promote agricultural water-conservation best practices.
- Continue implementation of the Climate Action Plan to reduce GHG emissions.
- Determine targets for stormwater and develop programmatic stormwater strategies.
- Expedite the Pure Water Southern California project.
- Advance Delta Conveyance Project Planning and Analysis.
- Implement watershed science and ecosystem restoration, to advance a holistic approach to the Delta.
- Increase outdoor water use efficiency.



**Strategic Priority #4:** Protect Public Health, the Regional Economy, and Metropolitan's Assets

Proactively identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.

- Enhance emergency preparedness and response plans.
- Implement cybersecurity strategies.
- Assess and prioritize Metropolitan's Capital Investment Plan based on risk and value.

Apply innovation, technology, and sustainable practices across project lifecycles (design, construction, operations, maintenance, and replacement).

- Complete the SCADA Control System replacement pilot project phase I at the Mills plant.
- Implement Enterprise Content Management system.
- Develop procurement policies that prioritize sustainable products and practices.
- Incorporate sustainable energy practices in CIP projects.

**Strategic Priority #5:** Partner with Interested Parties and the Communities We Serve

Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them and toward mutual and/or regional benefits.

- Assess Community Partnering Program, legislative events, memberships, sponsored events and other Metropolitan funded community outreach activities.
- Launch a public engagement strategy focused on climate adaptation, resilience, and community needs, to inform the CAMP4W.
- Create communication practices that facilitate input of interested parties into board consideration of policies and projects.
- Establish Internal Communications program to promote improvements in workplace culture and effectiveness and to support Metropolitan employees' ability to serve as ambassadors.

Reach disadvantaged communities and non-traditional interested parties to better understand their needs and ensure their inclusion in decision making.

- Complete the analysis of disadvantaged communities within Metropolitan service area and integrate the findings into our program activities.
- Identify tribal interests and engagement strategies.
- Locally implement the national Equity in Infrastructure Program.

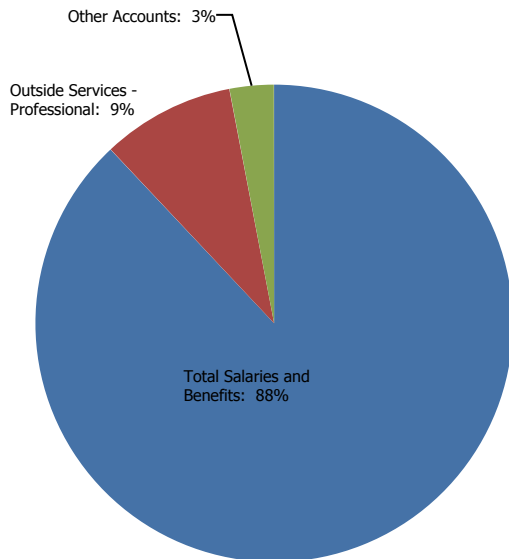
## O&M FINANCIAL SUMMARY

	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits <sup>1</sup>	7,523,214	9,509,411	9,782,149	272,738	10,134,825	352,676
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>7,523,214</b>	<b>9,509,411</b>	<b>9,782,149</b>	<b>272,738</b>	<b>10,134,825</b>	<b>352,676</b>
% Change		26.4%		2.9%		3.6%
Outside Services - Professional	1,074,004	1,040,000	1,000,000	(40,000)	1,000,000	—
Subsidies & Incentives	58,230	61,300	70,600	9,300	74,100	3,500
Travel Expenses	102,407	123,399	131,300	7,901	131,250	(50)
Other Accounts	130,881	72,400	146,000	73,600	149,235	3,235
<b>Total O&amp;M</b>	<b>8,888,737</b>	<b>10,806,510</b>	<b>11,130,049</b>	<b>323,539</b>	<b>11,489,410</b>	<b>359,361</b>
% Change		21.6%		3.0%		3.2%

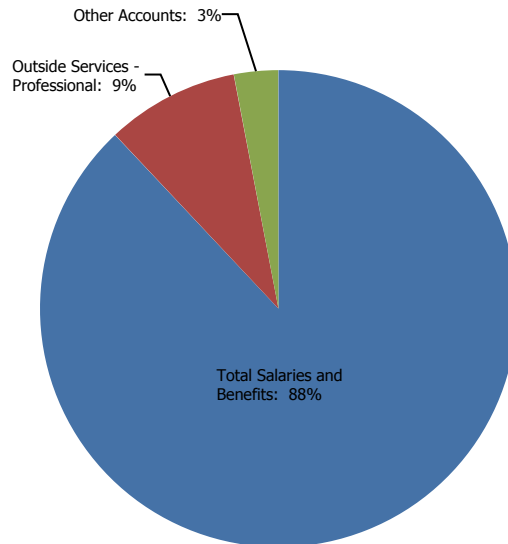
Totals may not foot due to rounding.

1. The FY 2023/24 Budget includes the Succession Planning Labor Pool budget of \$2M. Beginning in FY 2024/25, Succession Planning Labor Pool budget is distributed in multiple groups.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 BUDGET BY EXPENDITURE



## PERSONNEL SUMMARY

Office of the General Manager		2023/24 Budget	2024/25 Budget *	Change from 2023/24 *	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	5	6	1	6	—
	O&M	5	6	1	6	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	1	—	(1)	—	—
	O&M	1	—	(1)	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	6	6	—	6	—
	O&M	6	6	—	6	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

\* 2024/25 Budget includes 1 FTE transfer from other departmental Group

Assistant General Managers and Support		2023/24 Budget *	2024/25 Budget **	Change from 2023/24 **	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	16	18	2	18	—
	O&M	16	18	2	18	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	—	—	—	—	—
	O&M	—	—	—	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	16	18	2	18	—
	O&M	16	18	2	18	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

\* 2023/24 Budget includes 4 FTE net transfers from other departmental Groups

\*\* 2024/25 Budget includes 2 FTE net transfers from other departmental Groups

## BUDGET HIGHLIGHTS

The Office of the General Manager’s O&M Biennial Budget is \$11.1 million in FY 2024/25 and \$11.5 million in FY 2025/26 or an increase of 3.0% and an increase of 3.2% respectively from the prior budget years. The main factors affecting these changes:

- Three positions were transferred in from other groups and no new positions were added.
- Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.
- Non-labor expenses are increasing by about 3.9% primarily in the areas of subscriptions and memberships along with conferences to support GM strategic priorities.

The following are the significant changes by budget year:

## FY 2024/25

### Personnel–related issues

Regular full-time positions are increasing by 3 positions from FY 2023/24 due to 3 positions transferred from other departmental Groups and no new positions were added.

Succession Labor Pool budget in FY 2023/24 Budget was transferred in. Beginning in FY 2024/25, Succession Labor Pool budget is distributed in multiple groups.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

The budget for professional services is slightly decreasing to support GM strategic priorities.

### Other

The budget for travel is increasing in response to expected increases for travel and conferences.

Memberships and Subscriptions as well as Materials and Supplies are increasing to support GM strategic priorities.

## FY 2025/26

### Personnel–related issues

Total personnel count remains flat with the FY 2024/25 budget.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

The budget for professional services is flat to support GM strategic priorities.

### Other

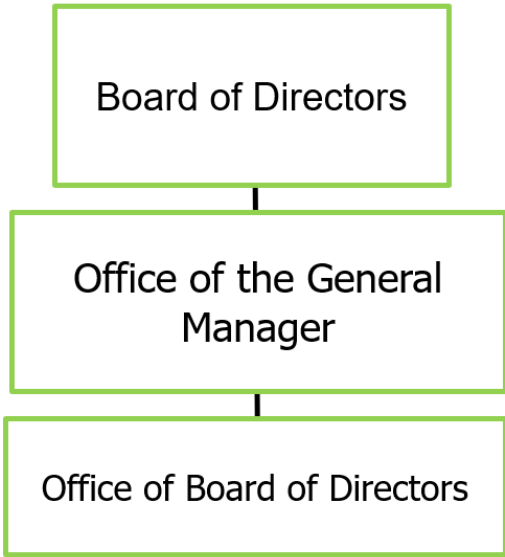
The budget for travel is flat to support additional staff.

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# OFFICE OF THE BOARD OF DIRECTORS

The Office of the Board of Directors provides policy and direction as the governing board of Metropolitan Water District and provides administrative support to the business of the Board.

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## GOALS AND OBJECTIVES

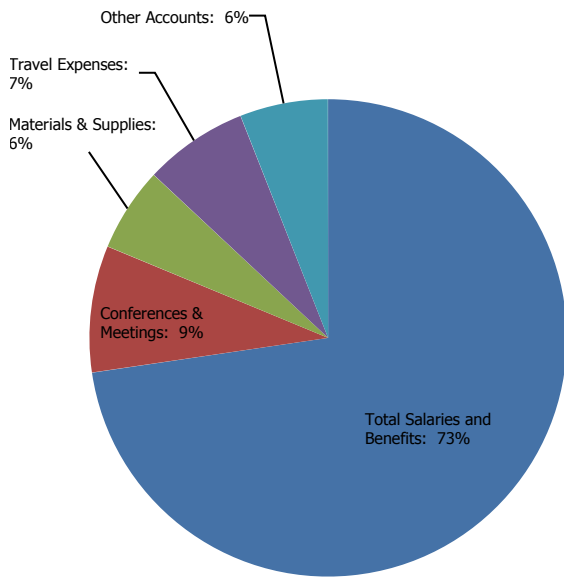
Provide support to the Board of Directors in conducting the business of the board including the coordination of a variety of administrative functions for the Board of Directors and related committees, Metropolitan staff, member agencies, and the general public.

# O&M FINANCIAL SUMMARY

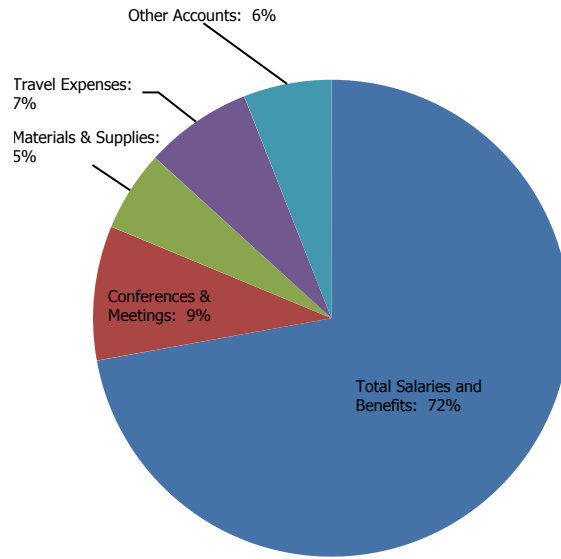
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	1,505,227	1,181,212	1,907,394	726,182	1,978,451	71,056
<i>Direct Charges to Capital</i>	—	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>1,505,227</b>	<b>1,181,212</b>	<b>1,907,394</b>	<b>726,182</b>	<b>1,978,451</b>	<b>71,056</b>
% Change		(21.5%)		61.5%		3.7%
Conferences & Meetings	189,720	150,000	225,000	75,000	250,000	25,000
Materials & Supplies	88,294	145,000	150,000	5,000	150,000	—
Outside Services - Professional	61,728	100,000	100,000	—	100,000	—
Travel Expenses	134,467	181,000	185,000	4,000	200,000	15,000
Other Accounts	43,808	30,440	45,500	15,060	45,500	—
<b>Total O&amp;M</b>	<b>2,023,244</b>	<b>1,787,652</b>	<b>2,612,894</b>	<b>825,242</b>	<b>2,723,951</b>	<b>111,056</b>
% Change		(11.6%)		46.2%		4.3%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 BUDGET BY EXPENDITURE



## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	5	7	2	7	—
	O&M	5	7	2	7	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	—	—	—	—	—
	O&M	—	—	—	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	5	7	2	7	—
	O&M	5	7	2	7	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Office of the Board’s O&M Biennial Budget is \$2.6 million in FY 2024/25 and \$2.7 million in FY 2025/26 or an increase of 46.2% and an increase of 4.3% respectively from the prior budget years. The increase from the previous biennial budget is due to the following:

- Two positions were transferred from other departmental Groups to accurately reflect ongoing operations.
- Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

The following are the significant changes by budget year:

### FY 2024/25

#### Personnel–related issues

Regular full-time positions are increasing by 2 positions from FY2023/24 due to 2 positions transferred from other departmental Groups.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Conferences and Meetings

Assumes higher participation in conferences, meetings and Metropolitan board meetings due to reduced impacts of COVID and increased costs of registration for conferences.

#### Other

Increase for cell phone and car allowance stipends.

### FY 2025/26

#### Personnel–related issues

Total personnel count remains flat with the FY 2024/25 budget.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.



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# OFFICE OF SUSTAINABILITY, RESILIENCE & INNOVATION

The Office of Sustainability, Resilience & Innovation promotes the successful integration of sustainability, resiliency, and innovation initiatives into all District wide efforts across all departments and with external agencies.

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## PROGRAMS

Metropolitan’s Office of Sustainability, Resilience and Innovation (SRI) was established in 2021. Initial efforts included planning and preparation for the future through innovative and sustainable solutions in collaboration with key stakeholders. Programs address environmental and infrastructure issues and address the District’s approach to environmental responsibility and minimize environmental impact of its activities and operations.

The Office of SRI reviews Metropolitan’s planned activities, operational functions, and capital investments to make sure they work toward meeting the goals of reducing Metropolitan’s carbon footprint and complies with the Board-adopted climate action plan.

### Centralized Grants and Research (CG&R)

The Centralized Grants Management Office (CGMO) serves as a repository of resources, expertise and tools to ensure Metropolitan’s teams are well equipped to successfully acquire financial and technical assistance support for their projects and programs.

Specifically, the CGMO:

- Identifies and tracks funding opportunities in partnership with all Metropolitan groups including legislative staff, using eCivis, and consultants
- Maintains updated documentation, forms and policies
- Assists in drafting applications, compiling documentation, and submit funding proposals on behalf of Metropolitan

- Solicit annual funding priorities from Metropolitan staff and Member Agencies to inform grant tracking and advocacy efforts

### Environmental Planning Section (EPS)

Provides expertise for environmentally responsible decision-making and compliance with environmental laws and regulations. EPS ensures Metropolitan activities comply with the California Environmental Quality Act (CEQA); obtains permits or approvals from federal and state environmental regulatory agencies for Metropolitan activities; oversees management of Metropolitan reserves, and partners with regulatory and resource agencies in support of habitat conservation planning efforts.

### Land Management (LM)

The Land Management Unit manages and directs SRI’s efforts in managing Metropolitan’s real property assets; is responsible for the development of real property policies and strategies to centralize Metropolitan’s land activities to ensure properties are maintained, secured, and protected for present and future needs. Land Management Unit is responsible for processing requests for secondary uses of real property and related revenue streams. LM is also responsible for the protection of Metropolitan’s real property including site inspections and assisting in trespass and encroachment resolution.

LM also identifies properties no longer needed for Metropolitan’s existing or future needs and taking related board action to consider them surplus to Metropolitan’s needs and disposition. In addition, LM handles property taxes, water tolls, and manages external leases needed for Metropolitan’s critical

communication infrastructure. The Unit also handles requests for annexation by member agencies into Metropolitan's service area.

### Climate Adaptation Master Plan for Water (CAMP4W)

To ensure the continued reliability of water supplies for the communities we serve, Metropolitan is developing our Climate Adaptation Master Plan for Water (CAMP4W). This comprehensive effort will provide the roadmap that will guide our future capital investments and business model as we confront our new climate reality in the years and decades ahead. This program requires coordination among Metropolitan's Board, member agencies, partner organizations, internal Metropolitan Groups, community based-organizations, trade organizations, and legislative partners. Current efforts are focused on coordinating the development of 1) Climate Decision-Making Framework 2) Financial Plan 3) Business Model 4) Internal and External Policy Recommendations.

### Sustainability and Resilience Section (SRS)

The Sustainability and Resilience Section is tasked with developing Metropolitan policies and processes for climate mitigation (reducing the causes of climate change) and climate adaptation (preparing for impacts of climate change). Climate mitigation work includes accounting for Metropolitan's Scope 1, 2 and 3 emissions through SRS's compiling of Environmental Social Governance (ESG) data for annual reporting of Metropolitan's Climate Action Plan, which characterizes the District's progress toward carbon neutrality by

2045. Furthermore, SRS works to coordinate Metropolitan's transition to a zero-emission vehicle fleet and increasing the District's investments in renewable energy and carbon storage. Climate adaptation includes SRS's work characterizing climate vulnerabilities of Metropolitan's infrastructure to inform the District's initiatives to increase operational flexibility through system redundancies, storage, and local supplies. SRS is also working with Metropolitan's Office of Diversity, Equity and Inclusion to develop environmental justice policies needed for federally funded projects. The Sustainability and Resilience Section

### Innovation

Innovations collaboration with the WaterStart program has brought in approximately \$250,000 for Metropolitan pilot projects throughout the District. Employees are at the heart of innovation and continuously improve and discover new approaches and innovative ways to increase efficiencies and effectiveness. Supporting this spirit of innovation, our employees have generated ideas to ensure Metropolitan maintains a high level of reliability against multi-year, severe droughts.

### Business Management (BMT)

The Business Management Team monitors and tracks the group's business plan, financial and budgetary initiatives; and provides administrative and business process support. In addition, the Team handles property tax payments, lease payments, provides contract support, and board letter and report coordination.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, the Office of Sustainability, Resilience & Innovation will focus on the following key issues and initiatives:

Development of a comprehensive resiliency and sustainability plan and goals for Metropolitan. These plans will define the baseline of current operations and include clear goals, deliverables and metrics that address reductions in greenhouse gas emissions.

The Office of SRI will monitor SRI work across the region and work to build collaborative relationships within Metropolitan and with external environmental advocacy organizations.

The CGMO will focus on the following:

### Increase Grant and Research Funds

The Grants and Research unit will continue to support and collaborate with Metropolitan and member agency staff to identify grants and research opportunities. The CGMO will host Grants Network quarterly meetings with Metropolitan’s grant administrators and member agencies. Through these quarterly meetings staff will share grants and research best practices, increase collective

knowledge, and re-enforce partnerships to increase funding brought in the service area.

The Environmental Planning section will focus on the following key issues and initiatives:

### Support Proposed Delta Improvements

Provide environmental and technical services to support long-term Delta solutions to improve water supply reliability and water quality, and protect and enhance Delta ecosystem and associated species.

Provide technical and regulatory support for Metropolitan’s Delta Island holdings.

### Support Development of Water Supplies and Management of Water Reserves

Provide planning, California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA), and regulatory support for development of new water supplies, including continued planning support for the Regional Recycled Water Program.

Prepare CEQA/NEPA and environmental permitting documentation for supplemental water supplies and

water conservation measures, including support of Local Resources Programs with member agencies.

Provide strategic environmental compliance input and services to obtain supplemental supplies of water through transfers, banking and innovative crop and land management practices.

### Climate Action Planning

Convene Climate Working Group responsible for implementation of Metropolitan's Climate Action Plan that mitigates the significant effects of greenhouse gas (GHG) emissions from Metropolitan projects.

Develop and implement web-based GHG monitoring and reporting tools and establish a monitoring schedule.

Continue collaboration with internal Metropolitan groups to implement GHG reduction strategies and verify reductions realized.

Provide annual Board updates on progress towards meeting CAP goals.

Continue to identify and evaluate new GHG reduction strategies for future updates to ensure Metropolitan is meeting its GHG reduction goal.

### Regulatory Compliance

Provide timely and professional planning services and CEQA and regulatory support for all capital and O&M projects in an environmentally responsible manner, including support for projects associated with refurbishment or replacement of aging infrastructure and urgent repairs resulting from changing climatic conditions.

Coordinate annual inspections and prepare annual reports for Metropolitan's operations in compliance with the provisions of the Surface Mining and Reclamation Act (SMARA).

Support continued monitoring of populations and habitat of the unarmored three-spine stickleback fish in compliance with Metropolitan-sponsored legislation (AB 2488) and long-term Endangered Species Act permits for the inspection and maintenance of the Foothill Feeder. Represent Metropolitan interests and support preparation of environmental documentation for

implementation of new operating guidelines on the Lower Colorado River.

### Reserve Management

Manage Metropolitan's four large-scale multi-species reserves and participate in several other regional conservation and multi-species reserve programs. Management of these reserves is required to satisfy regulatory requirements for the continued delivery of imported water and the construction and operation of major O&M and capital projects.

Serve as Metropolitan's representative on the Southwestern Riverside County Multi-Species Reserve Management Committee, administer a reserve management agreement with Riverside County Parks (Parks), and actively manage reserve lands to ensure compliance with state and federal permits and multi-agency cooperative management agreements.

Facilitate collaboration among Metropolitan, Parks, and the Southwestern Riverside County Multi-Species Reserve Management Committee towards implementation of the Trails Plan and construction of multi-use connecting trails between Diamond Valley Lake and Lake Skinner and between the Reserve and the County's Regional Trail System.

Serve as Metropolitan's representative on the Reserve Management Committee for the Lake Mathews Multiple Species Reserve, administer a reserve management agreement with Riverside County Habitat Conservation Agency, and actively manage Lake Mathews reserve lands to ensure compliance with state and federal permits.

Represent Metropolitan on the Orange County Natural Communities Coalition as voting members of the respective governance committees.

The Land Management section will focus on the following key issues and initiatives:

Centralized Management of Metropolitan's Real Property Assets - Continue with a centralized management approach of Metropolitan's real property assets to ensure properties are regularly maintained, secured and protected for present and future needs. Implement a new web-enabled right of way software and property management solution to improve processes to monitor financial

compliance with terms and conditions of licensing and leasing agreements such as invoicing, insurance coverage, and accounts receivable.

Provide timely and suitable responses to property adjacent projects, land developments, and environmental proceedings. Complete property management and right-of-way operating policies to reflect contemporary best practices.

Develop a staffing and implementation plan to detect and address historical right-of-way encroachments on Metropolitan properties with a collaborative cross-functional approach to prioritize and remediate the highest risk conditions.

Complete annual reviews to identify properties that are excess to Metropolitan's needs, and bring information to the Board for action to declare those properties surplus

Coordinate a monthly cross-functional Property Review Council to review land-use requests by public and private entities to ensure Metropolitan's rights-of-way, facilities, environmental reserves and water quality are protected. Complete annual site inspections of conveyed property to identify and correct any conditions in conflict with terms and conditions of the conveyance agreements.

Collaborate with other internal disciplines to develop a district wide plan to manage encampment and trespass issues.

File possessory tax reports and tax payments to appropriate counties on time.

Look at renewable energy and carbon sequestering/capture projects on Metropolitan's land holdings in alignment with the districts Climate Action Plan.

Collaborate with member agencies annexations and take related board actions in alignment with Admin Code

### Climate Action Planning

Convene Climate Working Group responsible for implementation of Metropolitan's Climate Action Plan that mitigates the significant effects of greenhouse gas (GHG) emissions from Metropolitan projects.

Develop and implement web-based GHG monitoring and reporting tools and establish a monitoring schedule.

Continue collaboration with internal Metropolitan groups to implement GHG reduction strategies and verify reductions realized.

Provide annual Board updates on progress towards meeting CAP goals.

Continue to identify and evaluate new GHG reduction strategies for future updates to ensure Metropolitan is meeting its GHG reduction goal.

### Palo Verde Valley Properties

Complete and start implementation of a specific comprehensive Land Management Plan to optimize use and best land owner management practices.

Manage Metropolitan's 29,000 acres of agricultural lands and revenue-leases to encourage a vibrant farming economy and to offset costs of land ownership. Ensure Palo Verde Irrigation District water tolls, local property taxes, and coalition fees are paid by the farmers and all rents are paid on time. Collaborate with WRM on water conservation and healthy soils initiatives.

### Bay Delta Properties

Complete and start implementation of a specific comprehensive Land Management Plan to optimize use and best landowner management practices. Collaborate with BDI to maximize utilization of the Delta Islands agricultural lands by increase revenue, reduce subsidence and create opportunities for carbon capture and storage.

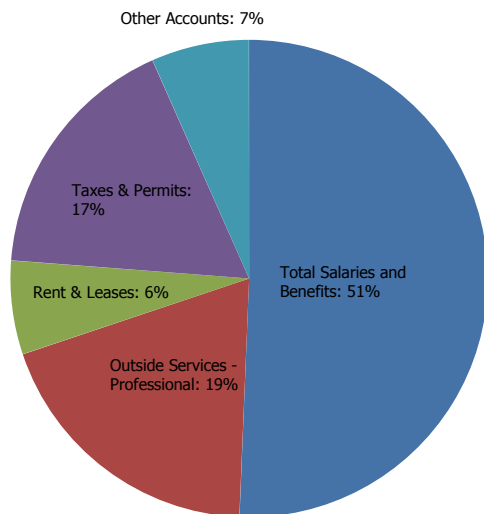
Ensure local property taxes and coalition fees are paid on time. Provide support to the Delta conveyance and habitat rehabilitation efforts

## O&M FINANCIAL SUMMARY

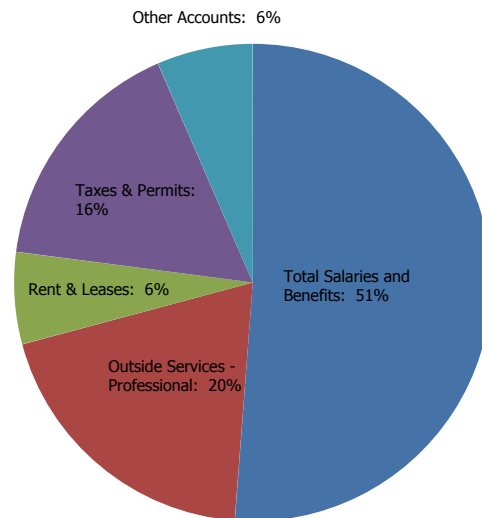
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	10,400,784	12,045,995	13,014,496	968,501	14,087,156	1,072,659
Direct Charges to Capital	(325,342)	(740,603)	(514,256)	226,347	(593,957)	(79,701)
<b>Total Salaries and Benefits</b>	<b>10,075,442</b>	<b>11,305,392</b>	<b>12,500,241</b>	<b>1,194,849</b>	<b>13,493,199</b>	<b>992,958</b>
% Change		12.2%		10.6%		7.9%
Outside Services - Professional	2,478,577	3,054,883	4,740,000	1,685,117	5,171,000	431,000
Rent & Leases	1,085,660	1,170,600	1,564,800	394,200	1,640,600	75,800
Taxes & Permits	3,683,131	4,069,000	4,236,600	167,600	4,332,800	96,200
Other Accounts	993,752	1,412,341	1,634,152	221,811	1,710,594	76,442
<b>Total O&amp;M</b>	<b>18,316,562</b>	<b>21,012,216</b>	<b>24,675,793</b>	<b>3,663,577</b>	<b>26,348,193</b>	<b>1,672,400</b>
% Change		14.7%		17.4%		6.8%
Operating Equipment	224,876	—	56,338	56,338	—	(56,338)
<b>Total O&amp;M and Operating Equipment</b>	<b>18,541,438</b>	<b>21,012,216</b>	<b>24,732,130</b>	<b>3,719,914</b>	<b>26,348,193</b>	<b>1,616,062</b>
% Change		13.3%		17.7%		6.5%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

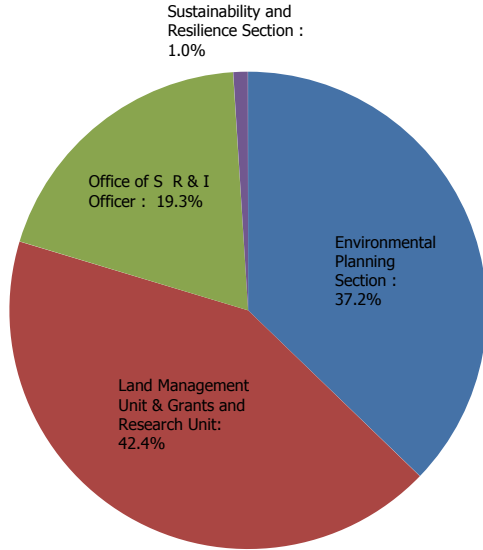


FY 2025/26 BUDGET BY EXPENDITURE

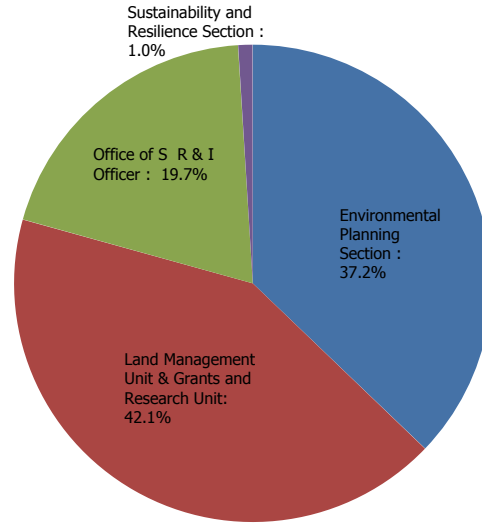


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Environmental Planning Section	7,718,987	9,184,980	1,465,993	9,795,320	610,340	17	18	18
Land Management Unit & Grants and Research Unit	9,099,523	10,474,821	1,375,298	11,103,751	628,930	13	13	14
Office of S R & I Officer	4,193,706	4,769,990	576,284	5,193,482	423,492	13	13	13
Sustainability and Resilience Section	—	246,002	246,002	255,640	9,638	—	1	1
<b>Total O&amp;M</b>	<b>21,012,216</b>	<b>24,675,793</b>	<b>3,663,577</b>	<b>26,348,193</b>	<b>1,672,400</b>	<b>43</b>	<b>45</b>	<b>46</b>

Totals may not foot due to rounding.

## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>46</b>	<b>44</b>	<b>(2)</b>	<b>44</b>	<b>—</b>
	O&M	43	42	(1)	42	—
	Capital	3	2	(1)	2	—
<b>Temporary</b>	<b>Total</b>	<b>—</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>1</b>
	O&M	—	3	3	4	1
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>46</b>	<b>47</b>	<b>1</b>	<b>48</b>	<b>1</b>
	O&M	43	45	2	46	1
	Capital	3	2	(1)	2	—

Totals may not foot due to rounding.



## BUDGET HIGHLIGHTS

The Office of Sustainability, Resilience & Innovation's Biennial Budget is \$24.7 million in FY 2024/25 and \$26.3 million in FY 2025/26 or an increase of 17.7% and an increase of 6.5% respectively from the prior budget years. The increase is due primarily to the following:

- New Office of SRI Officer includes 4 positions transferred out and 2 new positions requested and professional services to support Office's key issues and initiatives.
- Environmental Planning costs are increasing for more stringent and specialized environmental regulatory oversight services for O&M projects throughout Metropolitan's service area.
- Professional services budget for Environmental Planning is increasing due to anticipated environmental consultant support for large programs requiring complex environmental documentation, including the Pure Water Southern California Program, Webb Tract Multi-Benefit Mosaic Landscape Project, and implementation of new operating guidelines on the Lower Colorado River.

### FY 2024/25

#### Personnel-Related Issues

Regular full-time positions are decreasing by 2 position from FY 2023/24 due to 4 positions transferred to other departmental Groups and 2 additional positions. The 2 additional positions will support the formation of the Office of the Sustainability, Resilience and Innovation Officer.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Increases in professional services include budget for New Office of SRI Officer and Environmental Planning consultant support for large programs requiring complex environmental documentation, including the Pure Water Southern California Program, Webb Tract Multi-Benefit Mosaic Landscape Project, and implementation of new operating guidelines on the Lower Colorado River, as well as a high volume of O&M work requiring specialized CEQA, regulatory, and other technical support.

Add consultant expertise in telecom and renewable energy to assist staff in maximizing returns in these growth areas.

The CGMO will sustain an on-call grant services agreement with several contractors specialized in

pursuing managing grants in various areas such as zero-emission vehicles, education, workforce development, and water reuse construction projects.

### FY 2025/26

#### Personnel-Related Issues

Total personnel count remains flat with the FY 2024/25 budget.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Professional services are increasing due to an increase in environmental planning work required for the Pure Water Southern California program.

#### Operating Equipment FY 2024/25 & FY 2025/26

One vehicle is being requested in FY 2024/25. The vehicles will be issued to the new Landscape and Maintenance Team Manager.

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# EQUAL EMPLOYMENT OPPORTUNITY OFFICE

The Equal Employment Opportunity Office is responsible for ensuring a work environment free from discrimination, harassment and retaliation for all Metropolitan employees and job applicants.

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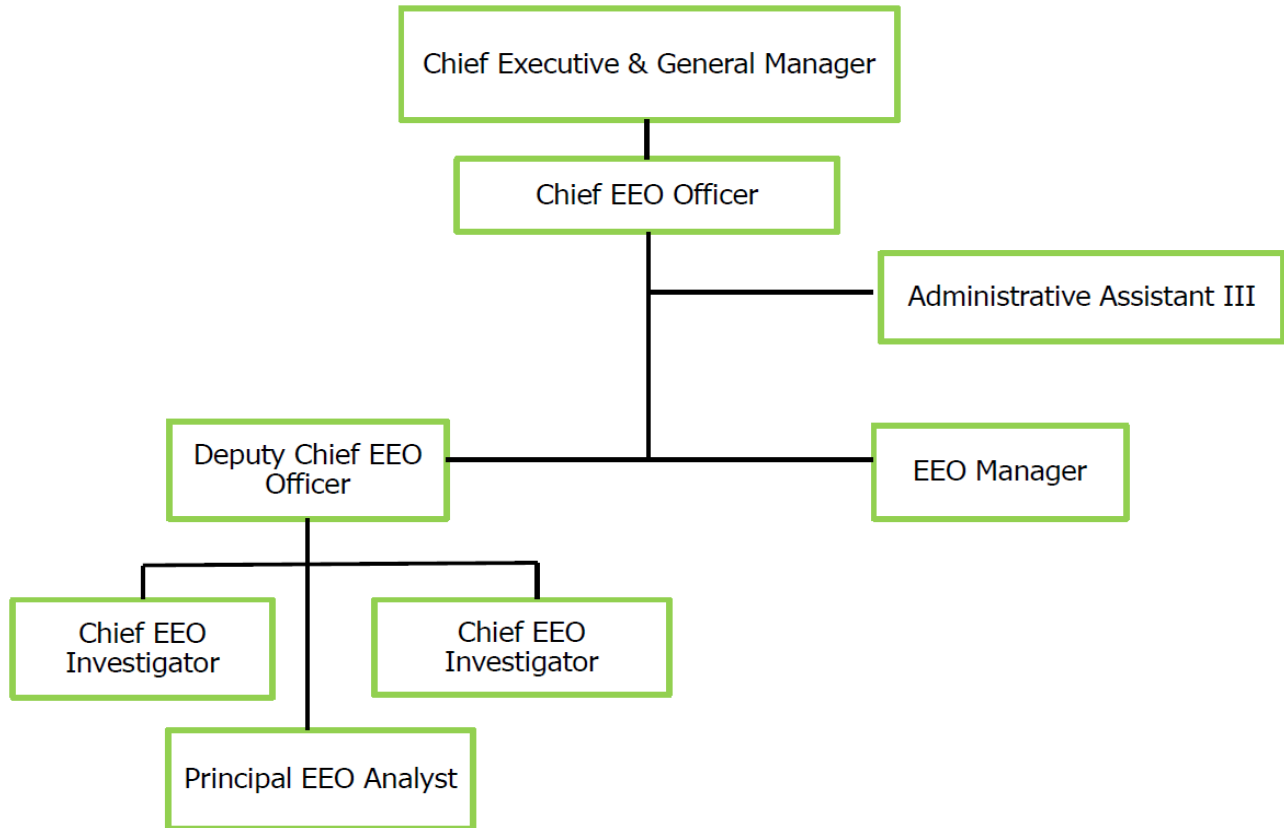
## PROGRAMS

Metropolitan’s Equal Employment Opportunity (EEO) Office was established by the Board in 2021. The EEO Office investigates all EEO complaints and oversees the complaint and investigative procedures to ensure investigations are conducted in a timely, impartial, and thorough fashion and are in alignment with industry best practices and standards.

The EEO Officer also directs staff responsible for Metropolitan’s Non-Discrimination Plan and EEOC regulatory compliance. The EEO Office develops

mitigation policies and trainings designed to provide awareness regarding employee rights and responsibilities and eliminate the possibility of future violations.

The EEO Office should be noted for balancing transparency and confidentiality, impartiality and accountability. The office should be operated independently and free from influence or interference and noted for protecting the integrity of investigations.



## GOALS AND OBJECTIVES

In FY 2024/25 the Equal Employment Opportunity Office will focus on the key priorities listed below. Goals will be reviewed and refined for FY 2025/26.

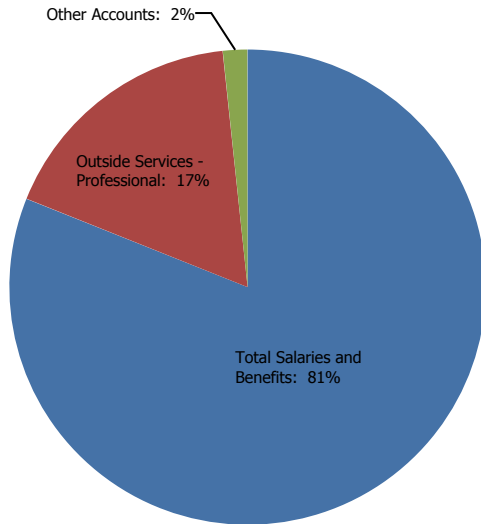
1. Execute the strategic and organizational plan created for the EEO Office.
2. Maintain the EEO case management system and utilize its reporting tool to provide EEO quarterly statistics to the Board.
3. Oversee the elimination of the backlog of EEO cases and adhere to established investigative timelines.
4. Enforce EEO policies and practices to ensure a work environment free of discrimination, harassment and retaliation; implement a training plan for all employees of Metropolitan.

## O&M FINANCIAL SUMMARY

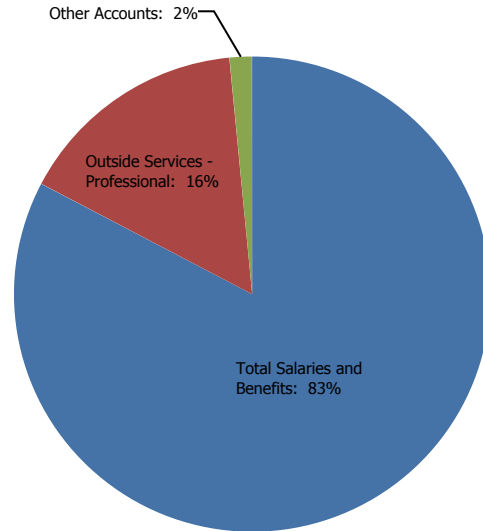
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	2,072,323	2,054,393	2,747,494	693,101	3,076,428	328,935
Direct Charges to Capital	—	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>2,072,323</b>	<b>2,054,393</b>	<b>2,747,494</b>	<b>693,101</b>	<b>3,076,428</b>	<b>328,935</b>
% Change		(0.9%)		33.7%		12.0%
Outside Services - Professional	187,820	747,151	585,000	(162,151)	587,500	2,500
Other Accounts	55,970	18,820	56,300	37,480	56,300	—
<b>Total O&amp;M</b>	<b>2,316,112</b>	<b>2,820,363</b>	<b>3,388,794</b>	<b>568,430</b>	<b>3,720,228</b>	<b>331,435</b>
% Change		21.8%		20.2%		9.8%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 BUDGET BY EXPENDITURE



## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>8</b>	<b>—</b>
	O&M	7	8	1	8	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	O&M	—	—	—	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>8</b>	<b>—</b>
	O&M	7	8	1	8	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Equal Employment Opportunity Office's Biennial Budget is \$3.4 million in FY 2024/25 and \$3.7 million million in FY 2025/26 or an increase of 20.2% and an increase of 9.8% respectively from the prior budget years. The increase is due primarily to the following:

- New EEO Office includes 1 new position requested to support the formation of the EEO Office.
- Professional services to support Office's key issues and initiatives.

### FY 2024/25

#### Personnel-Related Issues

Regular full-time positions are increasing by 1 position from FY 2023/24 due to 1 additional position. The additional position will support the formation of the EEO Office.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Reductions in professional services support Office's key issues and initiatives.

#### Other

Increases in other accounts includes materials & supplies, travel and other expenses necessary to support the EEO Office.

### FY 2025/26

#### Personnel-Related Issues

Regular full-time positions remain flat from FY 2024/25.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Professional services remain relatively flat with the FY 2024/25 budget.

#### Other

Other accounts remains flat with the FY 2024/25 budget.

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# ENGINEERING SERVICES

Engineering Services provides innovative solutions that exceed our partners' expectations as the public-sector's leader for water engineering.

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## PROGRAMS

Engineering Services performs project management, design, construction management, infrastructure condition assessments, and facility planning; manages Metropolitan's Capital Investment Plan (CIP); and provides on-going operations and maintenance support to other stakeholders and partners within the organization.

Engineering Services accomplishes its mission through the following programs or services to our strategic partners:

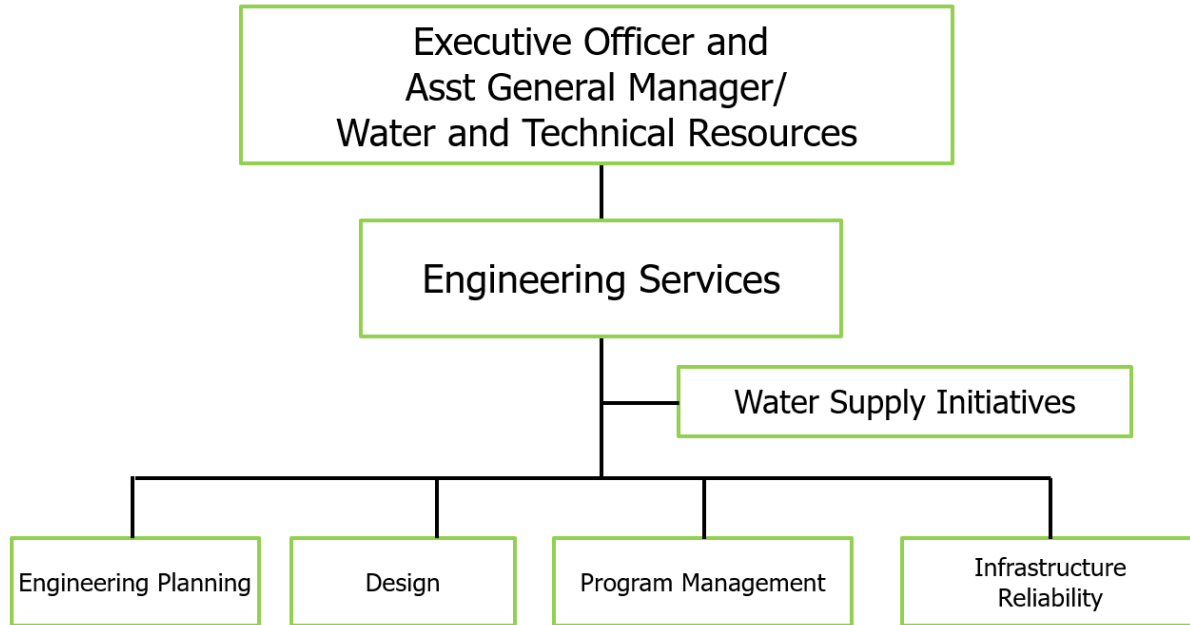
**Office of the Group Manager** oversees the management of the Engineering Services group by providing strategic leadership on engineering initiatives and core business efforts, to ensure the continued reliability and quality of water deliveries and the program to oversee the safety and integrity of Metropolitan's dams. The office also provides technical support for special initiatives including Metropolitan's Pure Water Southern California (PWSC), and the Delta Conveyance Program.

**Engineering Planning** is responsible for the functions of facility and drought and seismic resiliency planning, dam safety, hydraulic analysis, hydraulic modeling, protection of Metropolitan's substructures, construction contract administration, technical control and oversight of engineering standards, capital project support, business process management and budgeting, and management of Metropolitan's CIP. The section also provides technical support for the Climate Adaptation Master Plan for Water.

**Design** is responsible for the preparation of technical assessments, conceptual and preliminary designs for new facilities and for rehabilitation of existing facilities, final design drawings and specifications for construction, and technical support during the construction, commissioning, and operation of facilities and systems. Design provides engineering support of Metropolitan's operations including Damage Assessment (DAT) and incident responses. Design is also responsible for Engineering Services' design technology and Computer Aided Design (CAD) for 3D Drafting and Design, and developing Building Information Modeling (BIM) systems.

**Program Management** is responsible for the overall planning and delivery of both capital and O&M projects for treatment plants, distribution, conveyance and storage systems, PWSC, and planning and acquisition. Program Management guides projects from conception through design, construction, and commissioning; and serves as Metropolitan's Owner's Engineer.

**Infrastructure Reliability** is responsible for the management of construction and procurement contracts, field inspection, soils and concrete testing, and fabrication inspection; field surveying, survey mapping, and protection of right-of-way and property rights; and infrastructure condition assessments, corrosion engineering, and materials engineering.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, Engineering Services will focus on the following key areas:

### Pure Water Southern California (PWSC)

Provide program management and leadership for development of the full-scale PWSC Program in the form of program planning and technical studies; preliminary design of the first two conveyance reaches and initiation of design efforts for the advanced water treatment facilities; and budgeting and collaboration with internal and external program participants and stakeholders.

Successfully perform engineering and technical studies to plan and manage modifications to the Grace F. Napolitano Pure Water Southern California Innovation Center.

Continue to support opportunities to collaborate with other agencies to enhance local water supplies.

### Dam Safety

Ensure the safe and reliable operation of Metropolitan’s dams and reservoirs through regular dam inspections and extensive surveillance, comprehensive evaluations of existing dams and appurtenant structures using current design standards, thorough review and inspection of major repair work, and careful planning and coordination

of emergency action plans with local agencies. Dam safety initiatives include developing and receiving approval for State-mandated Emergency Action Plans, upgrading instrumentation and use of technology to obtain and present instrumentation results in real-time.

### Drought Resilience

Identify, develop and implement solutions to address impact of drought on Metropolitan’s ability to deliver water to its member agencies. Anticipate completing construction of the Wadsworth Pumping Plant Eastside Pipeline Intertie, the Inland Feeder Rialto Pipeline Intertie, the Badlands Tunnel Surge Tank Control Facility, the Foothill Pump Station, and the Sepulveda Feeder Pump Stations.



## Infrastructure Reliability

Manage and complete board–authorized projects within the CIP to ensure the reliable delivery of water to Metropolitan’s member agencies.

Provide engineering and technical services to support the operation and maintenance of Metropolitan’s water conveyance, delivery, treatment, and support facilities.

Protect public safety, minimize future costs of infrastructure maintenance and repairs, and avoid unplanned outages by monitoring Metropolitan’s facilities and right–of–way, performing essential technical assessments, and implementing modern asset management methods.

## CIP Management

Execute capital projects within board-authorized expenditure limits to rehabilitate aging infrastructure, enhance seismic resiliency of key Metropolitan facilities, and maintain system flexibility. High priority programs that will continue during the biennium include the Distribution System Reliability and CRA Rehabilitation Programs.

Manage Metropolitan’s overall CIP. Coordinate with stakeholders to prioritize project completion and develop asset-management tools. Provide regular updates on projected expenditures to finance and prepare informative quarterly reports illustrating progress on capital projects.

Partner with Operations and other stakeholders to prioritize capital projects to address Metropolitan’s short–term needs and long–term objectives, and optimize utilization of internal and external resources.

Continue to identify and implement improvements in project delivery, such as alternative delivery approaches for capital projects.

## Distribution System Reliability

Complete construction of the Perris Valley Pipeline Interstate 215 Crossing, and the Second Lower Feeder Reach 3B PCCP Rehabilitation. Continue implementation of water reliability improvements for the Rialto Pipeline service area, including completing construction of Wadsworth Bypass, Inland Feeder-Rialto Intertie and the Badlands Tunnel Surge Protection Facility. Continue development of the Lake Mathews Forebay and Electrical Rehabilitation project utilizing alternative project delivery methods.

## Treatment Plant Rehabilitation

Complete construction of the Mills Electrical Upgrades Stage 2, the Weymouth Water Treatment Plant Basins 5-8 and Filter Buildings No. 2 Rehabilitation, and the La Verne Shops Building Completion - Stage 4. Complete design for the Jensen Security Improvements, Diemer Filter Rehabilitation, and Diemer Chemical System Upgrades.

## CRA Rehabilitation

Complete construction of the Overhead Crane Replacement, the Domestic Water Treatment System Replacement, the Conduit Structural Protection, the Conveyance System Solar Level Sensor Installation, and the Storage Buildings at Hinds, Eagle Mountain, and Iron Mountain. Complete design to upgrade potable water, industrial water and wastewater lines; and award a procurement contract to replace transformers at each of the five CRA pumping plants.

## Asset Management

Provide comprehensive engineering support to implement Metropolitan’s Asset Management Strategy to effectively develop, operate, assess, upgrade, and dispose Metropolitan assets through the entire lifecycle. This effort will establish a consistent and unified framework for condition assessment and risk management, develop tools to facilitate the process, and prioritize asset acquisition, replacement, and rehabilitation to build a reliable infrastructure that is sustainable and resilient.

## Hazard Mitigation Planning and Grant Funding

Develop a comprehensive Hazard Mitigation Plan to assess the overall risk of Metropolitan's infrastructure to damage caused by natural hazards (e.g., seismic, fire, flooding, climate change), and use the plan as the basis to develop mitigation projects and actions. Based on the Hazard Mitigation Plan approved by the state and federal agencies, staff will research, pursue, administer, and manage state and federal grants and loans to implement the identified mitigation projects and actions. Potential projects include the Pure Water Southern California Program, drought-related improvements, seismic upgrade projects and measures to improve system flexibility.

## Sustainability and Innovation

Develop strategies for, and identify opportunities to implement sustainable energy practices in CIP projects. Key focus areas include renewable energy, energy storage such as battery storage systems, energy efficiency improvements, optimization of water operations, and greenhouse gas reductions. Collaborate with Metropolitan's Sustainability, Resiliency, and Innovation office.

Develop a sustainable infrastructure program within Engineering Services and take concrete steps to implement sustainable practices early in the planning and design phases of projects, while continuing to leverage technologies to facilitate optimal project delivery and engineering processes in addition to preserving institutional knowledge and achieving efficiencies.

## System Flexibility

In response to the updated IRP, conduct a system flexibility study to evaluate the impact of outages on water delivery to member agencies and identify opportunities for system improvements and interconnections to increase resilience and improve flexibility. The study will also address impacts on the system due to seismic vulnerabilities and develop mitigation measures.

## Employee Development

Empower employees today and develop a workforce for the future by actively maintaining and leading workforce development and succession planning activities to develop and maintain technical expertise and skills needed in the future to ensure infrastructure reliability, meet regulations, respond to emergencies, and support Metropolitan initiatives. Support Career Launch training program to provide engineering orientation on systems, facility configuration and organizational communication. Support Engineering Mentoring Program to promote coaching, partnership and knowledge transfer.

Empower employees to optimize procedures for routine activities and develop innovative solutions to address Metropolitan's challenges.

Actively foster open discussions to enhance workplace diversity, equity, and inclusion.

## Partnership and Collaboration

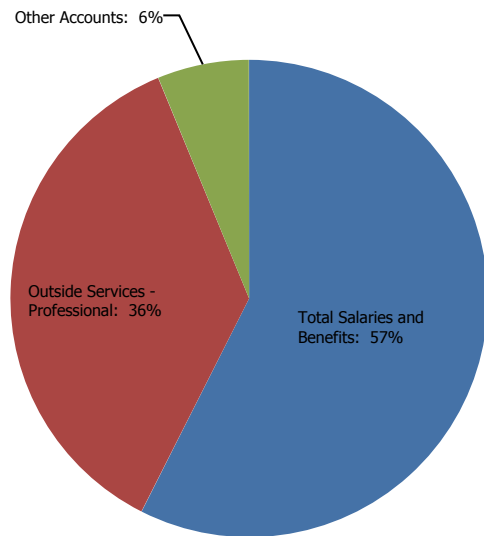
Lead ongoing communications and new initiatives to enhance partnership and collaboration between Engineering Services and Operations, to provide the best practical solutions for Metropolitan.

## O&M FINANCIAL SUMMARY

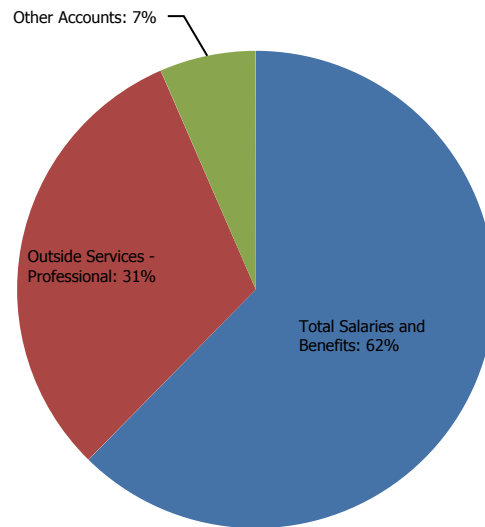
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	64,315,165	97,204,601	105,809,247	8,604,646	111,525,577	5,716,330
Direct Charges to Capital	(26,635,756)	(55,245,117)	(59,112,373)	(3,867,256)	(62,514,607)	(3,402,234)
<b>Total Salaries and Benefits</b>	<b>37,679,410</b>	<b>41,959,484</b>	<b>46,696,874</b>	<b>4,737,390</b>	<b>49,010,969</b>	<b>2,314,096</b>
% Change		11.4%		11.3%		5.0%
Materials & Supplies	961,545	1,237,000	2,198,000	961,000	2,278,100	80,100
Outside Services - Professional	5,701,322	6,277,151	29,527,925	23,250,774	24,452,251	(5,075,674)
Other Accounts	1,549,831	2,202,849	2,865,242	662,393	2,843,672	(21,570)
<b>Total O&amp;M</b>	<b>45,892,107</b>	<b>51,676,484</b>	<b>81,288,041</b>	<b>29,611,557</b>	<b>78,584,992</b>	<b>(2,703,048)</b>
% Change		12.6%		57.3%		(3.3%)
Operating Equipment	739,221	541,875	584,020	42,144	609,079	25,059
<b>Total O&amp;M and Operating Equipment</b>	<b>46,631,328</b>	<b>52,218,360</b>	<b>81,872,061</b>	<b>29,653,701</b>	<b>79,194,071</b>	<b>(2,677,989)</b>
% Change		12.0%		56.8%		(3.3%)

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

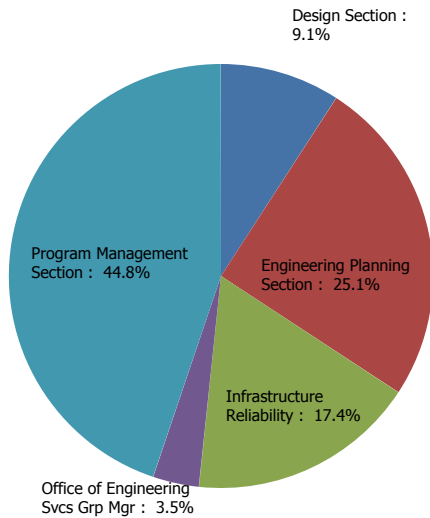


FY 2025/26 BUDGET BY EXPENDITURE

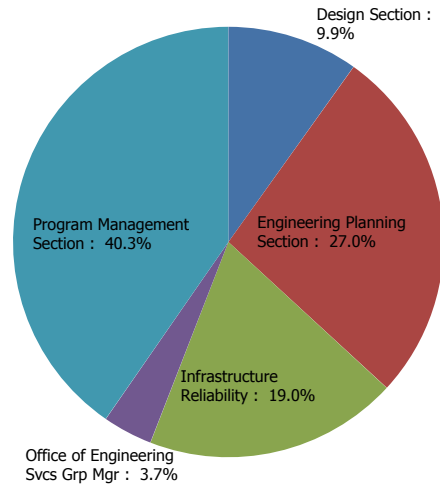


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Design Section	7,472,598	7,432,368	(40,230)	7,759,912	327,544	25	23	23
Engineering Planning Section	16,959,623	20,411,650	3,452,027	21,209,432	797,781	54	54	54
Infrastructure Reliability	13,197,010	14,158,800	961,791	14,965,469	806,668	51	53	53
Office of Engineering Svcs Grp Mgr	5,430,932	2,864,824	(2,566,108)	2,943,634	78,810	4	4	4
Program Management Section	8,616,322	36,420,398	27,804,077	31,706,546	(4,713,852)	36	36	36
<b>Total O&amp;M</b>	<b>51,676,484</b>	<b>81,288,041</b>	<b>29,611,557</b>	<b>78,584,992</b>	<b>(2,703,048)</b>	<b>170</b>	<b>171</b>	<b>171</b>

Totals may not foot due to rounding.

## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>379</b>	<b>384</b>	<b>5</b>	<b>384</b>	<b>—</b>
	O&M	168	169	1	169	—
	Capital	211	215	4	215	—
<b>Temporary</b>	<b>Total</b>	<b>2</b>	<b>2</b>	<b>—</b>	<b>2</b>	<b>—</b>
	O&M	2	2	—	2	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>381</b>	<b>386</b>	<b>5</b>	<b>386</b>	<b>—</b>
	O&M	170	171	1	171	—
	Capital	211	215	4	215	—

Totals may not foot due to rounding.

\* 2023/24 Budget includes 10.0 FTE PWSC positions which were approved by the Board in December 2022.

## BUDGET HIGHLIGHTS

Engineering Services Group's O&M and Operating Equipment Biennial Budget is \$81.9 million in FY 2024/25 and \$79.2 million in FY 2025/26 or an increase of 56.8% and a decrease of 3.3%, respectively from the prior year budgets. The main factors affecting these changes include the following:

- These budgets are significantly influenced by the addition of the Pure Water Southern California (PWSC) program to Engineering Services Group's O&M. This addition represents \$27.9 million, or 34%, of the budget in FY 2024/25 and \$24.2 million, or 30%, in FY 2025/26. This effort received \$80 million in grant funding from the State Water Resource Control Board through a board action in December 2022.
- Salaries and benefits reflect negotiated increases and additional increases due to Engineering Services Group's new organizational/management structure, a new position added to support the Pressure Vessel Inspection Program, and support for the PWSC.
- Materials and supplies reflect support for the PWSC and increases in software and maintenance fees.
- Professional services reflect support for the PWSC, drought-related projects, and sustainable & renewable energy projects.

The following are the significant changes by budget year:

### FY 2024/25

#### Personnel-Related Issues

Regular full-time positions are increasing by 5 positions from FY 2023/24 due to 5 additional positions. The 5 additional positions are to support the CIP expenditure plan. Additionally, the O&M and capital staffing complement differs from the FY 2023/24 budget. This change is primarily due to increased support for the PWSC, thereby resulting in a shift of staff from capital work to O&M in FY 2024/25.

Planned capital spending for FY 2024/25 is estimated to increase by \$12 million with a district-wide capital budget estimated to be approximately \$312 million (see details in CIP Appendix). Planned spending reflects project budgets and schedules to meet Metropolitan's overall biennial budgetary goals. High priority projects that will continue during the fiscal year include Sepulveda Feeder Pump Stations, Inland Feeder/Rialto Pipeline Intertie, Badlands Tunnel Surge Tank Facility, and Inland Feeder/San Bernardino Valley Municipal Water District Foothill Pump Station Intertie projects, which are part of the Dependent Area Drought Mitigation Program; Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems and District-wide Near Zero and Zero

Emission Fleet Infrastructure projects, which are part of the Climate Adaptation Program. In addition, projects under the following major capital projects programs are also planned: Colorado River Aqueduct (CRA) Program, Dams and Reservoirs Program, Distribution System Program, Information Technology and Control Systems Program; Other Facilities and Systems Program; Prestressed Concrete Cylinder Pipe (PCCP) Program; and Water Treatment Plants Program.

#### Salaries & Benefits

Salaries and benefits reflect negotiated increases, support for PWSC, new organizational/management structure, and a new position added to support the Pressure Vessel Program.

#### Professional Services

The budget primarily reflects an increase in the level of support for PWSC, drought-related projects, and support for sustainable & renewable energy projects.

## Materials and Supplies

The budget reflects an increase in software license and maintenance fees (e.g., Automation Data Acquisition System, LP Tracker, Bentley ProjectWise), and support for the PWSC.

## FY 2025/26

### Personnel-related issues

Regular full-time positions remain flat from FY 2024/25.

Planned capital spending for FY 2025/26 is estimated to increase by \$12.5 million with a district-wide capital budget estimated to be approximately \$324.5 million (see details in the CIP Appendix).

### Salaries & Benefits

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

The budget primarily reflects a decrease in level of support for the PWSC as the environmental planning process for the program is completed.

## Other

Other non-labor budgets reflect increases in utility costs; memberships for online real estate services (CoStar) and Centre for Energy Advancement through Technological Innovation (CEATI); travel, training and conferences for industry information exchange, technical knowledge, and new technologies; and permits for the PWSC.

### Materials and Supplies

The budget reflects an increase in software maintenance fees.

### Other

The budget reflects a decrease in PWSC permits.

### Operating Equipment – FY 2024/25 and FY 2025/26

The operating equipment budget reflects a slight increase in FY 2024/25 and FY 2025/26, primarily due to the replacement of aging vehicles, and equipment for survey engineering.

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# WATER RESOURCE MANAGEMENT

Water Resource Management (WRM) plans, secures, and manages water resources to provide its member agencies with a reliable, cost-effective, and drought and climate-resilient water supply.

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## PROGRAMS

Water Resource Management manages imported water supplies; advances water-use efficiency; forecasts water supply and demand for long-term resource planning; and develops and implements timely resource programs and projects.

Water Resource Management also assists member agencies in building and using local resources for regional benefit. This help ensures Metropolitan receives a fair return on contractual investments in local and imported resources.

Water Resource Management accomplishes its mission through the following programs or sections:

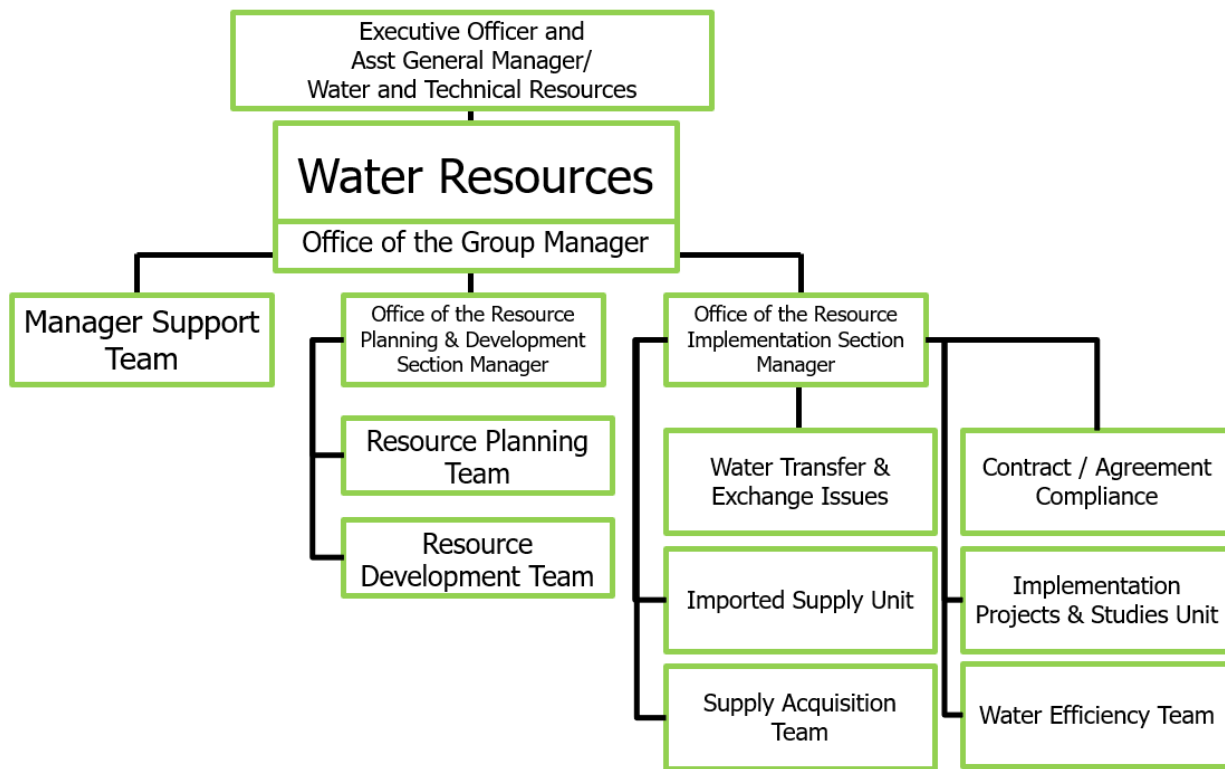
**Office of the Manager** (1) directs the group's efforts to plan, secure, and manage water resources; (2) monitors and tracks the group's business plan and budget; and provides administrative and business process support.

**Resource Planning & Development** is responsible for providing technical and policy planning to meet member agency needs. An integrated planning approach reflects long-range planning for local supplies and sets the foundation the resource investments and programs needed to meet demands. This section supports the development of resource programs, projects, and

infrastructure to meet resource targets; and defines strategies to meet the long-term service area water needs. These efforts include the Integrated Water Resources Plan (IRP), Water Surplus and Drought Management (WSDM) plan, Urban Water Management Plan (UWMP), and Climate Adaption Plan for Water (CAMP4W). Resource options developed include groundwater conjunctive use, regional recycling, stormwater capture, and seawater desalination. The Resource Planning & Development section works jointly with Water System Operations to identify and execute short-range planning and implementation.

**Resource Implementation** develops and administers water resource programs and pursues the application of new technologies and innovations. These activities focus on the Colorado River, State Water Project, water transfers, water recycling, groundwater recovery, and water conservation. The Resource Implementation Section also monitors and responds to regulatory, legislative, and operational activities that may influence Metropolitan's water rights and benefits related to the quality, reliability, and cost of water.





## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, WRM will focus on the following key issues:

### Colorado River

Advance multiple strategies toward sustainable Colorado River supplies and toward broad agreement in long-term compact negotiations.

Provide technical and policy support for negotiations for the U.S. Bureau of Reclamation's (USBR) development of post-2026 Colorado River reservoir operations guidelines and strategies for Lake Powell and Lake Mead.

Participate in the Colorado River Salinity Control Forum and facilitate salinity management projects and other actions that protect and improve source water quality.

Develop strategies and tools for managing agricultural land holdings in the Palo Verde Valley  
Implement agreements and execute programs

funded by the Inflation Reduction Act to provide both short- and long-term conservation savings.

Administer Imperial Irrigation District (IID), Palo Verde Irrigation District (PVID), and Bard Irrigation District agricultural conservation programs.

Work with representatives of the International Boundary and Water Commission and USBR to continue implementation of Minute 323 and coordinate emergency deliveries for Tijuana.

Administer contracts with Colorado River entities to make full use of Metropolitan's supplies developed from Colorado River resources. Manage intentionally created surplus supplies to ensure maximum benefit to Metropolitan.

### Groundwater Storage Program

Develop a new groundwater storage program with the member agencies that will capture surplus supplies in wet years and provide dry-year protections. Advance the principle of

Metropolitan's willingness-to-pay for actions taken by the member agencies.

Determine targets for stormwater capture and develop programmatic stormwater strategies for the Board's consideration

### Legislative Review

Support Metropolitan's legislative priorities and policy principals by review and commenting on proposed state and federal legislation related to Metropolitan's mission and WRM functions.

### Regional Resources and Water Conservation

Enhance long-term water supply reliability for the State Water Project dependent areas.

Support member agencies through technical analysis and conservation programs as the water use objectives and water shortage assessments come into effect through California's Conservation as a Way of Life legislative package.

Support implementation of Metropolitan's co-sponsored Assembly Bill No. 1572 which prohibits the use of potable water for the irrigation of nonfunctional turf located on commercial, industrial, and institutional properties.

Pursue grant funding to supplement regional water conservation initiatives, particularly for removal and replacement of non-functional turf.

Implement and promote agricultural water-conservation best practices and healthy soils initiatives.

Participate in local, state, and national activities leading to expanded use of recycled water and increased water-use efficiency.

Administer agreements that provide incentives for conservation, recycled water, recovered groundwater production, and support development of local resource development projects.

Conduct and fund research to advance local supply development and conservation program effectiveness.

Administer the Future Supply Actions Funding program to remove barriers to local supply production.

Monitor Metropolitan-funded stormwater pilot programs with the member agencies to evaluate Metropolitan's participation in stormwater projects.

Develop programs to improve water conservation in disadvantaged communities.

Implement agreements and execute conservation programs funded by the Inflation Reduction Act to provide both short- and long-term conservation savings.

### Seawater Desalination

Complete the study of seawater and brackish groundwater desalination opportunities, and evaluate new off-shore desalination technologies. Support member agency development efforts and actively participate in CalDesal regulatory and legislative initiatives.

### State Water Project

Coordinate with the State Water Contractors and the Department of Water Resources to advocate for more timely and accurate water supply projections.

Ensure accurate billings and influence sound financial decisions by DWR, including effective DWR energy management practices regarding renewable energy, emissions reductions, transmission strategies, and energy acquisitions.

Strongly advocate for a resolution of long-standing disputed charges related to annual SWP billings.

Protect SWP water, power, and financial positions under the Oroville Federal Energy Regulatory Commission (FERC) relicensing process as well as associated litigation and upcoming FERC relicensing and several DWR facilities in Southern California.

Coordinate and influence decisions for major facility rehabilitations and SWP capital projects to ensure cost-effective and reliable water supply, energy generation, and use.

Promote water quality monitoring and forecasting activities through the Municipal Water Quality Investigations program and raise awareness of

potential water quality impacts from operational decisions.

### Water Supply and System Planning

Using the IRP Regional Needs Assessment, engage with the member agencies and stakeholders through the CAMP4W process to improve water supply reliability, resilience, affordability, and financial sustainability.

Complete technical analyses and resource program improvements to inform resource options for consideration in CAMP4W.

Develop Metropolitan's long-term water resources strategy to respond to the IRP Regional Needs Assessment and Severe Drought Assessment on the State Water Project.

Complete the annual reports on Metropolitan's achievements in conservation, recycling, and groundwater recharge and Annual Water Supply Assessment.

Complete the annual forecast of Metropolitan demands to support revenue requirements and budget process.

Develop a comprehensive analysis of Metropolitan's distribution system. Identify potential spatial constraints and system improvements to reliably deliver water to member agencies during peak demands, drought, and emergency conditions.

Evaluate and potentially update the emergency storage objective for in-basin protection from earthquakes or other outages with information from IRP needs assessment.

Advance Pure Water Southern California to increase water reuse and enhance opportunities for groundwater recharge.

Upgrade and enhance planning tools, such as computer models for demand forecasting, resource program evaluation, and distribution system.

Collaborate with agencies and stakeholders in statewide and regional water resources planning efforts, such as the California Water Plan Updates, the Integrated Regional Water Management Plans, and the Los Angeles County Water Plan.

Continue work with the Water Utility Climate Alliance to inform the CAMP4W effort.

### Water Transfers, Exchanges, and Storage Programs

Manage existing water transfer, exchange, and storage programs along the California Aqueduct and Colorado River Aqueduct.

Continue to evaluate the need for additional reliability by either developing new programs or modifying existing programs. Pursue additional water transfers, exchanges, and storage programs as needed to increase the resilience of the State Water Project dependent area.

Develop program where member agencies can develop local supplies and exchange the benefit of local supplies with each other even if the member agencies are non-contiguous.

Work with other State Water Contractors on a long-term water transfer permitting process.

### Workforce Development & Succession Planning

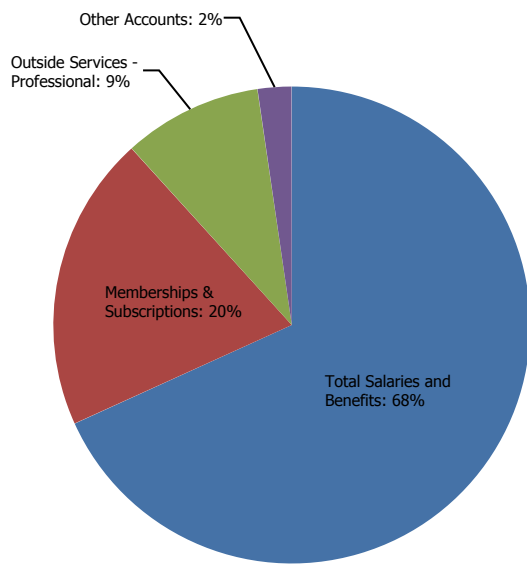
Continue to develop staff expertise in critical areas to prepare for employee retirements or departures.

## O&M FINANCIAL SUMMARY

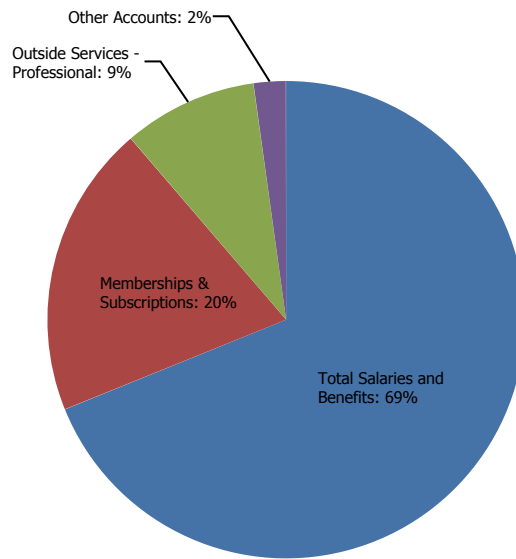
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	15,822,995	17,789,924	18,427,707	637,783	19,318,214	890,507
Direct Charges to Capital	(1,656)	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>15,821,338</b>	<b>17,789,924</b>	<b>18,427,707</b>	<b>637,783</b>	<b>19,318,214</b>	<b>890,507</b>
% Change		12.4%		3.6%		4.8%
Memberships & Subscriptions	4,876,255	5,116,436	5,417,330	300,894	5,567,051	149,721
Outside Services - Professional	1,998,960	2,442,600	2,544,655	102,055	2,547,121	2,466
Other Accounts	290,750	521,179	619,126	97,947	614,126	(5,000)
<b>Total O&amp;M</b>	<b>22,987,304</b>	<b>25,870,139</b>	<b>27,008,818</b>	<b>1,138,679</b>	<b>28,046,512</b>	<b>1,037,694</b>
% Change		12.5%		4.4%		3.8%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

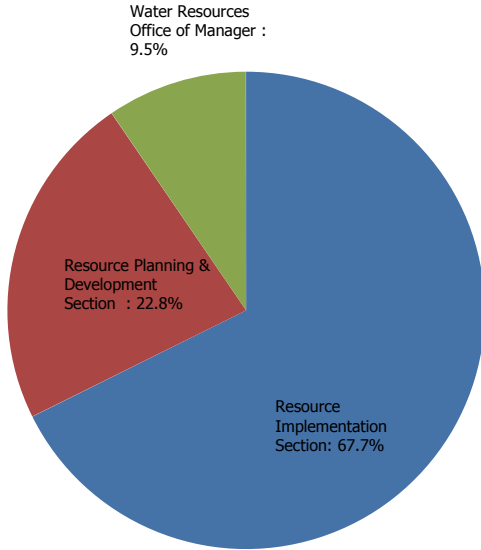


FY 2025/26 BUDGET BY EXPENDITURE

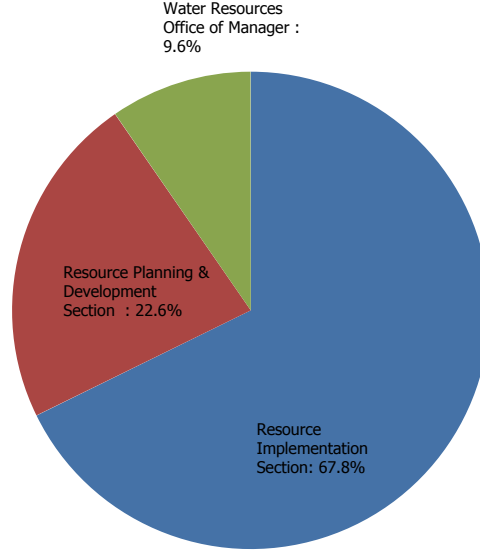


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Resource Implementation Section	17,655,620	18,274,888	619,268	19,001,557	726,670	43	40	40
Resource Planning & Development Section	5,530,767	6,162,965	632,198	6,345,209	182,244	17	17	17
Water Resources Office of Manager	2,683,752	2,570,965	(112,787)	2,699,746	128,780	11	10	10
<b>Total O&amp;M</b>	<b>25,870,139</b>	<b>27,008,818</b>	<b>1,138,679</b>	<b>28,046,512</b>	<b>1,037,694</b>	<b>71</b>	<b>67</b>	<b>67</b>

Totals may not foot due to rounding.

# PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>68</b>	<b>67</b>	<b>-1</b>	<b>67</b>	<b>—</b>
	O&M	68	67	-1	67	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	<b>3</b>	<b>—</b>	<b>-3</b>	<b>—</b>	<b>—</b>
	O&M	3	—	-3	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>71</b>	<b>67</b>	<b>-4</b>	<b>67</b>	<b>—</b>
	O&M	71	67	-4	67	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

WRM's Biennial Budget is \$27.0 million in FY 2024/25 and \$28.0 million in FY 2025/26 or an increase of 4.4% and an increase of 3.8%, respectively from the prior budget years. The main factors affecting these changes:

- The FY 2024/25, 4.7% increase, is due to salaries and benefits, professional services, memberships and subscriptions, and sponsorships.
- The FY 2025/26, 3.8% increase is due to salaries and benefits and memberships and subscriptions.

The following are the significant changes by budget year:

### FY 2024/25

#### Personnel–Related Issues

Regular full-time positions are decreasing by 1 position from FY 2023/24 due to 1 position transferred to other departmental Groups.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees. These increases are offset by the reduction of one full-time temporary position, three part-time intern temporary positions, and vacancies filled at lower job classifications.

#### Professional Services

The budget reflects an increase in professional services to advance water resource and economic modeling, and to advance initiatives to promote agricultural water use efficiency and healthy soils. Professional services also increased due to

inflationary pressures on consultant labor.

#### Memberships and Subscriptions

The budget is increasing from adding a new membership with the National Water Research Institute (NWRI). General dues increases are also expected for the Colorado River Board, and State Water Contractors funds (i.e., Bay Delta Fund, Energy Fund, Delta Conveyance Fund, and the General Dues fund).

#### Other

The budget reflects an increase in sponsorships for the Board requested California Resilience Challenge, offset by an anticipated reduction in travel, training and seminars, and conferences and meetings.

### FY 2025/26

#### Personnel–Related Issues

Regular full-time positions remain flat from FY 2024/25.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Budget reflects a slight increase due to the addition of crop age analysis with the field-level crop classification in PVID

#### Memberships and Subscriptions

The budget reflects an inflationary increase for State Water Contractors and Six Agency dues.

#### Other

The budget reflects a 1% decrease due to reductions in Training.

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# BAY DELTA INITIATIVES

Bay Delta Initiatives advances Delta improvements and the pursuit of the best scientific research to protect and restore fish, wildlife, and the Delta's ecosystem to ensure water supply reliability.

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## PROGRAMS

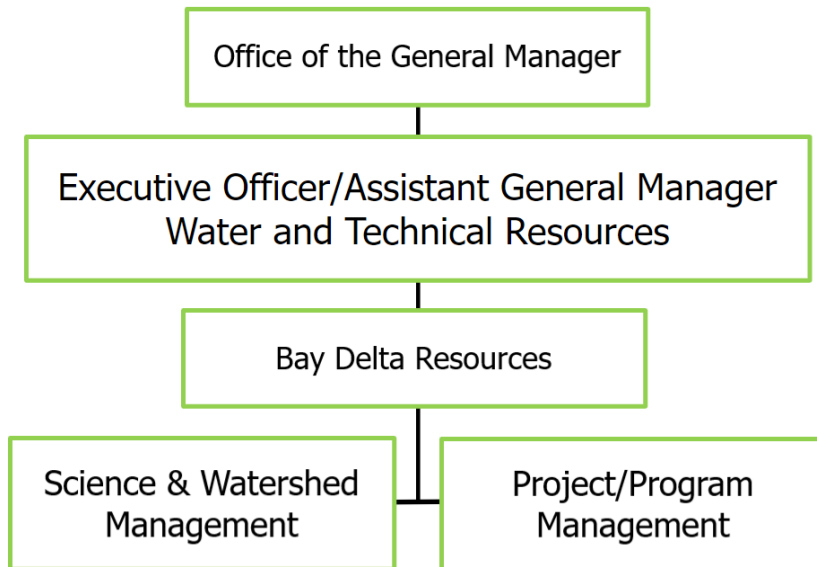
Bay Delta Resources (BDR) spearheads efforts toward advancement of water quality, supply reliability and system storage as it relates to the Sacramento/San Joaquin Delta and the State Water Project. In addition, BDR works with our partners to pursue scientific research to protect and restore fish and wildlife in the Delta watershed.

**Office of the Bay Delta Resources Manager** includes the Science and Watershed Management Section and Project/Program Management Section. BDR's Manager provides strategic leadership by ensuring the implementation of the organization's core business efforts and strategic objectives.

**Science & Watershed Management Section** is responsible for management of BDR's science program, support activities within Bay-Delta's watershed, continue engagement with the planning process for the proposed Delta Conveyance Project

including the Delta Conveyance Design and Construction Authority (DCA), Finance Joint Powers Authority, Department of Water Resources (DWR), and the State Water Contractors and policy/regulatory support.

**Project/Program Management Section** leads the implementation of strategic planning on Metropolitan's Delta Islands future land use including identifying habitat opportunities, sustainable agriculture and ecosystem health and restoration, participates in the planning process for the proposed Sites reservoir, manages the organization's budget and financial reporting, contract administration and general administration, and provides oversight of business plans, monthly reports, annual report, and board support.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, BDR will focus on the following key issues:

### Delta Conveyance

Final review and participation with the DWR for planning and environmental documentation including the Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) and key informational webinars, outreach and technical information provided to the public.

Support DWR planning to advance development of a biological assessment with fishery agencies and provide coordination as necessary.

Collaborate with the DCA and DWR on public outreach content and education.

### Science Development

Advance collaborative science through research and studies addressing the protection of endangered species, management of fish and wildlife species, management of stressors, and the improvement and protection of ecosystem habitat throughout the Delta ecosystem.

Continue to participate in the Bay-Delta science community by providing input to the Collaborative Science and Adaptive Management Program, including supporting the Collaborative Adaptive Management Team.

Develop manuscripts reporting on scientific research supported by Metropolitan for publication in peer-reviewed publications and conduct presentations at workshops, symposiums and conferences to advance new scientific findings.

Provide input on the review of technical work products, work plan development, and discussion of relevant issues that may influence key Delta regulations and policies.

Collaborate on scientific research for selected pilot projects using Metropolitan's Delta Islands.

### Regulatory, Planning, and Legislative Support

Provide analysis of key regulations and legislation that may influence water quality, supply reliability, storage, and watershed and environmental health related to the State Water Project (SWP) and Bay Delta estuary.

Review legislation and coordinate with Legal on key topics that intersect with regulations, policies, and operations.

Monitor and analyze Bay Delta and SWP permitting processes including long term Delta operations and proposed conveyance and storage projects.

Provide policy and technical support for processes related to State and Federal Endangered Species Act permitting for the State Water Project.

### Sites Reservoir

Continue participation with the Sites Authority in the planning, modeling and permitting for the proposed Sites Reservoir Project.

Continue discussions with federal and state regulatory agencies regarding project impacts and benefits.

Continue discussions with federal and state project operators regarding coordinated operation agreements.

Review and comment on the proposed governance structure, benefits and obligations agreement and the proposed financial plan.



## Delta Islands Management

Continue securing grants to enhance Delta levee stability, reduce subsidence, and promote climate adaptation and scientific research.

Implement the Delta Conservancy planning grant for the “Webb Tract Multi-Benefit Mosaic Landscape Project.”

Work with the Reclamation Districts (RD) to implement DWR grant-funded levee improvement projects on Bouldin and Bacon Islands and continue to develop a regional emergency flood fight supply depot on Bouldin Island.

Continue routine patrol of all four properties, identify and repair levee cracks, and monitor active seepage areas.

Work with Engineering in completing the installation of additional meters for full compliance with Senate Bill 88.

Manage the Delta Islands Emergency Response Team for flood and emergency situation updates.

## Levee Monitoring and Freshwater Pathway

Continue scientific field investigations and surveys related to levee monitoring and instrumentation pilot project. Manage the pilot projects related to testing subsurface instruments for levee anomalies and finding nutria with scent detection dogs.

Collaborate with the Delta RD and consulting engineering firms to develop a levee monitoring and instrumentation report and present the draft to management for direction and implementation.

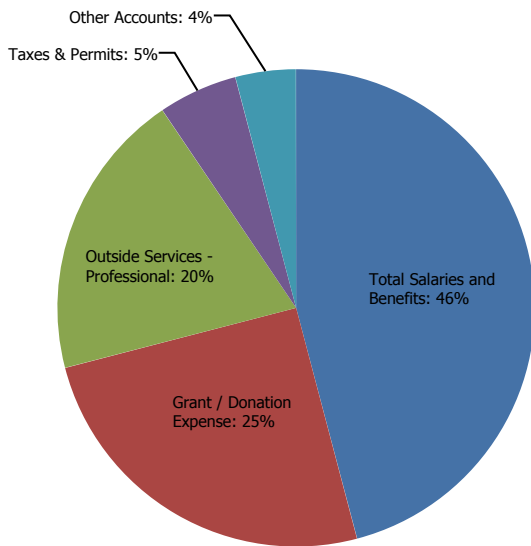
Work with local engineering firms, academia, and state and federal agencies to draft a revised Delta levee standard that incorporates seismic, sea level rise and habitat elements.

# O&M FINANCIAL SUMMARY

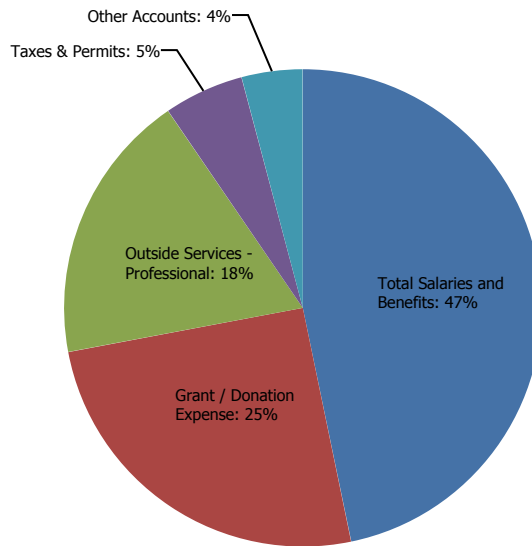
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	4,905,165	5,662,175	6,246,276	584,101	6,496,315	250,039
Direct Charges to Capital	(16,447)	(63,658)	(51,113)	12,544	(53,116)	(2,003)
<b>Total Salaries and Benefits</b>	<b>4,888,718</b>	<b>5,598,517</b>	<b>6,195,163</b>	<b>596,646</b>	<b>6,443,199</b>	<b>248,037</b>
% Change		14.5%		10.7%		4.0%
Grant / Donation Expense	477,277	722,500	722,500	—	744,175	21,675
Outside Services - Professional	2,951,748	3,284,293	3,382,822	98,529	3,484,306	101,484
Taxes & Permits	2,336,351	2,391,561	2,643,308	251,747	2,537,207	(106,101)
Other Accounts	468,557	535,666	553,626	17,960	569,596	15,970
<b>Total O&amp;M</b>	<b>11,122,650</b>	<b>12,532,537</b>	<b>13,497,419</b>	<b>964,882</b>	<b>13,778,484</b>	<b>281,065</b>
% Change		12.7%		7.7%		2.1%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 Budget by Expenditure



## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>16</b>	<b>17</b>	<b>1</b>	<b>17</b>	<b>—</b>
	O&M	16	17	1	17	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>—</b>
	O&M	2	3	1	3	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>18</b>	<b>20</b>	<b>2</b>	<b>20</b>	<b>—</b>
	O&M	18	20	2	20	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Bay Delta Resources O&M Biennial Budget is \$13.5 million in FY 2024/25 and \$13.8 million in FY 2025/26 or an increase of 7.7% and an increase of 2.1% respectively from the prior budget years. The main factors affecting these changes:

- Changes to BDR staffing from prior budget years include staff promotions and transfer of a staff from the Real Property Group during the reorganization. Some of the variances from promotions and position upgrades were offset by the downgrade of some positions. Budgets for FY 2024/25 and FY 2025/26 include allocations for three interns and a District Temp.
- Professional services cover allocations intended for consultants that will provide professional and technical expertise on Sacramento-San Joaquin Bay Delta (Bay-Delta) issues.
- Grant expense or cost shares for studies in collaboration with various agencies and academic institutions allows for continuous advancement of efforts on collaborative science.

The following are the significant changes by budget year.

## FY 2024/25

### Personnel–related issues

Regular full-time positions are increasing by 1 position from FY 2023/24 due to a position transferred in from another departmental Group. A District Temp is added to the labor budget for this year which will primarily be grant funded.

Capital labor is budgeted at 20% of one regular FTE for the Delta Islands regulatory compliance project (Senate Bill 88), replacement of pump stations, and implementation of the Delta smelt and native species preservation project.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

Professional Services budget reflects a 3.0% increase to maintain the current studies and projects underway including eDNA monitoring, various Delta smelt studies, GIS/mapping data management, water supply and quality modeling, Delta smelt and native species preservation study, regenerative agriculture, floating wetlands research and others. The Professional Services budget also includes allocations for consultants involved in emergency preparedness, water reliability planning, and various other land management alternatives for the Delta Islands.

### Grant Expense

The grant-related expense budget is flat and is for Metropolitan’s cost share contributions under collaborative partnerships with other agencies, and academic institutions that pursue studies that are of interest to Metropolitan.

### Travel Expenses

Maintain budget as staff routinely travel between Los Angeles and Sacramento for meetings including Reclamation District and Sites Authority Board meetings, Webb Tract grant project management activities and the resumption of in-person scientific conferences. Staff expect to resume more frequent

travels resulting from anticipated increase of in-person meetings as more offices and conferences go back to pre-Covid routines.

### Repairs & Maintenance (Outside Services)

The budget for this account is transferred from Real Property since BDI is mainly responsible for overseeing the operations and maintenance of the Delta Islands. The Repairs and Maintenance shall cover costs related to various structures and infrastructures in the islands to ensure safety and proper operations of facilities.

### Taxes & Permits

The taxes and permit budget is increasing. The budget for Taxes and Permits is transferred from Real Property since BDI is mainly responsible for RD coordination and activities. The budget is intended for RD assessments that cover the costs of levee and flood control facilities maintenance and abandoned structure removal. The assessment budget also includes additional funds for debt-service reduction payments.

### Other

The budget is for funding subsidies and incentives, materials and supplies, District validated parking for Bay Delta Sacramento staff, training and conferences, lease expense for two vehicles for use by staff for Delta Islands inspections, communication expenses, sponsorship, and membership and subscriptions mainly for open-access publication of science-related manuscripts resulting from the various science studies.

## FY 2025/26

### Personnel–related issues

Regular full-time positions remain flat from FY 2024/25. Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

The budget reflects an increase of 3.0% in funding to reflect typical cost increases for consultants.

### Grant Expense

The budget contains a minor increase of 3.0% in funding from the FY 2024/25 budget since most of the studies to be pursued have a duration of two to three years.

### Travel Expenses

The budget reflects a small increase of 1.1% in funding for continued, frequent travel between Los Angeles and Sacramento.

### Repairs & Maintenance

The budget remains flat from the FY 2024/25 budget since there is no anticipated change to the repairs and maintenance requirements.

### Taxes & Permits

The budget for assessments includes a 3.0% annual increase due to cost of living adjustment but remains relatively flat.

### Other

The budget remains relatively flat from the FY 2024/25 budget since there is no anticipated change to the requirements for the various accounts covered under this category.

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# FINANCE AND ADMINISTRATION

Finance & Administration provides innovative, proactive, and strategic financial direction and various administrative services in support of the mission of Metropolitan, the Board of Directors, management, and employees.

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## PROGRAMS

Finance & Administration is responsible for maintaining Metropolitan's strong financial position and high credit ratings and helping to achieve equitable water rates and charges that generate sufficient revenues.

In addition, Finance & Administration assists in the efficient management of Metropolitan's financial resources, and ensures that adequate financial controls are in place to accurately record financial transactions, communicate financial results, and protect Metropolitan's assets.

Finance & Administration accomplishes its mission through the following programs or sections:

**Office of the Group Manager, Finance & Administration** is responsible for the overall administration of finance and accounting functions for Metropolitan including debt and investment management; financial planning and analysis including rate setting and budgeting; accounting and control including financial reporting, payroll, accounts payable, accounts receivable; administrative services; and risk management and business continuity.

**Revenue and Budget Section** is responsible for Metropolitan's Biennial Budget, Cost-of-Service development and rates and charges recommendations; monitoring budget to actual for revenues and expenses through the year and recommending adjustments as necessary; administration of the fixed charges, and provide short and long-term financial analysis and planning.

**Controller** is responsible for maintaining internal controls that safeguard Metropolitan's assets, as well as recording and maintaining its official accounting records via the billing, accounts payable, payroll, and financial reporting functions.

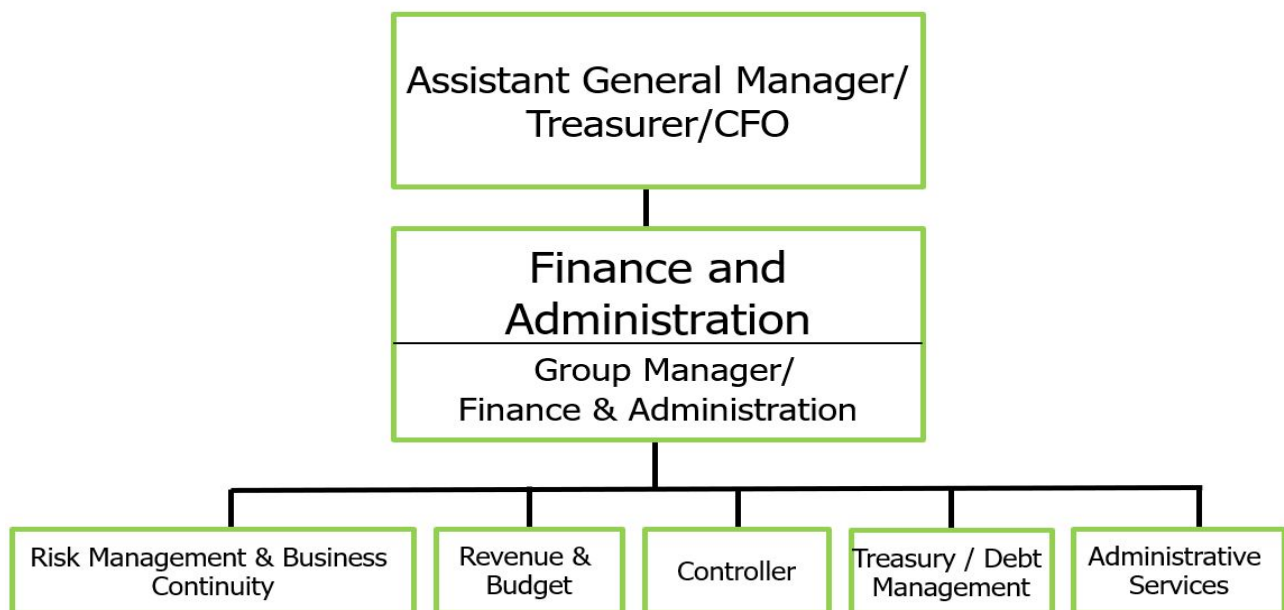
**Business Continuity Management Program** ensures that Metropolitan proactively identifies potential business impacts and develops recovery strategies to continue critical operations in the event of an emergency or other business disruption. This is accomplished by conducting Business Impact Analyses and developing business continuity plans along with a life cycle of ongoing plan maintenance, testing, training and awareness. In addition, emergency communications are spearheaded using the MetAlert emergency notification system.

**Risk Management**, which reports directly to the Office of the Group Manager, Finance & Administration, is responsible for managing all aspects of Metropolitan's risk management programs to minimize exposure to loss; access risk and recommend strategies to avoid minimize or transfer contract risk on all Metropolitan and agreements, manage the self-insured liability and property program to control risk, and procure excess and specialty insurance policies to supplement that program.

**Treasury/Debt Management** is responsible for Metropolitan’s investment and treasury operations including receipt, safekeeping, and disbursement of Metropolitan’s funds; managing the District’s liquidity cashflow needs and commercial banking activities, including receipts and payment processing, such as wires, checks, and automatic deposits; administering the District’s rebranded credit card program (the P-One Card Program); managing the District’s debt obligations including preparation of security sale documents for new issues, administration of outstanding debt obligations, including compliance with all certifications and disclosure notifications; investor

and bond rating agency relations; administering the District’s property tax programs, including the water standby charge exemption program and the annual ad valorem tax levy program.

**Administrative Services** provides a range of critical services including contracting, inventory management, warehousing, reprographics, records management, EForms management, Enterprise Content Management, and administration of Metropolitan’s Rideshare Program.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, Finance & Administration will focus on the following key issues:

### Cost of Service and Budget

Complete the biennial cost-of-service analysis for rates and charges. Complete and implement the Biennial Budget.

### Financial Forecasts and Analysis

Provide an updated Ten-Year Financial Forecast in the Biennial Budget.

Continue to provide the Board with various analyses to manage financial performance for long-term rate stability, including development of Phase 2 of the Long-Range Financial Plan.

Analyze the funding of financial initiatives as identified.

### Annexation/Tax Levy

Complete the annual annexation calculation and tax levy assessments.

## Rates and Charges

Manage and effectively administer rates and charges to recover costs consistent with Board policy and objectives. As part of the CAMP4W process, evaluate rate structures and business model alternatives.

## Financial Reporting/Internal Control

Continue to record and report the financial activities of Metropolitan in a timely and transparent manner to the Board and member agencies.

Continue to ensure that internal controls are in place to provide assurance that assets are safeguarded and financial information is fairly stated.

Continue to improve communications of financial information to the Board, member agencies, management, and the financial community.

## Capital Financing

Update capital financing plans and communicate Metropolitan's financial needs and capabilities to ensure cost-effective access to capital markets.

Work with Metropolitan's underwriting team, financial advisors, and swap advisors to identify financing opportunities to prudently manage the overall cost of financing Metropolitan's capital investment program.

Manage investor relations to ensure clear communications, accuracy of information, and integrity.

Continue to manage debt service to mitigate the volatility of debt service payments over time and reduce debt service costs through re-financings and the prudent use of interest rate swaps, in accordance with Metropolitan's interest rate swap policy.

Maintain relationships with the financial community and bond rating agencies to maintain Metropolitan's high credit ratings and access to various aspects of the financial markets to maximize financial flexibility.

## Investment

Prudently invest Metropolitan's funds with the objective of safety of principal, liquidity, and yield. Manage the District's portfolios to provide the necessary liquidity to fund in excess of \$3.0 billion over the biennium in expenditures for Operations

and Maintenance, debt service, and construction projects.

Measure the performance of the District's portfolios and manage each to meet or exceed the benchmark consistent within established investment codes and policy.

Manage all outside portfolio managers to ensure compliance with Metropolitan's investment policy, and to monitor investment activity performance.

## Risk Management

Continue to effectively manage Metropolitan's casualty insurance and risk management programs to minimize exposure to loss.

## Business Continuity

Conduct regular meetings with the Business Continuity Steering Committee to ensure the Business Continuity program is aligned with Metropolitan's strategic priorities.

Continue to refine the Business Continuity Plan template and Fusion system to capture better information and produce actionable and easy to follow recovery plans.

Continue collaboration with the business users to perform annual plan updates and approvals using the Fusion software.

Conduct biannual application recovery exercises with the business users to ensure accessibility and functionality of critical applications at the back up data center in accordance with business requirements.

Conduct tabletop exercises for Metropolitan's business continuity plans to validate recovery strategies and identify areas in need of updating.



Test emergency communications using the MetAlert emergency notification system to ensure effective communications in the event that normal methods are impacted.

### Innovative Solutions

Increase efficiency in procurement practices by streamlining acquisition processes. Enhance customer experience and satisfaction by upgrading warehouse online ordering system and expanding online training modules to grow customer's knowledge in key areas such as requisition processing and agreement administration.

Review business processes using data driven strategies to promote higher levels of productivity, optimize routine tasks, and improve efficiency across all Administrative functions.

Launch Information Governance / Enterprise Content Management (ECM) solution to increase employee productivity through improved storage, access, retrieval and control of physical and electronic records in line with fiscal, legal, and regulatory requirements.

Utilize Metropolitan's EForm program to improve district-wide business processes, increase productivity and enhance overall user experience by incorporating mobile technology and facilitating streamlined business workflows.

### Sustainability Efforts

Develop a sustainable procurement statement to enhance collaboration with suppliers and internal stakeholders to promote sustainable sourcing practices. Continue efforts to ensure Metropolitan's Rideshare Program remains beneficial for employees and compliant with South Coast Air Quality Management District's regulatory requirements.

Explore opportunities to expand the Electric Vehicle Charging program (partnership with Environmental/Engineering/WSO district-wide study).

Explore incentivized carpool program to further support sustainability goals.

### Workforce Development & Succession Planning

Continue to examine and consider the challenges associated with succession planning and future staffing requirements in light of the composition and age of the workforce.

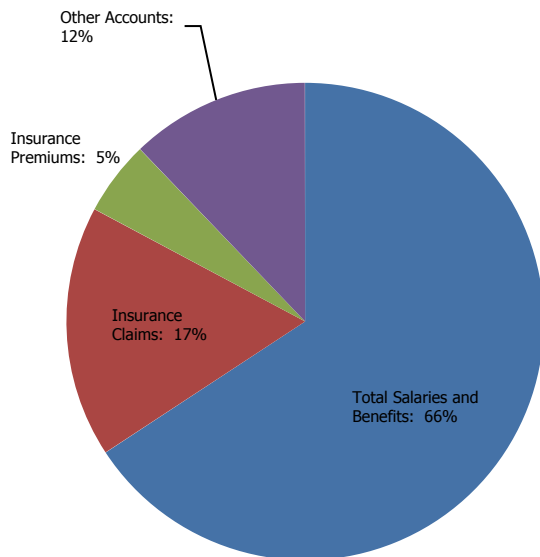
Work with each section within Finance & Administration to establish staff back-up responsibilities for various work processes.

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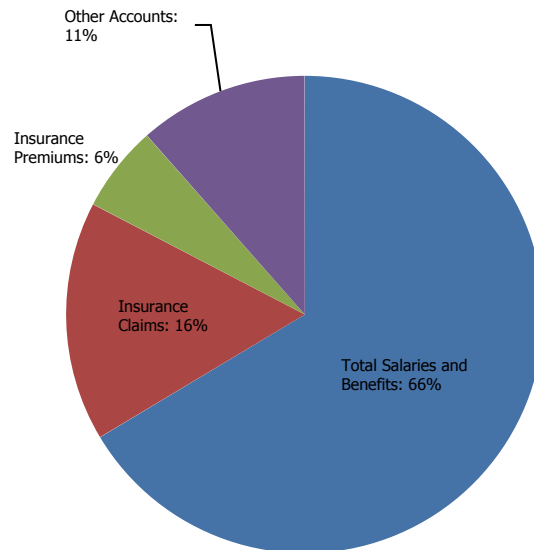
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	24,060,478	29,634,544	29,940,478	305,935	31,714,407	1,773,928
Direct Charges to Capital	(146,700)	(676,501)	(726,262)	(49,761)	(730,029)	(3,767)
<b>Total Salaries and Benefits</b>	<b>23,913,778</b>	<b>28,958,042</b>	<b>29,214,216</b>	<b>256,174</b>	<b>30,984,377</b>	<b>1,770,161</b>
% Change		21.1%		0.9%		6.1%
Insurance Claims	2,544,228	7,571,303	7,571,303	—	7,571,303	—
Insurance Premiums	1,751,908	2,000,000	2,243,000	243,000	2,736,000	493,000
Materials & Supplies	399,556	748,560	797,550	48,990	827,750	30,200
Outside Services - Professional	1,028,906	1,715,600	2,086,640	371,040	2,021,114	(65,526)
Rent & Leases	733,353	1,217,740	1,030,100	(187,640)	1,024,100	(6,000)
Other Accounts	987,116	1,417,812	1,480,086	62,274	1,487,801	7,715
<b>Total O&amp;M</b>	<b>31,358,845</b>	<b>43,629,057</b>	<b>44,422,895</b>	<b>793,838</b>	<b>46,652,445</b>	<b>2,229,550</b>
% Change		39.1%		1.8%		5.0%
Operating Equipment	202,848	43,351	—	(43,351)	—	—
<b>Total O&amp;M and Operating Equipment</b>	<b>31,561,693</b>	<b>43,672,408</b>	<b>44,422,895</b>	<b>750,487</b>	<b>46,652,445</b>	<b>2,229,550</b>
% Change		38.4%		1.7%		5.0%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

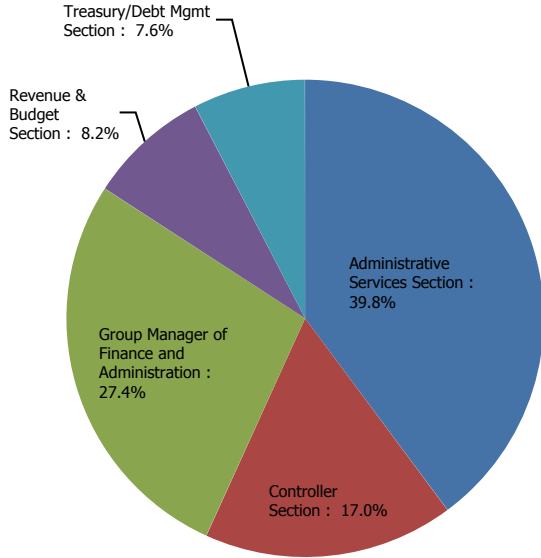


FY 2025/26 BUDGET BY EXPENDITURE

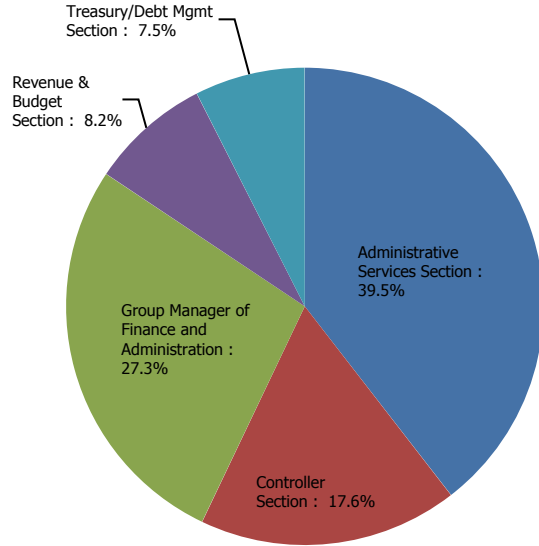


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Administrative Services Section	16,739,147	17,693,369	954,222	18,437,231	743,862	70	71	71
Controller Section	7,738,335	7,538,022	(200,313)	8,191,785	653,763	35	31	31
Group Manager of Finance and Administration	12,288,566	12,157,348	(131,217)	12,730,158	572,809	7	6	6
Revenue & Budget Section	3,042,271	3,652,660	610,389	3,807,233	154,573	9	11	11
Treasury/Debt Mgmt Section	3,820,739	3,381,496	(439,243)	3,486,038	104,542	11	8	8
<b>Total O&amp;M</b>	<b>43,629,057</b>	<b>44,422,895</b>	<b>793,838</b>	<b>46,652,445</b>	<b>2,229,550</b>	<b>132</b>	<b>127</b>	<b>127</b>

Totals may not foot due to rounding.

# PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>123</b>	<b>122</b>	<b>(1)</b>	<b>122</b>	<b>—</b>
	O&M	121	120	(1)	120	—
	Capital	2	2	—	2	—
<b>Temporary</b>	<b>Total</b>	<b>12</b>	<b>7</b>	<b>(5)</b>	<b>7</b>	<b>—</b>
	O&M	11	7	(4)	7	—
	Capital	1	—	(1)	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>135</b>	<b>129</b>	<b>(6)</b>	<b>129</b>	<b>—</b>
	O&M	132	127	(5)	127	—
	Capital	2	2	—	2	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

Finance & Administration's O&M Biennial Budget is \$44.4 million in FY 2024/25 and \$46.7 million in FY 2025/26, an increase of 1.7% and a increase of 5.0% respectively from the prior budget years. The change is primarily due to the following factors:

- Changes to Finance & Administration staffing from prior budget years include 1 position transferred out to Office of the Ethics Officer, 3 positions transferred out to the Office of the General Manager and the addition of 3 positions to support grants accounting for financial reporting and compliance, the establishment of financial systems and business analytics team, and to support inventory control. District temporary labor is decreasing by 5 positions, which offsets the increase in regular positions.
- Professional services costs are increasing to support critical budget systems, required services for investment and debt, for compliance with accounting and financial reporting standards, replacement of a legacy Rideshare database, and services to support the ADA PDF Initiative.
- The insurance premiums budget is increasing as a result of the expected overall pool exposure to catastrophic losses.

The following are the significant changes by budget year.

### FY 2024/25

#### Personnel-Related issues

Regular full-time positions are decreasing by 1 position from FY 2023/24 due to 4 positions transferred to other departmental Groups and 3 additional positions. The 3 additional positions were increased to support the Inventory team, ensure compliance with financial requirements, transparency, and accuracy in reporting grant expenditures and reimbursements, and to work at the intersection of IT and Finance to define business processes and needs and ensure end user success. District Temporary labor is decreasing by 5 FTE.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Increase in professional services budget includes outside services to support budget system and upgrades, increased cost for services provided by outside financial advisors and firms for investment and debt, for critical services related to accounting, reporting and business systems, replacement of a legacy Rideshare database that will no longer be supported and services to support the ADA PDF Initiative.

#### Insurance Premiums

The insurance premiums budget is increasing as a result of several factors and hardening insurance market. Several factors have impacted the insurance market including escalating global inflation due to the continuation of post-pandemic supply chain issues, global instability causing market fluctuations and uncertainty, climate change induced mega-catastrophic weather, and continued global political social unrest.

#### Rent & Leases

Lower cost of walk-up and production copiers resulted in a Rent and Leases budget decrease for Administrative Services. This decrease will help offset labor increases for this section.

#### Other

Increased budget for GFOA, Workiva, Arizent, and CSMFO memberships for the Finance and Administration Group by \$0.07 million. These memberships are important to ensure employees are up-to-date on licensing requirements and knowledgeable about ongoing changes to GASB and GAAP standards. Administrative Services' memberships cost is increased for Procurement Team's "Green Market Bloomberg subscriptions for

chemical market research” which will help to ensure fair and accurate pricing in Metropolitan’s procurement of water treatment chemicals and supplies.

## FY 2025/26

### Personnel–Related issues

Regular full-time positions remain flat from FY 2024/25. Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

The professional services budget is decreasing for services provided by outside financial advisors and firms for investment and debt.

### Insurance Premiums

The insurance premiums budget is increasing as a result of the expected overall pool exposure to catastrophic losses.

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# OFFICE OF DIVERSITY, EQUITY & INCLUSION

The Office of Diversity, Equity, and Inclusion (DE&I) is responsible for the strategic oversight of DE&I including planning, developing, and implementing Metropolitan’s strategies and initiatives that create an organizational culture of diversity, equity, and inclusion.

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## PROGRAMS

The vision of the Diversity, Equity and Inclusion (DEI) Department at Metropolitan Water District of Southern California is to build the most inclusive, equitable, socially and environmentally conscious public institution in the world. This vision comes to life in our holistic commitment to equity and inclusion across four (4) key stakeholder groups. First and foremost, our commitment is to our employees by creating, fostering and sustaining a culture of belonging and fairness across all People-related programs and processes. This focus is broadly communicated as our commitment to building a best-in-class Workplace. Our commitment also extends to our Workforce development efforts where we are committed to cultivating the next generation of talent, expanding greater access and equity in order to build a more diverse, qualified talent pipeline for Metropolitan and the water industry. Our commitment also extends to the broader water Industry, ensuring equity and inclusion is embedded in every aspect of water planning, conveyance and delivery, including aspects such as multicultural conservation messaging and environmental justice. Last, but certainly not least, our commitment extends to the diverse Communities we serve, ensuring inclusion of underserved communities and non-traditional partners thereby being trusted partners across our vast service territory.



### 1 Workplace

Build a **best-in-class** workplace where every employee is **valued**, their ideas **heard** and their work environment characterized by **respect, excellence and belonging**



### 2 Workforce (Future)

Cultivate the **next generation of talent** for expanding broader **access** and ensuring greater **equity** to build a more diverse, qualified workforce



### 3 Industry

Ensure diversity, equity and inclusion is embedded into **every aspect of water** planning, conveyance and delivery, including aspects such as **multicultural** conservation messaging and **environmental justice**



### 4 Community

Ensure inclusion of **underserved communities and non-traditional partners** thereby becoming **trusted partners**

## Business Outreach & Community Engagement

Our Business Outreach and Community Engagement Team is actively involved in the business community, building relationships and sharing opportunities in order to increase procurement spend with small business in service of our goal of 25% of all construction contracts awarded to small businesses. From strategic relationships with local chambers of commerce to partnerships with community-based organizations focused on historically underutilized businesses, the Business Outreach and Community Engagement Team engages with the business community to remove barriers to government contracting and invest in building a thriving small business and local community.

In our evolving commitment to this area of DEI influence, Metropolitan was one of 5 (five) government entities that signed the national Equity in Infrastructure pledge, a historic commitment to increase procurement spend to historically underutilized businesses, ensuring a renewed commitment to build generational wealth in communities that have been historically left behind.

## Workforce Development

Our workforce development efforts are focused on building a robust, qualified, diverse pipeline of talent to ensure a water workforce that can meet current and future needs for Metropolitan and beyond. From partnerships with community-based organizations such as Homeboy Industries and the California Conservation Corps to hosting resume writing and job information sessions, our workforce development efforts are focused on deep and authentic engagement in the communities we serve, thereby building brand capital for Metropolitan as a

preferred employer of choice and helping to expand economic empowerment whether through internships, our best-in-class apprenticeship program or full-time career opportunity.

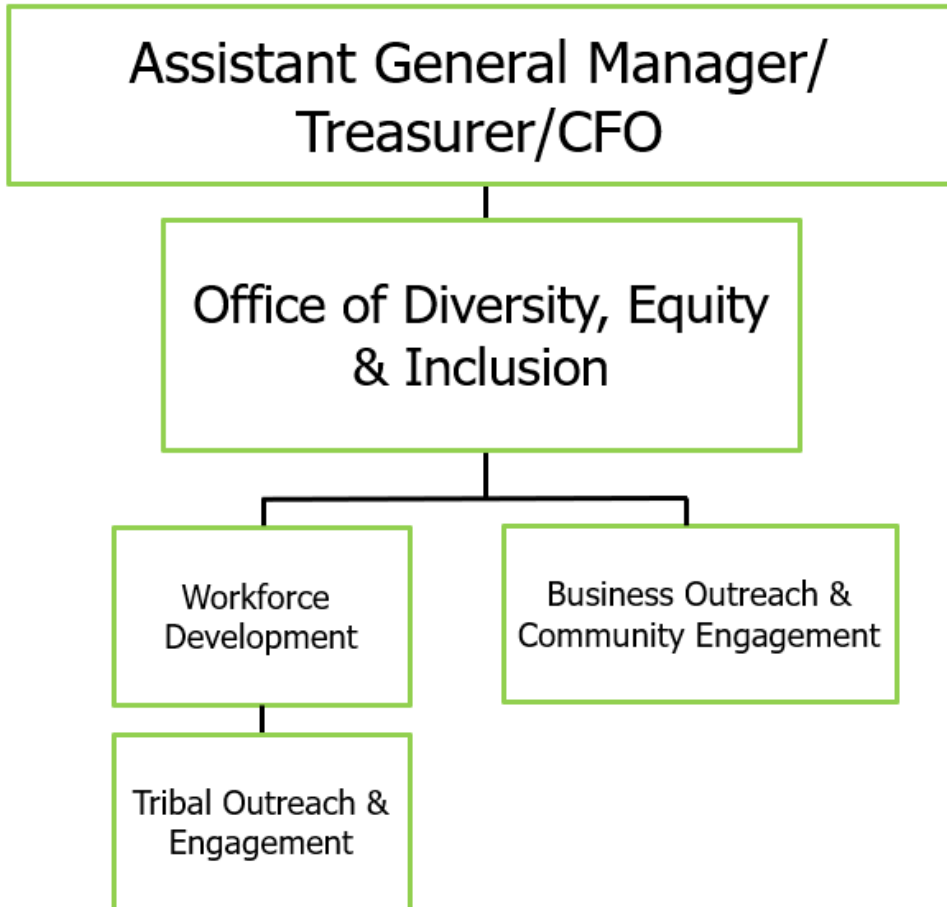
### Tribal Outreach and Engagement

Native communities, as the original holders of water rights, play an important role in the history of water in Southern California. From a DEI perspective, we are building trust in our Tribal communities and engaging with them to create pipelines of talent into Met. Furthermore, we are breaking ground in new and innovative ways, such as leveraging tribal knowledge to better inform our conservation efforts.

These efforts are ever evolving, as is the long-term work of building trust, and we look forward to working hand in hand with our Tribal communities to advance shared interest and in mutually beneficial ways.

### Diversity, Equity & Inclusion Council

The Metropolitan Diversity, Equity & Inclusion Council is a cross-functional, cross- departmental group of employees across the District who collectively advocate for a more inclusive and equitable workplace. The DEI Council is empowered to advance the strategic initiatives of the DEI Office with a focus on five C's – Connection & Care, Culture, Communication, Career and Community.



# GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, the Office of Diversity, Equity & Inclusion will focus on the following key issues and initiatives:

## DE&I Commitment

Create, foster and sustain a culture of belonging and fairness across all People-related programs and processes. **(Equity and Inclusion)** Leverage diversity and the power of inclusion to achieve superior results for Metropolitan. **(Outcomes over Optics)** Drive the ongoing recruitment, development, advancement and retention of diverse talent throughout all levels at Metropolitan. **(Increased diversity in talent pipeline)** Enhance communication and connection between people and functions in underserved communities and with non-traditional partners. **(Trusted employer and community partner)**



### Workplace

Build a **best-in-class** workplace where every employee is **valued**, their ideas **heard** and their work environment characterized by **respect, excellence and belonging**



### Workforce (Future)

Cultivate the **next generation of talent** for expanding broader **access** and ensuring greater **equity** to build a more diverse, qualified workforce



### Industry

Ensure diversity, equity and inclusion is embedded into **every aspect of water** planning, conveyance and delivery, including aspects such as **multicultural** conservation messaging and **environmental justice**



### Community

Ensure inclusion of **underserved communities and non-traditional partners** thereby becoming **trusted partners**

## Business Outreach & Community Engagement

Increase opportunities to encourage small, diverse and emerging businesses to work with and secure contracts with Metropolitan through training, workshops and partnerships with organizations and other outreach to the business community. Identify and develop strategies to reduce core barriers for small and diverse business success and growth, and collaborate with Metropolitan staff to understand, advocate for, and maximize Metropolitan's business outreach impact. Metropolitan is also a key player in advancing the national conversation through DEI's leadership in the Equity in Infrastructure pledge and, locally, in the California Plan, a consortium of California public agencies who are all signatories on EIP and strategizing collectively on how to advance our EIP commitments.

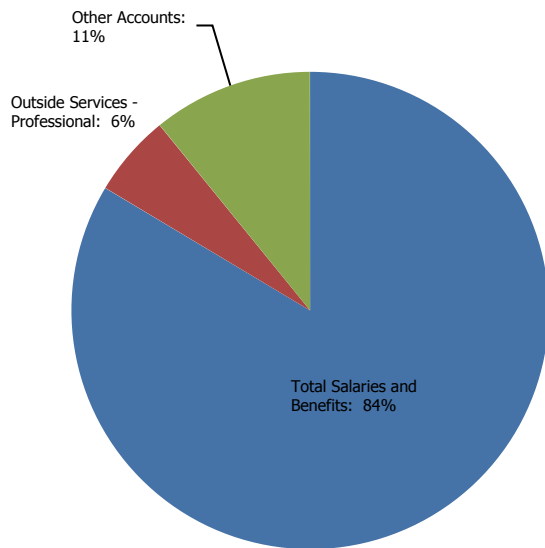


# O&M FINANCIAL SUMMARY

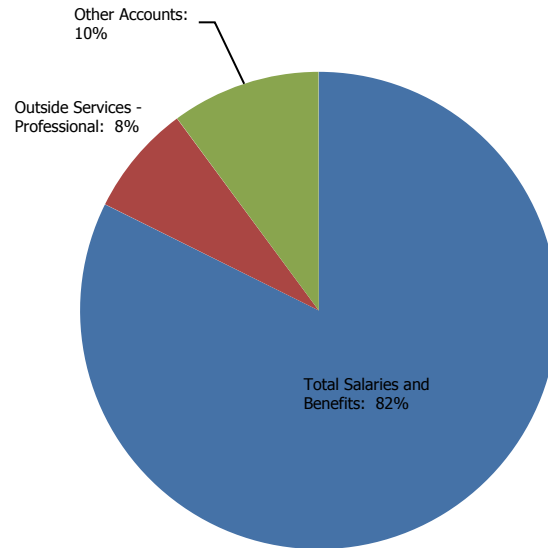
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	3,057,531	3,471,592	3,965,668	494,077	4,168,231	202,563
Direct Charges to Capital	—	(250,359)	(247,184)	3,175	(256,868)	(9,684)
<b>Total Salaries and Benefits</b>	<b>3,057,531</b>	<b>3,221,233</b>	<b>3,718,484</b>	<b>497,251</b>	<b>3,911,363</b>	<b>192,879</b>
% Change		5.4%		15.4%		5.2%
Community Outreach Activities	—	—	100,000	100,000	100,000	—
Memberships & Subscriptions	48,848	78,470	125,180	46,710	125,180	—
Outside Services - Professional	151,990	345,634	247,284	(98,350)	358,242	110,958
Sponsorships	141,550	100,000	135,000	35,000	135,000	—
Other Accounts	177,627	87,570	122,660	35,090	120,160	(2,500)
<b>Total O&amp;M</b>	<b>3,577,546</b>	<b>3,832,907</b>	<b>4,448,608</b>	<b>615,701</b>	<b>4,749,945</b>	<b>301,337</b>
% Change		7.1%		16.1%		6.8%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

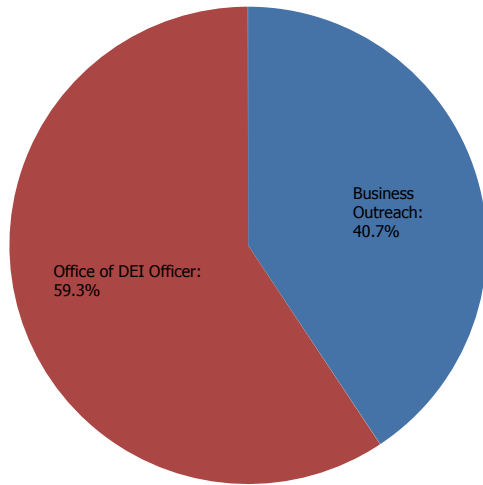


FY 2025/26 BUDGET BY EXPENDITURE

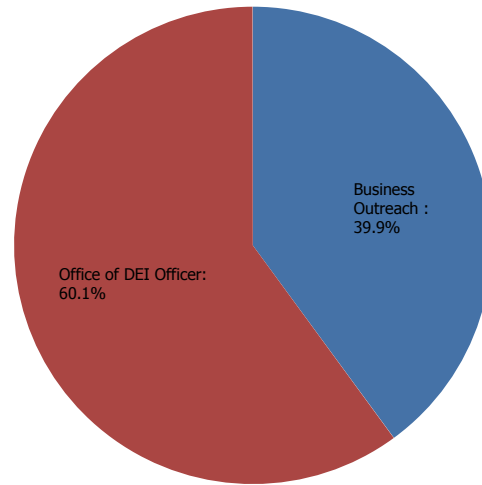


## O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Business Outreach	1,783,808	1,809,786	25,978	1,897,463	87,677	5	5	5
Office of DEI Officer	2,049,099	2,638,822	589,723	2,852,481	213,659	6	6	6
<b>Total O&amp;M</b>	<b>3,832,907</b>	<b>4,448,608</b>	<b>615,701</b>	<b>4,749,945</b>	<b>301,337</b>	<b>11</b>	<b>11</b>	<b>11</b>

Totals may not foot due to rounding.

## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>11</b>	<b>12</b>	<b>1</b>	<b>12</b>	<b>—</b>
	O&M	10	11	1	11	—
	Capital	1	1	—	1	—
<b>Temporary</b>	<b>Total</b>	<b>1</b>	<b>—</b>	<b>(1)</b>	<b>—</b>	<b>—</b>
	O&M	1	—	(1)	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>12</b>	<b>12</b>	<b>—</b>	<b>12</b>	<b>—</b>
	O&M	11	11	—	11	—
	Capital	1	1	—	1	—

Totals may not foot due to rounding.

# BUDGET HIGHLIGHTS

The Diversity, Equity & Inclusion Office’s Biennial Budget is \$4.4 million in FY 2024/25 and \$4.7 million in FY 2025/26 or an increase of 16.1% and an increase of 6.8% respectively from the prior budget years. The Salaries and Benefits increase in FY 2024/25 is due primarily to the negotiated labor increases and merit increases for qualified employees. Other noteworthy increases:

- The Office of DE&I Officer added 1 regular full-time position transferred in which will be the Workforce Development Manager.
- The budget for community outreach activities ins increasing to support the Office's key initiatives.

## FY 2024/25

### Personnel-Related Issues

Regular full-time positions are increasing by 1 position from FY 2023/24 due to 1 position transferred from another departmental Group. The additional position is for a new Workforce Development Manager to support the Office of the DE&I Officer.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

Professional services are decreasing from the FY 2023/24 budget.

### Memberships & Subscriptions

Memberships & Subscriptions are increasing to support the Office's key issues and initiatives.

### Community Outreach Activities

Community outreach activities are increasing to support the Office's key issues and initiatives.

### Other

Other accounts includes training & seminars, conferences & meetings, travel and other expenses necessary to support the Office of DE&I Officer are increasing.

## FY 2025/26

### Personnel-Related Issues

Regular full-time positions remain flat from FY 2024/25. Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

Professional services are increasing from the FY 2024/25 budget to support the Office's key issues and initiatives.

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# HUMAN RESOURCES

Human Resources (HR) strategically, and cost effectively, recruits, retains, motivates, rewards, and develops Metropolitan's employees.

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## PROGRAMS

The focus of Human Resources is to work closely with management to foster effective management; prepare to meet future workforce challenges; partner with customers on solutions; and provide excellent HR services that ensure compliance to numerous HR laws, regulations, and responsibilities.

The Human Resources Group partners with others across the organization to provide custom services and solutions that address current and future gaps in skills, knowledge, and abilities.

HR provides expertise to guide the District in matters related to employee and labor relations, recruitment and selection, HR Strategic Partnering, HR Information Systems, benefits, retirement, leave administration, classification and compensation administration, medical screening, workers' compensation, training, organizational development, workforce and career development, and HR business support services.

HR accomplishes its mission through the following programs or sections:

**Office of Human Resource Group Manager** provides strategic leadership and direction for Metropolitan's Human Resources functions. Organizations reporting directly to the Office of the Human Resource Group Manager include Employee Relations, Human Resources Services, Benefits, and Classification/Compensation & Recruitment.

**Employee Relations** is responsible for fostering harmonious labor relations between Metropolitan and its four certified bargaining units, and plays a key role in contract negotiations. The staff also serves as a resource to managers and supervisors on such matters as grievances, disciplinary actions, and workplace conflicts. The section also provides

ongoing training to managers on all facets of employer-employee relations.

HR has designated HR Strategic Partners to serve as single points of contact for managers, providing HR support in several areas, including Employee Relations, recruitment, training, succession planning, and strategic development.

**Human Resources Benefits and Workers' Compensation** is responsible for the strategic design and implementation of Metropolitan's benefits. The section leads and participates in continuous process improvement and cost optimization studies for all plans, active employee and retiree benefit program administration, partnering with management on new initiatives, compliance, Workers Compensation, medical screening and implementing new programs and agreements.

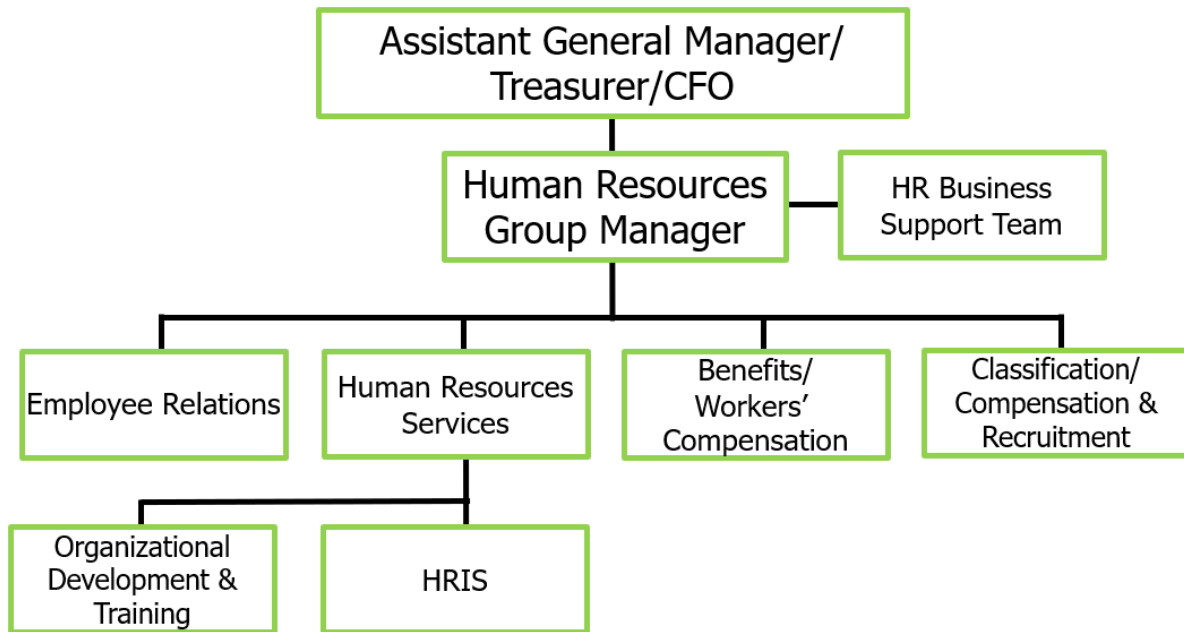
**Human Resources Services** is responsible for the development and training of Metropolitan employees. The Organizational Development & Training Unit assists both individual employees and collective work groups by identifying specific training needs, and developing strategic plans tailored to achieve those needs. OD&T develops Metropolitan's leaders and offers succession planning in its Leadership Academy and Management University programs. OD&T also continuously evaluates course curricula, measures training effectiveness through a dashboard of metrics, and offers one-on-one management coaching.

Staff under Human Resources Information Systems administer Metropolitan's MyHR system, and serve as a critical liaison between HR and the Information Technology Group.

**Classification/Compensation & Recruitment** is responsible for administering and ensuring compliance with policies, procedures, regulations, and laws related to areas of responsibilities.

Classification and Compensation is responsible for providing and monitoring a competitive and fair compensation system and maintains a standardized and equitable classification system which defines the scope and nature of job assignments. The Unit provides consultation on compensation and job structure issues. This is accomplished through job analyses and market assessments.

The Recruitment Unit is responsible for developing and managing recruitment strategies and processes. Recruitment is responsible for the recruitment and selection to attract and select the best qualified candidate for a vacant position from a highly qualified and diverse pool of applicants based on the selection criteria. Recruitment ensures equitable and fair selection methods that are consistent with legal requirements and procedures. Recruitment also administers and oversees supplemental labor staffing needs.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, HR will focus on the following key issues that support the General Manager's objective of Employee Development and additional HR priorities:

### Ensure Effective People Management

Strong people management skills are essential to meeting Metropolitan's future challenges and successes. HR will ensure that the role of management is defined and that current managers have the tools and training needed to provide effective management.

A formal, multi-tiered Management and Leadership Development program will help managers better understand their roles and responsibilities as they progress through management.

Learning opportunities will be provided to employees to prepare for future management positions from the entry-level manager all the way to the executive level.

Ongoing events, workshops and forums will provide opportunities to deliver consistent expectations and tools for management, including motivating and valuing employee contributions.

## Strengthen Partnerships with HR Customers

Effective people solutions require that HR partners with its customers, including management, unions, employees, retirees and others. HR must understand the customer's business needs and build working relationships that develop effective solutions to people-related challenges. This working partnership will minimize misdirected efforts, speed decision-making, reduce rework and, ultimately, produce a better workplace at a reduced cost.

Strengthened HR/customer partnerships and communications will identify areas for improvement in HR products, services, support and messaging.

Ensure that Risk Management, Employee Relations, EEO and the Legal Department coordinate to effectively defend against litigation of liability claims and to cost-effectively resolve claims.

## Prepare to Meet Challenges of Future Workforce Changes

On average, about 100 employees per year are retiring and this trend is expected to continue over the next several years. As experienced and knowledgeable employees retire, HR will continue to support and expand upon on-going succession planning efforts underway.

Efforts will include a focus on learning, development, knowledge capture, cross-training opportunities, and building pipelines for future vacancies.

HR will develop new strategies, support existing efforts and ensure Metropolitan remains competitive when compared to other organizations.

HR will support career development activity undertaken by employees to enhance knowledge, skills, and abilities for future work and promotional opportunities, including support of internship and mentoring initiatives.

## Provide Excellent Human Resources Services

HR provides a wide range of services and support from pre-hire to retirement, impacting almost every aspect of the organization. To make the maximum contribution, all HR functions must serve as trusted

advisors that speak with one voice, listen well and provide consistent guidance on people-related matters.

HR's organization is designed to improve customer service, provide stronger support to employees, and is aimed at developing the next generation of leaders through training, Management Academy, and recruitment.

HR will continue to simplify policies, processes, and procedures to reduce the costs of HR administration by utilizing technology, reducing redundancies and implementing new approaches to existing services.

HR will develop standard reports to enhance management access to employee data and assist with decision-making.

HR will administer a full-range of benefit services for health, leave, deferred compensation and retirement programs.

HR will continue to review the recruitment process and procedures to improve quality of hire and time-to-fill.

## Ensure Compliance with Laws and Regulations

HR manages compliance to four MOUs and the Administrative Code, and addresses many sensitive and confidential personnel issues.

HR will continue to monitor a wide array of changing legal and regulatory requirements while adapting HR processes and systems to conform to these changing requirements.

HR will ensure Metropolitan meets Equal Employment Opportunity requirements and numerous Federal, State, and Local laws and regulations and Public Sector codes and rulings.

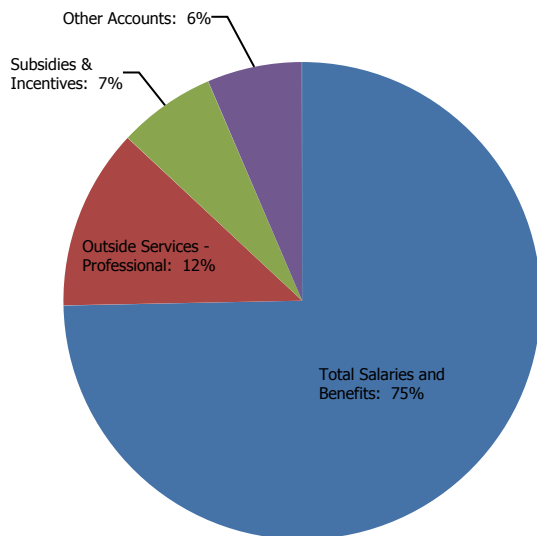
HR will maintain fiduciary responsibilities in the management of financial and retirement programs and comply with the Affordable Care Act and with all privacy and data security requirements.

## O&M FINANCIAL SUMMARY

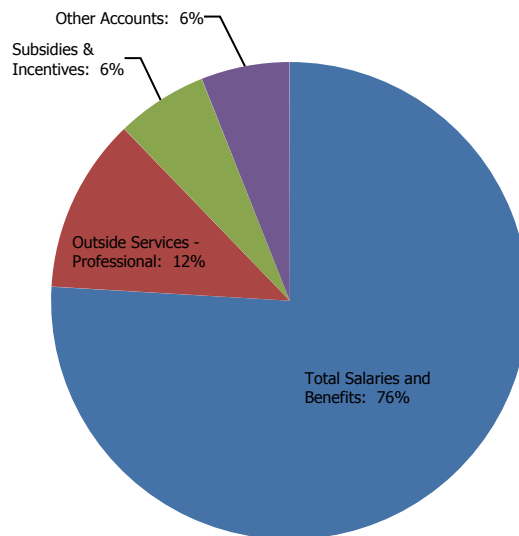
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	11,004,809	12,001,597	13,485,943	1,484,347	14,668,749	1,182,805
Direct Charges to Capital	(28,783)	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>10,976,026</b>	<b>12,001,597</b>	<b>13,485,943</b>	<b>1,484,347</b>	<b>14,668,749</b>	<b>1,182,805</b>
% Change		9.3%		12.4%		8.8%
Outside Services - Non Professional / Maintenance	371,083	408,970	425,355	16,385	425,355	—
Outside Services - Professional	1,186,424	1,467,001	2,213,800	746,799	2,291,324	77,524
Subsidies & Incentives	1,026,759	1,191,600	1,194,200	2,600	1,194,200	—
Other Accounts	727,560	807,860	735,414	(72,446)	735,422	8
<b>Total O&amp;M</b>	<b>14,287,852</b>	<b>15,877,028</b>	<b>18,054,712</b>	<b>2,177,685</b>	<b>19,315,050</b>	<b>1,260,337</b>
% Change		11.1%		13.7%		7.0%

Totals may not foot due to rounding.

### FY 2024/25 BUDGET BY EXPENDITURE

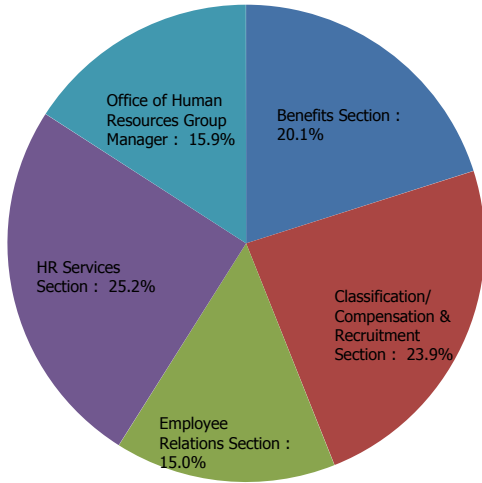


### FY 2025/26 BUDGET BY EXPENDITURE

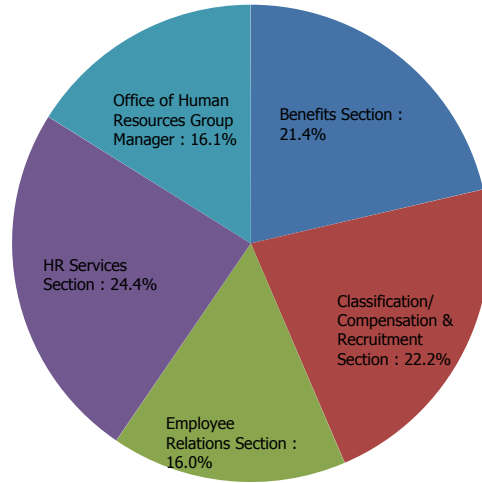


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Benefits Section	2,910,168	3,629,664	719,497	4,126,682	497,017	9	10	10
Classification/Compensation & Recruitment Section	3,462,773	4,308,709	845,936	4,290,192	(18,517)	12	15	15
Employee Relations Section	2,674,189	2,708,220	34,031	3,081,142	372,923	7	8	8
HR Services Section	4,077,269	4,541,221	463,952	4,707,019	165,798	9	11	11
Office of Human Resources Group Manager	2,752,629	2,866,898	114,269	3,110,014	243,116	8	9	9
<b>Total O&amp;M</b>	<b>15,877,028</b>	<b>18,054,712</b>	<b>2,177,685</b>	<b>19,315,050</b>	<b>1,260,337</b>	<b>45</b>	<b>53</b>	<b>53</b>

Totals may not foot due to rounding.

## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>43</b>	<b>47</b>	<b>4</b>	<b>47</b>	<b>—</b>
	O&M	43	47	4	47	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>6</b>	<b>—</b>
	O&M	2	6	4	6	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>45</b>	<b>53</b>	<b>8</b>	<b>53</b>	<b>—</b>
	O&M	45	53	8	53	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.



## BUDGET HIGHLIGHTS

Human Resource's Biennial O&M Budget is \$18.1 million in FY 2024/25 and \$19.3 million in FY 2025/26 or an increase of 13.7% and an increase of 7.0% respectively from the prior budget years. The changes are due primarily to the following factors:

- Four additional regular positions to support Human Resources efforts.
- Salaries and benefits reflect negotiated labor increases from the prior budget cycle.
- Materials and supplies reflect an increase in software licensing purchases and support.
- Professional services increase in both years due to increased organizational and employee development training programs, and increased recruitment support. Workers' Compensation third-party administrator cost is also reflected in the increase.
- Taxes and permits reflect an increase to accurately reflect the usage trend.
- Advertising reflects a decrease to accurately reflect the usage trend.

The following are the significant changes by budget year:

### FY 2024/25

#### Personnel–Related issues

Regular full-time positions are increasing by 4 positions from FY 2023/24 due to 4 additional positions. The 4 additional positions include a Human Resources Assistant III to support the Benefits Section; a Human Resources Analyst III to support the Employee Relations Section; a Human Resources Analyst III to support Classification/Compensation & Recruitment; and a Principal Administrative Analyst to support the reasonable medical accommodations.

District Temporary positions increased from 2 from the FY 2023/24 budget to 6 District Temporary positions. The District Temporary positions are to support HRIS in the implementation of Ventiv and PeopleSoft functionalities until automation can be achieved. Additional District Temporary positions are to support Classification/Compensation & Recruitment efforts to reduce the time-to-fill and reduce the volume of recruitments. One District Temporary position is to support the reasonable medical accommodations to ensure compliance with all COVID requirements and Metropolitan procedures, as well as bringing and keeping the Department of Transportation Drug and Alcohol Testing Program in compliance.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Materials & Supplies

The budget reflects an increase in software licensing in Organizational Development & Training (e.g., LifeMoxie, and Carahsoft service).

#### Professional Services

The budget reflects an increase in Professional Services as a result of the utilization of outside professional services for recruitment support, as well as a compensation study. Workers' Compensation third-party administrator cost is also reflected in the increase.

## FY 2025/26

### Personnel–Related issues

Regular full-time positions remain flat from FY 2024/25. Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Professional Services

The budget reflects an increase in Professional Services due to the Workers' Compensation cost for the third-party administrator.

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# INFORMATION TECHNOLOGY

Information Technology provides innovation and outstanding value to its customers for a wide range of technical services and enterprise business solutions.

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## PROGRAMS

Information Technology provides innovation and value to its customers for a wide range of technical services and enterprise business solutions. The group collaboratively works with customers to deliver information technology options, services, and solutions in the areas of enterprise and business applications, Engineering Services and Water System Operations applications, data analytics, mobile/wireless computing, telecommunications, network services, cybersecurity, project management and personal computing.

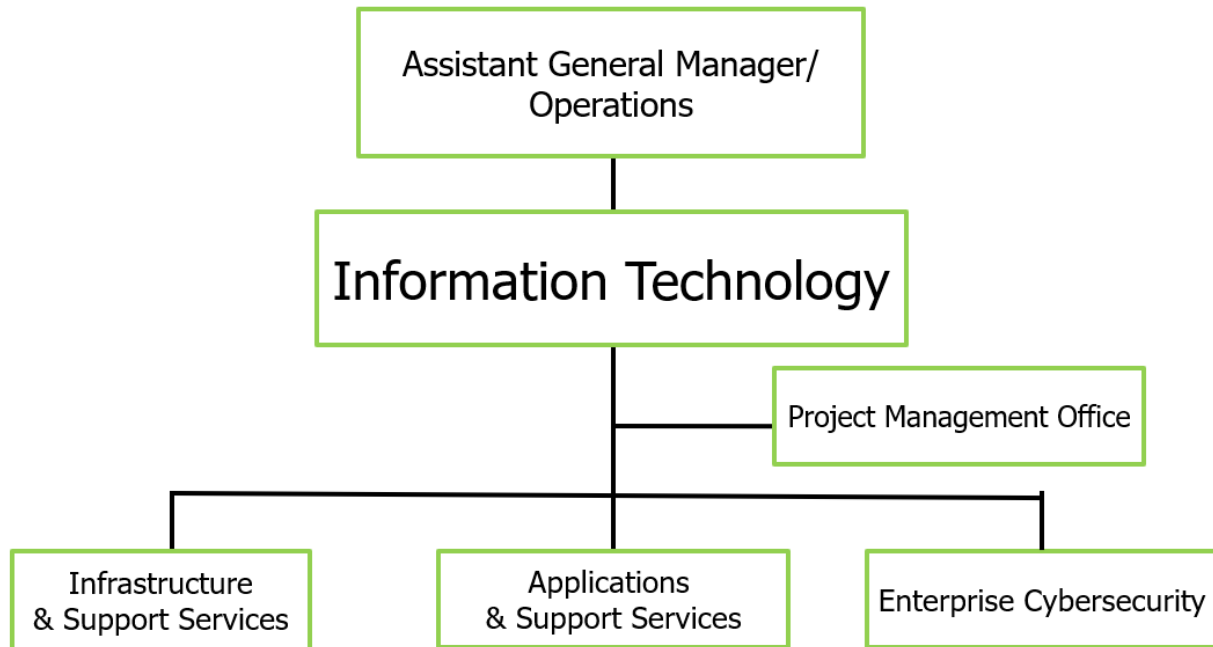
**Office of Group Manager** oversees the management of the Information Technology (IT) group by providing strategic leadership on initiatives and capital investments to improve operational efficiencies, enhance reliability & cybersecurity capabilities, and deliver innovative options and solutions.

**Cybersecurity** focuses on security standards and policies to enhance Metropolitan's cybersecurity posture and to ensure protection against evolving and increasing cyber threats.

**Project Management Office** is responsible for the overall governance and project management of the IT program and project portfolio.

**Office of IT Section Manager (IT Infrastructure & Client Services)** manages and supports IT business and service areas related to IT infrastructure, and maintains Metropolitan's enterprise-wide infrastructure services related to telecommunications, networks, servers, data center operations, and related client services.

**Office of IT Section Manager (Enterprise Applications & Support Services)** develops and supports enterprise, business software applications, business intelligence systems, and provides services, innovative solutions, and systems that support business functions in Engineering Services and Water Systems Operations.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, IT will focus on initiatives and projects that will enhance service reliability, improve resiliency, and improve workplace efficiency.

Key projects in support of strategic priorities include:

- Nurture our Cybersecurity Program
- Implement a world-class Enterprise Content Management (ECM) system
- Increase Cloud Services
- IT Capital Investment Plan
  - SCADA Control System
  - Replace end-of-life systems
  - IT Infrastructure Upgrades

### Business Technology & Process Enhancement

In the prior biennium, the IT Group completed a number of key projects and initiatives providing the foundation for Metropolitan’s move to the cloud. This transformation to cloud computing will continue to enhance productivity, streamline business processes, enhance resiliency, reliability and security, and mitigate costs for the organization.

During the FY 2024/25 and FY 2025/26 biennium, IT will continue to implement projects in support of Metropolitan’s strategic initiatives, including

strengthening Metropolitan’s cybersecurity capabilities by deploying new and emerging technologies and implementing a new security operations center.

In addition, the planned technology upgrades will provide greater visibility and consolidation of IT costs and performance.

### Information Systems Upgrades and Projects

IT continues to collaborate with business areas to enhance the capabilities of systems that achieve Metropolitan’s operational goals and objectives. The following key projects include IT deliverables that add value to the enterprise while delivering innovative solutions.

#### Data Center Backup Project

Provides an upgrade of Metropolitan’s data center(s) back up infrastructure that is cloud compatible to support and safeguard backup of all applications.

## Water Information Systems (WINS)

The WINS upgrade will include much needed enhancement features to Metropolitan's water billing system to allow for automation and increased mobile functionality.

## The Enterprise Data Analytics Project

The Enterprise Data Analytics Project will develop a data and analytics strategy, implement best practices, and engage Metropolitan stakeholders on a technology blueprint to serve the data analytics needs of Metropolitan business groups.

## Water Systems Control Master Plan (METCON)

The Water Systems Control Master Plan provides a road map to fully coordinate and further protect the operational and business investments of Metropolitan's SCADA systems. The master plan defines a multi-phased approach for replacing/upgrading the control system critical to Metropolitan's operations, water delivery, water quality, and infrastructure monitoring.

## Pasadena Microwave Tower

This project will include the design, decommission, and installation of a new tower at Pasadena Water and Power property to facilitate new microwave equipment for Metropolitan's network at Eagle Rock to ensure stability and reliability of data transmission.

## Enterprise Content Management (ECM)

Continue to partner with Administrative Services on the ECM project for the implementation of an ECM application and for the optimization of digital assets on Metropolitan's network storage devices. Once fully implemented, the ECM system will provide a framework for collaboration, automation, and enhancements of core business processes for all digital assets.

## Redundant Circuits at Remote Locations

Install redundant fiber circuits at Metropolitan plants to provide Wide Area Network (WAN) redundancy. The circuits are provided by a separate carrier resulting in telco diversity. This redundancy

is needed to provide reliable communications for systems such as internet, enterprise applications, VoIP, 2-Way Radio, Physical Security, and SCADA VPN.

## Cybersecurity Project

The Cybersecurity Project will assess and remediate potential vulnerabilities and evolving cyber threats with an emphasis on protecting Metropolitan through tighter network visibility and situational awareness upgrades.

## Clear Orbit Bar Coding System Replacement

Replace existing end of life Clear Orbit Bar Coding system with a new mobile hand held system that integrates with the Oracle inventory system.

## Oracle e-Business Suite (EBS) Upgrade

The purpose of this project is to upgrade Metropolitan's Oracle EBS which is a mission-critical integrated set of business applications for automating Metropolitan's financials, procurement, project management, and grants management activities.

## Maximo Preparation for Version 8

This project will prepare Maximo to move to the cloud. In preparation for the move, Maximo integrations with other applications will need to be recreated using the Maximo integration framework and all related business processes documented.

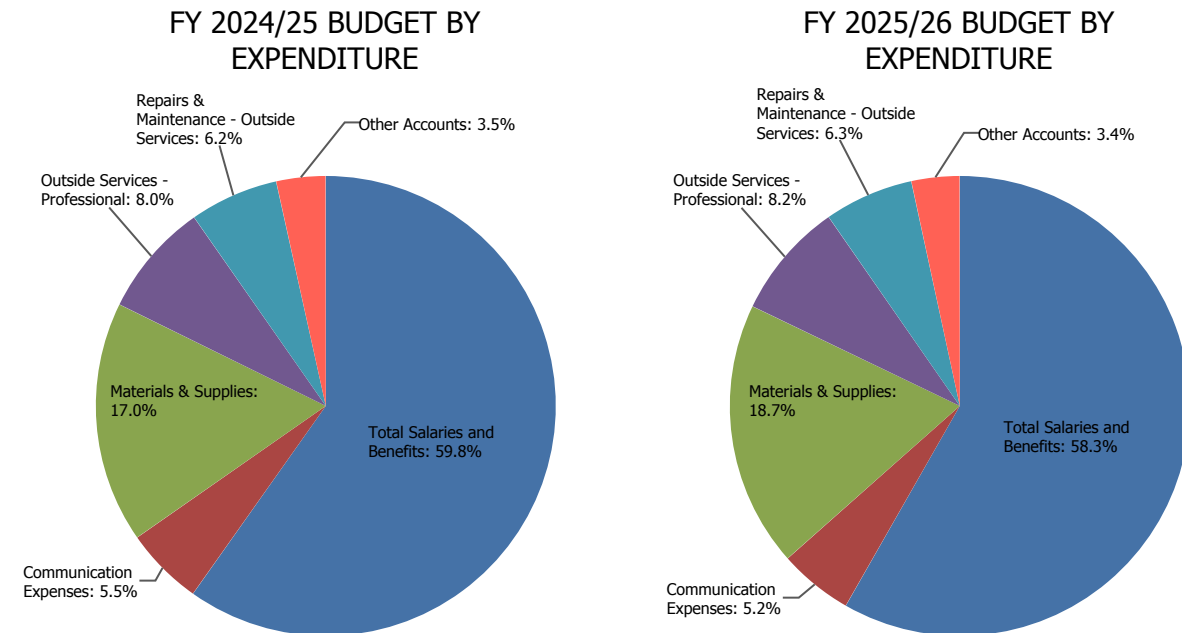
## Payroll/Timekeeping

The Payroll/Timekeeping project seeks to upgrade and enhance PeopleSoft payroll and replace the current timekeeping software with a package that integrates with the payroll system and provides for ease-of-use interface for customers.

# O&M FINANCIAL SUMMARY

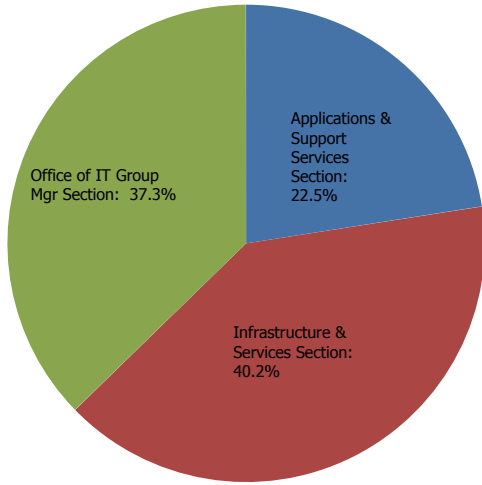
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	32,163,423	35,355,260	37,109,936	1,754,676	38,193,068	1,083,132
Direct Charges to Capital	(872,211)	(1,731,640)	(1,342,123)	389,517	(1,399,204)	(57,081)
<b>Total Salaries and Benefits</b>	<b>31,291,211</b>	<b>33,623,620</b>	<b>35,767,813</b>	<b>2,144,193</b>	<b>36,793,864</b>	<b>1,026,051</b>
% Change		7.5%		6.4%		2.9%
Communication Expenses	2,685,097	2,629,200	3,292,500	663,300	3,292,500	0
Materials & Supplies	9,217,985	9,569,481	10,150,000	580,519	11,785,750	1,635,750
Outside Services - Non Professional / Maintenance	650,853	1,211,400	1,419,500	208,100	1,476,500	57,000
Outside Services - Professional	1,546,521	2,477,954	4,790,750	2,312,796	5,184,750	394,000
Repairs & Maintenance - Outside Services	1,752,447	2,324,500	3,732,787	1,408,287	3,965,560	232,773
Other Accounts	595,747	589,624	653,825	64,201	653,825	0
<b>Total O&amp;M</b>	<b>47,739,861</b>	<b>52,425,778</b>	<b>59,807,175</b>	<b>7,381,397</b>	<b>63,152,749</b>	<b>3,345,574</b>
% Change		9.8%		14.1%		5.6%
Operating Equipment	209,270	181,385	502,084	320,699	490,737	(11,347)
<b>Total O&amp;M and Operating Equipment</b>	<b>47,949,131</b>	<b>52,607,163</b>	<b>60,309,259</b>	<b>7,702,096</b>	<b>63,643,486</b>	<b>3,334,227</b>
% Change		9.7%		14.6%		5.5%

Totals may not foot due to rounding.

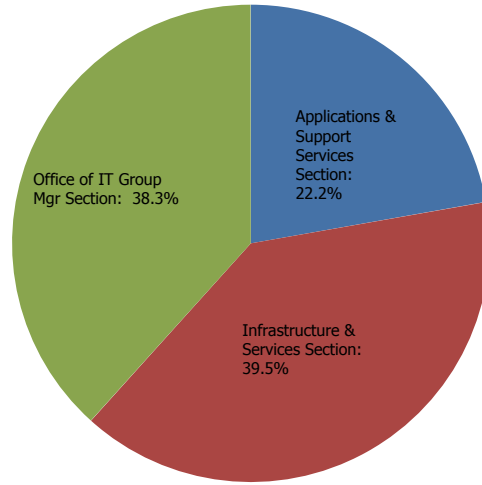


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Applications & Support Services Section	12,334,308	13,476,128	1,141,820	14,039,036	562,908	46	47	47
Infrastructure & Services Section	20,634,031	24,039,063	3,405,033	24,913,885	874,821	52	51	51
Office of IT Group Mgr Section	19,457,440	22,291,984	2,834,544	24,199,829	1,907,845	31	34	31
<b>Total O&amp;M</b>	<b>52,425,778</b>	<b>59,807,175</b>	<b>7,381,397</b>	<b>63,152,749</b>	<b>3,345,574</b>	<b>129</b>	<b>132</b>	<b>129</b>

Totals may not foot due to rounding.

# PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>131</b>	<b>132</b>	<b>1</b>	<b>132</b>	<b>—</b>
	O&M	125	128	2	128	—
	Capital	6	4	(1)	4	—
<b>Temporary</b>	<b>Total</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>(3)</b>
	O&M	4	5	1	2	(3)
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>135</b>	<b>137</b>	<b>2</b>	<b>134</b>	<b>(3)</b>
	O&M	129	132	3	129	(3)
	Capital	6	4	(1)	4	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Information Technology O&M biennial budget supports the need for Metropolitan to remain resilient, sustainable and innovative. This budget includes key investments in risk mitigation (cybersecurity), infrastructure replacement and refurbishment (data center back up), transition to cloud-based computing and deployment of innovative technologies to support business process improvements.

Information Technology's biennial O&M and Operating Equipment budget is \$60.3 million in FY 2024/25 and \$63.6 million in FY 2025/26 or an increase of 14.6% and an increase of 5.5% respectively from the prior budget years. The changes are due primarily to the following key factors:

- Salaries and Benefits reflect negotiated labor increases and the increase of one position in FY 2024/25 to support key cybersecurity initiatives.
- Services within this biennial budget include costs associated with data center infrastructure back up to mitigate risk to Metropolitan while providing greater redundancy and resiliency capabilities.
- As part of the Cloud First strategy, this biennial budget includes on-going cloud services and consulting to facilitate the transforming of IT services to the cloud environment.
- Increases in communication expenses include installing redundant circuits for added resiliency, cloud-based connections, and increased capacity (bandwidth) to support Metropolitan's operational needs.
- Strengthen Metropolitan's cybersecurity capabilities by staffing the newly formed cybersecurity operations center and deploy new and emerging technologies to enhanced Metropolitan's cybersecurity countermeasures capabilities.
- Continue to upgrade end-of-life equipment of the control system critical to Metropolitan's operations, water delivery, water quality, and infrastructure monitoring.

The following are significant changes by budget year:

### FY 2024/25

#### Personnel-Related Matters

Regular full-time positions are increasing by 1 position from FY 2023/24 due to 1 additional position. The additional position is to support key cybersecurity initiatives.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Professional Services

Increase to the budget was made in professional services to support the additional workload of staffing and monitoring the cybersecurity operations center.

#### Communication Expenses

The budget reflects increases in communication expenses including co-location (for redundancy and resiliency), cloud-based connections, and new circuits for field locations and increased capacity (bandwidth) to support Metropolitan's operational needs.

#### Materials and Supplies

This budget reflects inflationary increases for software licensing/support agreements, and continued transformation to cloud computing and increased consumption of cloud services.



## Repairs and Maintenance

Increases to the budget for repairs and maintenance are attributed to hardware equipment (servers) coming off warranty, growth in equipment, and expansion of Metropolitan network infrastructure.

## FY 2025/26

### Personnel-Related issues

Regular full-time positions remain flat from FY 2024/25. Salaries and Benefits reflect negotiated labor increases.

### Professional Services

Increases in professional services for FY 2025/26 reflects IT support for critical on-call services for key IT strategic priorities.

### Communication Expenses

No significant change in communication expenses for FY 2025/26.

### Materials and Supplies

The budget reflects inflationary increases for software licensing/support agreements, as well as new software costs from CIP projects transferring over to O&M.

## Non-Professional Services

Increase to non-professional services for FY 2024/25 is attributed to the microwave support and network cabling services needed to support key infrastructure initiatives for the District's telecommunications.

## Repairs and Maintenance

Increases to the budget for repairs and maintenance are associated with hardware maintenance for servers, networking equipment, routers and switches supporting the business and SCADA networks.

## Non-Professional Services

No significant change for FY 2025/26.

## Operating Equipment - FY 2024/25 and FY 2025/26

The operating equipment budget reflects an increase in FY 2024/25 for the critical replacement of IT equipment that has reached end-of-life, including hardware (servers, and storage devices), work trucks, drones, and GIS-workstations to support Metropolitan operations. No significant change in operating equipment for FY 2025/26.

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# EXTERNAL AFFAIRS

External Affairs builds awareness and support for Metropolitan's mission and programs by directing media and partner communications, public outreach and education projects, legislative activities, and member agency support services.

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## PROGRAMS

External Affairs is responsible for advancing Metropolitan's policy objectives and communicating with large and diverse audiences on behalf of the district. A strong portfolio of communication tools, media services, public outreach and sponsorship programs, education and legislative activities is used to build positive working relationships and increase awareness of Metropolitan's programs and initiatives with the public, news media, legislators, regulators, educators, community groups, businesses, labor organizations, Metropolitan's public member agencies and other interested parties.

Staff at Union Station headquarters and regional representatives give voice to Metropolitan's policy priorities and projects in the Delta, Palo Verde Valley and throughout Southern California. External Affairs also manages strategic activities and regional outreach from Metropolitan's offices in Sacramento and Washington, D.C.

**Office of the Group Manager** directs the activities of Conservation and Community Services, Legislative Services, Media and Communications and Member Services and Public Outreach sections, the Business Management Team, and two Community Outreach Managers serving the Sacramento-San Joaquin Delta and the Palo Verde Valley. The Group Manager leads policy objectives and program initiatives in coordination with the board, executive management and other groups within the organization.

**Legislative Services** promotes, protects, and advances the interests of Metropolitan and its member agencies at the state and federal levels by engaging on bills and administrative matters, sponsoring legislation or pursuing state and

federal funding. The section also engages with legislators and other water policymakers, member agencies and diverse community partners to mobilize and sustain regional support for Metropolitan's key initiatives.

### Conservation and Community Services

advances public awareness of Metropolitan and important water and conservation issues through advertising, education and community outreach. The section promotes and helps market conservation programs and activities, and manages Metropolitan's sponsorships for education and research programs, water forums, events and community partnerships.

The Education Team supports standards-based water education programs and works with member and retail agencies, educational associations, institutions and teachers to provide supplemental materials, resources, workshops, field trips, in-services and classroom presentations for Pre-K, elementary and secondary schools, colleges and universities.

### Member Services and Public Outreach

provides support services to Metropolitan's member agencies and manages outreach and engagement efforts for Metropolitan's major resource initiatives, facility operations, and construction activities. The section works with and supports environmental and community organizations, local government, and businesses, and directs research efforts to support Metropolitan programs.

The Inspection Trip Team conducts board-sponsored and other special inspection trips that

offer firsthand knowledge of Metropolitan's operations, introduces current water issues, and communicates Metropolitan's role in responding to those issues through its facilities, infrastructure, policies, and programs.

The Community Relations Team manages communications, outreach and engagement to support Metropolitan's initiatives for new and existing in-region water infrastructure projects. Working in cooperation with Engineering Services, Water System Operations, and Environmental Planning, the team plans and conducts external outreach for Metropolitan's capital and O&M projects, including Pure Water Southern California. The Community Relations Team serves as a liaison between Metropolitan and the community. The team works with residents, businesses, and communities to inform them of upcoming activities and resolve issues. The team helps gain support of projects, manages expectations, and develops trusted relationships to ensure that Metropolitan projects move forward.

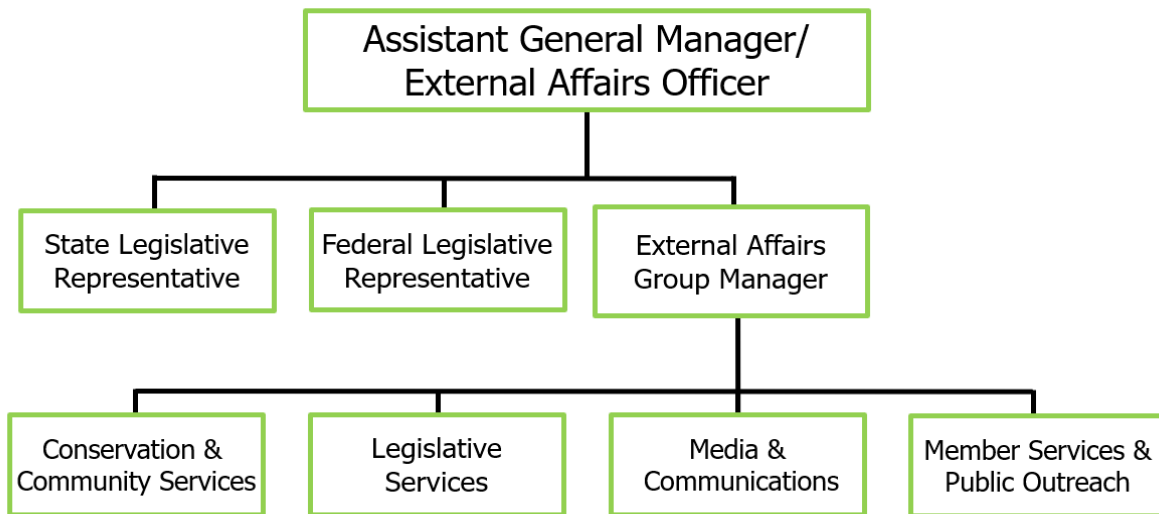
**Media and Communications** develops, coordinates, produces, and communicates messages, information and achievements to support Metropolitan's key objectives and programs. The section is comprised of Media Services as well as the Graphic Design and Creative Design teams.

Media Services, which includes the Press Office, handles and manages media inquiries, issues press releases, hosts press conferences and other media events; and oversees the placement of opinion pieces. Media Services manages and administers

the district's public-facing advertising and outreach campaigns and materials, including media placement buys. Media Services also develops and produces informational resources and materials, including fact sheets, brochures and reports, presentations, and the monthly e-newsletter. In addition, Media Services also maintains Metropolitan's websites by revising and updating content and visuals to keep pace with the district's changing messaging and achievements. The section also oversees Metropolitan's growing presence on social media platforms.

The Graphic Design Team provides Metropolitan's centralized, in-house graphic communication services. Areas of responsibility include all phases of desktop publishing and design and press-ready artwork using traditional and/or digital media, commercial art and technical illustration.

The Creative Design Team was established to serve as the district's production team for assets related to Metropolitan's conservation advertising and outreach campaigns as well as to support upper management and teams district-wide in the production of video and film, presentations, logo and branding design, maintenance of the photography archive, reports, and a wide range of printed and digital materials. The team also creates assets for the news media, Metropolitan's social media platforms and websites to communicate key priorities of management and the board of directors to diverse audiences - often in multiple languages.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, External Affairs will focus on the following key issues and objectives:

### Communications and Outreach Efforts

Expand and continue to improve the use of strategic, impactful and creative communication plans and programs to inform the public, businesses, environmental and other community groups about Metropolitan’s initiatives and leadership to ensure safe, reliable and sustainable water supplies now and into the future.

Maintain content and informational resources on the [mwdh2o.com](http://mwdh2o.com) website and newly redesigned microsites as needed to improve the functionality, content management, security and end-user experience.

Maintain in-house management of social media outreach and marketing activities, search engine optimization and marketing functions to meet business and outreach goals.

Strengthen the capacity of sponsorship and partnership programs, including the recently enhanced Community Partnering Program, legislative sponsorships and memberships, support information sharing on water issues and stewardship, and maintain strong relationships with non-governmental organizations, businesses, local elected officials, community organizations and other

groups throughout Southern California.

Engage in research and related activities that provide accurate and timely information on public opinions, consumer attitudes and awareness to inform future outreach activities with member agencies, interested organizations and the public.

### Water Supply Reliability, Conservation and Sustainability

Develop and implement an effective and well-managed multimedia, multilingual advertising and outreach campaign to increase public awareness of water supply conditions, Metropolitan and member agency rebate programs, and support for long-term conservation strategies.

Provide communication support for Metropolitan programs, planning activities and projects that ensure water supply reliability, including existing water operations, imported supplies from the Colorado River and State Water Project, and local resource programs that diversify the region’s water portfolio, conservation actions and innovative water technologies.

Increase awareness of Metropolitan's long-standing efforts to promote environmental stewardship through actions and investments for projects, programs, research and collaborative activities that promote the use of native plants, protect and

enhance habitat and ecosystems, watersheds, and water quality. Implement an effective outreach and engagement program for the Climate Adaptation Master Plan for Water, including Pure Water Southern California, that promotes public awareness of climate change impacts to Southern California's water resources and builds support for adaptation strategies including policies, programs, and investments in reliability and resiliency.

### Imported Supply Initiatives

Provide information and secure support of interested parties, the public and legislators for Metropolitan's positions on policies that promote water supply reliability and an environmentally sustainable Bay-Delta. This includes programs and policies related to Metropolitan-owned properties and science investments in the Delta.

Ensure strong coordination and consistent messaging with state and federal agencies, State Water Contractors, JPA-participating agencies, and member agencies on activities related to water operations and activities in the Delta.

Provide communication and community outreach and public awareness of and support for projects to advance local supply development, including Pure Water Southern California.

### Legislative Policy Objectives

Work with the board, member agencies and executive management to secure support for and/or sponsorship of federal and state legislation and regulatory policies that advance Metropolitan's policy objectives, including strategic water quality and supply initiatives, conservation, Delta issues, regional water resource projects, and sustainable water and energy management.

Conduct briefings, presentations and tours for elected officials, government leaders, and community-based environmental and business organizations to increase understanding of key water infrastructure systems, investments, and legislative and regulatory policies.

### Board and Member Agency Support

Facilitate ongoing communication and coordination between Metropolitan and its member agencies

through regular meetings with general managers, legislative and education coordinators, and public information officers.

Effectively manage the inspection trip program in coordination with the Board to educate the public, business and community leaders, elected officials, and the news media about Metropolitan and encourage a dialogue about the state's water supply and infrastructure, environmental issues and climate change impacts, agriculture and urban water interface and future challenges.

Provide primary support to the Board's Legislation, Regulatory Affairs and Communications Committee, and the ad hoc Facilities Naming Committee, the Subcommittee on Public Affairs Engagement ensuring that committee presentations, Board letters and associated activities provide timely, accurate and relevant information on programs, trends and activities to help inform Board actions and ensure transparency.

### Education Programs

In coordination with member agencies and the educational community, explore opportunities to expand educational services through the use of new technologies and strategic partnerships to reach more students, teachers and classrooms, including underserved and culturally diverse populations.

Support and manage Metropolitan's unique educational programs, including online workshops, field trips, water education sponsorship opportunities, and the annual Student Art Contest.

Collaborate with the Office of Diversity, Equity, and Inclusion to develop career pathways for secondary and college students into the water industry and related sustainability fields.

### Emergency Management and Crisis Communication

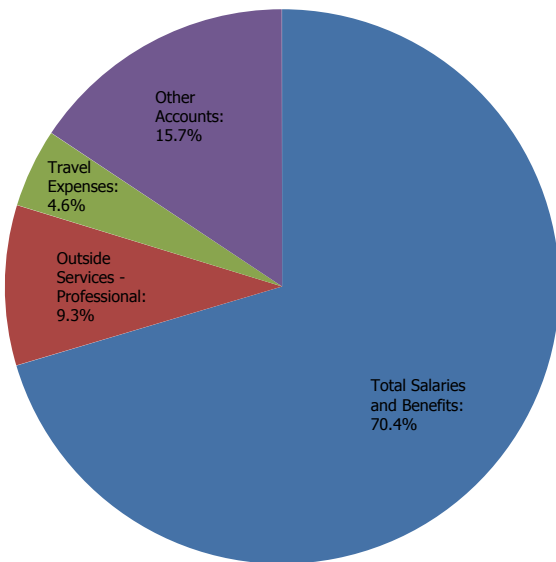
Support Metropolitan's emergency preparedness with a responsive crisis communications plan, well-trained staff, and the use of social media and other communications technologies to provide essential services during times of emergency and in response to disasters.

# O&M FINANCIAL SUMMARY

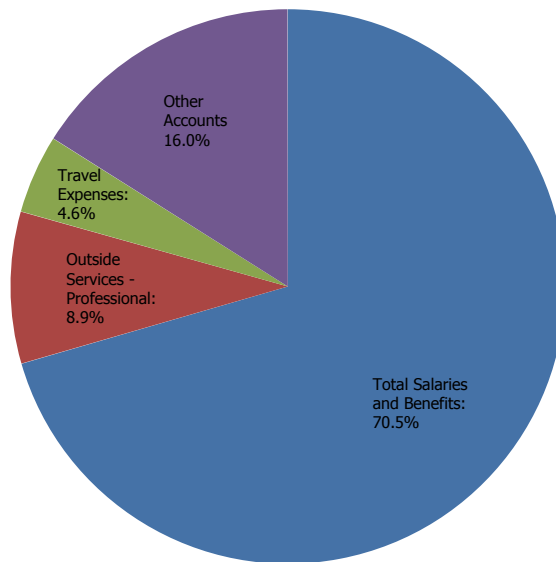
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	16,361,255	18,255,196	18,120,725	(134,471)	18,944,512	823,787
Direct Charges to Capital	(37,043)	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>16,324,212</b>	<b>18,255,196</b>	<b>18,120,725</b>	<b>(134,471)</b>	<b>18,944,512</b>	<b>823,787</b>
% Change		11.8%		(0.7%)		4.5%
Advertising	352,561	555,000	745,000	190,000	820,000	75,000
Community Outreach Activities	487,146	550,000	550,000	—	550,000	—
Memberships & Subscriptions	639,016	778,544	817,201	38,657	868,229	51,028
Outside Services - Non Professional / Maintenance	277,648	848,800	551,900	(296,900)	562,000	10,100
Outside Services - Professional	1,955,542	2,068,744	2,404,749	336,005	2,379,749	(25,000)
Sponsorships	293,060	522,188	585,000	62,812	726,000	141,000
Travel Expenses	714,300	1,140,500	1,184,740	44,240	1,234,740	50,000
Other Accounts	353,682	888,929	783,879	(105,050)	838,479	54,600
<b>Total O&amp;M</b>	<b>21,397,168</b>	<b>25,607,901</b>	<b>25,743,194</b>	<b>135,293</b>	<b>26,923,709</b>	<b>1,180,515</b>
% Change		19.7%		0.5%		4.6%
Operating Equipment	158,458	—	—	—	—	—
<b>Total O&amp;M and Operating Equipment</b>	<b>21,555,626</b>	<b>25,607,901</b>	<b>25,743,194</b>	<b>135,293</b>	<b>26,923,709</b>	<b>1,180,515</b>
% Change		18.8 %		0.5 %		4.6 %

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

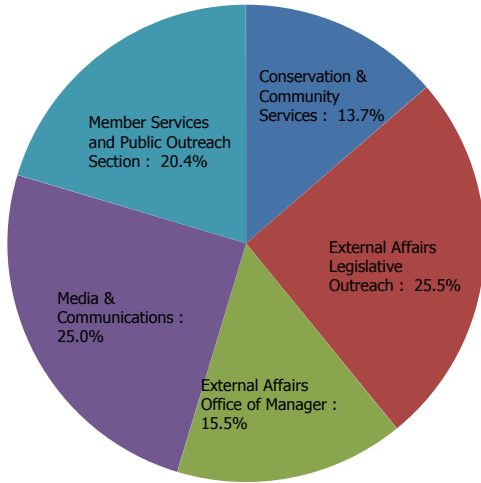


FY 2025/26 BUDGET BY EXPENDITURE

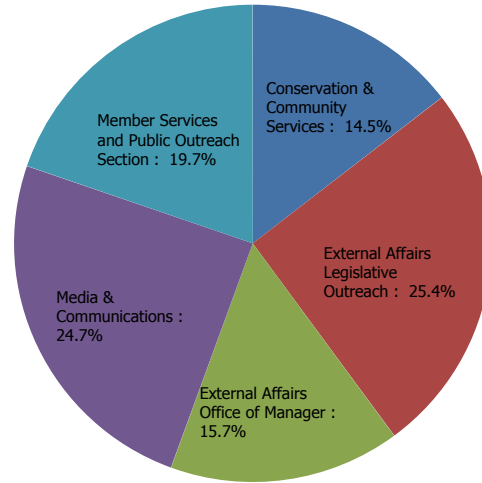


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Conservation & Community Services	4,853,049	3,513,995	(1,339,054)	3,914,559	400,564	12	8	8
External Affairs Legislative Outreach	6,336,921	6,559,590	222,669	6,831,398	271,808	13	13	13
External Affairs Office of Manager	3,631,639	4,000,451	368,812	4,216,060	215,609	9	11	11
Media & Communications	6,014,287	6,428,726	414,439	6,646,777	218,051	20	20	20
Member Services and Public Outreach Section	4,772,005	5,240,431	468,426	5,314,915	74,484	11	10	10
<b>Total O&amp;M</b>	<b>25,607,901</b>	<b>25,743,194</b>	<b>135,293</b>	<b>26,923,709</b>	<b>1,180,515</b>	<b>65</b>	<b>62</b>	<b>62</b>

Totals may not foot due to rounding.

## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>64</b>	<b>62</b>	<b>(2)</b>	<b>62</b>	<b>—</b>
	O&M	64	62	(2)	62	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	<b>1</b>	<b>—</b>	<b>(1)</b>	<b>—</b>	<b>—</b>
	O&M	1	—	(1)	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>65</b>	<b>62</b>	<b>(3)</b>	<b>62</b>	<b>—</b>
	O&M	65	62	(3)	62	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.



## BUDGET HIGHLIGHTS

External Affairs' O&M budget is \$25.7 million in FY 2024/25 and \$26.9 million in FY 2025/26 and does not include any new personnel or operating equipment for the biennium. This budget represents an increase of 0.5% in FY 2024/25 and an increase of 4.6% in FY 2025/26, due to community outreach efforts to support key District initiatives, including grant administration, expanded internal communications, Climate Adaptation Master Plan for Water, Pure Water Southern California, and post-pandemic re-engagement of community leader briefings and other coordinated conferences and meetings.

To achieve savings for non-labor activities, the External Affairs budget incorporates efficiencies while maintaining the core programs to support communication and outreach through a wide range of programs, business and community partnerships, education initiatives, legislative activities and media presence.

- **Advertising:** By utilizing in-house resources for video services, design, social media marketing and member agency partnerships, External Affairs has continued its award-winning outreach and marketing efforts to promote rebates, native plants and water-use efficiency. In addition to these cost savings over the past biennium, a partnership with Water Resource Management has afforded a consistent media presence during peak seasons to educate the service area on water- and cost-saving tips, as well as available rebates. Through use of the Water Resource Demand Fund, a three-year \$10.5 million campaign has generated over one billion media impressions from FY 2021/22 through FY 2023/24. This translates to millions of Southern Californians reached with the district's water saving message. These dollars provided supplemental online outreach and social media boosting opportunities and partnerships for expanded exposure throughout the service area that were not designated as part of the Water Resource Demand Fund. Over the next biennium, External Affairs will continue partnering with Water Resource Management to manage and administer media placement throughout the service area with a new three year contract. The new contract will once again allow advancement of Board-directed conservation messaging through multilingual multimedia advertising to diverse audiences and will provide for new community outreach activities to support Metropolitan's strategic priorities.
- **Community Outreach:** External Affairs will continue to provide a full range of communications and public outreach support for local supply development, capital projects and other major initiatives to promote water supply reliability, climate impact response, conservation and sustainability. Outreach priorities include infrastructure and rehabilitation projects as directed by management and Metropolitan's board, such as the proposed Delta Conveyance and Colorado River Aqueduct refurbishment. External Affairs also continues to budget for partnerships with community and environmental organizations that expand outreach efforts that support construction activities, expand workforce development and contracting opportunities.
- In FY 2024/25 and FY 2025/26, External Affairs will continue investing in Pure Water Southern California outreach with consultant services and support for recycled water communications with member agencies, impacted communities and organizations.
- Other outreach efforts will continue to include inspection trips and social research to gauge public attitudes and awareness of conservation campaigns, messaging and other outreach efforts.
- **Board Outreach Support:** External Affairs will continue to provide support and resources to Metropolitan's Board and the general manager, including participation at conferences and community events, media support and training, coordination with member agencies for education, communication, legislative services, and logistical support. External Affairs will manage and monitor expenditures for professional services funding and for partnerships, sponsorships and memberships to support and communicate Metropolitan's mission, enhance collaboration with current and new organizations as directed by the general manager and executive management, and to partner on projects that reach diverse audiences throughout the region.



The following are the significant changes by budget year:

## FY 2024/25

### Personnel-Related Issues

Regular full-time positions are decreasing by 2 positions from FY 2023/24 due to 2 positions transferred to other departmental Groups. Salary and Benefit dollar increases reflect negotiated labor increases and merit increases for qualified employees.

### Other

The External Affairs Group's FY 2024/25 total O&M budget of \$25.7 million reflects an increase of 0.5% over FY 2023/24.

Memberships and Subscriptions funding have been minimally increased from FY 2022/23 level of \$778,544 to \$817,201 in FY 2024/25. This 5% increase accounts for some of the already-realized inflationary pressures and will allow for new and continued partnerships that align with priorities of the Board and executive management and will advance Metropolitan's programs and initiatives.

Other non-labor planning and budgeting for External Affairs includes one annual media inspection trip, the return of two annual legislative inspection trips for state and federal elected officials and their staff, and several in-person community leader briefings throughout the service area for FY 2024/25. This budget proposes no change to the budget for the Board of Directors inspection trip program. Overall, travel is budgeted at a nominal increase of 3.8% over FY 2023/24 to accommodate the post-pandemic cost increases for in-person conferences and events.

The FY 2024/25 budget allows for development of curriculum and new partnerships in support of

diversity, equity and inclusion, workforce development programs and distance learning, including new programs focused on climate change and environmental justice.

Outside Services - Non-Professional/Maintenance has been reduced by 35% from FY 2022/23 through strategic realignment to fund increased community outreach activities in support of the general manager's strategic priorities, Pure Water Southern California and management-approved sponsorships.

Advertising and Outside Services -Professional were also increased through the realignment of funds from Outside Services- Non-Professional/Maintenance dollars. By maintaining funding in advertising, online outreach and social media boosting can be maximized and realigned in according to current messaging as needed during climate shifts throughout the biennium. Professional Services dollars can continue to support the need for social research, as well as lobbying, government relations and advocacy.

To accomplish the increased outreach across the service area, External Affairs has budgeted necessary funding to cover various expenditures directed by the General Manager including promotional items and branding for the monthly events that will sustain Metropolitan's expanded presence at community events across the service area.

### Operating Equipment

The budget reflects no new operating equipment requests for FY 2024/25.

## FY 2025/26

### Personnel–Related Issues

Regular full-time positions remain flat from FY 2024/25. Salary and Benefit dollar increases reflect negotiated labor increases and merit increases for qualified employees.

In support of the Education Team and Metropolitan’s commitment to advancing career technical education, agency temporary staff funding has been requested for one part-time teacher and one part-time student intern to staff the career technical education and workforce development efforts.

### Other

The FY 2025/26 O&M budget of \$26.9 million for External Affairs reflects a nominal increase of 4.6% over FY 2024/25.

Memberships and Subscriptions funding have been minimally increased from FY 2024/25 level of \$817,200 to \$868,228 in FY 2025/26. This increase accounts for some of the increased costs and will allow for new and continued partnerships that align with the priorities of the Board and executive management and will advance Metropolitan’s programs and initiatives.

Other non-labor planning and budgeting for External Affairs includes one annual media inspection trip, the return of two annual legislative inspection trips and nine in-person community leader briefings throughout the service area for FY 2025/26. This budget proposes no change to the budget for the Board of Directors inspection trip program. Group travel is budgeted at a nominal increase of 4.2% over FY 2024/25 with the anticipation of continuing the trending increase of in-person attendance at conferences and events.

The FY 2025/26 budget allows for the continued development of curriculum and new partnerships in support of diversity, equity and inclusion, workforce development programs and distance learning, including new programs focused on climate change and environmental justice.

Outside Services - Non-Professional/Maintenance has been increased by 1.9% group-wide over FY 2024/25 to maintain services associated with service requests and unanticipated conservation and outreach activities, such as additional filming and photography during heightened workloads, news releases, direct mail services, conservation projects, education program service agreements, and executive management-directed monthly outreach events.

To accomplish the increased outreach across the service area, External Affairs has budgeted \$412,300 in Materials and Supplies for FY 2025/26 — 15% more than FY 2024/25. This increase will support additional conservation outreach that could not be budgeted in FY 2024/25 and will support the expanded presence at community events across the service area during FY 2024/25.

### Operating Equipment

The budget reflects no operating equipment requests for FY 2025/26.

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# OFFICE OF GENERAL COUNSEL

The Office of the General Counsel provides a full range of legal services in a professional, timely, cost-effective, and creative manner.

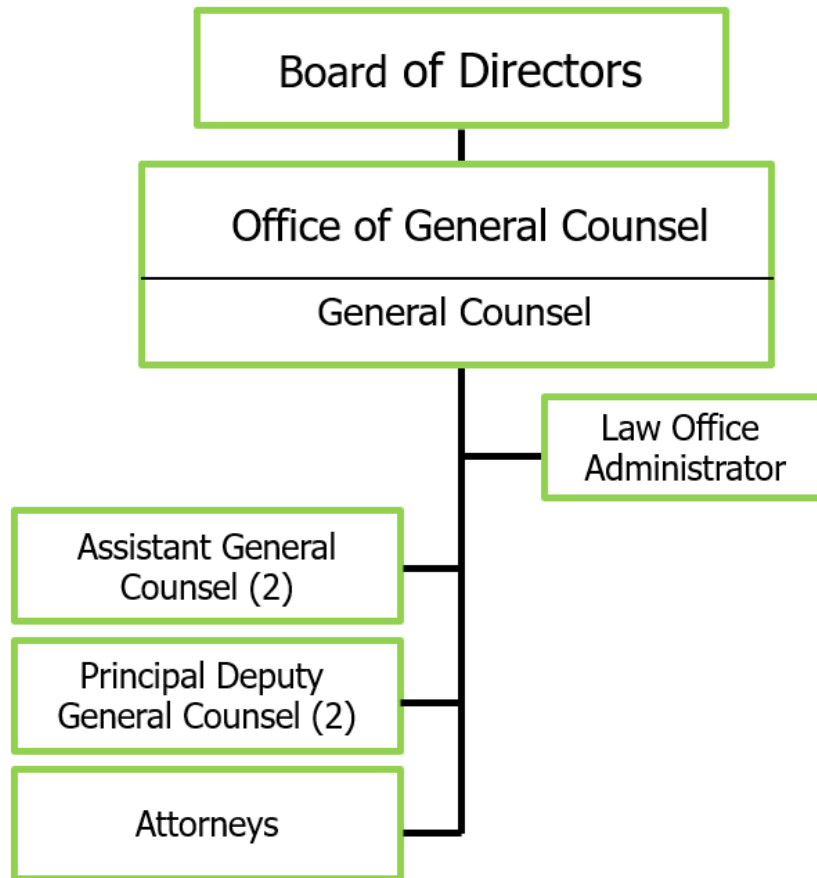
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## PROGRAMS

The General Counsel is the chief legal spokesperson for Metropolitan and the Board of Directors and oversees the Office of the General Counsel's administrative functions.

The Office of the General Counsel represents Metropolitan in litigation and other proceedings to which Metropolitan is a party; provides legal advice to the Board, its committees, and staff on matters of Board governance; drafts, reviews, and negotiates contracts, documents, and other agreements; consults with representatives of other public and private entities on matters of mutual concern; monitors and analyzes pending and enacted legislation; and provides legal services to Metropolitan staff with regard to the full range of substantive matters addressed by staff.

- Provides support and legal assistance for the Regional Recycled Water Program, water supply, including the impacts of and response to drought conditions, water conservation, water delivery and treatment, and water quality, including emerging contaminants.
- Represents Metropolitan's interests with regards to claims and litigation by or against Metropolitan.
- Provides legal advice with respect to the acquisition, management, and disposal of Metropolitan property.
- Provides legal assistance in Metropolitan's procurement and construction contract programs.
- Provides legal advice with respect to Metropolitan's financial activities, including Metropolitan's rates and charges, taxation, disclosure and bond issuance, legality of investments, and fiscal administration.
- Provides legal advice and assistance related to labor and personnel matters.
- Reviews, analyzes, and monitors pending state and federal legislation and drafts legislative recommendations.



## GOALS AND OBJECTIVES

The role of the Office of the General Counsel is to support the priorities established by the Board of Directors and the General Manager. The goal of the Office of the General Counsel is to provide a full range of legal services in a professional, timely, cost-effective and creative manner that minimizes risk to Metropolitan.

In FY 2024/25 and FY 2025/26, the Office of the General Counsel will focus on the following key issues:

### Water Supply Reliability

#### State Water Project

Pursue a comprehensive legal strategy that proactively addresses legal issues associated with the operation of the State Water Project (SWP) and the related permits and environmental matters while vigorously asserting and defending Metropolitan’s interest in litigation and administrative proceedings regarding Metropolitan’s participation rights in the SWP.

Provide legal advice in support of the development and implementation of the anticipated Department of Water Resources’ (DWR) proposal to improve the Delta conveyance facilities, including the associated environmental documentation, implementing agreements and litigation in a manner supportive of Metropolitan’s goals and objectives.

Provide legal advice and support in connection with the extension and amendments of the State Water Contract, including preparation of supporting environmental documents under California Environmental Quality Act (CEQA) litigation relating to the proposed amendments.

Provide legal advice regarding permitting, implementation, and financing, of any proposed improvements to the Delta conveyance facilities, including agreements with DWR and other state water contractors.

### **Colorado River**

Provide legal advice and support in the negotiations with other California Colorado River Contractors and the other Basin States regarding proposals and requests for funding from the Bureau of Reclamation for programs to reduce reliance on Colorado River supplies due to climate change and long-term drought. Collaborate with policy staff and other agencies to develop and implement programs to protect Lake Mead.

Provide legal advice regarding potential regulatory actions of the Bureau of Reclamation regarding the allocation of Colorado River supplies and the requirements for enforceable agreements among stakeholders and contractors. Assist with drafting and documentation of proposed agreements and applications for funding.

Provide legal support for Metropolitan's efforts to protect and make optimal use of its Colorado River rights and related water transfer, storage, and exchange programs. Provide legal support for initiatives to identify and obtain new water supplies on the Colorado River, and to protect existing Colorado River water supplies against erosion by unlawful or unreasonable uses.

Continue to defend and enforce the terms of the Quantification Settlement Agreement and related agreements among the participating agencies and other agencies with Colorado River contracts.

### **Water Resilience Portfolio**

Develop and implement a legislative and regulatory strategy addressing the Governor's Water Resilience Portfolio.

Assist with the preparation of the SB 60 Report to the California State Legislature regarding Metropolitan's achievements in conservation, recycling and groundwater recharge.

Provide legal advice and support for water transfers and exchanges, development of local resources, desalination, and conservation projects and programs.

Provide legal support for capital projects required to upgrade, repair, and provide additional flexibility in the operation of Metropolitan's distribution system.

Provide legal advice and support for update and implementation of Metropolitan's Integrated Water Resources Plan Update and Urban Water Management Plan, including development of the Long-Term Conservation Plan.

Provide legal advice and support for continued use of existing groundwater storage programs and development of new storage facilities and options.

### **Pure Water Southern California**

To the extent authorized by the Board, provide legal advice and support for the environmental review and development of agreements to implement the Pure Water Southern California Recycled Water Project.

## **Finance**

Provide legal advice regarding adoption of rates and charges. Work to resolve challenges to Metropolitan's rate structure.

Provide legal advice and assist with issuance of bonds and other debt instruments.

Provide legal advice and assistance with the review and consideration of new financing mechanisms and modifications to Metropolitan's current business model.

## **Operations**

Negotiate and prepare new and amended service connection agreements for new or modified member agency connections. Provide legal assistance on regulatory and real estate issues, including CEQA issues arising from service connection requests.

## District Governance

Continue to provide timely advice to the Board and committees on governance and legal compliance matters.

Serve as the point of contact and coordinate Metropolitan's responses to Public Records Act requests.

## Corporate Resources/District Infrastructure

Provide legal support for capital investment projects and repair and replacement plans, including professional services and procurement contracts.

Provide legal support for environmental analysis under CEQA of Metropolitan's projects and other discretionary actions, in addition to analyzing potential environmental impacts of other agencies' projects on Metropolitan properties and facilities.

## Workforce/Human Resources

Provide proactive counsel, assistance and advice on workforce issues. Continue to defend Metropolitan in Equal Employment Opportunity and California Public Employment Relations Board matters, as well as grievance and disciplinary matters. Assist with investigations or engage third-party investigators.

Represent Metropolitan in claims and litigation.

## Real Property Acquisitions and Dispositions

Assist the Planning and Disposition and Land Management Units in the negotiation and documentation of real property acquisitions and the surplus of real property. Negotiate and provide legal support for the lease and licensing of Metropolitan property. Provide legal support for the grant and acceptance of easements and entry permits.

Represent Metropolitan in real property disputes, including landlord tenant issues, condemnation and inverse condemnation issues, and other matters.

## Technology

Collaborate with Information Technology, External Affairs, and Human Resources groups on Information Governance Policies and the implementation of new technologies and protocols. Assist in educating staff and the Board in matters relating to new technology and the legal requirements relating to the use of social media by public officials.

Assist with implementation of policies and procedures to enhance cyber-security required to upgrade physical systems, including SCADA.

## Energy Costs and Management

Assist with implementation of the Energy Management Plan, including providing advice on wholesale energy transactions contracts relating to energy facilities and Hoover Power; renewable energy projects and energy-related contracts, and legislation.

Provide assistance with energy resource adequacy requirements and compliance with North American Electric Reliability Corporation standards.

Provide legal support to ensure that SWP energy needs are met in a cost-effective and sustainable manner.

## Legal Department Administration

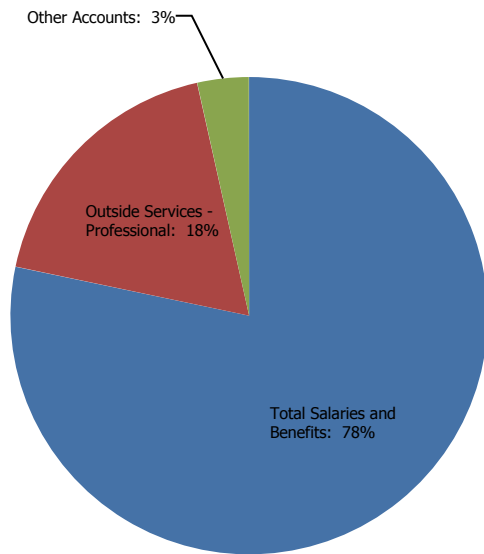
Continue to aggressively manage outside counsel costs, while obtaining effective representation to protect Metropolitan's interests. Provide ongoing training opportunities; develop and implement succession planning.

## O&M FINANCIAL SUMMARY

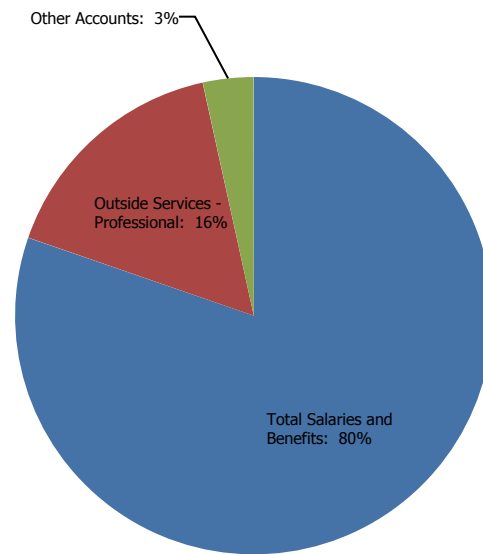
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	11,606,923	13,540,273	14,381,792	841,520	14,970,147	588,355
Direct Charges to Capital	—	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>11,606,923</b>	<b>13,540,273</b>	<b>14,381,792</b>	<b>841,520</b>	<b>14,970,147</b>	<b>588,355</b>
% Change		16.7%		6.2%		4.1%
Outside Services - Professional	1,720,664	2,130,000	3,345,000	1,215,000	3,030,000	(315,000)
Other Accounts	321,031	619,000	640,000	21,000	640,000	—
<b>Total O&amp;M</b>	<b>13,648,618</b>	<b>16,289,273</b>	<b>18,366,792</b>	<b>2,077,520</b>	<b>18,640,147</b>	<b>273,355</b>
% Change		19.3%		12.8%		1.5%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 BUDGET BY EXPENDITURE



## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	37	37	—	37	—
	O&M	37	37	—	37	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	2	2	—	2	—
	O&M	2	2	—	2	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	39	39	—	39	—
	O&M	39	39	—	39	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Office of the General Counsel’s Biennial Budget is \$18.4 million in FY 2024/25 and \$18.6 million in FY 2025/26 or an increase of 12.8% and an increase of 1.5% respectively from the prior budget years. The change is primarily due to the following factors:

- Professional services costs increase reflects anticipated expenses for water quality litigation, labor and employment claims/litigation, general litigation and other legal costs.
- Salaries and Benefits costs increase reflects negotiated labor increases, merit increases for qualified employees and COLA assumptions.



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# OFFICE OF GENERAL AUDITOR

The Office of General Auditor provides independent, professional, and objective assurance and consulting services designed to add value to and improve Metropolitan's operations.

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## PROGRAMS

The Office of General Auditor assists the organization in accomplishing its objectives by using a proactive, systematic approach to evaluate and improve the effectiveness of governance, risk management, and compliance.

The General Auditor conforms to professional internal auditing standards issued by the Institute of Internal Auditors, works collaboratively with all Metropolitan departments, and accomplishes its mission through the following programs:

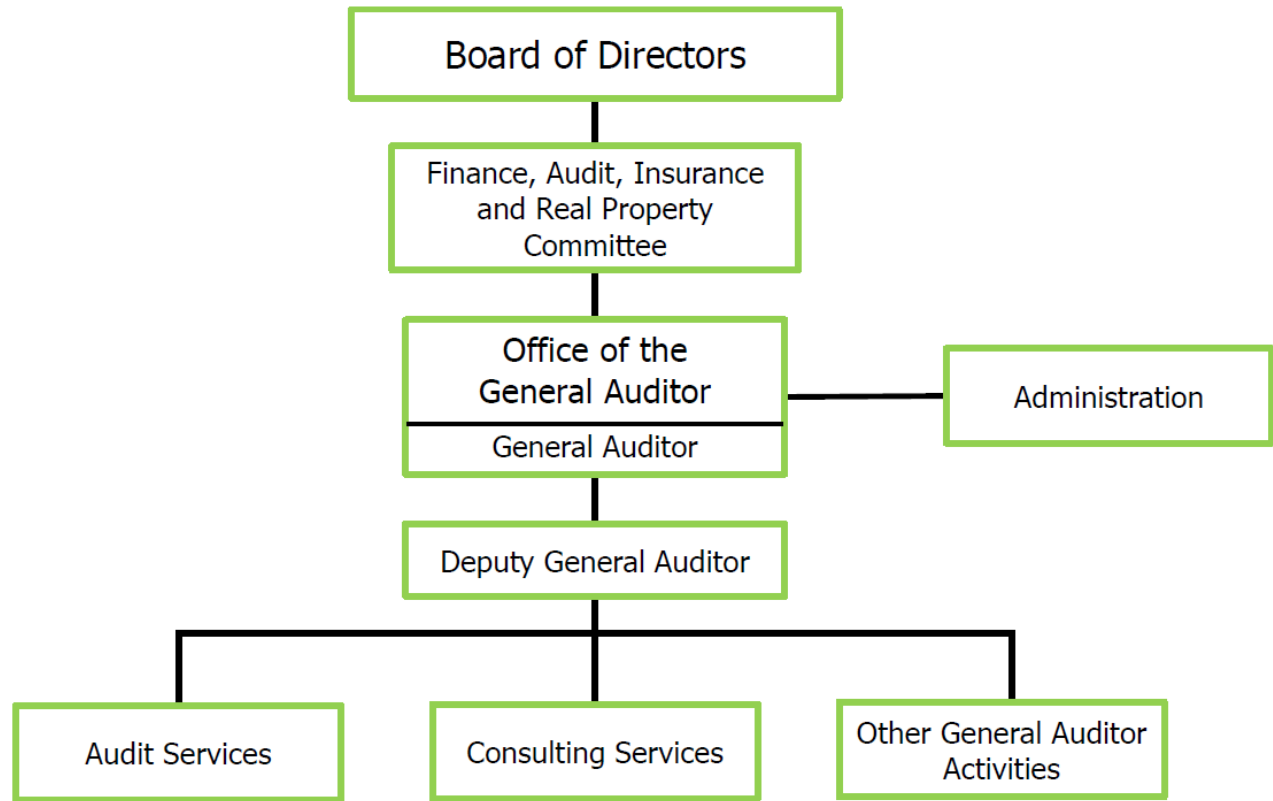
**General Auditor** serves as the chief audit officer for Metropolitan and is responsible for ensuring the mission and scope of work of the district's internal audit function is executed, that the internal audit function is accountable to the Board of Directors (Board), professional internal auditing standards are conformed to, specified internal audit responsibilities are carried out, and authority is exercised to effect independent, objective, and professional assurance activities.

**Audit Services** performs core activities, including operational, compliance, and information technology audits. These projects provide assurance, focusing on internal control design, implementation, and/or maintenance. Projects can also assess policy, contractual, and/or regulatory compliance. Information technology audits focus on general information technology controls or specialized cybersecurity controls. Follow-up audits are also performed to monitor the implementation status of recommended corrective actions.

**Consulting Services** provides advisory services to Metropolitan functions primarily in support of major business changes or application implementation but may also provide informal on-demand advice.

**Administration** supports all department functions and performs engagement quality assurance, committee coordination, Board support liaison, budget, purchasing, scheduling, facilities, office management, training coordination, records management, and directed research.

**Other General Auditor Activities** include preparation and presentation of the annual audit risk assessment and audit plan, TeamMate+ project management system support, administration of the external auditor contract, provision of resources to the external auditor engagement, execution of the internal quality assurance and improvement program, and management of contracted professional or technical consultants to advise or assist in the performance of assigned duties.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, the Office of General Auditor will focus on the following key issues:

### Forward Focus

Effect new vision statement and updated mission statement. Monitor new key performance indicators establishing accountability. Continue to refine department communications to enhance transparency. Leverage technology and agile audit methodologies to expand audit coverage and improve audit engagement effectiveness and efficiency. Educate the Board and management on the role and value of internal audit.

### Board Relations

Build and strengthen the relationship with the 38-member Board of Directors by developing trust and establishing credibility and reliability. Continue robust risk conversations with the Board, facilitate risk assessment workshops, and be available to discuss any Board risk concerns. Execute work with due professional care and complete work in accordance with the IIA's Code of Ethics while promoting an ethical workplace.

### Governance

Push to establish COSO (Committee on Sponsoring Organizations) as Metropolitan's internal control framework. Provide internal control training to departments. Facilitate the combined assurance model and related assurance mapping. Complete control environment and governance-related audit engagements. Look to partner with management in formalizing enterprise risk management.

### Audit Plan

Develop and execute an annual internal audit plan that is bold and strategic and addresses any outstanding audit recommendations along with timelines for implementation. Offer consulting services to improve internal control during application implementation. Follow up on all audit recommendations issued in a timely manner. Update audit plan quarterly based on emerging risks. Right-size audit objectives/scope and move to horizontal subject audits to reduce report turnaround time.

## Team Development

Take steps toward creating a high-performing, inclusive, and innovative team of audit professionals noted for valuing diversity, workplace equity, shared vision, and mission. Perform a gap analysis to identify improvement and training opportunities in talent, processes, and technology. Increase audit team involvement at all levels in audit risk assessment preparation, engagement planning activities, and Board interactions. Implement multi-person audit engagement teams and individual team member subject specialization.

## Professional Internal Audit Standards

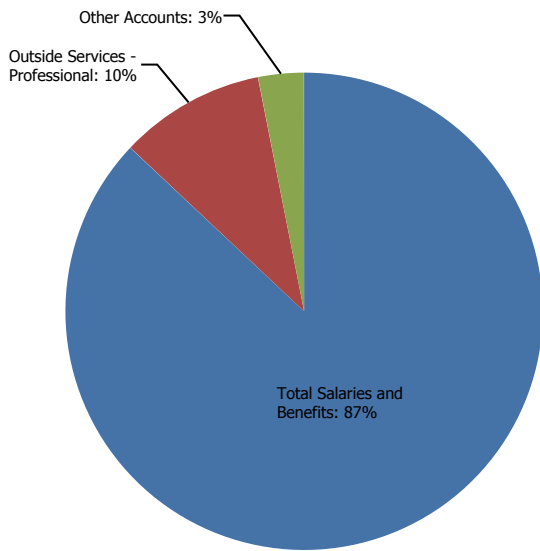
Strengthen the organization's operations by providing independent, objective advice in accordance with the Institute of Internal Auditors' International Standards for Professional Internal Auditing. Strive to improve quality and seek customer service feedback. Implement recommended corrective actions from the FY 2023/24 External Quality Assessment.

# O&M FINANCIAL SUMMARY

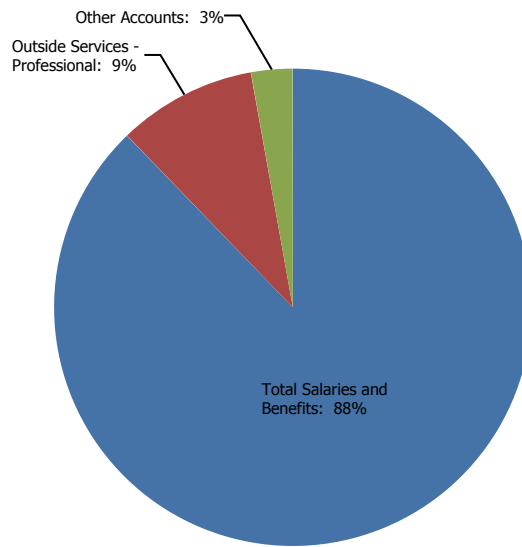
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	3,242,969	3,892,205	4,313,121	420,915	4,760,304	447,183
Direct Charges to Capital	—	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>3,242,969</b>	<b>3,892,205</b>	<b>4,313,121</b>	<b>420,915</b>	<b>4,760,304</b>	<b>447,183</b>
% Change		20.0%		10.8%		10.4%
Materials & Supplies	29,287	43,000	57,000	14,000	58,500	1,500
Outside Services - Professional	475,527	550,000	490,000	(60,000)	510,000	20,000
Training & Seminars Costs	2,505	17,000	35,000	18,000	35,000	—
Other Accounts	22,679	44,500	57,117	12,617	57,796	679
<b>Total O&amp;M</b>	<b>3,772,967</b>	<b>4,546,705</b>	<b>4,952,238</b>	<b>405,532</b>	<b>5,421,600</b>	<b>469,362</b>
% Change		20.5%		8.9%		9.5%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 BUDGET BY EXPENDITURE



## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>12</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>—</b>
	O&M	12	14	2	14	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	O&M	—	—	—	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>12</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>—</b>
	O&M	12	14	2	14	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Office of General Auditor’s Biennial Budget is \$5.0 million in FY 2024/25 and \$5.4 million in FY 2025/26, or an increase of 8.9% and an increase of 9.5% respectively from the prior budget years. The main factors affecting these changes:

- Total personnel count is increasing by two regular full-time positions to increase information technology audit coverage and provide administrative support covered by audit staff.
- Increases in training will help ensure audit staff are current on the latest audit and consulting means and methods.
- Salaries and benefits costs reflect negotiated labor increases and merit increases for qualified employees.

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# ETHICS OFFICE

The Ethics Office promotes the highest standards of ethics and integrity by administering, advising on, educating about, and investigating potential violations of Metropolitan's governmental ethics policies.

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## PROGRAMS

Metropolitan's Ethics Office was established by special legislation enacted in 1999. In doing so, it was with a conviction that a strong ethical culture is the foundation of good governance. Moreover, it was based on the belief that an ethical culture is created through a robust ethics program that sets clear expectations for conducting business within the organization and with external parties. This ensures that Metropolitan is transparent, operates with integrity, and upholds the high ethical standards expected of a governmental entity as large and significant as Metropolitan.

An ethical culture is based on the following: effective board oversight, trustworthy and honest tone-at-the-top, senior management engagement, fair and effective policies and interventions, organization-wide commitment, codes of conduct, dynamic ethical programs, open communication, and an ongoing monitoring system. It also involves the administration of financial disclosure reports, an anonymous complaint reporting system, timely investigation of reported incidents, publication of summary investigation findings, and, where appropriate, referrals for remedial action.

These processes promote transparency and accountability, allowing the public insight into how Metropolitan conducts business and holding its officials accountable for meeting internal and state ethics standards. The Ethics Office accomplishes its mission through the following programs and services, each of which is critical to achieving the goal of internal ethics and compliance:

### Ethics Education

Ethics education is provided through consultations, training programs, and reference materials. The Ethics Office matches the training method that is

best suited for the topic or issue. Training may include in-person presentations, virtual training sessions, informational pamphlets, and engaging peer group discussions at different facility locations. The education and training program informs Metropolitan officials about the specific ethics rules and principles that guide their actions as public officials. Among the most important subjects are avoiding misuse of official positions for private gain, recognizing and averting potential conflicts of interest, and protecting whistleblowers.

### Ethics Compliance

The Ethics Office serves as the filing officer for state-mandated financial interest disclosure reports for directors and employees. These filings are required for individuals who make or participate in making decisions in their official capacity that could affect their personal financial interests. To date, all directors and over 700 employees have been identified as mandatory filers.

The Ethics Office also maintains and updates Metropolitan's Conflict of Interest Code, designating employee reporting positions and disclosure categories. These requirements are tailored to the unique responsibilities of each designated position and are reviewed periodically for compliance with evolving standards.

### Advice

The Ethics Office advises directors, employees, and contractors on Metropolitan's ethics policies including conflicts of interest and proper use of governmental authority. Advice is provided through individual consultations.

## Policy Development and Program Development

The Ethics Office performs risk assessment and analyses existing policies and procedures. It proposes new policies and amendments to achieve compliance and best practices in the field.

## Investigations

The Ethics Office conducts objective, independent investigations to promote accountability, identify systemic issues, and propose recommendations.

Comprehensive investigations include investigation planning, evidence gathering, document review, witness interviews, comparative analysis of facts, drafting reports, and organization and indexing of evidence.

The Ethics Officer reviews investigation findings, determines whether ethics violations occurred, issues the reports, and makes recommendations to management.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, the Ethics Office will focus on the following key initiatives:

### Education and Outreach

Education and Outreach is a top priority and a cornerstone of the ethics program. The Ethics Office will develop more tailored and focused training for groups of employees like managers or functional areas within Metropolitan and for directors. Outreach efforts will include visiting field facilities to provide ethics-related information and participating in listening sessions. Extensive ethics-related training materials will be updated to reflect administrative code amendments approved by the

Board, including updates to new employee orientation materials, website content, and online training programs on common ethics topics at Metropolitan.

### Ethics Advice

Provide ethics advisory services to directors, officers, and employees needing input on ethics-related issues. In specific requests for assistance, provide thorough analysis and prompt responses. Continue to review board agendas and prepare a memorandum for directors to help identify potential conflicts of interest in matters coming before them. Review conflict of interest disclosures

from potential contractors for the professional services contracting team and make recommendations for resolving potential conflicts.

### Policy Management and Program Development

Continue to critically evaluate existing ethics policies, procedures, and the role of the Ethics Office. Determine whether current approaches are as effective as alternatives for promoting a culture of ethics, integrity, and transparency among Metropolitan officials at all levels. Propose any recommended changes requiring amendments to the Administrative Code to the Board of Directors.

### Investigations

Evaluate opportunities to streamline the investigation process. These efforts include establishing reasonable guidelines to ensure inquiries proceed efficiently and responsibly. Improve the effectiveness and timeliness of communication to interested parties on the progress of investigations. Survey best practices in the field and recommend improvements to investigation procedures.

### Management and Leadership

Expand the range of capabilities and capacities of Ethics Office staffing resources. Evaluate all options for obtaining additional human resources necessary to keep up with growing caseloads and policy initiatives.

Provide training and development opportunities to enable professional staff to expand their knowledge base and ability to respond to changing conditions.

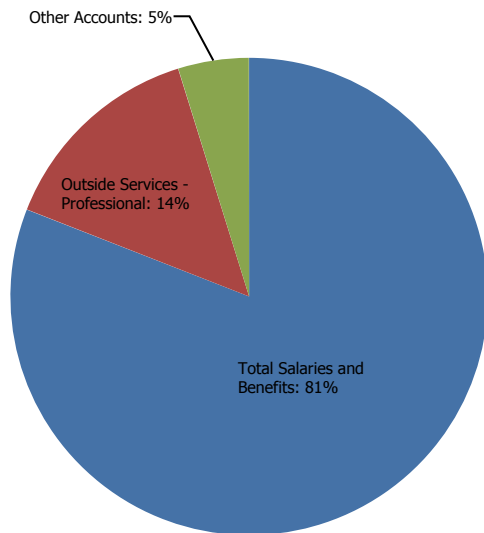


## O&M FINANCIAL SUMMARY

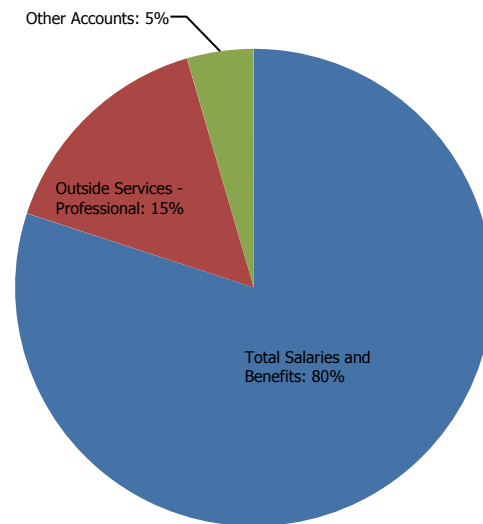
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	1,602,066	2,486,982	2,836,408	349,426	2,976,571	140,163
Direct Charges to Capital	—	—	—	—	—	—
<b>Total Salaries and Benefits</b>	<b>1,602,066</b>	<b>2,486,982</b>	<b>2,836,408</b>	<b>349,426</b>	<b>2,976,571</b>	<b>140,163</b>
% Change		55.2%		14.1%		4.9%
Memberships & Subscriptions	4,285	2,700	79,740	77,040	79,740	—
Outside Services - Professional	74,919	200,000	500,000	300,000	575,000	75,000
Other Accounts	54,504	148,129	88,100	(60,029)	88,100	—
<b>Total O&amp;M</b>	<b>1,735,774</b>	<b>2,837,811</b>	<b>3,504,248</b>	<b>666,437</b>	<b>3,719,411</b>	<b>215,163</b>
% Change		63.5%		23.5%		6.1%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE



FY 2025/26 BUDGET BY EXPENDITURE



## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	7	8	1	8	—
	O&M	7	8	1	8	—
	Capital	—	—	—	—	—
<b>Temporary</b>	<b>Total</b>	—	—	—	—	—
	O&M	—	—	—	—	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	7	8	1	8	—
	O&M	7	8	1	8	—
	Capital	—	—	—	—	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

The Ethics Office’s Biennial Budget is \$3.5 million in FY 2024/25 and \$3.7 million in FY 2025/26 or an increase of 23.5% and an increase of 6.1% respectively from the prior budget years. The increase is due primarily to the following:

- Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.
- Professional Services and non-labor budgets are increasing to support ethics program development, including case management and software solutions and investigative services.
- Regular full-time positions are increasing by 1 position from FY 2023/24 due to a position transferred in from another group. The additional position will support the realignment of the Ethics Office’s functions to meet the enhanced education/outreach and compliance expectations and priorities in accordance with Board objectives.

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# CONVEYANCE AND DISTRIBUTION

Conveyance and Distribution is responsible for resilient and reliable operation and maintenance of Metropolitan’s conveyance and distribution system, including the Colorado River Aqueduct.

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## PROGRAMS

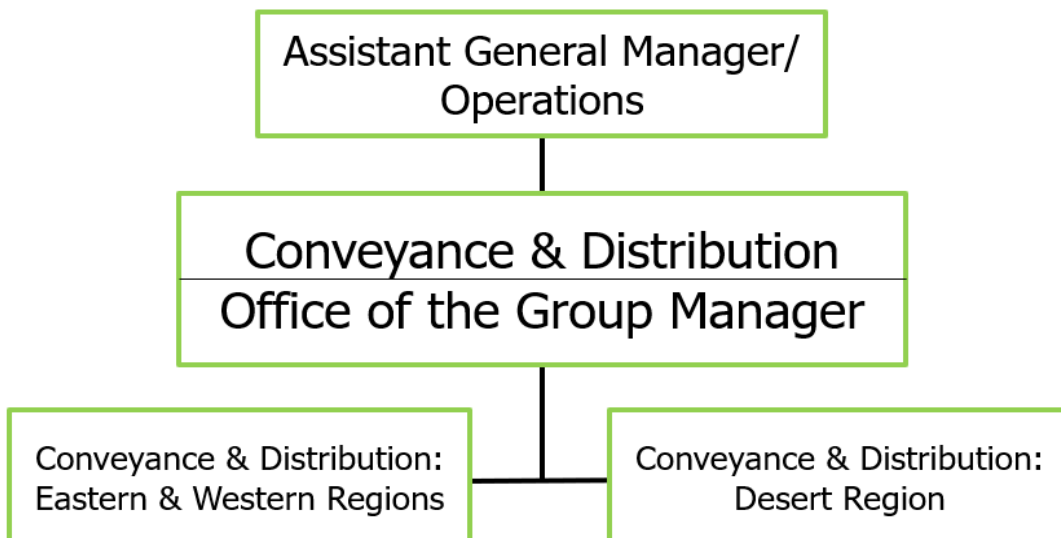
Conveyance & Distribution (C&D) meets delivery requirements of member agencies by moving water from the Colorado River and the State Water Project (SWP) through a raw water conveyance system, into and through Metropolitan’s treated water distribution network. C&D is responsible for system maintenance and assists operators as needed to ensure resilience and reliability.

C&D accomplishes its mission through the following programs or sections:

**Office of the Group Manager** provides day-to-day operational management as well as strategic and organizational leadership, directing all initiatives and core business efforts of C&D. The office also provides support functions such as business administration.

**Desert Region** meets conveyance requirements of Metropolitan and member agencies by moving water through the Colorado River Aqueduct system and its five pumping plants and four regulating reservoirs to Metropolitan’s storage and distribution system, performing a wide range of operations and maintenance activities to ensure system resilience and reliability.

**Eastern and Western Regions** meet delivery requirements of member agencies by moving water into and throughout Metropolitan’s 5,200 square mile service area and performing a wide range of operations and maintenance activities to ensure system resilience and reliability. This work encompasses a distribution system of about 830 miles of pipelines, approximately 350 service connections to member agencies, 15 hydroelectric plants, and five storage and regulatory reservoirs that help Metropolitan meet peak flow periods and provide dry year and emergency supply reliability.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, C&D will focus on the following key issues:

### System Resilience and Reliability

Manage and maintain the water system to ensure long-term system resilience and operational reliability for all reasonably expected demands. Metropolitan enters the biennium amid rapidly changing climate conditions that has led to efforts to further expand system flexibility and resilience by developing and implementing new projects and envisioning future projects, that add new features to the conveyance and distribution system. These efforts will expand the movement of supplies and storage throughout the service area, with an emphasis on addressing the SWP dependent areas of the system.

In collaboration with our Operations partners, plan and execute the Annual Shutdown Plan. Ensure long-term system resilience and reliable operation of the water delivery system by implementing an increasing number of rehabilitation and replacement projects and performing necessary maintenance.

Maintain eight-pump flow readiness on the CRA and manage storage accounts to capture all available Colorado River supplies in concert with water supplies from other sources.

Support the Colorado River Aqueduct Main Pump Reliability Program, including detailed inspections of pumps, components, and support systems.

Participate with the California Department of Water Resources (DWR) on efforts to ensure cost-effective rehabilitation of SWP conveyance, pumping, and generation facilities.

Conduct emergency response exercises involving internal operational groups, member agencies, and other emergency response partners.

### Workforce Development & Succession Planning

Partner with Human Resources on programs to improve recruitment and retention for Desert positions. Coordinate with HR to develop and implement targeted training courses for new field managers. Provide training for apprenticeship classes for the mechanical and electrical trades.

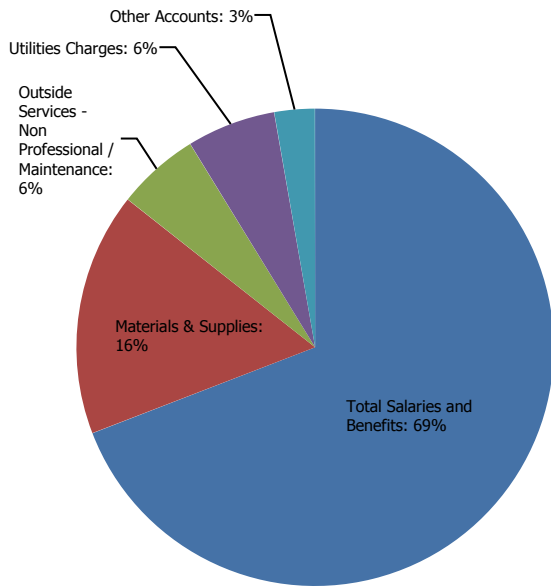
Support additional workforce development opportunities and continuing education that are tailored to Conveyance & Distribution's management, procedures, and facilities.

# O&M FINANCIAL SUMMARY

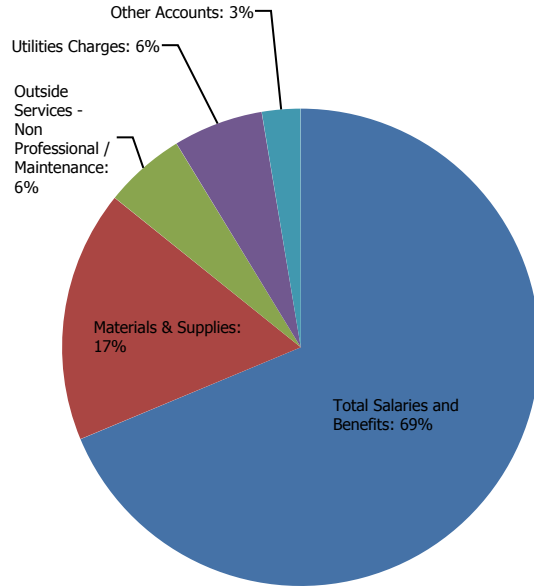
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	54,832,243	58,537,251	65,794,019	7,256,769	68,592,168	2,798,149
Direct Charges to Capital	(1,862,397)	(2,891,469)	(6,860,751)	(3,969,283)	(7,240,073)	(379,321)
<b>Total Salaries and Benefits</b>	<b>52,969,847</b>	<b>55,645,782</b>	<b>58,933,268</b>	<b>3,287,486</b>	<b>61,352,095</b>	<b>2,418,827</b>
% Change		5.1%		5.9%		4.1%
Materials & Supplies	11,812,989	9,309,907	14,060,321	4,750,414	15,223,508	1,163,187
Outside Services - Non Professional / Maintenance	4,021,898	4,174,900	4,775,100	600,200	4,927,300	152,200
Utilities Charges	4,015,945	3,836,447	5,125,682	1,289,235	5,430,123	304,441
Other Accounts	2,750,251	2,043,928	2,338,789	294,861	2,340,569	1,780
<b>Total O&amp;M</b>	<b>75,570,929</b>	<b>75,010,964</b>	<b>85,233,160</b>	<b>10,222,196</b>	<b>89,273,595</b>	<b>4,040,435</b>
% Change		(0.7%)		13.6%		4.7%
Operating Equipment	2,852,980	4,140,990	3,743,002	(397,988)	3,305,555	(437,447)
<b>Total O&amp;M and Operating Equipment</b>	<b>78,423,909</b>	<b>79,151,954</b>	<b>88,976,162</b>	<b>9,824,208</b>	<b>92,579,150</b>	<b>3,602,988</b>
% Change		0.9%		12.4%		4.0%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

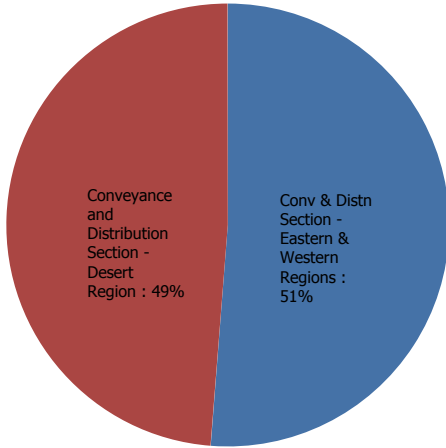


FY 2025/26 BUDGET BY EXPENDITURE

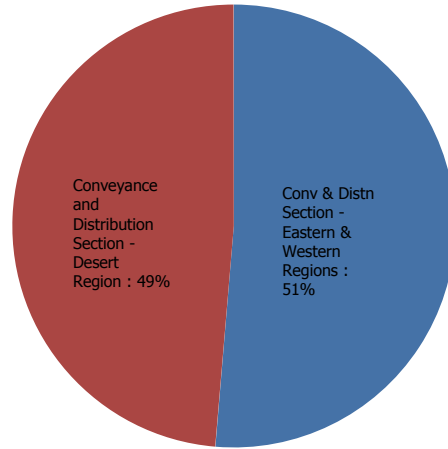


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Conv & Distn Section - Eastern & Western Regions	40,308,106	43,676,970	3,368,864	45,835,957	2,158,986	131	119	119
Conveyance and Distribution Section - Desert Region	34,702,858	41,556,190	6,853,332	43,437,638	1,881,449	132	138	138
<b>Total O&amp;M</b>	<b>75,010,964</b>	<b>85,233,160</b>	<b>10,222,196</b>	<b>89,273,595</b>	<b>4,040,435</b>	<b>263</b>	<b>257</b>	<b>257</b>

Totals may not foot due to rounding.

# PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>267</b>	<b>271</b>	<b>4</b>	<b>271</b>	<b>—</b>
	O&M	253	240	(13)	240	—
	Capital	14	31	17	31	—
<b>Temporary</b>	<b>Total</b>	<b>10</b>	<b>17</b>	<b>7</b>	<b>17</b>	<b>—</b>
	O&M	10	17	7	17	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>277</b>	<b>288</b>	<b>11</b>	<b>288</b>	<b>—</b>
	O&M	263	257	(6)	257	—
	Capital	14	31	17	31	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

C&D's O&M and Operating Equipment Biennial Budget is \$89.0 million in FY 2024/25 and \$92.6 million in FY 2025/26 or an increase of 12.4% and an increase of 4%, respectively from the prior year budgets. The main factors affecting these changes:

- Significant increases in chemical commodity prices raised the expected chemical costs for quagga mussel control in the conveyance system.
- An increase in vendor pricing in all areas due to increasing fuel and labor costs.
- An increase in electricity costs due to price increases from utility providers, as well as operation of the Greg Avenue pump station in FY 2024/25 to manage available supplies and help mitigate drought conditions in the event of a low SWP allocation.

The following are the significant changes by budget year:

### FY 2024/25

#### Personnel–Related issues

Water System Operations has been reorganized into three new Operations groups: Conveyance and Distribution, Treatment and Water Quality, and Integrated Operations, Planning and Support Services. The overall number of regular positions in the Operations groups has increased by seven from the FY 2023/24 budget, with the addition of Board-approved positions for the Pure Water Southern California program. It should be noted that positions can fluctuate between these groups based on operational priorities.

Regular full-time positions are increasing by 4 position from FY 2023/24 due to 4 positions transferred in from other departmental Groups. This contrasts with the need for additional staff in C&D to reliably operate and maintain the system including the CRA, accomplish key initiatives, contribute to advancing drought resiliency programs, and support numerous resilience and reliability projects and programs.

Agency Temp labor needs are anticipated to increase due to work driven by on-demand cooks/kitchen staff in Desert locations for inspection trips, visitors and tours, shutdowns, and other operational needs.

Temporary labor needs in the Desert are projected to increase due to challenges filling vacancies for trade positions.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Materials and Supplies

The budget reflects anticipated inflationary pressures for chemicals, fuels and other materials and supplies.

#### Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services.

#### Utilities

The budget reflects an increase in expected electrical rates due to continuing rapidly changing energy market and climatic conditions, as well as pumping at the Greg Avenue facility under low SWP allocation conditions.

## FY 2025/26

### Personnel–Related issues

Regular full-time positions remain flat from FY 2024/25. This contrasts with the need for additional staff in C&D to reliably operate and maintain the system including the CRA, accomplish key initiatives, contribute to advancing system and drought resiliency programs, and support numerous reliability projects and programs.

Temporary labor is needed to meet project goals, including usage for trades positions which are challenging to hire in the Desert locations, and student interns which help to support certain desert facility tasks, such as weed abatement and general maintenance.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Materials & Supplies

The budget reflects anticipated inflationary pressures for chemicals, fuels, and other materials and supplies.

### Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services.

### Utilities

The budget reflects an increase in expected electrical rates due to continuing rapidly changing energy market and climatic conditions, as well as pumping at the Greg Avenue facility under low SWP allocation conditions.

### Operating Equipment – FY 2024/25 and FY 2025/26

The operating equipment budget is maintained to replace the aging fleet, construction equipment, laboratory instruments, and other equipment to support the safe and reliable delivery of water. The budgeted amount reflects inflationary pressures in pricing and significantly aging and worn equipment that is at the end of its useful life. During this period, operating equipment was budgeted across all three operational groups and prioritized based on individual group needs. Numerous equipment deferrals were made to meet budgetary targets.



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# TREATMENT AND WATER QUALITY

Treatment and Water Quality is responsible for reliable treatment and ensuring high-quality water is delivered to Metropolitan's member agencies.

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## PROGRAMS

Treatment and Water Quality provides core functions of Metropolitan's water system operation through the reliable treatment of water and ensuring water quality objectives are met. Water from the Colorado River and the State Water Project (SWP) is conveyed and treated through five treatment plants and delivered through an extensive distribution network to member agencies. This flexible system provides reliable deliveries to the member agencies and moves available supplies and storage reserves to meet Metropolitan's mission. Water quality remains paramount, and all functions focus on meeting or surpassing drinking water standards in a safe and economical way.

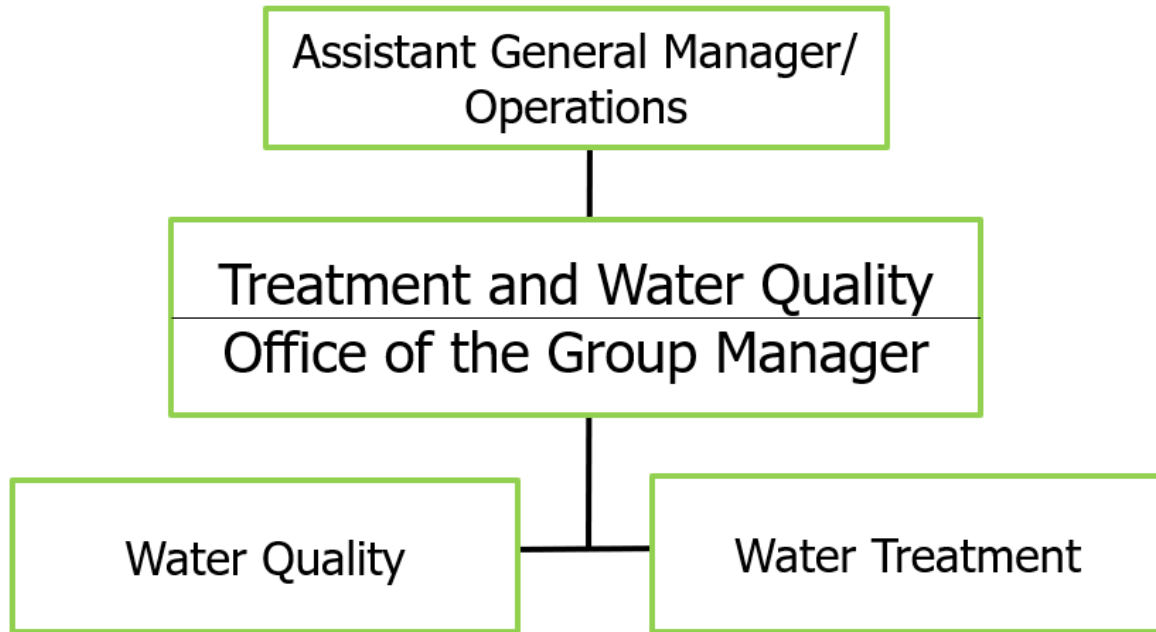
Treatment and Water Quality accomplishes its mission through the following programs or sections:

**Office of the Group Manager** provides day-to-day operational management as well as strategic and organizational leadership, directing all initiatives and core business efforts of Treatment and Water Quality. The office also provides support functions such as budgeting and administration, and coordinates and engages in regulatory and legislative activities.

**Water Treatment** operates and maintains five water treatment plants with a combined capacity of over 2.3 billion gallons per day. The section oversees treatment processes to ensure high quality water is reliably produced that complies with drinking water regulations. All five treatment plants are staffed and operated 24 hours a day,

seven days a week to meet about half of Metropolitan's annual deliveries. All five of the treatment plants (Jensen, Mills, Skinner, Weymouth, and Diemer) have been retrofitted to use ozone as the primary disinfectant. Water Treatment also operates and maintains the Chemical Unloading Facility to ensure reliable chlorine supply to the water treatment plants for backup disinfection and to provide distribution system disinfectant residual. In addition to work at the treatment plants, Water Treatment also maintains electrical and control system responsibilities within the distribution system.

**Water Quality** ensures that Metropolitan provides safe and aesthetically pleasing water through the following activities: conducting chemical and biological analyses; optimizing existing treatment processes; testing new technologies to assure compliance with current and future regulations; and providing technical expertise, laboratory services, and troubleshooting of water quality issues for Metropolitan and its member agencies. Water Quality also works to preserve and improve source water quality through rigorous watershed surveys, advocacy for measures to reduce the risk of point and non-point source pollution, and reservoir management strategies. The section is also advancing water reuse opportunities through demonstration-scale operations and testing at the Grace F. Napolitano Pure Water Southern California Innovation Center.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, Treatment and Water Quality will focus on the following key issues:

### System Resilience and Reliability

Manage and maintain the water treatment plants and supporting facilities to ensure operational reliability for all reasonably expected demands. Metropolitan recently experienced severe drought conditions that has led to efforts to further expand system flexibility and resilience. These efforts will expand the movement of supplies and storage throughout the service area, with an emphasis on addressing the SWP dependent areas of the system.

Ensure a robust treatment process that is optimized to adapt to extreme changes in source water quality. Maintain robust chemical feed systems and strive to ensure reliable supply availability of treatment chemicals. Meet regulatory compliance and Metropolitan’s internal water quality goals.

Support Pure Water Southern California and achieve regulatory acceptance for the advanced water treatment process. Conduct demonstration testing and perform optimization studies.

Partner with other groups to implement the Energy Sustainability Plan that will define strategies to

increase operational flexibility while reducing energy costs and greenhouse gas emissions.

Continue the multi-year upgrade of the SCADA system to maintain and improve the ability to remotely operate the conveyance, distribution, and treatment systems.

Conduct emergency response exercises involving internal operational groups, member agencies, and other emergency response partners.

### Workforce Development & Succession Planning

Partner with Human Resources to improve the internal recruitment pool for all positions. Coordinate with HR to develop and implement targeted training courses for new field managers.

Provide training for apprenticeship classes for the mechanical and electrical trades. Support additional workforce development opportunities for the water sector. Provide continuing education classes for licensed water treatment and distribution operators that are tailored to Metropolitan's procedures and facilities.

## Water Quality and Environmental Protection

Meet or surpass all drinking water standards and ensure delivery of aesthetically pleasing water.

Engage in regulatory processes to ensure full consideration of technical and economic feasibility for drinking water and environmental regulations. Implement increased laboratory functions to comply with new, stringent laboratory accreditation standards. Monitor for constituents of emerging concern, including PFAS and microplastics.

Engage watershed stakeholders and regulators to ensure effective control of source water contaminants such as PFAS, uranium, perchlorate, hexavalent chromium, nutrients, and cyanotoxins.

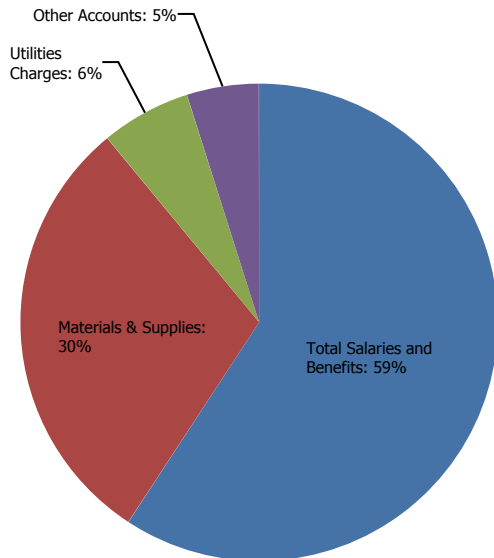
Continue effective management and monitoring of quagga mussels throughout Metropolitan's water system. Partner with DWR for monitoring quagga mussels in the west and east branches of the State Water Project and prepare quagga mussel control plans.

## O&M FINANCIAL SUMMARY

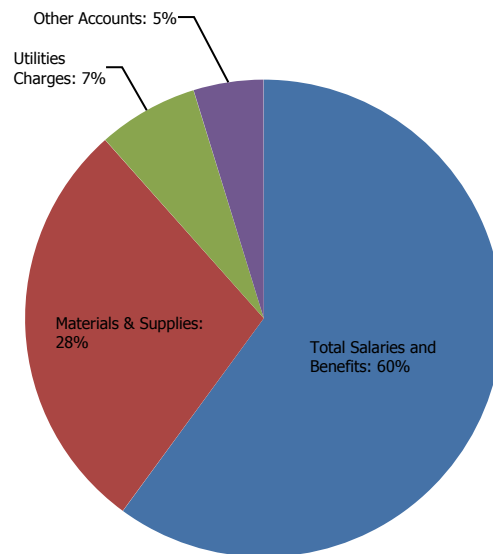
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	76,792,785	82,575,980	89,508,049	6,932,069	93,704,184	4,196,135
Direct Charges to Capital	(1,214,966)	(2,390,340)	(1,503,420)	886,920	(1,561,318)	(57,897)
<b>Total Salaries and Benefits</b>	<b>75,577,818</b>	<b>80,185,639</b>	<b>88,004,629</b>	<b>7,818,989</b>	<b>92,142,867</b>	<b>4,138,238</b>
% Change		6.1%		9.8%		4.7%
Materials & Supplies	37,986,492	31,814,269	44,259,649	12,445,380	43,535,826	(723,823)
Utilities Charges	7,369,797	9,083,273	9,042,861	(40,412)	10,463,084	1,420,223
Other Accounts	6,893,238	5,160,870	7,268,064	2,107,194	7,280,761	12,697
<b>Total O&amp;M</b>	<b>127,827,346</b>	<b>126,244,051</b>	<b>148,575,203</b>	<b>22,331,151</b>	<b>153,422,538</b>	<b>4,847,335</b>
% Change		(1.2%)		17.7%		3.3%
Operating Equipment	2,287,855	1,976,124	2,779,113	802,989	3,005,929	226,816
<b>Total O&amp;M and Operating Equipment</b>	<b>130,115,201</b>	<b>128,220,175</b>	<b>151,354,316</b>	<b>23,134,141</b>	<b>156,428,467</b>	<b>5,074,151</b>
% Change		(1.5%)		18.0%		3.4%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

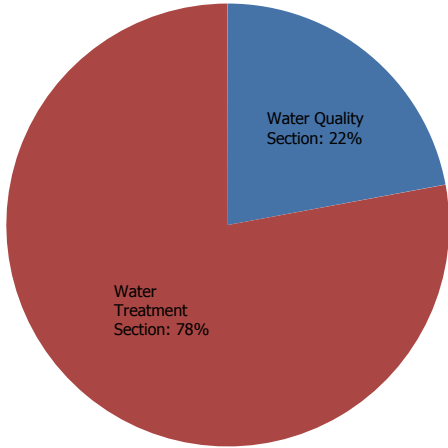


FY 2025/26 BUDGET BY EXPENDITURE

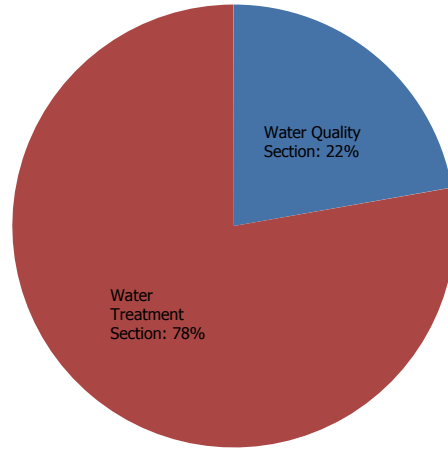


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Water Quality Section	28,811,868	32,810,298	3,998,430	34,101,762	1,291,463	109	109	109
Water Treatment Section	97,432,183	115,764,905	18,332,722	119,320,776	3,555,871	266	270	270
<b>Total O&amp;M</b>	<b>126,244,051</b>	<b>148,575,203</b>	<b>22,331,151</b>	<b>153,422,538</b>	<b>4,847,335</b>	<b>375</b>	<b>379</b>	<b>379</b>

Totals may not foot due to rounding.

## PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>386</b>	<b>384</b>	<b>(2)</b>	<b>384</b>	<b>—</b>
	O&M	374	378	4	378	—
	Capital	12	6	(6)	6	—
<b>Temporary</b>	<b>Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>—</b>
	O&M	1	1	0	1	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>387</b>	<b>385</b>	<b>(2)</b>	<b>385</b>	<b>—</b>
	O&M	375	379	4	379	—
	Capital	12	6	(6)	6	—

Totals may not foot due to rounding

\* 2023/24 Budget includes 7.0 FTE PWSC positions which were approved by the Board in December 2022.

## BUDGET HIGHLIGHTS

Treatment and Water Quality's O&M and Operating Equipment Biennial Budget is \$151.4 million in FY 2024/25 and \$156.4 million in FY 2025/26 or an increase of 18.0% and an increase of 3.4%, respectively from the prior year budgets. The main factors affecting these changes:

- Significant increases in chemical commodity prices raised the expected chemical costs for water treatment.
- An increase in vendor pricing in all areas due to increasing fuel and labor costs.
- While there was an overall decrease in hazardous waste abatement costs across all Operations groups, the recent reorganization reallocated select budget items resulting in an increase in hazardous waste abatement costs for facility R&R projects within Treatment and Water Quality.
- An increase in professional consulting services to support the next phase of testing at the Napolitano Innovation Center and the environmental planning phase of the Pure Water Southern California program.
- These increases are offset in part by a reduction in Agency and District Temp labor, Memberships & Subscriptions, and Travel expenses.
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The following are the significant changes by budget year:

### FY 2024/25

#### Personnel–Related issues

Water System Operations has been reorganized into three new Operations groups: Conveyance and Distribution, Treatment and Water Quality, and Integrated Operations, Planning and Support Services. The overall number of regular positions in the Operations groups has increased by seven from the FY 2023/24 budget, with the addition of Board-approved positions for the Pure Water Southern California program. It should be noted that positions can fluctuate between these groups based on operational priorities.

Regular full-time positions are decreasing by 2 positions from FY 2023/24 due to 2 positions transferred to other departmental Groups. This contrasts with the need for additional staff in Treatment and Water Quality to reliably operate, maintain, and monitor the system to ensure treatment and water quality objectives are met, accomplish key initiatives, and support numerous resilience and reliability projects and programs.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Materials and Supplies

The budget reflects anticipated inflationary pressures on chemicals and other materials and supplies.

#### Professional Services

The budget reflects an increase in consultant services required to support demonstration testing and technical studies for the Pure Water Southern California program.

#### Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services.

## Utilities

The budget reflects an increase in O&M hazardous waste abatement costs from the Weymouth Basin Remediation capital project and other facility R&R projects. As well as an increase in expected electrical rates due to continuing rapidly changing energy market and climatic conditions.

## FY 2025/26

### Personnel–Related issues

Regular full-time positions remain flat from FY 2024/25. This contrasts with the need for additional staff in Treatment and Water Quality to reliably operate, maintain, and monitor the system to ensure treatment and water quality objectives are met, accomplish key initiatives, and support numerous resilience and reliability projects and programs.

Temporary labor needs were reduced to meet budgetary goals including continued deferment of student intern positions, which will lead to select water treatment facility tasks to be deferred or require existing full-time employees to complete at the expense of other O&M duties.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Materials & Supplies

The budget remains relatively flat and includes anticipated inflationary pressures on chemicals, fuels, and other materials and supplies.

### Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services.

### Professional Services

Includes a reduction in consultant services required to support demonstration testing and technical studies for the Pure Water Southern California program.

### Utilities

A continued increase is anticipated in electrical rates due to continuing rapidly changing energy market and climatic conditions. The budget reflects an unchanged O&M hazardous waste abatement cost from the Weymouth Basin Remediation capital project and other facility R&R projects.

### Operating Equipment – FY 2024/25 and FY 2025/26

The operating equipment budget is maintained to replace the aging fleet, construction equipment, laboratory instruments, and other equipment to support the safe and reliable delivery of water. The budgeted amount reflects inflationary pressures in pricing and significantly aging and worn equipment that is at the end of its useful life. During this period, operating equipment was budgeted across all three operational groups and prioritized based on individual group needs. Numerous equipment deferrals were made to meet budgetary targets.

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# INTEGRATED OPERATIONS, PLANNING AND SUPPORT SERVICES

Integrated Operations, Planning and Support Services plans for and operates Metropolitan's system and provides service and support to ensure Metropolitan's operational objectives are met.

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## PROGRAMS

Integrated Operations, Planning and Support Services (IOPSS) plans for and operates Metropolitan's water system, power system, and storage reserves to ensure reliable water deliveries to the member agencies. The group also supports Metropolitan's operational objectives through a variety of services including manufacturing, construction, power equipment reliability, facility management, and fleet management. All these efforts help meet Metropolitan's mission.

IOPSS accomplishes its mission through the following programs or sections:

**Office of the Group Manager** provides day-to-day operational management as well as strategic and organizational leadership, directing all initiatives and core business efforts of IOPSS. The office also provides support functions, such as budgeting and administration, and coordinates and engages in regulatory and legislative activities.

**Operations Support Services** provides a diverse range of support to Metropolitan's core operational reliability functions and, on a reimbursable basis, to public entities such as DWR and member agencies. The Manufacturing Services unit performs fabrication, machining, coating, valve and pump refurbishment, underwater maintenance, and crane safety and certification. The Construction Services unit performs general construction, large equipment transportation, equipment installation, and emergency response. The Power & Equipment Reliability unit provides maintenance services which include predictive, preventive, and corrective maintenance analysis for critical equipment, including all treatment plants, pumping plants, hydroelectric power plants, pressure control

structures, high-voltage equipment, and heating, ventilation, and air conditioning (HVAC) systems. The Operations Projects & Asset Management unit provides oversight for the Operations groups on capital and operational project delivery, asset management, and member agency service connection requests.

**Water Operations and Planning** plans and implements the movement and use of water resources. These plans incorporate infrastructure and supply limitations, hydrologic variations, agency demands, changing water quality requirements, and storage program economics. Operational scenarios that encompass a broad range of potential supplies and demands are developed and continually refined. This prepares Metropolitan for a wide variety of possible outcomes as the year develops while maintaining reliable deliveries and balancing management of water storage reserves at a reasonable cost.

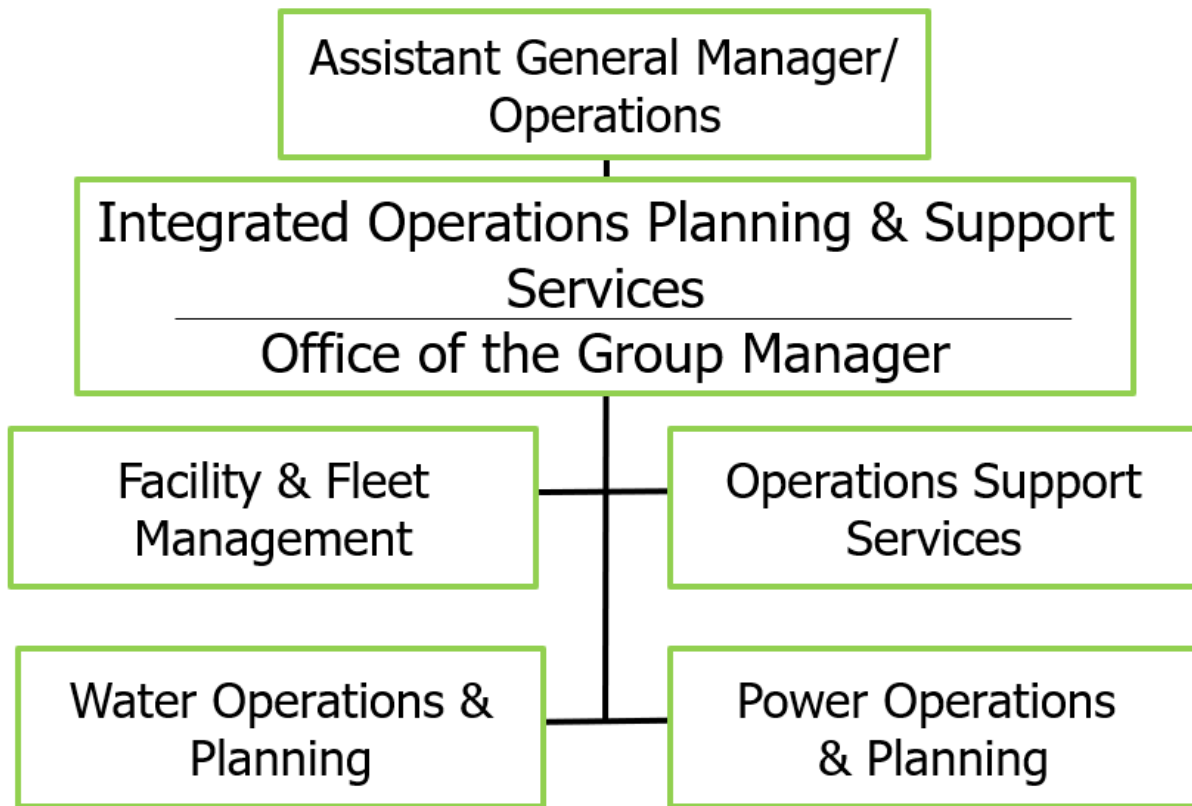
In addition, the section programs and maintains Metropolitan's automated control system, known as the Supervisory Control and Data Acquisition (SCADA) system.

**Facility and Fleet Management** is responsible for managing Metropolitan facilities and fleet. The Facility Asset Management unit manages and maintains Metropolitan's headquarters facility, the DVL office buildings and recreational area, employee housing, and village recreational facilities. The Fleet Services unit acquires, maintains, and manages vehicles, construction equipment, aircraft, and emergency generators.



Power Operations and Planning plans, acquires and accounts for the energy required to operate the CRA. This activity includes energy transactions with electric utilities and marketers. The section also negotiates and manages the contracts and energy accounting of renewable energy credits and greenhouse gas allowances for 15 small hydroelectric power plants and the CRA system.

In addition, the section is responsible for wholesale energy activities including evaluation of proposed energy-related regulations and legislation; analysis of state and regional transmission plans and impacts to the CRA transmission system; and reporting on compliance with regional and national electric reliability standards. Finally, the section works closely with energy staff at DWR on energy and transmission issues for the SWP.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, IOPSS will focus on the following key issues:

### System Resilience and Reliability

Manage and maintain the water system to ensure operational reliability for all reasonably expected demands. Metropolitan recently experienced a period of severe drought conditions that have led to efforts to further expand system flexibility and resilience by developing and implementing new

projects and envisioning future projects that add features to the conveyance and distribution system. These efforts will expand the movement of supplies and storage throughout the service area, with an emphasis on addressing the SWP-dependent areas of the system.

Develop and distribute the Annual Operating Plan and manage water storage to provide the greatest delivery flexibility, reliability, and cost-effectiveness. Build on strategies such as employing operational

flexibility to mitigate future changing climate conditions and their impacts on water availability.

Plan, schedule, and execute the Annual Shutdown Plan, in coordination with other groups, to ensure reliable operation of the water delivery system. Develop and implement strategies to manage more and longer shutdowns to support system refurbishment, such as shutdowns of prestressed concrete cylinder pipelines.

With member agency and regional partners, support development of new water supplies to supplement the core SWP and Colorado River supplies including groundwater recovery, ocean desalination, and potable reuse.

Participate with the California Department of Water Resources (DWR) on efforts to ensure cost-effective rehabilitation of SWP conveyance, pumping, and generation facilities.

Fully utilize the manufacturing shops in La Verne to maintain Metropolitan's infrastructure reliability and support projects for DWR and the member agencies.

Partner with Engineering Services and Information Technology groups to implement a comprehensive Asset Management Plan that will maximize the value of infrastructure assets and enhance reliability.

Partner with other groups to implement the Energy Sustainability Plan that will define strategies to increase operational flexibility while reducing energy costs and greenhouse gas emissions.

Manage Metropolitan's fleet assets including replacing aging vehicles and equipment while meeting all applicable air quality regulations. Work with partners to facilitate Metropolitan's transition towards a zero-emission fleet.

Continue the multi-year upgrade of the SCADA system to maintain and improve the ability to remotely operate the conveyance, distribution, and treatment systems.

Conduct emergency response exercises involving internal operational groups, member agencies, and other emergency response partners.

## Workforce Development & Succession Planning

Partner with Human Resources to improve the internal recruitment pool for all positions. Coordinate with HR to develop and implement targeted training courses for new field managers.

Provide continuing education classes for licensed water distribution operators that are tailored to Metropolitan's procedures and facilities.

## Desert Housing Improvements

Continue upgrading desert housing and amenities according to the Desert Housing and Recreation Interim Action Plan. Implement and construct new desert facilities according to the final design adopted through the Community Planning and Design process.

## Diamond Valley Lake Recreation and Management

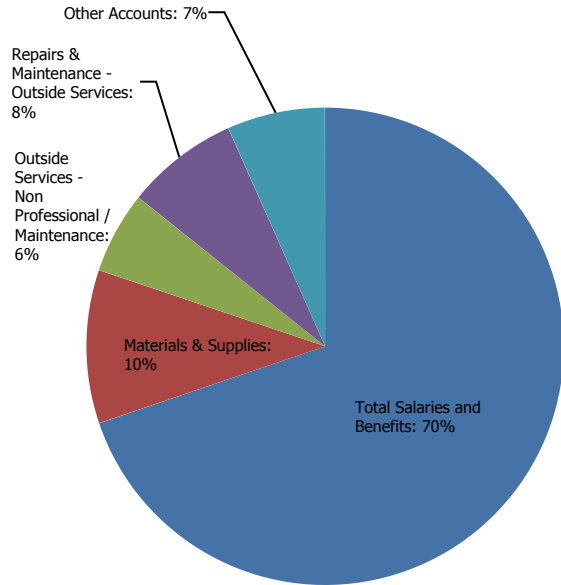
Identify and implement infrastructure improvements as part of the Diamond Valley Lake Recreation capital appropriation to enhance recreational opportunities and promote economic sustainability. Explore and implement marina and other recreational opportunities to expand lease revenues and collaborate with the stakeholders of the DVL Recreation Area Memorandum of Intent. Identify additional DVL land considered excess to Metropolitan's needs and bring to the Board for appropriate action.

# O&M FINANCIAL SUMMARY

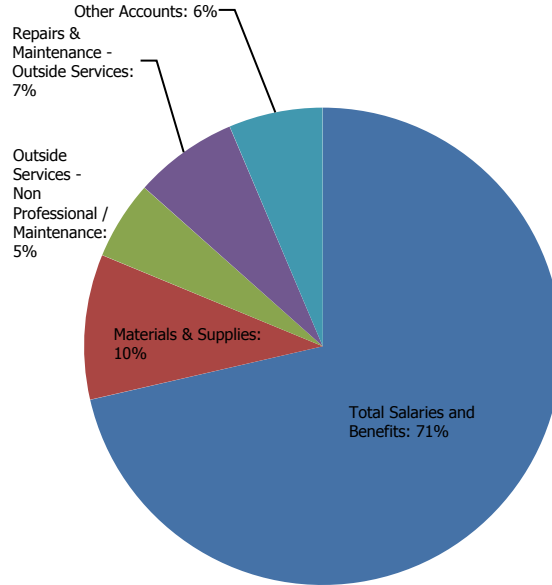
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	56,017,539	64,269,882	71,077,158	6,807,276	76,501,208	5,424,050
Direct Charges to Capital	(3,344,885)	(4,247,190)	(4,919,564)	(672,374)	(5,168,068)	(248,504)
<b>Total Salaries and Benefits</b>	<b>52,672,654</b>	<b>60,022,692</b>	<b>66,157,594</b>	<b>6,134,901</b>	<b>71,333,140</b>	<b>5,175,546</b>
% Change		14.0%		10.2%		7.8%
Materials & Supplies	9,060,035	9,118,991	9,856,555	737,564	9,811,555	(45,000)
Outside Services - Non Professional / Maintenance	4,729,470	4,989,750	5,253,500	263,750	5,328,500	75,000
Repairs & Maintenance - Outside Services	2,400,638	4,248,019	7,240,000	2,991,981	7,048,500	(191,500)
Utilities Charges	2,081,409	4,880,130	2,261,100	(2,619,030)	2,326,100	65,000
Other Accounts	2,786,723	3,607,147	4,042,722	435,575	4,038,365	(4,357)
<b>Total O&amp;M</b>	<b>73,730,928</b>	<b>86,866,729</b>	<b>94,811,471</b>	<b>7,944,741</b>	<b>99,886,160</b>	<b>5,074,690</b>
% Change		17.8%		9.1%		5.4%
Operating Equipment	2,169,033	1,834,390	1,935,217	100,827	2,704,475	769,258
<b>Total O&amp;M and Operating Equipment</b>	<b>75,899,961</b>	<b>88,701,119</b>	<b>96,746,687</b>	<b>8,045,568</b>	<b>102,590,635</b>	<b>5,843,948</b>
% Change		16.9%		9.1%		6.0%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

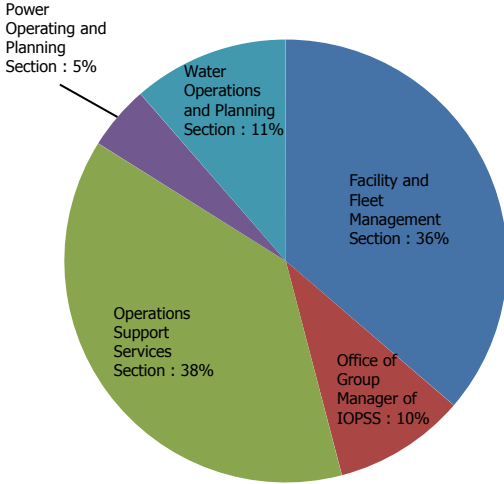


FY 2025/26 BUDGET BY EXPENDITURE

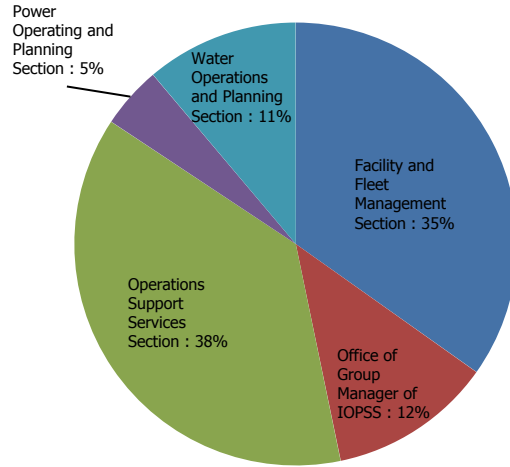


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Facility and Fleet Management Section	29,588,511	34,414,950	4,826,438	34,776,673	361,724	62	64	63
Office of Group Manager of IOPSS	9,156,732	9,132,595	(24,137)	11,932,258	2,799,663	14	14	14
Operations Support Services Section	31,353,810	36,011,152	4,657,343	37,507,252	1,496,100	122	134	134
Power Operating and Planning Section	3,941,953	4,456,088	514,135	4,540,034	83,946	11	11	11
Water Operations and Planning Section	12,825,723	10,796,686	(2,029,038)	11,129,942	333,256	38	28	28
<b>Total O&amp;M</b>	<b>86,866,729</b>	<b>94,811,471</b>	<b>7,944,741</b>	<b>99,886,160</b>	<b>5,074,690</b>	<b>247</b>	<b>251</b>	<b>250</b>

Totals may not foot due to rounding.

# PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>259</b>	<b>257</b>	<b>(2)</b>	<b>257</b>	<b>—</b>
	O&M	240	240	0	240	—
	Capital	19	17	(2)	17	—
<b>Temporary</b>	<b>Total</b>	<b>8</b>	<b>11</b>	<b>3</b>	<b>10</b>	<b>(1)</b>
	O&M	8	11	4	10	(1)
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>267</b>	<b>268</b>	<b>1</b>	<b>267</b>	<b>(1)</b>
	O&M	247	251	4	250	(1)
	Capital	20	17	(2)	17	—

Totals may not foot due to rounding.

## BUDGET HIGHLIGHTS

IOPSS' O&M and Operating Equipment Biennial Budget is \$96.7 million in FY 2024/25 and \$102.6 million in FY 2025/26 or an increase of 9.1% and an increase of 6.0%, respectively from the prior year budgets. The main factors affecting these changes:

- Materials and Supplies increases, predominately due to the increased cost of goods due to market pricing, and labor and fuel cost increases.
- Membership increases with new memberships to support Power Operations and Planning to respond to rapidly changing energy markets and regulations.
- An increase in Repair & Maintenance costs, primarily cost of auto parts/repairs for aging and worn fleet and general supplies. Repair projects include security systems, fence maintenance, roof replacements, environmental remediation, and other building maintenance.
- These increases are offset in part by a reduction in Training and Travel expenses.
- With the reorganization of Operations groups, the hazardous waste abatement costs for facility R&R projects was moved to Treatment and Water Quality group budget; therefore, this reflects a reduction in IOPSS overall budget from the previous fiscal year.

The following are the significant changes by budget year.

### FY 2024/25

#### Personnel–Related issues

Water System Operations has been reorganized into three new Operations groups: Conveyance and Distribution, Treatment and Water Quality, and Integrated Operations, Planning and Support Services. The overall number of regular positions in the Operations groups has increased by seven from the FY 2023/24 budget, with the addition of Board-approved positions for the Pure Water Southern California program. It should be noted that positions can fluctuate between these groups based on operational priorities.

Regular full-time positions are decreasing by 2 positions from FY 2023/24 due to 2 positions transferred to other departmental Groups. This contrasts with the need for additional staff to accomplish several key initiatives, such as regulatory compliance programs, system and drought resiliency programs, and numerous reliability projects and programs.

Agency Temp labor needs increased driven by workload and vacancies including retirements. District Temp positions across IOPSS increased and are used for both part-time work (reservoir cover

cleaners to maintain regulatory requirements), increased support for Desert housing and the Desert Housing and Recreation Interim Action Plan, and annuitant support for several major operational priorities. Student Intern positions continued to be deferred to meet budgetary goals.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

#### Materials and Supplies

The budget reflects inflationary pressure anticipated on mechanical fluids and other materials and supplies, in support of aging equipment including an aging and worn vehicle fleet.

#### Repair & Maintenance

The budget reflects a significant increase in Repair & Maintenance costs required to support the Desert Housing and Recreation Interim Action Plan, other housing improvements, and repairs of an aging and worn fleet.

## Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services.

## Utilities

The budget reflects a decrease in waste disposal costs from IOPSS facility O&M projects. The remainder represents hazardous waste repair and maintenance activities and an increase in expected electrical rates due to the continuing rapidly changing energy market and climatic conditions.

## FY 2025/26

### Personnel–Related issues

Regular personnel count for both O&M and capital work remains unchanged from the FY 2024/25 budget. This contrasts with the need for additional staff to accomplish several key initiatives, such as regulatory compliance programs, system and drought resiliency programs, and numerous reliability projects and programs.

Temporary labor needs were reduced due to the anticipated completion of key projects and to meet budgetary goals.

Salaries and Benefits reflect negotiated labor increases and merit increases for qualified employees.

### Materials & Supplies

The budget remains relatively flat and includes anticipated inflationary pressures on chemicals, fuels, and other materials and supplies.

### Non-Professional Services

The budget reflects inflationary increases in labor and fuel costs for services provided in this category such as janitorial, pest control, and inspection services. In addition, costs for compliance-related contract services increased for environmental and safety equipment.

## Other

A switch to high-capacity circuits resulted in a reduction in Communications Expenses by reducing the amount and types of communications lines needed for both data and phone traffic.

The budget reflects a decrease in professional services required to support the strategic development of the Asset Management Program.

### Repairs and Maintenance

Repairs and maintenance costs have slightly decreased to maintain both aging and worn machinery and fleet vehicles.

### Utilities

The budget reflects an expected continued increase in electrical rates due to continuing rapidly changing energy market and climatic conditions.

### Operating Equipment – FY 2024/25 and FY 2025/26

The operating equipment budget is maintained to replace the aging fleet, construction equipment, laboratory instruments, and other equipment to support the safe and reliable delivery of water. The budgeted amount reflects inflationary pressures in pricing and significantly aging and worn equipment that is at the end of its useful life. During this period, operating equipment was budgeted across all three operational groups and prioritized based on individual group needs. Numerous equipment deferrals were made to meet budgetary targets.

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# OFFICE OF SAFETY, SECURITY AND PROTECTION

By establishing the new Office of Safety, Security and Protection, the District aims to consolidate its efforts to ensure the well-being of all personnel, protect vital water resources, promote environmental sustainability, develop skills within our workforce through a water-focused apprenticeship program, and maintain a safe and secure environment for employees, visitors and stakeholders.

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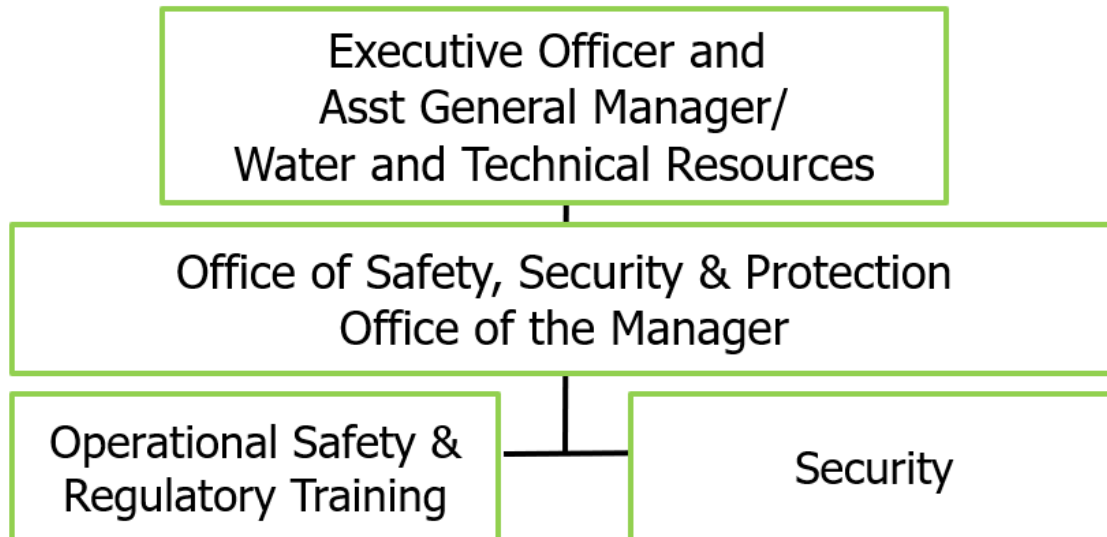
## PROGRAMS

The newly established Office of Safety Security and Protection group accomplishes its mission through the following program or section:

**Safety, Regulatory and Training Section** is responsible for ensuring a safe working environment for employees through programs and training, ensuring business practices are conducted in an environmentally responsible way, and complying with all regulatory and occupational health and safety regulations and requirements. The section integrates environmental, health and safety practices into Metropolitan's practices and culture with the goal of maintaining an injury-free safe workplace while eliminating regulatory incidents. In addition, the section manages safety and technical skills training for Metropolitan employees and sponsors an accredited apprenticeship program. This is done by training industrial mechanics and electricians over a four-year period of classroom and hands-on instruction.

**Security Management** provides cost-effective and innovative protection of Metropolitan's employees, patrons, infrastructure, and equipment. Our Security Management Unit provides Security management services that protect Metropolitan's Board of Directors, Executive management, employees, and physical assets while maintaining Metropolitan's critical infrastructure secure.

**Emergency Management** Supports employee safety and operations by providing guidance on district emergency response planning, hazard mitigation, response and recovery efforts. Acts as the liaison between Metropolitan and external emergency management agencies. Conducts emergency response exercises involving internal operational groups, member agencies, and other emergency response agencies.



## GOALS AND OBJECTIVES

In FY 2024/25 and FY 2025/26, the Office of Safety Security and Protection will focus on the following key issues and initiatives:

### Safety, Regulatory and Training

Provide safety and regulatory services to ensure safe work practices and adhere to environmental and workplace health and safety regulations.

Continue to partner with the National Safety Council to identify and implement areas for improvement of the health and safety program, building upon prior efforts to continuously improve.

Partner with Human Resources to provide health and safety orientation training for all newly hired employees.

Develop and deliver environmental, safety and health training for all field managers.

Continue to partner with internal partners and external entities in transitioning Metropolitan's fleet and equipment to zero-emission technology to meet regulatory requirements and Metropolitan Climate Action Plan goals.

Recruit and begin training a new apprentice class for the mechanical and electrical trades. Support

additional workforce development opportunities for the water sector.

Develop with management a new continuing education program for mechanical and electrical journeymen.

Provide continuing education classes for licensed water treatment and distribution operators are tailored to Metropolitan's procedures and facilities.

### Security Management

Implement a Security Strategic plan that is aligned with District goals and objectives and provides for an incremental and phased approach to obtaining resources, including staff, equipment and technology.

Publish specifications for security infrastructure, based on regulatory requirements and industry best practices.

Formalize conceptual approval on capital project plans and specifications to ensure security opportunities and considerations are incorporated.

Conduct emergency response exercises involving internal operational groups, member agencies, and other emergency response agencies.



## Emergency Management

Provide professional emergency management support to support District goals including maintaining employee safety and operations.

Update the District emergency response plan and coordinate with other Metropolitan Groups to ensure various District response plans complement each other.

Provide real-time emergency coordination through the EOC Duty Officer program, to monitor potential threats to Metropolitan employees and operations from external emergencies.

Send emergency alerts and warnings to employees when an emergency incident threatens them or their facilities.

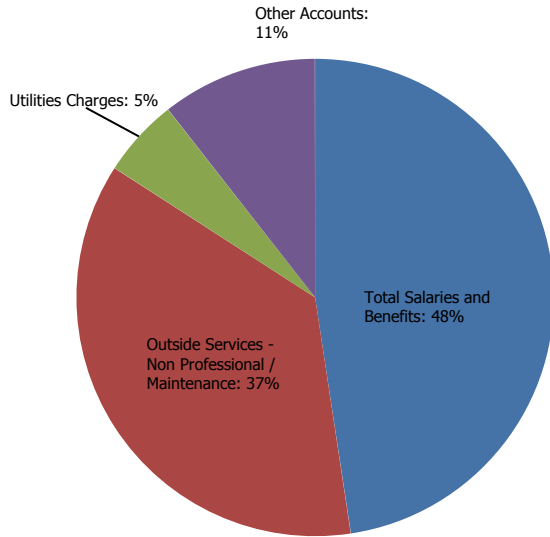
Conduct emergency response exercises involving internal operational groups, member agencies, and other emergency response agencies.

# O&M FINANCIAL SUMMARY

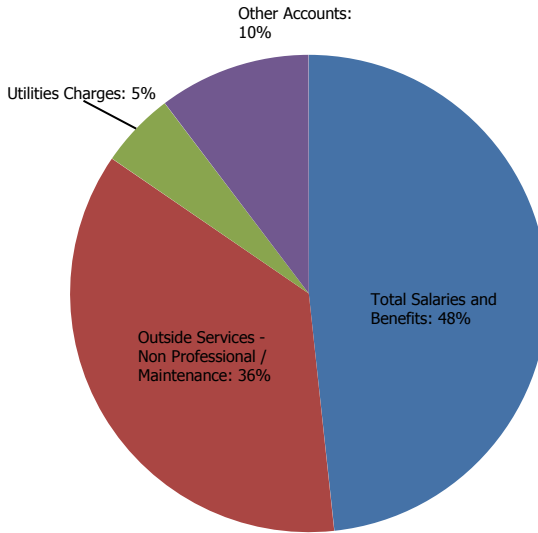
	2022/23 Actual	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
Total Salaries and Benefits	16,670,881	17,019,580	19,219,655	2,200,075	20,239,736	1,020,081
Direct Charges to Capital	(120,471)	(171,031)	(2,227,255)	(2,056,223)	(2,349,732)	(122,478)
<b>Total Salaries and Benefits</b>	<b>16,389,879</b>	<b>16,848,549</b>	<b>16,992,400</b>	<b>143,851</b>	<b>17,890,004</b>	<b>897,603</b>
% Change		2.3%		0.9%		5.3%
Outside Services - Non Professional / Maintenance	11,115,983	12,335,934	13,028,100	692,166	13,433,100	405,000
Outside Services - Professional	406,144	517,500	1,135,368	617,868	1,146,086	10,718
Utilities Charges	1,514,842	1,400,000	1,900,000	500,000	1,900,000	—
Other Accounts	2,115,002	2,197,784	2,631,725	433,941	2,672,005	40,280
<b>Total O&amp;M</b>	<b>31,622,116</b>	<b>33,299,767</b>	<b>35,687,593</b>	<b>2,387,826</b>	<b>37,041,195</b>	<b>1,353,601</b>
% Change		5.3%		7.2%		3.8%
Operating Equipment	325,265	118,910	—	(118,910)	—	—
<b>Total O&amp;M and Operating Equipment</b>	<b>31,947,381</b>	<b>33,418,677</b>	<b>35,687,593</b>	<b>2,268,916</b>	<b>37,041,195</b>	<b>1,353,601</b>
% Change		4.6%		6.8%		3.8%

Totals may not foot due to rounding.

FY 2024/25 BUDGET BY EXPENDITURE

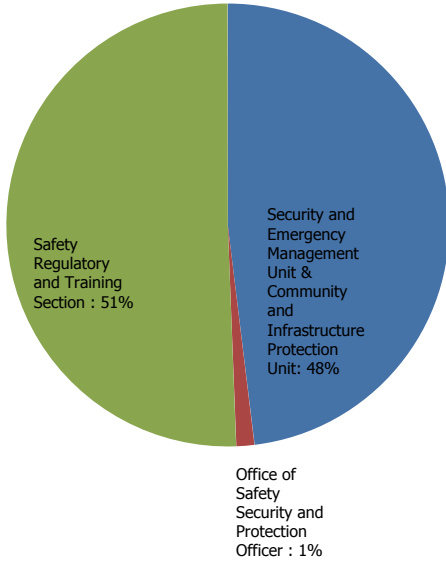


FY 2025/26 BUDGET BY EXPENDITURE

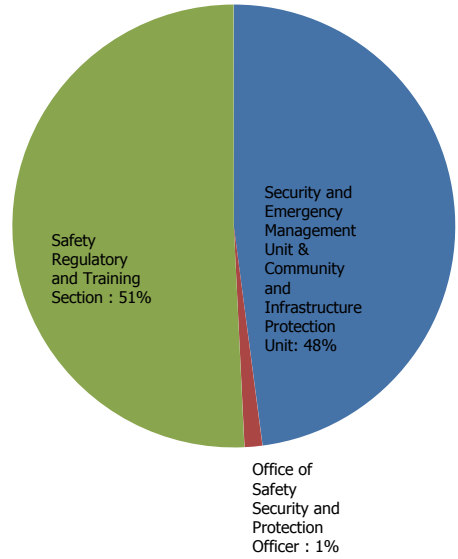


# O&M BUDGET BY SECTION

FY 2024/25 BUDGET BY SECTION



FY 2025/26 BUDGET BY SECTION



	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25	Personnel Budget		
						23/24	24/25	25/26
Security and Emergency Management Unit & Community and Infrastructure Protection Unit	15,486,486	17,159,512	1,673,026	17,753,188	593,676	12	14	14
Office of Safety Security and Protection Officer	809,390	471,031	(338,358)	484,050	13,018	2	1	1
Safety Regulatory and Training Section	17,003,891	18,057,050	1,053,159	18,803,957	746,907	50	45	45
<b>Total O&amp;M</b>	<b>33,299,767</b>	<b>35,687,593</b>	<b>2,387,826</b>	<b>37,041,195</b>	<b>1,353,601</b>	<b>64</b>	<b>60</b>	<b>60</b>

Totals may not foot due to rounding.

# PERSONNEL SUMMARY

		2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular</b>	<b>Total</b>	<b>64</b>	<b>68</b>	<b>4</b>	<b>68</b>	<b>—</b>
	O&M	63	59	(4)	59	—
	Capital	1	9	8	9	—
<b>Temporary</b>	<b>Total</b>	<b>1</b>	<b>1</b>	<b>—</b>	<b>1</b>	<b>—</b>
	O&M	1	1	—	1	—
	Capital	—	—	—	—	—
<b>Total Personnel</b>	<b>Total</b>	<b>65</b>	<b>69</b>	<b>4</b>	<b>69</b>	<b>—</b>
	O&M	64	60	(4)	60	—
	Capital	1	9	8	9	—

Totals may not foot due to rounding.

# BUDGET HIGHLIGHTS

The Office of Safety Security and Protection group's Biennial Budget is \$35.7 million in FY 2024/25 and \$37.0 million in FY 2025/26 or an increase of 6.8% and an increase of 3.8% respectively from the prior budget years. The increase is due primarily to the following:

- Increased Non-Professional Services due to Recommended Security enhancements, threat assessment, and urgent migration to an end-of-life security platform.
- Transfer of a new team, Emergency Management, whose added expenses are not reflected in previous year's totals.
- Increased Professional Services, due to implementation of National Safety Council Safety assessment recommendations and Clean Fleet initiative consulting.
- Increased Standby, and OT for Shutdown support.

The following are the significant changes by budget year:

## FY 2024/25

### Personnel-Related Issues

Regular full-time positions are increasing by 4 positions from FY 2023/24 due to 3 positions transferred from other departmental Groups and 1 additional position. The additional position is necessary to provide support for Desert training in high voltage electrical, health and safety training, while the other position was moved from another group to provide administrative support for the newly formed Group.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

### Non-Professional Services

The budget increase from FY 2023/24 is due to Recommended Security enhancements, threat assessment, and urgent migration to an end-of-life security platform.

Transfer and creation of a new team, Emergency Management, whose added expenses are not reflected in previous year's totals.

### Professional Services

The budget increase from FY 2023/24 due to the implementation of the National Safety Council Safety assessment recommendations and Clean Fleet initiative consulting.

## FY 2025/26

### Personnel-Related Issues

Regular full-time positions remain flat from FY 2024/25.

Salaries and benefits reflect negotiated labor increases and merit increases for qualified employees.

### Non-Professional Services

Non-Professional services increase is nominal with the FY 2024/25 budget, and predominately due to labor increases.

### Professional Services

Professional services remain flat with the FY 2024/25 budget.

### Operating Equipment – FY 2024/25 and FY 2025/26

No OE has been budgeted for this biennium.

# STAFFING SUMMARY

Group/Department	2023/24 Budget	2024/25 Budget	Change from 2023/24	2025/26 Budget	Change from 2024/25
<b>Regular Employees</b>					
Water Resource Management	68	67	(1)	67	—
Treatment and Water Quality	386	384	(2)	384	—
Office of Sustainability, Resilience & Innovation	46	44	(2)	44	—
Office of Safety Security and Protection	64	68	4	68	—
Office of Diversity, Equity & Inclusion	11	12	1	12	—
Integrated Operations Planning and Support Services	259	257	(2)	257	—
Information Technology	131	132	1	132	—
Human Resources	43	47	4	47	—
Office of the General Manager	21	24	3	24	—
Finance and Administration	123	122	(1)	122	—
External Affairs	64	62	(2)	62	—
Equal Employment Opportunity Office	7	8	1	8	—
Engineering Services	379	384	5	384	—
Conveyance and Distribution	267	271	4	271	—
Board of Directors	5	7	2	7	—
Bay Delta Initiatives	16	17	1	17	—
<b>Subtotal - General Manager's Department</b>	<b>1,890</b>	<b>1,906</b>	<b>16</b>	<b>1,906</b>	<b>—</b>
Office of the General Auditor	12	14	2	14	—
Ethic's Office	7	8	1	8	—
General Counsel	37	37	—	37	—
<b>Total - Departmental Regular Employees</b>	<b>1,946</b>	<b>1,965</b>	<b>19</b>	<b>1,965</b>	<b>—</b>
<b>Temporary Employees</b>					
District Temporary	49	59	10	56	(3)
<b>Total Authorized Positions</b>	<b>1,995</b>	<b>2,024</b>	<b>29</b>	<b>2,021</b>	<b>(3)</b>





\* 2023/24 Budget includes 17.0 PWSC positions which were approved by the Board in December 2022.

# OPERATING EQUIPMENT SUMMARY

Classification	2024/25 Quantity	2024/25 Amount	2025/26 Quantity	2025/26 Amount
Audio Visual	1	8,432	—	—
Automobiles (Passenger Car)	—	—	1	26,501
Communication Equipment	3	244,355	—	—
Construction/Shop/Maint Equip	27	1,527,241	3	1,107,353
CPU's, Laptops & Servers	5	122,866	8	387,805
Heavy Equipment	19	4,940,155	3	5,119,711
Lab Equipment	2	38,160	1	16,563
Monitoring Equipment	1	14,884	2	43,727
Office Equipment	1	6,363	—	—
Other Equipment	5	255,413	—	—
Printers	—	—	1	17,859
Survey Equipment	7	341,362	4	123,220
Trucks	24	2,100,544	12	2,956,716
Utility Van	—	—	3	316,317
<b>Grand Total</b>	<b>95</b>	<b>9,599,773</b>	<b>38</b>	<b>10,115,775</b>

Totals may not foot due to rounding.

# PERFORMANCE MEASURES

<b>SMART TRACKER - FY 23/24</b>					
Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
1. EMPOWER the workforce and promote diversity, equity, and inclusion	1.1-Build a safe, inclusive, and accountable workplace where all employees feel valued, respected, and able to meaningfully contribute to decisions about their work to fulfill Metropolitan's Mission.	1.1.1-Renovate desert housing and update plans for future housing	 50	On Target	Quarterly report provided to the board in Oct.  At the special Board meeting at Gene Pumping Plant in Dec., Board members heard the status of housing improvements and community planning and were able to see improvements firsthand.  Staff held meetings with employees on-site in the desert to present and get feedback on the consultant's proposed options for a long-term housing model to serve our future remote workforce.
		1.1.2-Reestablish Metropolitan's Vision and Values, along with a communication plan to reach all of the Metropolitan community	 75	On Target	Vision and Values have been updated, informed by employee input, and announced at a meeting with 270 managers in January and a meeting with 900 employees in February.
		1.1.3-Timely closure of EEO complaints within 90 business days	 50	On Target	Average case closure rate is under the 90 business day target.
		1.1.4-Increase employee awareness of and access to EEO	 80	On Target	The EEO Office conducted four live training sessions on EEO's complaint and investigative process. A total of 163 employees attended the sessions.

FY through Feb. 2024







## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
		1.1.5-Implement the National Safety Council recommendations	 80	On Target	Established the Office of Safety Security and Protection to ensure executive level focus on safety and alignment of related activity enterprise wide.  Streamlined the reporting of safety concerns in the Safety Review Request E-Form.  Developed Safety Vision and Guiding Principles.
		1.1.6-Partner with department heads on issues affecting the District	 50	On Target	Regular meetings between the GM and each Department Head are calendared.  Auditor featured in the All Manager briefing. General Auditor Suzuki shared his vision for the office.  Office of Ethics featured in the All Manager briefing. Staff presented re gift rules, in advance of the holidays.
	1.2-Prepare and support the workforce by expanding training and skill development and updating strategies to recruit and retain diverse talent at a time when Metropolitan's needs are evolving and employee expectations about the workplace are	1.2.1-Update recruitment processes, and shorten recruitment timeline	 45	On Target	Mark Brower joined Metropolitan as HR Group Manager.  We are prioritizing improvements to the recruitment process. Under Mark, HR has established a recruitment tracking system in an effort to identify bottlenecks in the process and opportunities to shorten the recruitment timeline
		1.2.2-Expand and enhance a District wide workforce development program	 60	On Target	Independent assessment completed, including a survey of member agency programs and interests.






FY through Feb. 2024

## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
	the workplace are changing.	1.2.3-Grow staff development and training in key areas		On Target	The 13th cohort of Metropolitan Management University graduated 20 newly-promoted managers in December.
2. SUSTAIN Metropolitan's mission with a strengthened business model	2.1-Develop revenue and business model options that support the needs of the member agencies as well as Metropolitan's financial sustainability and climate adaptation needs	2.1.1-In conjunction with the Climate Adaptation Master Plan for Water process, complete the Phase 1 Long-Range Financial Plan and a review of Business Model/revenue options		On Target	Board action at November Finance, Audit, Insurance, and Real Property (FAIRP) committee concurred with the assumptions in the Long-Range Finance Plan-Needs Assessment for planning purposes.  Phase 1 Long-Range Finance Plan is 100 percent complete. First presentation of PWSC cost recovery alternatives done at November 2023 FAIRP.
		2.1.2-Provide equity and fairness in rates and the business model		On Target	Affordability panel discussions have been held in the Equity, Inclusion and Affordability Committee: August 2023 - Panel 1: Discussion of member agency programs October 2023 - Panel 2: Metropolitan and household water affordability November 2023 - Panel 3: Regulatory requirements impacting costs January 2024 - Panel 4: Metropolitan's efforts to contain/offset costs
	2.2-Manage rate pressure on member agencies through attention to programmatic costs, organizational efficiencies, and efforts to secure external funding for projects with broad	2.2.1-Establish a centralized grants office to ensure more consistent and coordinated pursuit of external funding		On Target	This FY through Nov. 2023, the new Centralized Grants Office has assisted with the submittal of grants applications worth \$135.15 million






FY through Feb. 2024

## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
	and multi-purpose benefits.	2.2.2-Complete the organizational assessment and implement key recommendations to improve efficiency and effectiveness		On Target	Initial changes took effect in August, based on the organizational assessment to better align certain functions and priorities.  Chief of Staff position established; Mohsen Mortada started as Chief of Staff in October.
		2.2.3-Secure Inflation Reduction Act funding that supports Colorado River water use objectives		On Target	Metropolitan submitted to the Bureau of Reclamation a proposal for "Bucket 2" funding under the Inflation Reduction Act to help fund conservation programs, new storage programs and Member Agency programs, which would provide long-term reduction of Colorado River water.
3. ADAPT to changing climate and water resources	3.1-Provide each member agency access to an equivalent level of water supply reliability through the development of a Climate Adaptation Master Plan for Water (CAMP4W) that integrates water resource, financial and climate adaptation planning	3.1.1-Provide the Board with a decision-making framework and evaluative criteria to identify investments toward climate adaptation and related supply and system resilience		On Target	Six Evaluative Criteria approved for next steps.  Draft Framework is developed.
		3.1.2-Complete technical analyses and resource program improvements to inform resource options for consideration in CAMP4W		Borderline	The Board approved the scope of brackish and seawater desalination studies and contracts are executed.
		3.1.3-Enhance long-term water supply reliability for the State Water Project dependent areas		On Target	Presented a proposed implementation plan in the January PWSCRC Subcommittee.

FY through Feb. 2024






## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
3.2-Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets community and ecosystem needs, and adapts to a changing climate		3.2.1-Advance multiple strategies toward sustainable Colorado River supplies and toward broad agreement in long-term compact negotiations	 50	On Target	Agreements finalized with USBR for near-term Bucket 1 funding.  Bucket 2 funding application submitted after Board authorization.
		3.2.2-Implement and promote agricultural water-conservation best practices	 10	On Target	Pilot study of N-Drip technology concluded in 2023 indicating up to 40% less applied water than fields irrigated using furrow/flood methods.  Quechan Seasonal Following Pilot Program has been extended through December 31, 2026
		3.2.3-Continue implementation of the Climate Action Plan to reduce GHG emissions	 50	Borderline	An update was provided to the January EOT on the roadmap for a ZEV transition. A detailed replacement schedule is in place, and the team has already accumulated ZEV credits under the State Program for the purchase of 8 ZEVs.
		3.2.4-Determine targets for stormwater and develop programmatic stormwater strategies	 60	On Target	Executed agreement with Las Virgenes MWD to implement pilot projects to evaluate the feasibility of introducing dry- and wet-weather urban runoff to wastewater treatment plants.  Stormwater opportunities analysis is expected in April.
		3.2.5-Expedite the Pure Water Southern California project	 28	On Target	Regular progress reporting to the Board, including cost update.  LSWR grant request for \$125M was submitted, along with supporting Feasibility Study. Notification of LSWR awards will be made in the 1st or 2nd quarter 2024.

FY through Feb. 2024








## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
		3.2.6-Advance Delta Conveyance Project Planning and Analysis		On Target	Metropolitan completed its internal review of the Draft EIR and contributed to the development of the Final EIR.  In January, staff presented contents of the final EIR to the One Water and Stewardship Committee.
		3.2.7-Implement watershed science and ecosystem restoration, to advance a holistic approach to the Delta		On Target	Following the Board's action to accept the \$20.9 million grant from the Delta Conservancy for the Webb Tract Mosaic Landscape Project in October, Metropolitan's Board also approved amending the Capital Investment Plan for FY 22/23 & 23/24 to include the development of the Project.
		3.2.8-Increase outdoor water use efficiency		On Target	Assembly Bill 1572 signed into law October 14, 2023.  The turf dashboard has been provided to both member and retail agencies
4. PROTECT public health, the regional economy, and Metropolitan's assets	4.1-Proactively identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.	4.1.1-Enhance emergency preparedness and response plans		On Target	Seismic Resilience Water Supply Task Force workshop completed in FY 23/24  Progress reports have been provided to the Board on dam safety and seismic resilience.  All 13 dam Emergency Action Plans have been completed and submitted to the state; 10 have been approved, and review of the remaining three is expected in Q1 2024.
		4.1.2-Implement cybersecurity strategies		On Target	RFP is being processed for release to obtain a permanent CSOC Co-Managed Service which will improve monitoring and response capabilities.





FY through Feb. 2024

## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
		4.1.3-Assess and prioritize Metropolitan's Capital Investment Plan (CIP) projects based on risk and value.		Completed	1) Evaluate risk and value of each project against established criteria and calculate a quantitative score. 2) Survey project sponsors and Group Managers to refine priorities and confirm need-by-date for CIP projects. 3) Rank projects by risk and value. 4) Develop a capital spending plan focusing on both a 2-year and 10-year
	4.2-Apply innovation, technology, and sustainable practices across project lifecycles (design, construction, operations, maintenance, and replacement)	4.2.1-Complete the SCADA Control System replacement pilot project phase I at the Mills plant		On Target	Pilot project at Mills completed, and we are nearing completion of its evaluation to inform the full control system upgrade.
4.2.2-Implement Enterprise Content Management system			On Target	Contract negotiations and development were finalized in October 2023. The project was successfully presented to and the contract was authorized by the Board in November 2023.	
4.2.3-Develop procurement policies that prioritize sustainable products and practices			On Target	Sustainable Procurement Operating Policy and updates and revisions to Operating Policy G-05 are drafted	
4.2.4-Incorporate sustainable energy practices in CIP projects			On Target	Water Quality Laboratory Upgrade selected to pursue LEED certification.	




FY through Feb. 2024

## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
5. PARTNER with interested parties and the communities we serve	5.1-Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them and toward mutual and/or regional benefits	5.1.1-Assess Community Partnering Program, legislative events, memberships, sponsored events and other Metropolitan funded community outreach activities		On Target	Two pilot projects for the Community Partnering Program have been launched.
		5.1.2-Launch a public engagement strategy focused on climate adaptation, resilience and community needs, to inform the CAMP4W		On Target	With input from Member Agency PIOs, CAMP4W materials were created and posted on the website, which is kept updated with information from the Board process.  Held a listening session focused on CAMP4W Evaluative Criteria, focused on environmental groups.
		5.1.3-Create communication practices that facilitate input of interested parties into board consideration of policies and projects		Completed	Recommendation memo submitted to Office of the GM, and Board Letter template adjusted to provide information about outreach efforts and input received, when the issue has included external engagement.
		5.1.4-Establish Internal Communications program to promote improvements in workplace culture and effectiveness and to support Metropolitan employees' ability to serve as ambassadors		Borderline	While staff have outlined a number of potential improvements to internal communications, budget constraints are requiring us to evaluate our ability to take on new activities with existing resources.

FY through Feb. 2024

## SMART TRACKER - FY 23/24

Strategic Priority	Goal	Outcome	Percent Complete	Status	YTD Achievement
	5.2-Reach disadvantaged communities and non-traditional interested parties to better understand their needs and ensure their inclusion in decision making	5.2.1-Complete the analysis of disadvantaged communities within Metropolitan service area and integrate the findings into our program activities	 50	On Target	Staff is researching community benefit programs to consider incorporation into Pure Water Southern California and other large infrastructure projects.  Focus groups were held in December in English and Spanish to inform efforts to improve services for and to reach underrepresented communities.  Provided a Community Partnering Program grant to Pando Populus for a pilot program with Homeboy Industries to engage young adults that are not in the workforce or the education system.
		5.2.2-Identify tribal interests and engagement strategies	 30	On Target	DEI staff are focusing their tribal outreach on workforce development initiatives.
		5.2.3-Locally implement the national Equity in Infrastructure Program	 60	On Target	Established a baseline for ongoing measurement of HUB outreach and procurement.

FY through Feb. 2024



# STATE WATER PROJECT

## OVERVIEW

Metropolitan participates in the State Water Project (SWP), which is managed, owned and operated by the California Department of Water Resources (DWR) and is an integral part of Metropolitan's conveyance system. The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife. The SWP provides irrigation water to 750,000 acres of farmland, mostly in the San Joaquin Valley, and provides municipal and industrial water to approximately 27 million of California's estimated 39.5 million residents.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area. The budgeted costs for the SWP are as follows:

### SWC Cost Summary, \$ millions<sup>1</sup>

	2022/23 Actuals	2023/24 Budget	2024/25 Adopted	Change from 2023/24	2025/26 Adopted	Change from 2024/25
Delta Water Charge: Capital	\$72.9	\$85.5	\$72.1	(\$13.4)	\$75.1	\$3.0
Delta Water Charge: OMP&R	107.2	107.0	100.6	(6.4)	105.3	4.6
Transportation Capital	119.7	129.4	98.3	(31.2)	99.8	1.5
Transportation OMP&R	237.7	198.7	230.1	31.5	239.5	9.3
Power, Variable	96.2	257.5	258.7	1.3	256.6	(2.2)
Power, OAPF	2.9	5.0	4.1	(0.9)	4.1	0.0
Credits	(59.2)	(56.3)	(75.0)	(18.6)	(76.4)	(1.4)
<b>SWC Total</b>	<b>\$577.4</b>	<b>\$726.7</b>	<b>\$689.0</b>	<b>(\$37.8)</b>	<b>\$703.9</b>	<b>\$14.9</b>
Delta Conveyance Project planning costs <sup>2</sup>	30.0	34.5	11.6	(22.9)	0.0	(11.6)
<b>SWC Total with Delta Conveyance</b>	<b>\$607.4</b>	<b>\$761.2</b>	<b>\$700.6</b>	<b>(\$60.7)</b>	<b>\$703.9</b>	<b>\$3.3</b>
SWC Dues	\$3.8	\$4.1	\$4.2	\$0.1	\$4.3	\$0.1
Thousand Acre-Feet Delivered	572	869	820	(49)	795	(25)

<sup>1</sup> Does not include Departmental costs reflected elsewhere in this Budget.

<sup>2</sup> Delta Conveyance Project planning costs does not include \$4.5 M and \$30.0M funded from California WaterFix refunding in FYs 2022/23 and 2023/24 respectively.

Annually, the DWR reviews and redetermines the water supply aspects of the SWP as required by the SWC, and the financial aspects attributable to the water supply function of the SWP.<sup>1</sup> This results in the annual Statement of Charges to the Contractors for each calendar year. The information that supports the Statement of Charges is published by the DWR as Appendix B to the appropriate Bulletin 132 (i.e., the Statement of Charges for Calendar Year 2024 is supported by Appendix B to Bulletin 132-22). DWR does not charge rates for water service. It does not develop a revenue requirement and then develop rates based on projected billing determinants for a calendar year. Rather, DWR apportions its costs to the Contractors based on their proportionate share of estimated supply costs (Delta Water Charge) and transportation costs (Transportation Charge). All State Water Contractors are obligated to pay all costs incurred by DWR to operate the SWP for water supply delivery, as part of their contractual participation in the project. Therefore, DWR reconciles actual costs for each year and either collects more funds from the Contractors if actual costs exceeded estimated costs, or provides a credit/refund if actual costs were lower than estimated costs.

Metropolitan’s budgeted SWC costs are based on the 2024 Statement of Charges and supporting Appendix B. Power costs are estimated by Metropolitan assuming a 51 percent allocation in 2024, 49 percent allocation in 2025, and 48 percent allocation in 2026 and use of the Central Valley storage programs.

## STATE WATER CONTRACT

The State Water Contractors have long-term contracts with DWR for participation in the SWP, through which they receive delivery of SWP water and use of the SWP transportation facilities. Metropolitan signed the first State Water Contract (SWC) on November 4, 1960, and received its first delivery of SWP water in 1972. Metropolitan has a contractual right to a proportionate share of the project water that DWR determines is available for allocation to the Contractors. This determination is made each year based on existing supplies in storage, forecasted hydrology, and other factors. Available project water is then allocated to the Contractors in proportion to the amounts set forth in Table A of their SWCs (Table A Allocation). Under its SWC, Metropolitan is entitled to roughly 46% of the annual Table A Allocation.

All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by the 29 State Water Contractors. Through Calendar Year 2022, Metropolitan has paid about 51 percent of the total payments to DWR by all Contractors. Metropolitan’s financial records show that total accumulated amounts paid under the SWC are \$15.4 billion through fiscal year 2022/23. Metropolitan’s SWC was originally a 75-year contract through December 31, 2035. Although the SWC had been amended for other provisions before, the term of the contract was extended and approved in December 2018. Among other amendments, the Contractors and DWR agreed to an extension to December 31, 2085.

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the contract and states “[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract ....”. However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors’ rights to use the portion of the SWP conveyance system necessary to deliver water to them (their “Reaches”) also includes the right to convey non-SWP water at no additional cost as long as

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<sup>1</sup> The term “supply” is used to distinguish between other functions of the SWP such as recreation and flood control. The term is not used to distinguish between the conservation (supply) and transportation (conveyance) functions of the SWP under the State Water Contracts for participation in the SWP.

capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendment also expanded the ability to carryover SWP water in SWP storage facilities, allowed participating Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use. These amendments, approved by Metropolitan's Board in 1995, secured the means for individual Contractors to increase supply reliability through water transfers and storage outside their service areas.

The charges to the Contractors include a SWP supply charge (Delta Water Charge) and a SWP transportation charge (Transportation Charge). The Delta Water Charge recovers both Capital and OMP&R costs for those facilities that conserve and create the actual water supply of the SWP. The Delta Water Charge is based on Contractors' cumulative Table A Allocations, and is paid regardless of whether Contractors receive any Table A Allocations in a given year.

The Transportation Charge recovers the costs associated with the various aqueduct reaches that deliver project water to the Contractors. The Capital and fixed OMP&R portions of the SWP Transportation Charge recover costs from the Contractors based on their proportionate use of facilities. Unlike the Delta Water Charge, which is uniform for a unit of Table A water, the allocation of these portions of the Transportation Charge will vary based on the aqueduct segments needed to deliver water to a specific Contractor. The further a Contractor is from the Delta and the greater its capacity in the transportation facilities, the greater its allocation of the Capital and fixed OMP&R Transportation Charges. The capacity of the SWP to deliver water decreases with distance from the Banks Pumping Plant, located in the Sacramento-San Joaquin Delta, as water is delivered to Contractors through the South Bay Aqueduct and the Coastal Branch Aqueduct, and to turnouts in the San Joaquin Valley and Southern California. Payment of the Transportation Charge entitles Contractors to the right to use their capacity in the SWP facilities for transportation of SWP or non-SWP water, on a space available basis, under the SWC. A Contractor that participates in the repayment of a particular reach, or segment of the SWP, has already paid the costs of using that reach for the conveyance of water supplies through the Transportation Charge.

In addition to the charges for supply (the Delta Water Charge capital and OMP&R) and Transportation (Transportation Capital and OMP&R), DWR also charges for the power needed to deliver project water throughout the system. Two charges recover these power costs: the variable OMP&R portion of the Transportation Charge (Variable Charge) and the Off-Aqueduct Power Facilities (OAPF) charge. Because the SWC are cost recovery contracts, DWR invoices Contractors on an estimated basis for any calendar year, and then provides adjusting credits or debits in later years once actual costs are reconciled with the estimated costs.

The Variable Charge includes the annually estimated cost of purchased power including capacity and energy, cost of SWP power generation facilities, program costs to offset annual fish losses at the Banks Pumping Plant, purchased transmission services, and credits for sales of ancillary services and excess SWP system power sales. The Variable Charge is calculated on the basis of the energy required to pump an acre-foot of water to its take-out point multiplied by the system energy rate, less energy from the recovery generation plants. The system energy rate is a system-wide average rate calculated as the net cost of energy--total costs less revenues--divided by the net energy required to pump all water. That melded rate is applied to each acre-foot of water delivered to SWP customer based on the power required to pump the water to designated delivery points on the system. DWR can adjust the system energy rate as the calendar year progresses in order to reflect actual costs.

The OAPF charge recovers environmental remediation costs of power generation facilities not on the aqueduct, namely Reid Gardner Unit 4, and is negligible at this time.

The SWP uses low-cost hydroelectric and recovery generation resources, but they only provide about 50 percent of the SWP energy needs in an average water year. The SWP relies on the wholesale market and contractual resources with exposure to market price volatility for as much as 30 to 35 percent of its needs, using other contractual resources to fill in the difference.

The SWP energy required to move water to Metropolitan is related to the transportation on the East Branch through Devil Canyon and on the West Branch through Castaic.

Cost of SWP Power for Metropolitan Terminal Delivery Points, \$ per Acre-Foot

	CY 2019 DWR	CY 2020 DWR	CY 2021 DWR	CY 2022 DWR	CY 2023 Estimated	CY 2024 Estimated	CY 2025 Estimated
East Branch	\$159	\$175	\$291	\$256	\$233	\$241	\$194
West Branch	\$146	\$170	\$271	\$242	\$243	\$228	\$210

The SWP energy costs are impacted by two factors. First, the annual hydrology, and second, the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator’s (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center.

### BUDGET HIGHLIGHTS

The budget for the SWP is decreasing in FY 2024/25 compared to the FY 2023/24 budget due the implementation of a contract extension that allows DWR to amortize debt service over a longer period.

The Biennial Budget includes Metropolitan’s planned contribution of \$12 million over the budget period for DCP planning activities. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. If staff determines that Metropolitan’s appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, at a later date staff will recommend that the Board separately consider Metropolitan’s participation in a new DCP, after project planning has progressed further.

# COLORADO RIVER AQUEDUCT

## OVERVIEW

Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the Colorado River Aqueduct (CRA). The CRA consists of 5 pumping plants, 450 miles of high voltage power lines, 1 electric switching station, 4 regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. Metropolitan first delivered CRA water in 1941 to its member agencies.

Metropolitan owns, operates, and manages the CRA. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Under its contracts with the federal government, Metropolitan has a fourth priority to 550,000 acre-feet per year of Colorado River water, less certain use by higher priority holders and Indian tribes. Metropolitan also holds a fifth priority for an additional 662,000 acre-feet per year that exceeds California's 4.4 million acre-foot per year basic apportionment, 38,000 acre-feet under the sixth priority during the term of the Colorado River Water Delivery Agreement, and another 180,000 acre-feet per year when surplus flows are available. Metropolitan can obtain water under the fourth, fifth, and sixth priorities from:

- Water unused by the California holders of priorities 1 through 3;
- Water saved by extraordinary conservation programs, crop rotation, and water supply program; or,
- When the U.S. Secretary of the Interior makes available:
  - o Surplus water, Intentionally Created Surplus water, and/or
  - o Water apportioned to, but unused by, Arizona and Nevada.

Metropolitan also receives water from the Colorado River pursuant to CRA supply programs and water exchanges.

### CRA Cost Summary, \$ millions

	2022/23 Actuals	2023/24 Budget	2024/25 Adopted	Change from 2023/24	2025/26 Adopted	Change from 2024/25
CRA Power <sup>1</sup>	\$161.9	\$85.6	\$84.5	-\$1.1	\$93.3	\$8.8
CRA Dues <sup>2</sup>	\$0.9	\$0.8	\$1.0	\$0.2	\$1.0	—
Thousand Acre-feet	956	923	750	(173)	760	10

<sup>1</sup>Does not include Departmental costs reflected elsewhere in this Budget

<sup>2</sup>Six Agency and Colorado River Authority of California

Budgeted CRA Power costs represent expenditures for the Hoover and Parker contracts and market power purchases to support budgeted CRA water deliveries.

## CRA COSTS FOR TRANSPORTATION AND SUPPLY

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The costs of the CRA activities include labor, materials and supplies, outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan’s capital financing activities are apportioned to service functions, such as the CRA.

The costs of the CRA supply portfolio developed by Metropolitan are paid by Metropolitan. The CRA supply portfolio is supported by Water Resource Management labor, materials and supplies. The CRA supply portfolio activities benefit from Water Resource Management support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements associated with the CRA supply portfolio capital assets and has capitalized these investments as Participation Rights.

Accordingly, the CRA costs for transportation and supply are reflected in the Departmental and General District Requirements budgets.

## CRA COST FOR POWER

Metropolitan currently has four basic sources of power available to meet CRA energy requirements: Hoover Power, Parker Power, and wholesale power purchases from inside and outside the California Independent System Operator (CAISO). For wholesale power purchases within the CAISO, the appropriate price index is the South Path 15 for Southern California (SP15), whereas wholesale power purchases outside of CAISO utilize the MEAD bi-lateral index. MEAD substation is an import interconnection point for power into CAISO and can be utilized by Metropolitan to import power for the CRA from entities throughout the western United States.

### Cost of CRA Power Sources, \$ per Megawatt-hour (MWh)

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Hoover <sup>1</sup>	\$18.33	\$17.64	\$15.76	\$17.79	\$20.98
Parker <sup>1</sup>	\$17.67	\$18.34	\$15.86	\$18.33	\$19.63
SP15, off-peak <sup>2</sup>	\$38.52	\$27.29	\$35.73	\$85.15	\$52.56
SP15, on-peak <sup>3</sup>	\$49.97	\$38.84	\$46.60	\$91.92	\$61.81
MEAD, off-peak <sup>4</sup>	\$31.89	\$23.61	\$36.98	\$87.21	\$54.37
MEAD, on-peak <sup>5</sup>	\$44.31	\$29.01	\$65.89	\$87.92	\$60.69

<sup>1</sup>Information from Annual Reports for years 2019, 2020, 2021, 2022, and 2023.

<sup>2</sup>SP15, off-peak price, is used to determine Metropolitan’s off-peak energy costs.

<sup>3</sup>SP15, on-peak, is used to determine the market value of Metropolitan’s sales of excess energy, if any. SP15 on-peak is also used to determine the pumping costs associated with pumping non-Metropolitan water through the CRA system, unless otherwise provided by contract.

<sup>4</sup>MEAD, off-peak, is used to determine Metropolitan’s off-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO.

<sup>5</sup>MEAD, on-peak, is used to determine Metropolitan’s on-peak supplemental energy costs imported at MEAD substation for power outside of the CAISO. The market value of Metropolitan’s sales of excess energy, when not all power supply is needed for the CRA pumps, if any, is valued at SP15 index for on and off-peak periods.

Metropolitan’s current basic power resource mix, which is comprised of generation from Hoover and Parker dams, is cost effective but is not sufficient energy to pump Metropolitan’s Colorado River water supplies in all years. For that reason, Metropolitan is required to purchase additional or supplemental power to transport Colorado River water supplies in some years. As a result, Metropolitan requires that any party seeking to transport non-Metropolitan water through its Colorado River Aqueduct to purchase, or arrange for Metropolitan to purchase, the power supplies required to pump that water.

Supplemental power can be purchased and transmitted to Metropolitan to pump non-Metropolitan water through the CRA. The market price for electric energy prices is regularly tracked and published for various regions in California. Metropolitan uses the CAISO Open Access Same-time Information System (OASIS) Day-Ahead Locational Marginal Price as reflective of the supplemental power costs for electric energy used for its pumping plants on the CRA. The regional index price applicable to energy sold for use on the CRA is designated as “South-of-Path 15”, or SP15, and is reflective of Southern California market energy prices.

### South-of-Path 15 On-Peak Energy Prices, \$/MWh

	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
January	\$42.56	\$33.60	\$33.22	\$52.50	\$144.57
February	\$72.73	\$26.85	\$71.09	\$42.16	\$68.92
March	\$35.98	\$25.49	\$29.91	\$40.94	\$64.13
April	\$24.83	\$17.11	\$28.04	\$53.03	\$46.35
May	\$20.25	\$16.81	\$26.59	\$57.10	\$18.10
June	\$24.81	\$23.72	\$56.06	\$70.88	\$25.54
July	\$35.24	\$31.63	\$78.89	\$82.30	\$79.27
August	\$36.39	\$108.05	\$65.08	\$113.88	\$87.16
September	\$40.35	\$46.14	\$72.09	\$133.89	\$36.35
October	\$35.71	\$48.29	\$57.89	\$65.33	\$54.56
November	\$37.44	\$39.32	\$60.14	\$82.95	\$51.70
December	\$37.80	\$40.80	\$63.40	\$257.11	\$45.37

MWh = megawatt-hour, or 1,000 kilowatt-hours  
 Financial forecast for the budget assumes all supplement energy purchased at SP 15 rates.

## RESOURCE ADEQUACY (RA) OBLIGATIONS

RA is the mechanism the California ISO uses to ensure there is adequate generation online during the peak demand period each month. Each entity that is responsible for serving load is required to show that they have contracted with sufficient generation capacity to meet their forecasted demand, plus an additional safety margin. If an entity does not have sufficient native generation, they can contract for capacity with merchant generators. Currently, entities can count load reduction programs, called Demand Response, in lieu of generation resources.

Metropolitan uses a combination of our Hoover and Parker Dam generation, Demand Response, and purchased capacity to meet our RA obligation for the CRA. The anticipated new rules for RA obligations might not allow credits for Demand Response capacity in the future. As a result, Metropolitan will need to purchase RA from merchant generators, which can be expensive during the peak load months. The budget includes financial impacts from the anticipated market rule changes.

## BUDGET HIGHLIGHTS

The budget for the CRA power is increasing in FY 2024/25 compared to FY 2023/24 due to higher market power rates and anticipated market rule changes for Resource Adequacy obligations.



# SUPPLY PROGRAMS

## OVERVIEW

Metropolitan’s principal sources of water supplies are the State Water Project (SWP) and the Colorado River. Metropolitan receives water delivered from the SWP under State Water Contract (SWC) provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. Metropolitan also holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount from the Colorado River depending on availability of surplus supplies. The Supply Programs supplement these SWP and Colorado River supplies. The budgeted costs for the Supply Programs are as follows:

### Supply Programs Cost Summary, \$ millions

	2022/23 Actuals	2023/24 Budget	2024/25 Adopted	Change from 2023/24	2025/26 Adopted	Change from 2024/25
AVEK High Desert Water Bank <sup>1</sup>	\$30.3	\$46.0	\$91.2	\$45.2	\$51.1	(\$40.0)
IID/MWD Conservation	10.3	12.4	12.8	0.4	13.3	0.5
In Basin	13.1	3.6	10.4	6.8	10.7	0.4
Multi Species Conservation Program	4.4	4.2	5.2	1.0	2.6	(2.6)
Other CRA <sup>2</sup>	10.7	15.6	17.5	2.0	18.6	1.0
Other SWP Programs	54.4	1.4	5.0	3.6	5.3	0.3
PVID Program <sup>2</sup>	7.1	9.0	33.0	24.1	33.4	0.3
Sites Reservoir	5.0	8.0	4.5	(3.5)	0.0	(4.5)
System Conservation	0.0	10.0	0.0	(10.0)	0.0	0.0
<b>Total Supply Programs</b>	<b>\$135.3</b>	<b>\$110.1</b>	<b>\$179.5</b>	<b>\$69.4</b>	<b>\$135.0</b>	<b>(\$44.6)</b>

Totals may not foot due to rounding.

<sup>1</sup> The capital expenditures for AVEK High Desert Water Bank program are proposed to be bond funded.

<sup>2</sup>Some expenditures for CRA Supply Programs are proposed to be funded from IRA Bucket 1 Funding

Budgeted Supply Programs costs represent opportunities and actions associated with a 51 percent SWP allocation in 2024, 49 percent allocation in 2025, and 48 percent allocation in 2026, and diversions on the CRA of 750 to 760 TAF. On the SWP, Supply Program expenditures support maximizing storage capabilities of the Central Valley storage programs, utilizing transfer and exchange programs recently executed, and bringing the balance into the region. On the CRA, the expenditures support the Palo Verde Irrigation District (PVID) land fallowing program and the Imperial Irrigation District/Metropolitan Conservation Program, as well as other programs to conserve and develop supplies.

The budget assumed receipt of funding provided by the Inflation Reduction Act (IRA) for conservation agreements in California to reduce water demand on the Colorado River and leave water at Lake Mead as system water. The budget includes the projected financial benefits: funding of \$47.3 million annually for FY 2023/24 through 2025/26 to offset PVID and Bard supply program costs in the respective fiscal years.

Total expenditures paid from current year revenues are budgeted at \$94.0 million for FY 2024/25 and \$90.9 million in FY 2025/26. Additional spending on Participation Rights for the AVEK High Desert Water Bank Program of \$85.5 million in FY 2024/25 and \$44.1 million in FY 2025/26 will be funded by debt.



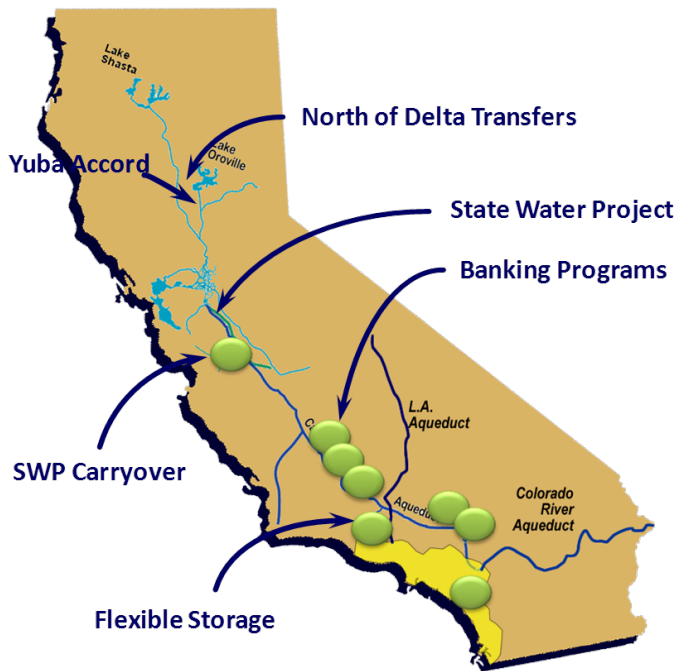
## SUPPLY PROGRAMS DEVELOPED ALONG THE STATE WATER PROJECT

Since adoption of the 1996 Integrated Resources Plan (1996 IRP) and subsequent updates, Metropolitan has developed and actively managed a portfolio of supplies to convey through the California Aqueduct, as shown in Figure 10. The geographical locations of the projects are indicated by the green dots; Metropolitan’s service area is designated by the yellow highlighted area. Metropolitan submits delivery schedules to DWR for these supplies, and alters these schedules throughout the year based on changes in the availability of SWP and Colorado River water. The portfolio of supplies that Metropolitan has developed to be conveyed through the SWP since adoption of the Monterey Amendments and the 1996 IRP extend from north of the Delta to Southern California.

Since the Monterey Amendments, Metropolitan has secured one-year water transfer supplies through Metropolitan-only purchases, buyer coalition-purchases, and Governor Drought Water Banks. The most recent years that Metropolitan secured these one-year transactions were 2008 through 2010, 2015, 2021, and 2022. Metropolitan opted not to pursue these transactions in 2012 through 2014, 2018, or 2020. Most of the sellers were Sacramento Valley water users who are not Contractors. Other Contractors obtained one-year water transfers during this time frame as well. There were no single-year transfer programs in 2011, 2016-2017, 2019, or 2023 because of favorable water supply conditions and lack of capacity to move transfer supplies through the Delta.

In addition to the above one-year water transfers, Metropolitan purchases long-term water transfer supplies through the Yuba Accord. The Yuba Accord has provided water to enhance SWP and CVP water supply reliability by offsetting Delta export reductions and providing dry year water supplies for participating SWP and CVP contractors. Acting as the intermediary for Yuba Accord transactions, DWR purchases water made available by the Yuba County Water Agency and sells a portion of such water to Metropolitan. Water purchased under the Yuba Accord is not SWP water.

**Figure 10: California Aqueduct Portfolio of Supplies**



In addition to one-year transfers, and the Yuba Accord water, Metropolitan has developed groundwater storage agreements that allow Metropolitan to store available supplies in the Central Valley for return later. Metropolitan enters into point of delivery agreements with DWR to deliver water supplies from the SWP facilities to these

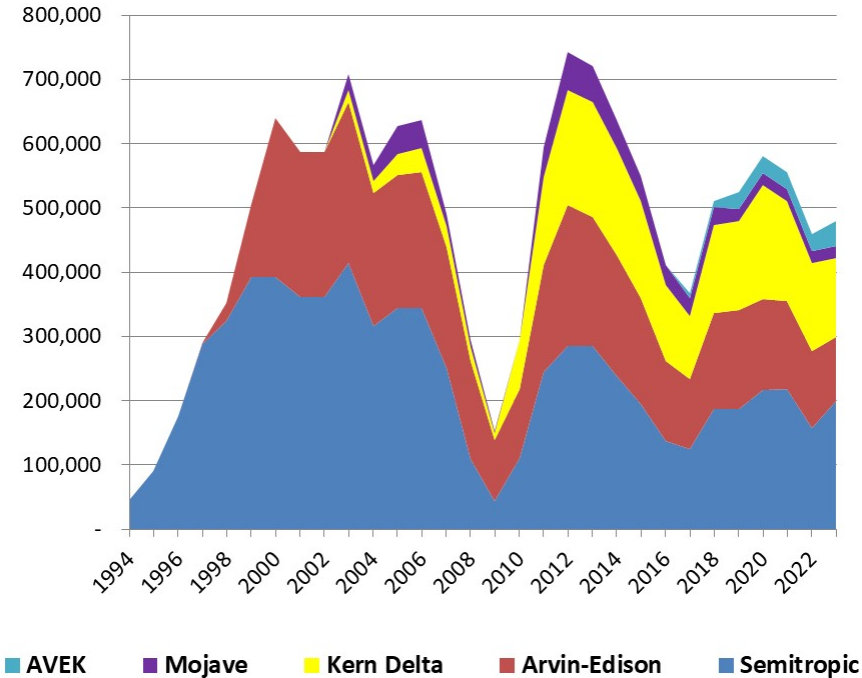
storage programs. Later, Metropolitan enters into introduction of local supplies agreements to return these water supplies to the SWP system for delivery to Metropolitan's service area. Metropolitan's storage activities are shown in Figure 11. The figure shows how the programs function to store supplies during surplus conditions and return supplies during a drought. The storage programs have demonstrated that they can provide a significant amount of water when needed.

#### SWP Groundwater Storage Programs year–end balance, acre–feet

- Arvin-Edison Storage Program: under the agreement, Arvin-Edison Water Storage District stores water on behalf of Metropolitan. Up to 350,000 acre-feet can be stored; Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The water is returned by direct groundwater pump-in and exchange of SWP supplies. A 2017 State Water Resources Control Board (SWRCB) regulation setting a Maximum Contaminant Level (MCL) for trichloropropane (TCP) has temporarily suspended use of this program due to the levels detected in the program groundwater wells. In November 2021, a change in point-of-delivery was initiated to allow Metropolitan access to its stored water through an operational exchange of Friant Division CVP water supplies with SWP supplies in San Luis Reservoir.
- Semitropic Storage Program: under the agreement, Metropolitan stores water in the groundwater basin underlying land within the Semitropic Water Storage District. The maximum storage capacity is 350,000 acre-feet. Currently, the minimum annual yield to Metropolitan is 38,200 acre-feet, and the maximum annual yield is 229,700 acre-feet depending on the available unused capacity and the SWP allocation. The water is returned by direct groundwater pump-in and exchange of SWP supplies.
- Kern Delta Storage Program: under the agreement, Kern Delta Water District provides groundwater banking and exchange transfer to allow Metropolitan to store up to 250,000 acre-feet of SWP water in wet years and take up to 50,000 acre-feet annually during droughts. The water is returned by direct groundwater pump-in or by exchange of surface water supplies.
- Mojave Storage Program: under the agreement, Mojave Water Agency provides groundwater banking and exchange transfers to allow Metropolitan to store up to 390,000 acre-feet for later return. The agreement allows Metropolitan to annually withdraw Mojave Water Agency's SWP contractual amounts, after accounting for local needs. The Mojave storage program returns water only by exchange of surface water supplies.
- Antelope Valley-East Kern (AVEK) Storage Program: under the storage agreement, Metropolitan, at its discretion, would return half of the exchange water to AVEK at the Banks pumping plant. Under the Storage Program, Metropolitan, at its discretion, could store up to 30,000 acre-feet of its SWP Table A amount or other supplies in the Antelope Valley Groundwater Basin in an account designated for Metropolitan. The water is returned by exchange of SWP supplies or direct groundwater pump-in. The AVEK Program is expiring in 2025, however the remaining balance has been transferred to the new High Desert Water bank Program. Please see below for details.
- Antelope Valley-East Kern (AVEK) High Desert Water Bank Program: under this agreement, AVEK provides storage for up to 70,000 acre-feet per year of its unused SWP Table A amount to Metropolitan or other supplies for later return. The maximum storage capacity for Metropolitan supplies would be 280,000 acre-feet. The program is designed to return up to 70,000 acre-feet per year by direct pump-in to the East Branch of the California Aqueduct. Water can also be returned by exchange of SWP supplies when available.
- Sites Reservoir: under a participation agreement, Metropolitan is contributing to planning activities for a proposed reservoir project of approximately 1.3 to 1.5 million acre-feet being analyzed by the Sites Reservoir Authority, to be located in Colusa County. Water stored for the proposed project would be diverted from the Sacramento River. The maximum storage capacity for Metropolitan supplies would be 311,700 acre-feet. As proposed, the program would be designed to return up to 50,000 acre-feet per year on average to Metropolitan by direct pump-in to the Sacramento River. Metropolitan's agreement to participate in funding

of this phase of project development activities does not commit Metropolitan to participate in any actual reservoir project that may be undertaken in the future.

**Figure 11: SWP Groundwater Storage Programs, acre-feet**



Metropolitan has developed exchanges and transfers with other Contractors to enhance supply flexibility. Some of these agencies have extensive groundwater supplies and are willing to exchange their SWP supplies.

- San Gabriel Valley Water District: under this agreement, Metropolitan delivers treated water to a San Gabriel Valley Water District (SGVMWD) sub-agency in exchange for twice as much untreated SWP supplies delivered into the Main San Gabriel groundwater basin. The groundwater basin supplies water to both Metropolitan and SGVMWD sub-agencies. Each year Metropolitan purchases 5,000 acre-feet minus the unbalanced exchange amount. By mutual agreement Metropolitan may purchase more than the 5,000 acre-feet per year should SGVMWD have additional supplies available. This program has the potential to increase Metropolitan’s reliability by providing 115,000 acre-feet through 2035.
- Desert Water Agency/Coachella Valley Water District Advance Delivery Program: under this program, Metropolitan delivers Colorado River water to the Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) in advance of the exchange for their SWP Contract Table A allocations. In addition to their Table A supplies, the agencies can take delivery of SWP supplies available under Article 21 and the Turn-back Pool Program, and non-SWP supplies separately acquired by each agency. These non-SWP supplies have included Yuba Accord water, drought water bank water, and San Joaquin Valley water. By delivering enough water in advance to cover Metropolitan’s exchange obligations, Metropolitan is able to receive DWA and CVWD’s available SWP supplies in years in which Metropolitan’s supplies are insufficient without having to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under the amended agreement, CVWD and DWA in wet years pay a portion of Metropolitan’s water storage management costs, up to a combined total of \$4 million per year.

## SUPPLY PROGRAMS DEVELOPED ALONG THE COLORADO RIVER AQUEDUCT

Since adoption of the 1996 IRP and subsequent updates, Metropolitan has developed and actively manages a portfolio of supplies to convey through the CRA. Metropolitan determines the delivery schedule of those resources throughout the year based on changes in the availability of SWP and of Colorado River water. Figure 12 shows the geographic location of the portfolio of additional CRA supplies, designated by the red dots, which Metropolitan has developed for diversion into the CRA since adoption of the 1996 IRP. These resources extend from Lake Mead to Southern California and provide supply to Metropolitan’s service area, which is shown in the yellow highlighted area.

**Figure 12: Colorado River Aqueduct Portfolio of Supplies**



- Bard Following:** Approved by the MWD Board in December 2019, the Bard Water District (Bard) Seasonal Following Program (Program) incentivizes farmers to fallow up to 3,000 acres irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in Bard and augment Metropolitan's Colorado River supplies. Metropolitan estimates a water savings of 1.9 acre-feet per irrigable acre. A fallowing call inviting farmers in Bard Unit to participate has been made for the summer of 2024. Metropolitan, USBR, and Bard Water District entered into a System Conservation Implementation Agreement where water conserved under this program will be left in Lake Mead in 2024, 2025, and 2026 in exchange for Federal funding under Reclamation's Lower Colorado Conservation Programs.
- Imperial Irrigation District/Metropolitan Conservation Program:** Under a 1988 Conservation Agreement, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service

area in return for the right to divert the water conserved by those investments. Metropolitan provided funding for IID to construct and operate a number of conservation projects that have conserved up to 109,460 acre-feet of water per year that is then available to Metropolitan. Execution of the Quantification Settlement Agreement (QSA) and related agreements resulted in changes in the availability of water under the program. As a result of a 2014 IID-Metropolitan letter agreement, the amount of water conserved by IID has been quantified at 105,000 acre-feet per year beginning in 2016. Metropolitan is guaranteed at least 85,000 acre-feet per year, with the remainder of the conserved water being made available to the Coachella Valley Water District (CVWD), if needed under the 1989 Approval Agreement as amended. However, in a recent clarifying agreement, CVWD has agreed to limit its call to 15,000 acre-feet per year through 2026, yielding 90,000 acre-feet annually from the program for Metropolitan, with Metropolitan delivering the remaining 15,000 AF to CVWD at Whitewater.

- System Efficiency Pilot: Metropolitan has agreed to jointly fund a pilot project in Arizona to test the efficacy of a novel drip irrigation technology produced by an Israeli company called N-Drip. The key component of the technology is a drip emitter that resists clogging under relatively low water pressure, which allows for drip irrigation systems without pumps or electricity, significantly reducing the cost of installation and operation. Other funding partners include the Central Arizona Water Conservation District (the project lead), the Southern Nevada Water Authority, the Central Utah Water Conservancy District, and Denver Water. The pilot is primarily a research project expected to yield minimal water savings for Metropolitan (at most, 400 AF in 2022). However, if the technology is widely adopted in the future, it could yield significant additional conservation savings that could increase Metropolitan's Colorado River supplies.
- Palo Verde Land Management, Crop Rotation, and Water Supply Program: Under this program, participating landowners in the PVID's valley service area are paid to reduce water use by not irrigating a portion of their land. A maximum of 35 percent of the participating lands within the Palo Verde Valley can be fallowed in any given year. This program saves up to 133,000 acre-feet of water in certain years, and a minimum of up to 33,000 acre-feet per year. The term of the program is 35 years. Fallowing began in 2005. In March 2009, Metropolitan and PVID entered into a supplemental emergency fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. Since 2005, over 1.3 million acre-feet total of Colorado River water has been conserved. The volume of water that becomes available to Metropolitan is governed by the QSA and the Colorado River Water Delivery Agreement. Under these agreements:
  - Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
  - Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

Metropolitan, USBR, and PVID entered into a System Conservation Implementation Agreement where water conserved under this program from August 1, 2023 to July 31, 2026 will be left in Lake Mead in exchange for Federal Funding under Reclamation's Lower Colorado Conservation Program under IRA Bucket 1 funding.

- Quechan Tribe Diversion Forbearance: In 2005, Metropolitan entered into a settlement agreement in Arizona v. California with the Quechan Indian Tribe and other parties. The Tribe uses Colorado River water on the Fort Yuma Indian Reservation. In addition to the amounts of water decreed for the benefit of the Reservation in the 1964 Arizona v. California decree, under the 2005 settlement agreement the Tribe is entitled to (a) 20,000 acre-feet of diversions from the Colorado River, or (b) the amount necessary to supply the consumptive use required for irrigation of a specified number of acres, and for the satisfaction of related uses, whichever is less. Of the additional diversions, 13,000 acre-feet became available to the Tribe in 2006. An additional 7,000 acre-feet will become available to the Tribe in 2035. Metropolitan agreed to provide

annual incentive payments to the Tribe if the Tribe forbore diversion of the additional water, thereby allowing Metropolitan to divert it. The U.S. Bureau of Reclamation (USBR) will make incentive payments to the Tribe instead of Metropolitan for the forbearance years 2023 through 2025 under Bucket 1 of USBR's Lower Colorado River Basin System Conservation and Efficiency Program. As a result, forborne water will remain in Lake Mead as system water and will not be diverted by Metropolitan during those years.

- Quechan Fallowing: Approved by the MWD Board in December 2021, the Metropolitan/Quechan Tribe Seasonal Fallowing Pilot Program (Pilot) incentivizes farmers to fallow land irrigated with Colorado River water for the spring and summer months in order to reduce water consumption in the Quechan tribal land and augment Metropolitan's Colorado River supplies. Since the Quechan Tribe's water supplies have a higher priority than Metropolitan's on the Colorado River, Metropolitan benefits from the reduced water consumption as the saved water will remain in the Colorado River and be made available for diversion.
- Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement: Under this 2004 agreement and a related Operational Agreement, the Southern Nevada Water Authority (SNWA) may offer a portion of its Colorado River water supplies to Metropolitan when there is space available in the CRA to receive the water. SNWA may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water. In 2009, 2012, and 2015, Metropolitan, the Colorado River Commission of Nevada, and SNWA amended the related Operational Agreement dealing with volumes of water that may be stored or called at various times. The agreements can be terminated upon 90 days' notice following the return of the water stored by Metropolitan.
- Lower Colorado Water Supply Project: This project develops additional water supplies by pumping groundwater into the All-American Canal for delivery to IID. An equal volume of Colorado River water is then made available for other water users along the river. Under a contract among Metropolitan, the City of Needles, and the United States Bureau of Reclamation, Metropolitan receives any excess unused water developed by the project. Metropolitan makes payments to a trust fund to develop a replacement project or to desalt the groundwater should the groundwater become too saline for discharge into the All-American Canal.
- Exchange with the United States (San Luis Rey): 16,000 acre-feet from the All-American and Coachella Canal lining projects is allocated to the San Luis Rey Settlement Parties. The United States furnishes this water at Metropolitan's Colorado River Intake on Lake Havasu. Metropolitan takes possession of the water and by exchange delivers an equal volume of Metropolitan's blended supplies to SDCWA. By separate agreement, SDCWA conveys the water to the San Luis Rey Settlement Parties.
- California ICS Agreement: Under a 2007 agreement and its amendment, Metropolitan may store a portion of IID's excess conservation in Metropolitan's service area, subject to both annual creation and total accumulation limits. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return the water. The total accumulation limit for this program has been reached.
- Lake Mead Storage Program: In December 2007, Metropolitan entered into agreements to set forth the guidelines under which Intentionally Created Surplus (ICS) water is developed, stored in, and delivered from Lake Mead. The amount of water stored in Lake Mead must be created through extraordinary conservation, system efficiency, or tributary conservation methods. ICS is available for delivery in a subsequent year, with Extraordinary Conservation ICS subject to a one-time deduction to benefit the river system and annual evaporation losses. Extraordinary conservation methods used by Metropolitan to date are water saved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, the Lower Colorado Water Supply Project, All American and Coachella Canal water received under the San Luis Rey Indian Water Rights Settlement Agreement prior to the settlement parties receiving the water, groundwater desalination, groundwater recovery, water conserved from Metropolitan's Landscape Transformation Program, water conserved from implementation of indoor water conservation devices, and water recycling. "System Efficiency ICS" can be created through the development and funding of system efficiency projects that save

water that would otherwise be lost from the Colorado River. Metropolitan has participated in two projects to create System Efficiency ICS, and two projects to create ICS by conservation in Mexico:

- Yuma Desalting Pilot Project: Metropolitan contributed funds toward the 2010-2011 pilot run of the Yuma Desalting Plant in exchange for a portion of the desalinated water produced by the project. The Yuma Desalting Plant treated brackish agricultural drainage that flows into Mexico to the Ciénega de Santa Clara at the terminus of the Colorado River but does not count as deliveries to Mexico under the Mexican Water Treaty. Metropolitan's portion of the desalinated water was 24,397 acre-feet and this water was stored in Lake Mead. Metropolitan can take delivery of up to the entire amount in any single year.
- Drop 2 (Warren H. Brock) Reservoir: Metropolitan contributed funds toward the Bureau of Reclamation's construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County. This reservoir conserves about 55,000 acre-feet of water per year by capturing and storing otherwise non-storable flow. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead, and has the ability to take delivery of up to 25,000 acre-feet of water in any single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.
- In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply between 2013 and 2017 through an international pilot project in Mexico. Metropolitan's total share of costs was \$5 million for 47,500 acre-feet of project supplies. The costs were paid, and the conserved water was credited to Metropolitan's intentionally-created surplus water account. In December 2013, Metropolitan and IID executed an agreement under which IID paid half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, 23,750 acre-feet.
- In September 2017, Metropolitan executed agreements in support and continuation of a program to augment Metropolitan's Colorado River supply through international pilot projects in Mexico. Under the new set of agreements, Metropolitan's total share of costs are expected to be \$3.75 million for 27,275 acre-feet of project supplies. The costs will be paid in three parts, 2020, 2023, and 2026. Water was and will be received in the year of payment.
- In May 2019, Upper and Lower Basin Drought Contingency Plans (DCP) were executed and became effective. The Lower Basin DCP Agreement requires California, Arizona, and Nevada to store defined volumes of water in Lake Mead at specified lake levels. Pursuant to intrastate implementation agreements, and the September 16, 2021 Settlement Agreement with IID, Metropolitan will be responsible for 93 percent of California's DCP Contributions under the Lower Basin DCP. Implementation of the Lower Basin DCP enhances Metropolitan's ability to store water in Lake Mead, changes the one-time deduction and annual evaporation rates, and ensures that water in storage can be delivered at lower elevation levels. The Lower Basin DCP increases the total volume of water California may store in Lake Mead by 200,000 acre-feet, which Metropolitan will have the right to use. The Lower Basin DCP will be effective through 2026.

In September 2021, Metropolitan and IID executed a settlement agreement. Provisions included Metropolitan's creation of an IID ICS-Sub Account. IID can store water in this sub account, subject to both annual creation and accumulation limits. Terms of IID's ICS Sub-Account mirror those of the Drought Contingency Plan with respect to one-time deductions, annual evaporation rates, and accessibility at various Lake Mead elevations. IID may call for return of the water in a future year, in which Metropolitan would reduce its Colorado River water order to return this water.

In addition to programs that add water to Lake Mead in an ICS account in Metropolitan's name, Metropolitan has entered into various agreements to create system water. System water does not accrue to the benefit of a user, but does increase the elevation of Lake Mead, thereby increasing the reliability of



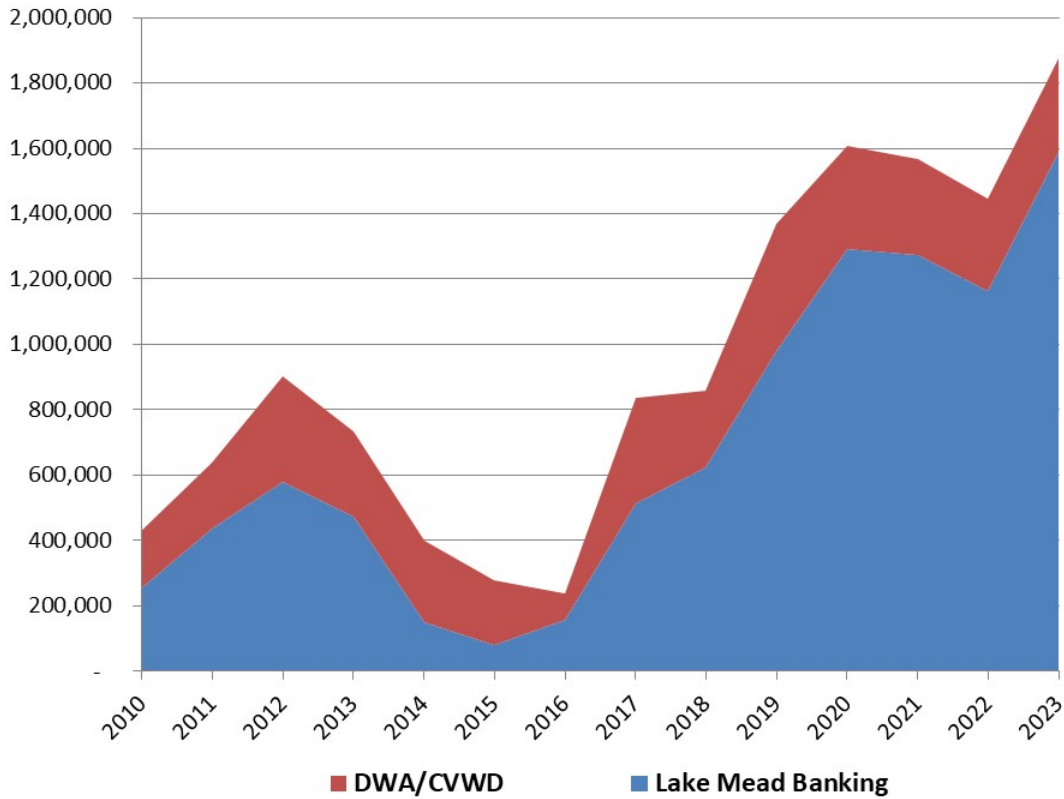
Metropolitan's base and transfer supplies. Active programs or agreements that generate system water include:

- Reclamation's Lower Colorado River Basin System Conservation and Efficiency Program (LC Conservation Program) - This program was funded with an initial allocation from the 2022 Inflation Reduction Act. The funding is used for the creation of Colorado River system water through voluntary water conservation and reduction in use. Metropolitan has signed multiple system conservation implementation agreements with Reclamation and our agricultural partners to create system water from Metropolitan supply programs in exchange for Federal funding. While this and the other system conservation generated under this program does not directly generate supplies for Metropolitan, it does increase the elevation of Lake Mead, thereby increasing the reliability of Metropolitan's base and transfer supplies.
- PVID System Conservation - In June 2021, Metropolitan's board approved entering into a funding agreement with USBR, Central Arizona Water Conservation District, and Southern Nevada Water Authority to fund fallowing additional acres under the Palo Verde land Management, Crop Rotation, and Water Supply Program. The water conserved from the additional fallowed acres stays in Lake Mead to improve the system storage, thereby reducing the risk of future water curtailments. the fallowing of the additional acres started August 1, 2021 and will continue through July 31, 2023. The projected water conserved under the agreement is up to 125,000 acre-feet.
- System Conservation Pilot Program – On July 30, 2014, Metropolitan entered into an agreement with USBR, CAWCD, SNWA, and DW for a Pilot Program for funding the creation of Colorado River system water through voluntary water conservation and reduction in use. While the pilot has ended, it was successful, and Metropolitan expects that a similar structure may be used to fund additional voluntary water conservation and reductions in use in response to the 24 Month Study's minimum probable projection of Lake Mead falling below elevation 1,030 feet within the next two years. While system conservation does not directly generate supplies for Metropolitan, it does increase the elevation of Lake Mead, thereby increasing the reliability of Metropolitan's base and transfer supplies.
- Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs: Under these programs, Metropolitan delivers Colorado River water to the DWA and CVWD, in exchange for future deliveries by DWA and CVWD of an equal volume of their SWP supplies. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient to deliver an equivalent amount of Colorado River water. In December 2019, the exchange agreements were amended to provide more flexibility and operational certainty for the parties involved. Additionally, under the amended agreement, Coachella and Desert in wet years pay a portion of Metropolitan's water storage management costs, up to a combined total of \$4 million per year<sup>1</sup>.

Figure 13 shows the year-end balance in Metropolitan's Colorado River storage programs. The combined capacity of the Lake Mead Storage program and the DWA/CVWD advance delivery program is 2,300,000 acre-feet. This is inclusive of the amount of water in storage in Lake Mead as a result of the Drop 2 Reservoir and Yuma Desalting Plant system efficiency projects.



**Figure 13: Colorado River Storage Programs, acre-feet**



<sup>1</sup> DWA has a SWP Table A contract right of 55,750 acre-feet per year and CVWD has a SWP Table A contract right of 138,350 acre-feet per year, for a total of 194,100 acre-feet per year. In addition to their Table A supplies, DWA and CVWD, subject to Metropolitan's written consent may by exchange take delivery of SWP supplies available under Article 21 of their SWP Contracts, the Turn-back Pool Program, and non-SWP supplies they may acquire and convey through SWP facilities. Under the Metropolitan-CVWD Delivery and Exchange Agreement for 35,000 Acre-feet, up to 35,000 acre-feet of Metropolitan's SWP Table A supply can be requested annually by CVWD for delivery by exchange. Through the Second Amendment to this agreement, CVWD can request an additional 15,000 acre-feet annually from 2020 through 2026, for an additional transfer amount of 105,000 acre-feet.

In addition to the supply programs developed by Metropolitan, Metropolitan entered into an exchange agreement with the San Diego County Water Authority (SDCWA) in 1998, which was amended in 2003. The entire agreement, consideration exchanged between the parties, and obligations are found in the Amended and Restated Exchange Agreement and the related QSA Agreements. SDCWA acquires Colorado River water from two sources and exchanges up to 277,700 with Metropolitan for Metropolitan water deliveries. SDCWA makes available to Metropolitan Colorado River water it purchases from IID that is conserved within IID and conserved water from the lining of the All-American and Coachella canals. In exchange, Metropolitan delivers its own blended water to SDCWA in even monthly installments.

## SUPPLY PROGRAMS DEVELOPED IN SERVICE AREA

Metropolitan has developed a number of local programs to work with its member agencies to increase storage in groundwater basins. Metropolitan has encouraged storage through its cyclic and conjunctive use storage programs. These programs allow Metropolitan to deliver water into a groundwater basin in advance of agency demands. Metropolitan has drawn on dry-year supply from nine contractual conjunctive use storage programs to address shortages from the State Water Project and the CRA.

- **Cyclic Storage Agreements:** Under these agreements, the pre-delivery of imported water is used for recharge into groundwater basins in excess of an agency's planned and budgeted deliveries making best use of available capacity in conveyance pipelines, use of storm channels for delivery to spreading basins, and use of spreading basins. This water is then purchased at a later time when the agency has a need for groundwater replenishment deliveries. Total program capacity is 525,000 AF.
- **Conjunctive Use Agreements:** Under these agreements, excess imported water can be stored, and then called for use by Metropolitan during dry, drought, or emergency conditions. During a dry period, Metropolitan has the option to call water stored in the groundwater basins pursuant to its contractual conjunctive use agreements. At the time of the call, the member agency pays Metropolitan the prevailing rate for that water. Nine conjunctive use projects provide about 210,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year.
- **Operational Shift Cost-Offset Program:** Under these agreements, Metropolitan works with the member agencies to shift the points of delivery to meet demands wherever possible to preserve SWP storage during calendar years 2021 and 2022. Shifts are made at Metropolitan's request and in accordance with the member agencies' capabilities. Metropolitan provides these member agencies a credit to offset additional operational costs the member agencies may accrue from shifting delivery locations. OSCOP allows for improved availability of storage reserves to supplement supplies during dry years by maximizing current available resources from the Colorado River and SWP storage. This program helps reduce the need for purchasing more expensive transfer supplies and helps Metropolitan fully utilize its diverse portfolio to increase reliability for the entire region. This Program continues through end of CY 2022, which covers the first half of the first fiscal year of the biennial budget.

## BUDGET HIGHLIGHTS

The budget for the Supply Programs increases over the budget period compared to FY 2023/24, primarily due to AVEK and increased costs associated with Lower Colorado Conservation Program. AVEK capital costs are proposed to be bond funded and Reclamation is providing funding for the Lower Colorado Conservation Programs.

# DEMAND MANAGEMENT

## OVERVIEW

Demand Management costs are Metropolitan’s expenditures for funding local water resource development programs, water conservation programs and the Future Supply Actions Program. These demand management programs incentivize the development of local water supplies, the conservation of water to reduce the reliance on imported water, and funding of programs focused on removing barriers to the development of local water supplies. These programs are implemented after the service connection between Metropolitan and its member agencies and, as such, do not add any water to the quantity Metropolitan obtains from other sources or to Metropolitan’s own supply. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies, and as a result, Metropolitan avoids and defers the need to deliver more water to its agencies, and accordingly, also avoids and defers additional costs associated with the development and delivery of that additional water. Local supplies also afford Metropolitan the opportunity to store more imported water during normal and wet-years, and also provide supplies during drought.

The budgeted costs for Demand Management are as follows:

### Demand Management Cost Summary, \$ millions

	2022/23 Actuals	2023/24 Budget	2024/25 Adopted	Change from 2023/24	2025/26 Adopted	Change from 2024/25
Conservation Program*	\$46.0	\$43.0	\$54.1	\$11.1	\$44.2	(\$9.9)
Local Resources Program	\$12.9	\$21.7	\$27.7	\$6.0	\$32.6	\$4.9
Future Supply Actions / Stormwater Pilot	\$0.9	\$2.4	\$5.9	\$3.5	\$3.5	(\$2.4)

\* Part of the expenditures for the Conservation Credits Program are proposed to be bond funded for FY 2023/24, FY2024/25, and FY2025/26.

Budgeted Demand Management costs reflect the financial commitment for the Conservation Program, conservation messaging, and maintaining the financial incentives for existing contracts under the Local Resources Program (LRP).

The Conservation Program remains unchanged from the FY 2021/22 level, budgeting \$98.3 million over the biennium with \$48.2 million to be bond financed to minimize short-term rate impacts. Some of the conservation funds for the FY 2024/25 and FY 2025/06 budget are committed funds from prior years. This includes incentive programs for residential, commercial, industrial, and institutional sectors where applicants can reserve in one fiscal year and not complete their project until the following year, and the Member Agency Administered Program which also spans across multiple fiscal years.

Metropolitan has been awarded over \$40 million in recent grants for conservation and is continuing to pursue other grant opportunities. Most of these grants require 50 percent matching funds and this is the primary reason why the conservation budget is increasing beyond \$25 million per year. As such, reductions to the conservation budget might disqualify some of the grant awards received.

The budget does not include any new LRP agreements for FY 2024/25 and FY 2025/26. The increase in LRP expenditures during that period is a result of ramping up of existing agreements. While Metropolitan is still

accepting applications for LRP project consideration, the biennial budget assumes all new projects would be funded in future budgets, subject to Board approval.

In addition to Metropolitan's own objectives, Metropolitan also pursues local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed Senate Bill (SB) 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of AB 1668 and SB 606. These bills build on Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. They establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards. Agencies will begin reporting to the State Water Resources Control Board in 2024 to start tracking progress toward meeting the standards. The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Metropolitan coordinates closely with its member agencies to achieve these provisions both at a retail agency level in compliance with legislative requirements and as a region.

Metropolitan co-sponsored Assembly Bill 1572, which was signed into law on October 14, 2023. This legislation will phase out the use of potable water to irrigate non-functional turf - defined as turf grass that is not used for recreation or other purposes on commercial, industrial, municipal and institutional properties - beginning in 2027.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles embody the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

## SB 60 DIRECTED METROPOLITAN TO EXPAND DEMAND MANAGEMENT PROGRAMS

In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase "sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to

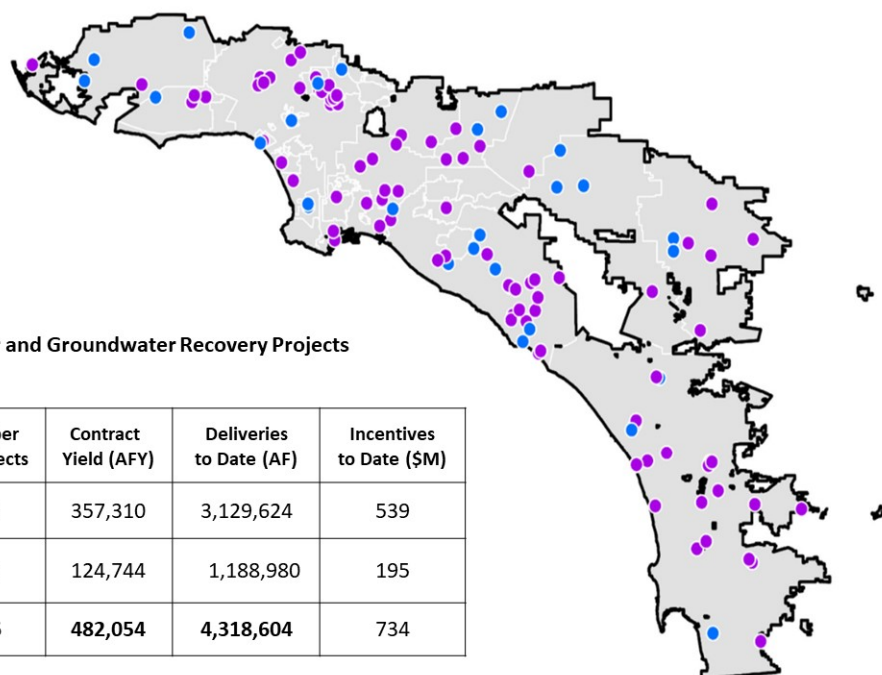
invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on its progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In FY 2022/23 alone, Metropolitan’s service area achieved 307 thousand acre–feet of water savings from conservation, recycled water and groundwater recovery programs. These savings derived from programs for which Metropolitan paid incentives, as well as code–based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1982 Metropolitan has invested more than \$1.6 billion and Metropolitan’s service area has achieved 8.3 million acre–feet of water savings.

Metropolitan’s Conservation Program provides incentives to residents and businesses for use of water–efficient products and qualified water–saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high–efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water–saving devices. In fiscal year 2022/23, the Conservation Program achieved 207 thousand acre–feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2022/23 the Conservation Program has achieved 3.9 million acre–feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater. The Local Resources Program consists of 88 recycling projects and 28 groundwater recovery projects located throughout Metropolitan’s service area. A total of 116 projects have participated in the program. Since inception in 1982 through FY 2022/23, Metropolitan has provided about \$539 million in incentives to produce about 3.1 million acre–feet of recycled water and approximately \$198 million to recover 1.2 million acre–feet of degraded groundwater for municipal use.

### Local Resources Program Projects



Recycled Water and Groundwater Recovery Projects

Type	Number of Projects	Contract Yield (AFY)	Deliveries to Date (AF)	Incentives to Date (\$M)
● Recycling	88	357,310	3,129,624	539
● Groundwater Recovery	28	124,744	1,188,980	195
<b>Total</b>	<b>116</b>	<b>482,054</b>	<b>4,318,604</b>	<b>734</b>

## BUDGET HIGHLIGHTS

The budget for Demand Management increases when comparing the Biennial Budget to FY 2023/24.

The Demand Management is budgeted at \$87.7 million for FY 2024/25 and \$80.3 million in FY 2025/26.

The adopted rates and charges for CYs 2025 and 2026 exclude a separate rate or charge to recover demand management costs, as a result of Metropolitan's Board action on November 23, 2021, directing staff to recover 100 percent of demand management costs from Metropolitan's supply rate elements. Accordingly, all demand management costs (regardless of funding source, such as bond financing or current revenues) are functionalized as supply and collected on the supply rate.

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# DEVELOPMENTS

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## OVERVIEW

Today, Metropolitan finds that its challenges and goals are evolving. The Board of Directors in the 1990s was deeply concerned with member agencies relying too much on importing supplies from Northern California and the Colorado River. Programs to regionalize conservation efforts and to incentivize new local supplies such as the LRP were developed. This approach was developed through regional long-term planning via Metropolitan's Integrated Water Resources Plan (IRP) initiated in 1996.

Today, there is a shifting water landscape. Population growth and water demands, in large part due to tremendous strides in water use efficiency, are far less impactful than once predicted. Metropolitan's water transactions, which include sales, exchanges, and wheeling, in fiscal year 2019 were the lowest in nearly 40 years, and a new generation of larger local supply projects are in the planning stages.

Delivery of imported supplies will always be a foundation to meet ongoing regional demands, even with climate change, and importantly so will storage of imported water for droughts and emergencies. Given the fluctuations in the availability of water resources, maintaining and enhancing system flexibility is a priority for Metropolitan. The evolving mix of Southern California's future water portfolio is still to be determined and will be impacted by future policies and decisions made by Metropolitan's Board.

## Delta Conveyance

Within the region's water portfolio, supplies from the SWP remain an essential baseline water source for Southern California. Water from Northern California delivered through the SWP has provided key supplies in wet years to manage against dry years, and it is the only imported supply that can physically reach significant portions of Metropolitan's service area. This water source faces uncertainties due to climate change and the Delta's badly outdated delivery system; these problems are compounded by a declining ecosystem and 1,100-mile levee systems that are increasingly vulnerable.

On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a comprehensive statewide strategy to build a climate-resilient water system that included consideration of a single-tunnel Delta conveyance facility instead of the approved two-tunnel California WaterFix project. Consistent with the Governor's direction, the formal environmental review process for a proposed single-tunnel Delta Conveyance Project commenced with the issuance by DWR of a Notice of Preparation under CEQA on January 15, 2020. On December 21, 2023, DWR certified the Final EIR and approved the Delta Conveyance Project. Additional project permitting processes are expected to continue into 2027.

In light of the Governor's April 29, 2019 order, DWR and the State Water Contractors deleted the WaterFix cost provisions from the current amendment process leaving only the water management provisions and embarked on a new public process to further negotiate proposed amendments related to cost allocation for a potential new Bay-Delta conveyance project. As a result, the costs of the Delta Conveyance Project are yet unknown, and Metropolitan's projected up to \$10.8 billion costs for California WaterFix are no longer included in its current or future budgeting or projections.

The Biennial Budget includes Metropolitan's planned contribution of \$11.6 million for Delta conveyance project planning activities. This contribution follows Board policy that staff work with the State to find solutions to improve Delta conveyance. The focus over the next two years will be supporting the DWR as it seeks permits for a Delta conveyance project; participating in the Delta Conveyance Design and Construction Authority; and



continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the budgeted amount, the General Manager will request authorization from the Board for additional funding. Additionally, the Board will separately consider Metropolitan's participation in a new Delta conveyance project once that proposed project is finalized by DWR. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>.

## Pure Water Southern California Program

Pure Water Southern California (PWSC), is a partnership between Metropolitan and the Sanitation Districts of Los Angeles County. Construction of the 0.5 million gallons per day (mgd) advanced water treatment demonstration plant was approved in 2017 and was completed in August 2019. Testing and operation of the plant began in October 2019 to confirm treatment costs and provide the basis for regulatory approval of the proposed treatment process and technical recommendations concerning design, operation, and optimization of the PWSC. As it has since its completion in 2019, the PWSC's demonstration facility will produce approximately 500,000 gallons per day and will continue to be operated to generate information needed for regulatory approval and to increase the efficiency of the treatment processes that may be used in a potential full-scale recycled water facility. The potential full-scale project, viewed as a potential third source of water for Metropolitan, would provide a reliable, drought-proof, climate-resilient, local supply for indirect potable reuse (IPR) through groundwater basin recharge, direct potable reuse (DPR) through raw water augmentation at Metropolitan's treatment plants, and direct industrial use. If approved, the full-scale project will produce 150 mgd, or up to 155,000<sup>2</sup> acre feet (AF) per year (AFY), of purified water.

In November 2020, Metropolitan's Board voted to proceed with the Environmental Planning Phase of the Program. This work will prepare the documentation needed for future Board approval of the Program Environmental Impact Report. The first phase of testing for tertiary membrane bioreactor (tMBR), the second phase of testing for secondary membrane bioreactor (sMBR) were completed in 2022 and 2023, respectively. The next phase of testing for tMBR optimization scheduled to begin in early 2024 will form the basis for design, operation and optimization of, and will inform Metropolitan's Board decision whether to move forward with, a full-scaled advanced water treatment facility. The Board has not yet committed to a full-scale project.

The FY 2024/25 and FY 2025/26 budget includes funding for planning costs for the potential Pure Water Southern California at \$28.9 million and \$25.1 million, respectively, for preparation of a programmatic environmental impact report. The departments have budgeted for the PWSC planning costs as a major O&M project with their budgets. These planning costs will be funded out of the \$80M grant from State Water Resource Control Board (SWRCB) received in May 2023 to offset the respective departmental O&M costs. This is the next step before the Board will be fully informed and ready to make a decision on whether to proceed with further investments in this potential project.

Metropolitan has secured partners in the Southern Nevada Water Authority and Central Arizona Project who have each committed to pay a portion of the planning costs of the project and executed Memorandum of Understandings with Metropolitan to document their commitment to the program's success. Information regarding the PWSC is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>.

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<sup>2</sup> Assuming 92 percent operational



# CAPITAL FINANCING

## OVERVIEW

Capital financing costs are Metropolitan’s expenditures for revenue bond debt service, General Obligation bond debt service, debt administration costs, and the funding of capital expenditures from current operating revenues or Pay-As-You-Go (PAYGO).

The budgeted costs for capital financing are as follows:

### Capital Financing Cost Summary, \$ millions

	2022/23 Actuals	2023/24 Budget	2024/25 Adopted	Change from 2023/24	2025/26 Adopted	Change from 2024/25
Debt Service	\$293.1	\$296.4	\$335.2	\$38.8	\$348.7	\$13.5
GO Bond Debt Service	2.0	2.0	2.0	0.0	2.0	0.0
Debt Administration	5.6	2.7	3.2	0.5	2.9	(0.3)
PAYGO	135.0	135.0	175.0	40.0	175.0	—
<b>Total</b>	<b>\$435.7</b>	<b>\$436.0</b>	<b>\$515.4</b>	<b>\$79.3</b>	<b>\$528.5</b>	<b>\$13.2</b>

Budgeted amounts for Capital Financing represent the expenditures for existing and future debt service, anticipated debt administration costs to support the debt portfolio, and PAYGO amounts to support the Capital Investment Plan. Metropolitan generally incurs long-term debt to finance projects or purchase assets that will have useful lives equal to or greater than the related debt. Revenue supported debt can be authorized by Metropolitan’s Board of Directors.

## CAPITAL INVESTMENT PLAN

The Capital Investment Plan (CIP) expenditures for FY 2024/25 and FY 2025/26 which includes Minor Capital Projects are estimated to be \$637 million. They are funded by current operating revenues (PAYGO) and revenue bond proceeds. The FY 2024/25 CIP expenditures are 4 percent (or \$12 million) higher than the FY 2023/24 budget, and similarly, the FY 2025/26 is increased by 4 percent from the FY 2024/25 budget. The largest areas of expenditures in the Biennial Budget are infrastructure refurbishment and replacement and infrastructure upgrades.

## PAYGO Percentage of Funding, \$ millions

	2023/24 Budget	2024/25 Adopted	2025/26 Adopted
CIP	\$300.0	\$312.0	\$324.5
Project Funding:			
Bond Proceeds	165.0	137.0	149.5
Operating Revenues (PAYGO)	135.0	175.0	175.0
PAYGO Percentage of Funding	45.0 %	56.1 %	53.9 %

In FY 2024/25 and FY 2025/26, the percentage of capital that is funded by operating revenues is between 54 percent and 56 percent. The projected percentage of CIP funded from operating revenues will range from 13 percent to 56 percent over the ten years of the long-range forecast, which is described in detail in the Ten-Year Financial Forecast section.

## SUPPLY PROGRAMS

In FY 2024/25 and FY 2025/26, the Supply Programs include capital expenditures related to the development of the AVEK High Desert Water Bank program. These capital expenditures will be recorded as participation rights and funded by debt. Remaining project costs total \$177.9 million and would be covered by a tax-exempt, fixed rate bond issuance in FY 2023/24 assuming a 30-year maturity and interest rate of 4.5%. The 10-year forecast, which is described in detail later in this report, does not assume additional debt issuances to fund Supply Programs beyond the budget biennium period.

## CONSERVATION

In FY 2024/25 and FY 2025/26 the Conservation Program is budgeted at \$54.1 million and \$44.2 million in each year, respectively. Expenditures in excess of \$25 million will be funded by debt. These additional expenditures will be covered by a \$48.2 million taxable, fixed-rate bond issuance in FY 2024/25 assuming a 10-year maturity and interest rate of 3.25%. The 10-year forecast, which is described in detail later in this report, does not assume additional debt issuances to fund Conservation beyond the budget biennium period.

## OUTSTANDING DEBT

Metropolitan has total debt outstanding of \$3.9 billion as of December 31, 2023. Metropolitan's debt issues are summarized below and discussed in detail thereafter.

Outstanding Debt, \$'s, as of December 31, 2023

Issue	Debt Outstanding
2011 Series C, Water Revenue Refunding Bonds	29,315,000
2014 Series E, Water Revenue Refunding Bonds	3,560,000
2015 Series A, Authorization Water Revenue Bonds	50,860,000
2016 Series A, Water Revenue Refunding Bonds	112,415,000
2016 Series B-2, Special Variable Rate Water Revenue Refunding Bonds (1)	25,325,000
2017 Series A, Authorization Water Revenue Bonds (1)	24,275,000
2017 Series A, Subordinate Water Revenue Refunding Bonds	182,745,000
2017 Series B, Subordinate Water Revenue Refunding Bonds	35,640,000
2017 Series C, Subordinate Water Revenue Bonds (1)	80,000,000
2017 Series D, Subordinate Water Revenue Refunding Bonds (1)	95,630,000
2017 Series E, Subordinate Water Revenue Refunding Bonds (1)	95,625,000
2018 Series B, Subordinate Water Revenue Bonds	57,740,000
2018 Series B, Water Revenue Refunding Bonds	119,690,000
2019 Series A, Water Revenue Refunding Bonds	218,090,000
2019 Series A, Subordinate Water Revenue Refunding Bonds	184,280,000
2020 Series A, Water Revenue Bonds	207,355,000
2020 Series A, Subordinate Water Revenue Refunding Bonds	139,190,000
2020 Series B, Special Variable Rate Water Revenue Refunding Bonds (2)	271,815,000
2020 Series C, Water Revenue Refunding Bonds	255,900,000
2021 Series A, Water Revenue Bonds	188,890,000
2021 Series A, Subordinate Variable Rate Water Revenue Refunding Bonds	222,160,000
2021 Series B, Water Revenue Refunding Bonds	74,465,000
2022 Series A, Water Revenue Refunding Bonds	268,360,000
2022 Series B, Water Revenue Refunding Bonds	253,365,000
2022 Series C1, Special Variable Rate Water Revenue Refunding Bonds (1)	147,650,000
2022 Series C2, Special Variable Rate Water Revenue Refunding Bonds (1)	134,625,000
2023 Series A, Water Revenue Refunding Bonds	258,410,000
<b>Total Revenue Bonds</b>	<b>\$3,737,375,000</b>
2019 Series A, WaterWorks General Obligation Refunding Bonds	5,550,000
2020 Series A, WaterWorks General Obligation Refunding Bonds	13,665,000
<b>Total General Obligation Bonds</b>	<b>\$19,215,000</b>
Total Revolving Note Program	176,400,000
<b>Total Debt:</b>	<b>\$3,932,990,000</b>

(1) Outstanding variable rate obligation.  
(2) Issued in fixed mode.

## DEBT SERVICE

Debt Service payments in FY 2024/25 are budgeted at \$340.4 million and includes \$2.0 million in General Obligation bond debt service, \$335.2 million in revenue bond debt service, and \$3.2 million for debt administration costs.

Debt Service payments in FY 2025/26 are budgeted at \$353.5 million and include \$2.0 million in General Obligation bond debt service, \$348.7 million in revenue bond debt service, and \$2.9 million for debt administration costs. Total debt service costs in FY 2025/26 are expected to be \$13.2 million greater than the FY 2024/25 payments. Interest payments on synthetic fixed rate debt were calculated at their associated swap rates. Interest rates on variable rate debt were calculated at 4.0 percent for FY 2024/25 and 3.75 percent for FY 2025/26.

Outstanding variable rate debt on December 31, 2023 was approximately \$1,001.7 million, including bonds bearing interest in the Index Mode, variable rate demand obligations, and revolving note programs. Of the \$1,001.7 million, \$338.1 are treated by Metropolitan as fixed rate debt by virtue of interest rate swap agreements. The remaining \$663.6 million of variable rate obligations represent approximately 17.0 percent of total outstanding water revenue bonds and revolving notes.

Summarized in the table below is the projected debt service payment schedule, grouped by fiscal year and bond type, for existing long-term debt.

Fiscal Year Ending June 30	Revenue Bonds		General Obligation Bonds		Total Debt Service
	Principal	Interest	Principal	Interest	
2025	150,215,000	162,232,594	1,055,000	910,500	314,413,094
2026	158,455,000	155,390,638	1,110,000	857,750	315,813,388
2027	167,700,000	145,985,806	1,160,000	802,250	315,648,056
2028	177,815,000	138,338,536	1,220,000	744,250	318,117,786
2029	184,910,000	130,556,083	1,245,000	683,250	317,394,333
2030	178,810,000	122,614,213	1,300,000	621,000	303,345,213
2031	167,770,000	114,489,068	1,365,000	556,000	284,180,068
2032	184,070,000	106,518,105	1,435,000	487,750	292,510,855
2033	163,865,000	98,486,908	1,510,000	416,000	264,277,908
2034	191,820,000	90,397,790	1,580,000	340,500	284,138,290
2035	210,910,000	81,899,561	1,660,000	261,500	294,731,061
2036	217,740,000	73,170,298	1,740,000	178,500	292,828,798
2037	223,255,000	63,743,038	1,830,000	91,500	288,919,538
2038	209,510,000	54,891,635	—	—	264,401,635
2039	157,175,000	48,463,801	—	—	205,638,801
2040	164,470,000	40,456,937	—	—	204,926,937
2041	171,845,000	32,353,257	—	—	204,198,257
2042	79,215,000	26,284,570	—	—	105,499,570
2043	81,885,000	22,695,726	—	—	104,580,726
2044	47,150,000	20,408,590	—	—	67,558,590
2045	49,195,000	18,153,492	—	—	67,348,492
2046	77,520,000	15,104,560	—	—	92,624,560
2047	80,205,000	11,901,973	—	—	92,106,973
2048	82,915,000	8,753,569	—	—	91,668,569
2049	42,320,000	6,622,388	—	—	48,942,388
2050	40,015,000	4,589,000	—	—	44,604,000
2051	25,230,000	2,973,000	—	—	28,203,000
2052	26,510,000	1,695,375	—	—	28,205,375
2053	13,990,000	699,500	—	—	14,689,500
2054	—	—	—	—	—
<b>Total</b>	<b>\$3,726,485,000</b>	<b>\$1,799,870,011</b>	<b>\$18,210,000</b>	<b>\$6,950,750</b>	<b>\$5,551,515,761</b>

Metropolitan will finance a portion of its construction program, Supply Program capital expenditures, and Conservation Program expenditures through the issuance of debt. Metropolitan intends to issue approximately \$556.1 million of new debt over the biennium.

## DEBT RATINGS

Credit risk is the risk that a financial loss will be incurred if a counterparty to a transaction does not fulfill its financial obligations in a timely manner. This is measured by the assignment of a rating by a nationally recognized credit rating organization. Strong credit ratings provide tangible benefits to ratepayers in the form of reduced debt service costs. A strong credit rating provides better access to capital markets, lower interest rates, better terms on debt, and access to a greater variety of debt products. Prudent financial management policies

have resulted in Metropolitan's senior lien bond ratings of AAA from Standard & Poor's, Aa1 from Moody's, and AA+ from Fitch.

## DEBT POLICY AND COVERAGE

Metropolitan is subject to limitations on additional revenue bonds. Resolution 8329 (the "Master Revenue Bond Resolution"), adopted by Metropolitan's Board in 1991 and subsequently supplemented and amended, provides for the issuance of Metropolitan's revenue bonds. The Master Revenue Bond Resolution limits the issuance of additional obligations payable from Net Operating Revenues, among other things, through the requirement that Metropolitan must meet an Additional Bonds Test, as defined in the Master Revenue Bond Resolution. Metropolitan's Master Subordinate Bond Resolution, Resolution 9199, adopted by the Board in March 2016, and subsequently supplemented and amended, also incorporates limitations on additional revenue bonds.

The Metropolitan Act also provides two additional limitations on indebtedness. The Act provides for a limit on general obligation bonds, water revenue bonds and other indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan's service area. As of December 31, 2023, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of \$3.9 billion represented approximately 0.10 percent of the FY 2023/24 taxable assessed valuation of \$3,861 billion. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of net assets of Metropolitan as shown on its balance sheet as of the end of the last fiscal year prior to the issuance of the bonds equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of the bonds. The net position of Metropolitan at June 30, 2023 was \$7.5 billion. The aggregate amount of revenue bonds outstanding as of December 31, 2023 was \$3.9 billion.

Metropolitan has also established its own policy regarding debt management. The purpose is to maintain a balance between current funding sources and debt financing to retain Metropolitan's financing flexibility. Flexibility allows Metropolitan to use a variety of revenue or debt-financing alternatives, including issuing low-cost variable rate and other revenue supported obligations.

Metropolitan's debt management policy is to:

- Maintain an annual senior/subordinate lien revenue bond debt coverage ratio of at least 2.0 times coverage;
- Maintain an annual fixed charge coverage ratio of at least 1.2 times coverage;
- Limit debt-funded capital to no more than 40 percent of the total capital program over the ten-year planning period; and
- Limit variable rate debt such that the net interest cost increase due to interest rate changes is no more than \$5 million, and limit the maximum amount of variable rate bonds to 40 percent of outstanding revenue bond debt (excluding variable rate bonds associated with interest rate swap agreements).

In order to comply with the debt management policy, Metropolitan has taken the following measures:

### Revenue Bond Debt Coverage Ratio

This policy ensures that Metropolitan has sufficient annual operating revenues to pay its operating expenses and meet its debt service obligations on its revenue bonds and other senior debt. The revenue bond debt coverage ratio is defined as Metropolitan's net operating revenue (current year's operating revenue less the current year's operating expenses) divided by the current year's senior/subordinated lien debt service on all revenue bonds and other senior debt. While the budget reflects debt service coverage based on net operating revenue, actual revenue bond coverage may differ based on actual revenue receipts and/or the application of reserves.

Metropolitan's revenue bond debt service coverage ratio target is 2.0 times. In FY 2024/25 and FY 2025/26, the projected debt coverage ratio is 1.7 and 1.9 times, respectively.

### Fixed Charge Coverage Ratio

In addition to revenue bond debt service coverage, Metropolitan also measures total coverage of all fixed obligations after payment of operating expenditures. This additional measure is used to account for Metropolitan's recurring capital costs for the State Water Contract, which are funded after debt service on revenue bonds and other parity obligations. Rating agencies expect that a financially sound utility will consistently demonstrate an ability to fund all recurring costs, whether they are operating expenditures, debt service payments or other contractual payments. Metropolitan's fixed charge coverage ratio target is 1.2 times. In FY 2024/25 and FY 2025/26, the projected fixed charge coverage ratio is 1.7 and 1.9, respectively. These levels help maintain favorable credit ratings and access to the capital markets at low cost.

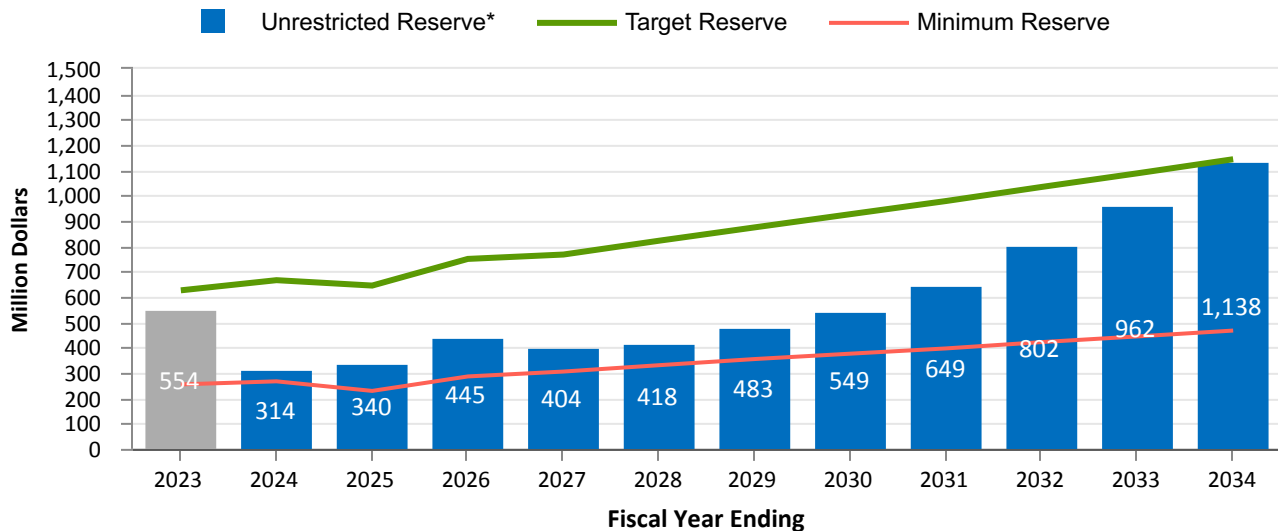
## BUDGET HIGHLIGHTS

The FY 2024/25 and FY 2025/26 Capital Financing budget is increasing from the FY 2023/24 budget due to higher debt service expenditures. Debt service costs increase over the biennium compared to the FY 2023/24 budget due to higher interest rates and increased capital costs.

# TEN-YEAR FINANCIAL FORECAST

The ability to ensure a reliable supply of high quality water for Metropolitan’s 26 member agencies depends on Metropolitan’s ongoing ability to fund operations and maintenance, maintain and augment local and imported water supplies, fund replacements and refurbishment of existing infrastructure, and invest in system improvements. This ten-year forecast (Ten-Year Financial Forecast or Ten-Year Forecast) builds on the biennial budget to support long range resource, capital investment and operational planning. As such, it includes a forecast of future costs and the revenues necessary to support operations and investments in infrastructure and resources that are derived from Metropolitan’s planning processes while conforming to Metropolitan’s financial policies. These financial policies, which address reserve levels, financial indicators, and capital funding strategies, ensure sound financial management and fiscal stability for Metropolitan. The Ten-Year Financial Forecast is updated with every budget to reflect the most up-to-date planning assumptions and projections.

## Projected Financial Indicators



Overall Rate Inc.	5.0%	5.0%	8.5%	8.5%	11.5%	11.5%	5.0%	5.0%	4.0%	4.0%	4.0%	4.0%
Water Transactions * (MAF)	1.42	1.17	1.34	1.34	1.34	1.35	1.35	1.36	1.37	1.39	1.41	1.43
Rev. Bond Cvg	1.5	1.1	1.7	1.9	1.6	1.8	1.9	1.8	1.8	1.7	1.7	1.7
Fixed Chg Cvg	1.5	1.1	1.7	1.9	1.6	1.8	1.9	1.8	1.8	1.7	1.7	1.7
PAYGO, \$M	135	35	175	175	175	250	275	275	250	225	230	240

\* includes Revenue Remainder and Water Rate Stabilization Fund

\*\* includes water sales, exchanges, and wheeling

The figure above summarizes the financial metrics of the Ten-Year Financial Forecast. Metropolitan projects that the fixed charge coverage ratio will meet the board-established target of 1.2 times throughout the ten-year period. Revenue bond coverage will not meet the target of 2.0 times during this forecast period. Reserve levels will be above minimums as established by board policy; PAYGO expenditures will range to fund between 13 percent and 56 percent of the Capital Investment Plan (CIP) expenditures; and projected overall rate increases are expected to range from 4 to 11.5 percent.



The estimated overall rate increases for the Ten-Year Financial Forecast is a result of lower projected water transactions, higher projected costs over the forecast period and inclusion of the PWSC bond-financed construction costs starting in FY 2026/27. Annual expenditures are expected to increase from \$2.1 billion in FY 2024/25 to \$3.4 billion by FY 2033/34, or an annual average increase of about 5 percent. During this same period, capital investments are expected to be about \$11.6 billion. To finance these capital investments, the ten-year forecast anticipates funding \$2.3 billion of the CIP from water revenues or PAYGO. The balance of the CIP, or \$6.6 billion, will be financed by issuing revenue bond debt, assumed to be fixed rate bonds.

Planning is necessary for Metropolitan to successfully fund the many investments necessary to meet the challenges facing the region over the next ten years with manageable rate increases. Among the more significant challenges are:

- Investing in the elements of the 2020 IRP Update to ensure reliable water supplies for Metropolitan's service area and preparing for uncertainty.
- Continuing to provide supply reliability through a diversified portfolio of actions to stabilize and maintain imported supplies.
- Meeting future growth through increased water conservation and the development of new local supplies, while protecting existing supplies, to achieve higher retail water use efficiency, in compliance with state policy.
- Building storage in wet and normal years to manage risks and drought.
- Funding an estimated \$11.6 billion capital program that provides projects meeting water quality, reliability, stewardship, information technology directives, and includes the PWSC.
- Funding for Metropolitan's planned contribution for Delta Conveyance Project (DCP) planning costs of \$11.6 million are included in fiscal year FY 2025. The focus over the next two years will be supporting the California Department of Water Resources as it seeks permits for a DCP; participating in the Delta Conveyance Design and Construction Authority; and continuing to put forward sound scientific research to help inform and improve Delta management decisions. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the amount included in the Biennial Budget for FY 2024/25 and 2025/26, the General Manager will request authorization from the Board for additional funding. Long-term costs for a DCP have not been included in the forecast. At a later date staff will recommend that the Board separately consider Metropolitan's participation in a new DCP after project planning has progressed further.
- Funding for the potential PWSC of \$54 million for the planning costs for the PWSC is included in the Operating and Maintenance budget for FY 2024/25 and FY 2025/26. The departments have budgeted for the PWSC planning costs as a major O&M project with their budgets. These planning costs will be funded out of the \$80M grant from State Water Resource Control Board (SWRCB) received in May 2023 to offset the respective departmental O&M costs. Long-term costs of the PWSC are included in the forecast.

# ASSUMPTIONS FOR THE TEN-YEAR FORECAST

The following table summarizes key assumptions that underlie the Ten-Year Forecast.

Fiscal Year Ending	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Water Transactions, MAF *	1.34	1.34	1.34	1.35	1.35	1.36	1.37	1.39	1.41	1.43
CRA Diversions, TAF	750	760	788	800	818	867	898	923	948	973
SWP allocation, %	50%	49%	47%	46%	45%	44%	42%	41%	40%	39%
CIP, \$M	312	324	1,390	1,684	2,171	1,966	1,544	1,091	655	502
PAYGO, \$M	175	175	175	250	275	275	250	225	230	240
Interest on investments, %	4.50%	3.75%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Interest rate, fixed bonds, %	4.75%	4.75%	4.75%	4.75%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Interest rate, variable bonds, %	4.00%	3.75%	3.25%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%	2.75%

\* includes member agency water sales and exchanges presented on a Cash Year basis

Metropolitan’s principal sources of water supplies are the SWP and the Colorado River. Metropolitan receives water delivered from the SWP pursuant to its participation in that project, including Table A allocation, use of carryover storage in San Luis Reservoir, and surplus supplies. Metropolitan holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount depending on availability of surplus supplies. The Supply Programs and other contractual arrangements supplement these SWP and Colorado River supplies. The SWP and Colorado River sources derive from two different hydrologic regions, which have helped buffer shortages. The Ten-Year Forecast assumes an average hydrology on the Colorado River and hydrology on the SWP with a 51 percent allocation in CY 2024, 49 percent allocation in CY 2025, 48 percent allocation in CY 2026. Additionally, it assumes the use of the Central Valley storage programs and a gradual reduction to a 38% SWP allocation in CY 2034, matching with severe climate change impacts from the 2020 IRP Need Assessment Scenarios C & D. Together with Metropolitan’s Supply Programs, dry periods in either region can be managed.

The CIP has been reviewed to maintain affordability throughout the ten-year period. CIP projects have been carefully reviewed, scored and ranked to continue the ability to deliver water reliably and safely while meeting all regulatory requirements.

Unless specific forecast information is available, the general inflation factor of 4 percent is used for O&M and capital expenses. Assumed escalators for labor and benefits in the forecast period are based on the Memoranda of Understanding for the represented employees.

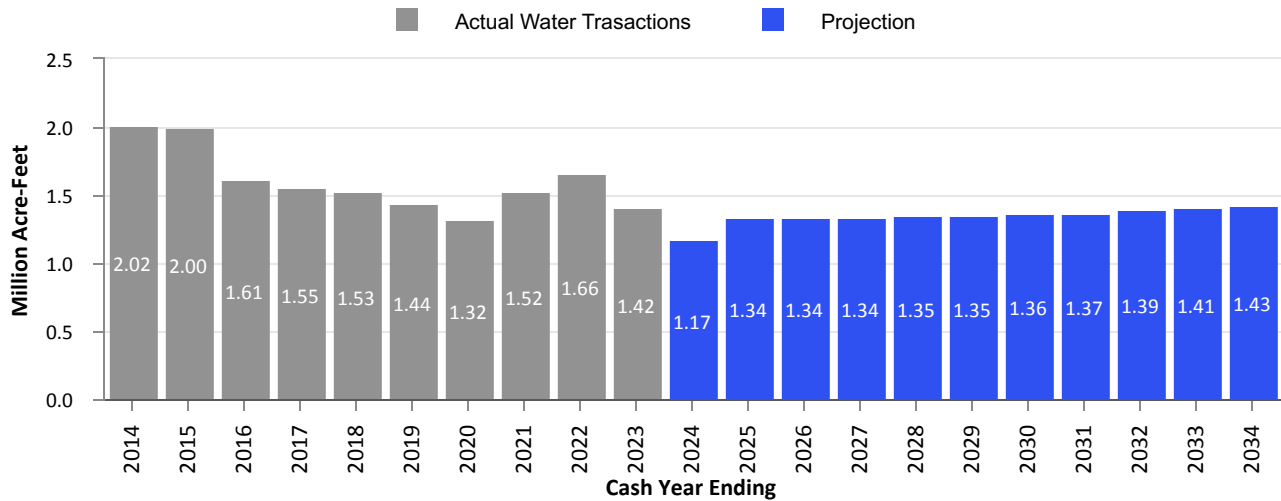
The interest rate applicable to Metropolitan’s investment portfolio is based on an analysis of the current forward curve for investments over a ten-year period. This interest rate forecast informs the interest rate applicable to variable rate bonds. The interest rate for new fixed rate bonds is also based on forecasts.

# FORECAST OF WATER TRANSACTIONS

Under Metropolitan's rate structure, revenues from water transactions (sales, exchanges, and wheeling) provide approximately 80 percent of the revenues necessary to support Metropolitan's capital and operating costs. Demands for Metropolitan water has decreased over the last ten years and it is expected that demand will maintain at the more recent lower levels over the ten-year period, ranging from 1.34 million acre-feet in Cash Year 2024/25 to 1.43 million acre-feet by Cash Year 2033/34. This forecast includes water delivered to the San Diego County Water Authority (SDCWA) pursuant to the 2003 Amended and Restated Exchange Agreement (exchange transactions).

The figure below shows historic and forecasted water transactions, including the exchange transactions and wheeling.

## Water Transactions, MAF



# SOURCES OF FUNDS

## Revenues

Through FY 2033/34, revenues from rates and charges, which include the Readiness-to-Serve (RTS) Charge, Capacity Charge, and water transaction revenues, collected from the member agencies will account for approximately 82 percent of total revenues. Total revenues are projected to increase from about \$2.2 billion in FY 2024/25 to \$3.6 billion in FY 2033/34. This increase is almost entirely attributed to increases in water rates and charges.

## Water Rates and Charges

The table below shows the estimated unbundled water rates and charges under the current rate structure. The rate structure components may experience different increases, on a percentage basis, depending on the costs recovered. The full-service treated water rate is estimated to be \$2,310 per acre-foot by January 1, 2034, compared to \$1,256 per acre-foot on January 1, 2024, based on the Tier 1 Supply Rate for 2024, reflecting an average increase of 6.3 percent per year over the ten-year period.

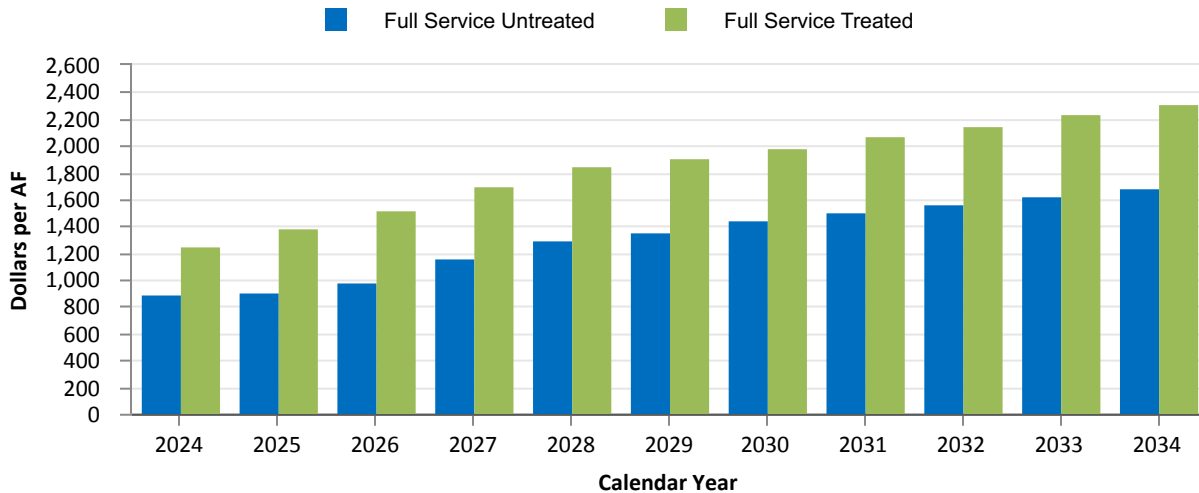
Rates & Charges Effective January 1st	2024*	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Supply Rate (\$/AF)	\$332	\$290	\$313	\$464	\$518	\$545	\$599	\$633	\$664	\$688	\$707
System Access Rate (\$/AF)	\$389	\$463	\$492	\$522	\$607	\$636	\$663	\$690	\$722	\$757	\$799
System Power Rate (\$/AF)	\$182	\$159	\$179	\$179	\$179	\$180	\$182	\$185	\$185	\$185	\$185
<b>Full Service Untreated Volumetric Cost (\$/AF)</b>	<b>\$903</b>	<b>\$912</b>	<b>\$984</b>	<b>\$1,165</b>	<b>\$1,304</b>	<b>\$1,361</b>	<b>\$1,444</b>	<b>\$1,508</b>	<b>\$1,571</b>	<b>\$1,630</b>	<b>\$1,691</b>
Treatment Surcharge (\$/AF)	\$353	\$483	\$544	\$544	\$544	\$548	\$548	\$565	\$579	\$606	\$619
<b>Full Service Treated Volumetric Cost (\$/AF)</b>	<b>\$1,256</b>	<b>\$1,395</b>	<b>\$1,528</b>	<b>\$1,709</b>	<b>\$1,848</b>	<b>\$1,909</b>	<b>\$1,992</b>	<b>\$2,073</b>	<b>\$2,150</b>	<b>\$2,236</b>	<b>\$2,310</b>
<b>Readiness-to-Serve Charge (\$M)</b>	<b>\$167</b>	<b>\$181</b>	<b>\$188</b>	<b>\$197</b>	<b>\$247</b>	<b>\$278</b>	<b>\$292</b>	<b>\$297</b>	<b>\$309</b>	<b>\$322</b>	<b>\$346</b>
<b>Capacity Charge (\$/cfs)</b>	<b>\$11,200</b>	<b>\$13,000</b>	<b>\$14,500</b>	<b>\$15,100</b>	<b>\$20,000</b>	<b>\$23,600</b>	<b>\$26,900</b>	<b>\$29,200</b>	<b>\$31,400</b>	<b>\$32,700</b>	<b>\$34,200</b>

\*Supply Rate and Full Service based on Tier 1 Supply for 2024

At the November 14, 2023 FAIRP meeting, staff presented to the Board the status of the 2014 Purchase Order, which will end on December 31, 2024. Based on the information provided at that meeting, staff proposes to not renew the 2014 Purchase Order. As a result, Tier 2 rate will not be included in the rates. No Tier 2 revenue has been included in past recent budgets, and therefore, the exclusion of Tier 2 does not impact the present budget. Metropolitan can revisit Purchase Order commitments and structure as needed during the business model review through the CAMP4W process.

The long-term rate projection is highly influenced by the addition of the PWSC, which is assumed to begin construction in FY 2026/27 and affect the 2027 to 2034 rates and charges. The allocation of the PWSC costs to the rates and charges is based on preliminary information and might substantially change as a result of the Board-approved Cost Recovery Alternative for the PWSC. In addition, this rate projection does not include any other large projects that will be considered in the Climate Adaptation Master Plan for Water process like Sites Reservoir, East-West Conveyance, or the Delta Conveyance Project.

### Volumetric Cost, \$ / AF



Property tax revenue is expected to increase from \$316.5 million in FY 2024/25 to \$436.5 million in FY 2033/34. In April 2022, the Board determined that it is essential for fiscal integrity to maintain the ad valorem tax of 0.0035 percent of assessed valuation for fiscal years 2022/23 through 2025/26. This projection assumes the Board increases the tax rate from 0.0035 percent ad valorem tax rate to 0.0070 percent starting in 2025. Over the 10-year forecast, assessed value is assumed to increase by 4.0 percent per year. Property tax revenue is used to pay Metropolitan's general obligation bonds and a portion of the SWC costs.

Power sales from Metropolitan's hydroelectric power recovery plants and the CRA are projected to average about \$14 million per year over this ten-year period. Metropolitan has 15 small hydroelectric plants on its distribution system. These revenues are dependent on the amount of water that flows through Metropolitan's distribution system and the price paid. Power from some of the plants is sold under existing contracts that are priced higher compared to the prices currently being offered for renewable power. CRA revenues derive from the management of loads and resources on the CRA; energy not needed to meet hourly CRA loads is sold into the California Independent System Operator.

Interest income is projected to increase from \$57.7 million in FY 2024/25 to \$78.6 million in FY 2033/34 as a result of increased balances. Returns are projected to stabilize decreasing from 4.5 percent in FY 2024/25 to 3.25 percent annually in FY 2026/27 through FY 2033/34. Metropolitan earns interest on invested fund balances and uses this income to reduce the costs that must be recovered through rates and charges. These invested funds also act as a partial hedge against changes in interest rates on Metropolitan's variable rate debt obligations. Interest income will vary over the ten-year forecast period as interest rates and cash balances available for investments will fluctuate.

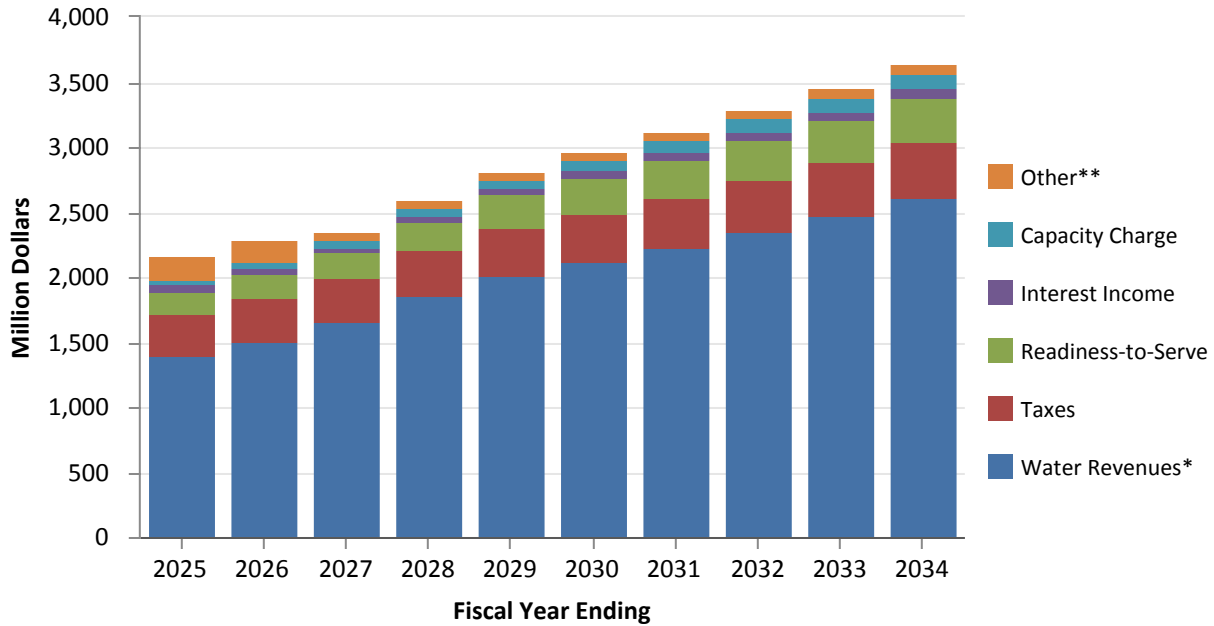
Miscellaneous revenue is forecasted to average \$86.1 million over the ten-year forecast period. Miscellaneous revenue includes items such as leases, late fees, and water transactions with non-member agencies including Coachella Valley Water District and United States Bureau of Reclamation.

IRA Bucket 1 funding revenues: On December 13, 2023, at the Colorado River Water Users Association's annual conference, Bureau of Reclamation (Reclamation) Commissioner Camille Touton signed several conservation agreements in California, made possible by funding provided by the Inflation Reduction Act (IRA). Metropolitan was a party to three of the agreements that will affect Metropolitan's water supply and finances for the next 3 years. Those agreements are between Metropolitan and Palo Verde Irrigation District (PVID), the Fort Yuma Quechan Indian Tribe (Quechan), and San Diego County Water Authority (SDCWA). Additionally, an agreement with Bard Water District is in development and should be executed, soon. These agreements reduce Metropolitan's base Colorado River supply through 2026, but as Metropolitan has a record amount of water stored in Lake Mead as Intentionally Created Surplus supplies (nearly 1.7 million acre-feet), Metropolitan projects that it will be able to fill its Colorado River Aqueduct in any year through at least 2026.

The agreements provide financial benefits to Metropolitan in four ways: (1) They reduce the annual program costs that Metropolitan has committed to for these water supply programs, which will be instead paid for by Reclamation through fiscal year 2026; (2) Metropolitan receives funding for some of its past expenditure from the programs; (3) Metropolitan will receive revenue for fallowing on Metropolitan-owned land; and (4) Metropolitan will potentially increase its full service rate sales. The exact amount of financial impact of these collective actions is not certain at this time, as some of the details are still being worked out and the quantities of water affected may change. In the budget, \$47.3 million from IRA (Bucket 1) funding is included in the revenues to offset supply program costs in FY 2023/24 through FY 2025/26.

Forecasted revenues by major category are shown in the figure below.

### Revenue Forecast, \$ millions



\* includes revenues from water sales and exchanges

\*\*includes revenues from power sales, new grants, IRA Bucket 1, and miscellaneous revenues

### Other Funding Sources

Other sources of funds include withdrawals from bond construction funds, Refurbishment and Replacement (R&R) Fund, General Fund, Treatment Surcharge Stabilization Fund (TSSF), Water Rate Stabilization Fund (WRSF), and the Revenue Remainder Fund.

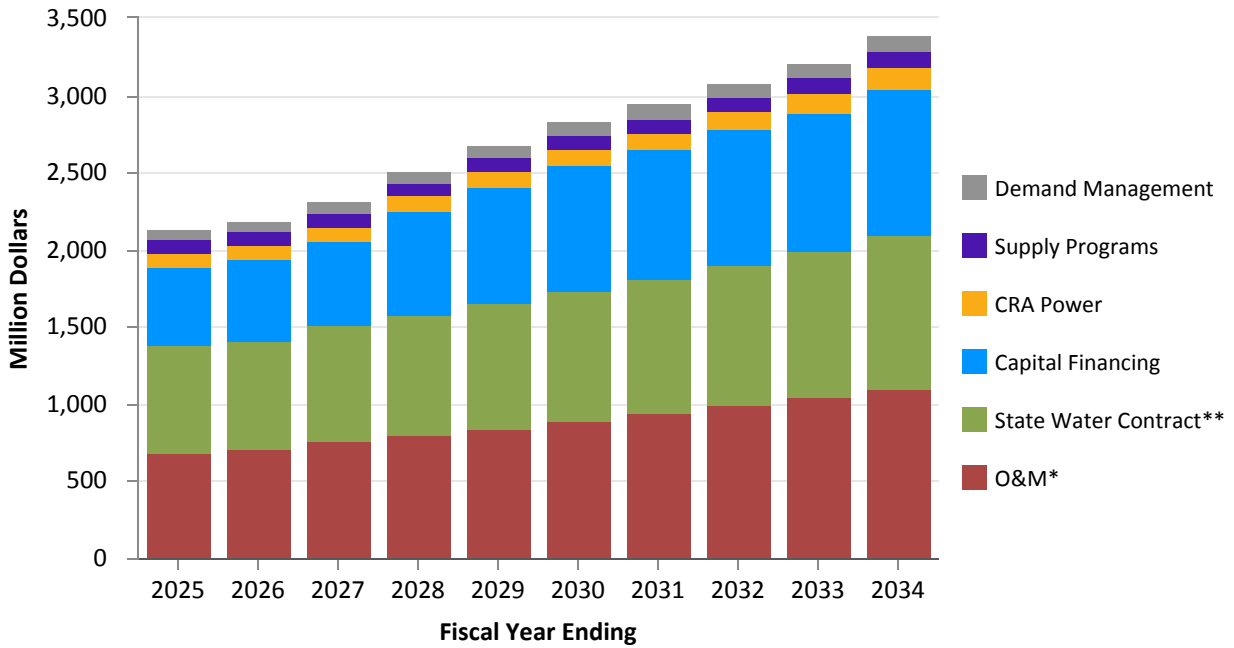
## USES OF FUNDS

Over the next ten years, total annual expenditures are projected to range from \$2.13 billion in FY 2024/25 to \$3.40 billion in FY 2033/34.

### Expenditures

Expenditures are grouped into eight major categories: SWC, O&M, PWSC planning costs (included in the O&M expenditures in the chart below), Delta Conveyance (included in the SWC expenditures in the chart below), demand management programs, CRA power costs, supply programs, and capital financing. The first figure below illustrates the general trends in expenditures over the ten-year period from FY 2024/25 to FY 2033/34. The second figure following shows the comparison of FY 2024/25 to FY 2033/34 in terms of the contribution of expenditures to the total.

Expenditure Forecast, \$ millions

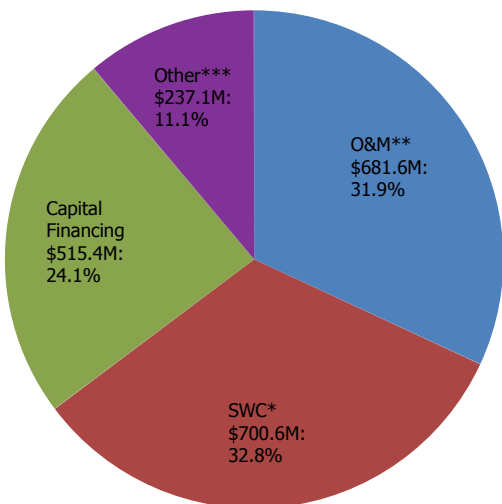


\* includes PWSC planning costs

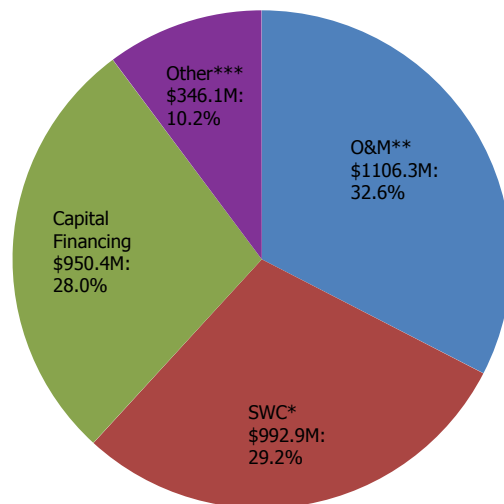
\*\* includes Delta Conveyance Project planning costs

Expenditure Forecast, Contribution by Major Area

FY 2024/25 : \$2.10B



FY 2033/34 : \$3.34B



\* includes Delta conveyance planning costs

\*\* includes PWSC planning costs

\*\*\* includes CRA Power, Demand Management, and Supply Programs

## Pure Water Southern California Planning Costs

The Ten-Year Forecast includes planning costs for the PWSC at \$28.9 million in FY 2024/25 and \$25.1 million in FY 2025/26 for preparation of a programmatic environmental impact report for the PWSC system. The departments have budgeted for the PWSC planning costs as a major O&M project with their budgets. These planning costs will be funded out of the \$80M grant from State Water Resource Control Board (SWRCB) received in May 2023 to offset the respective departmental O&M costs. This is the next step before the Board will be fully informed and ready to make a decision on if, how, and when to proceed with further investments in this project.

## State Water Project

Metropolitan is one of 29 agencies that contract with the State of California for participation in the SWP's water supply function<sup>1</sup>. Metropolitan is obligated to pay its share of the capital and minimum operations, maintenance, power, and replacement charges of the SWP regardless of the amount of water actually received. In addition, Metropolitan pays the power costs to convey the water. The Ten-Year Forecast assumes that SWC annual costs, including power, will increase from \$689.0 million in FY 2024/25 to \$992.9 million in FY 2033/34, as shown in the figure below. SWC costs account for 32 percent of Metropolitan's expenses in FY 2024/25, and 29 percent in FY 2033/34. The remainder of the fixed costs is based upon information provided by the DWR, and is associated with Transportation Capital and Minimum Operations & Maintenance, and the Delta Water Supply Capital and Minimum Operations & Maintenance. Variable SWP power costs are projected to gradually increase over the ten-year period.

Power costs will vary depending on the price of electricity, total system deliveries, storage operations, and the amount of water pumped on the SWP. SWP variable power costs are projected to change about (1) percent per year over the ten-year forecast period. The SWP energy costs are impacted by two factors. First, the annual hydrology, secondly the energy policies of the state of California. The SWP has invested heavily in hydroelectric power generation facilities. The unit cost of operating the power facilities declines as the amount of available water increases. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center. Net flows through the SWP that incur power are expected to average about 182 to 328 TAF per year.

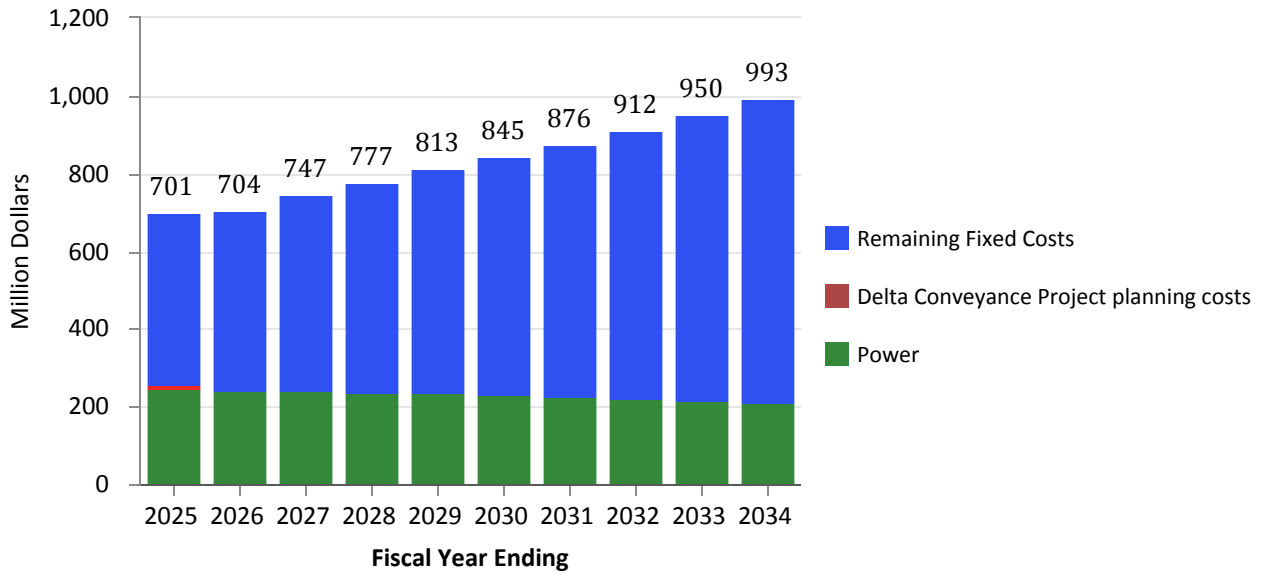
On April 29, 2019, Governor Newsom issued an executive order directing State agencies to develop a single-tunnel Bay-Delta conveyance facility instead of the approved WaterFix project. In light of this, the WaterFix project is no longer included in the ten year projection. Funding for Metropolitan's contribution for Delta conveyance project planning activities of \$11.6 million is included in the fiscal year 2024/25. If staff determines that Metropolitan's appropriate contribution toward planning activities should exceed the Board-approved amount included in the Biennial Budget for FY 2024/25 and 2025/26, the General Manager will request authorization from the Board for additional funding. Long-term costs for the DCP have not been included in the forecast. At a later date staff will recommend that the Board separately consider Metropolitan's participation in the DCP after project planning has progressed further.

Please refer to the section on the SWP for additional details on SWP expenditures.

The total SWC expenditures are shown in the figure below. The SWP is described under the Non-Departmental Budgets section of the Biennial Budget.



SWC Expenditure Forecast, \$ millions

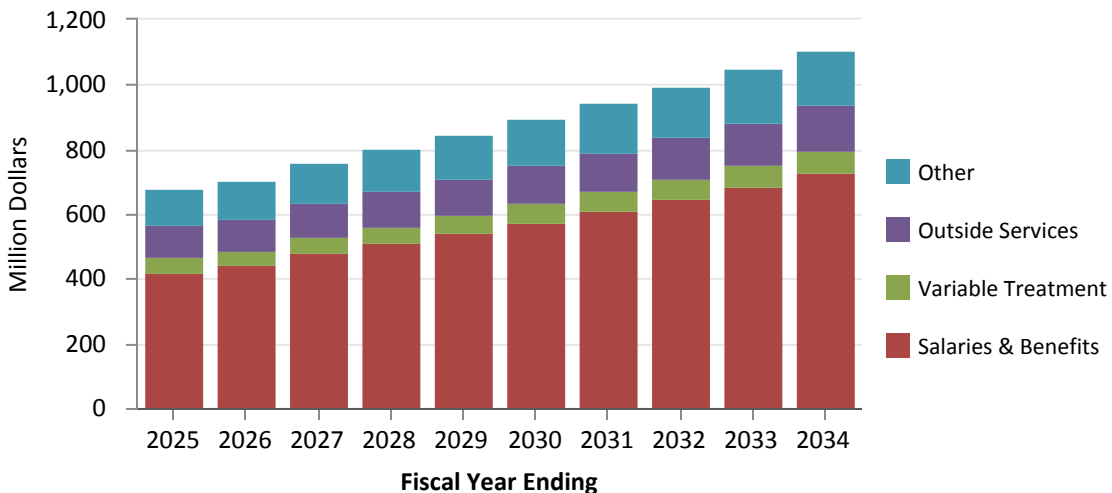


<sup>1</sup> The term “supply” is used to distinguish between other functions of the SWP such as recreation and flood control. The term is not used to distinguish between the conservation (supply) and transportation (conveyance) functions of the SWP under the State Water Contracts for participation in the SWP.

Operations and Maintenance

O&M costs are projected to increase from \$682 million in FY 2024/25 to \$1,106 million in FY 2033/34. This represents an average annual increase of 5.5 percent from FY 2024/25. During this time frame, inflation is assumed to be 4.0 percent for variable treatment costs and outside and other services. Salaries and benefits are expected to escalate at a rate of 6.0 percent over the 10-year forecast period. The Ten-Year Forecast assumes Metropolitan continues to fully fund the annual required contribution to meet future retiree medical costs (Other Post-Employment Benefits, or OPEB) and retirement benefits.

O&M Forecast, \$ millions



## Demand Management

Demand management costs include funding for the Local Resource Programs (LRP), the Conservation Program, Future Supply Actions Program and the Stormwater Pilot Program. These expenditures are projected to increase from \$58.6 million in FY 2024/25 to \$101.6 million in FY 2033/34, excluding any bond funded expenditures. The LRP costs are projected to increase from \$27.7 million in FY 2024/25 to \$66.4 million in FY 2033/34. The Conservation costs are projected to be \$98.3 million over the biennium and \$30.5 million per year for the remainder of the ten-year period. This program provides continued funding of residential, commercial, and outdoor conservation programs, and conservation messaging. In addition, Future Supply Actions and Stormwater Pilot costs average about \$4.2 million per year throughout the ten-year period.

Demand Management programs are described under the Non-Departmental Budgets section of the Biennial Budget.

## CRA Power Costs

CRA Power costs are projected to increase from \$84.5 million in FY 2024/25 to \$142.9 million in FY 2033/34. Power costs will vary depending on the price of electricity, Metropolitan's resource portfolio to meet electricity needs, storage operations, and the amount of water pumped on the CRA.

Colorado River diversions are expected to average about 852 TAF over the ten-year period.

Power costs are described under the Non-Departmental Budgets section of the Biennial Budget.

## Supply Programs

Supply programs increase slightly over the ten-year period from \$94.0 million in FY 2024/25 to \$101.6 million in FY 2033/34, excluding bond funded program costs. Additional spending on Participation Rights for the AVEK High Desert Water Bank Program of \$85.5M in FY 2024/25, \$44.1M in FY 2025/26, and \$10M in FY 2026/27 will be funded by debt. The estimates represent expenditures for average year conditions. If extreme weather conditions are experienced, these cost estimates could be much higher or lower. If higher than normal demand is coupled with lower than normal supply, supply program costs could be significantly higher.

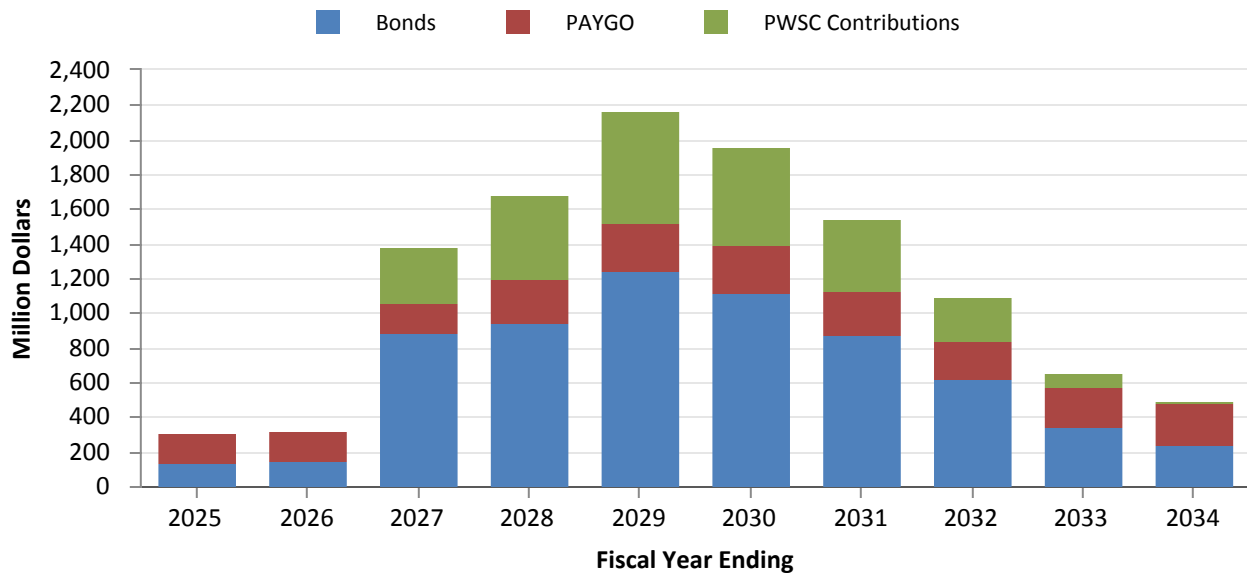
A description of Metropolitan's Supply Programs is provided under the Non-Departmental section of the Biennial Budget.

## Capital Investment Plan

The ten-year projected CIP through FY 2033/34 is estimated at a cumulative amount of \$11.6 billion and includes the construction of the PWSC. The CIP continues to reflect the deferral of facility expansion projects. The CIP focuses on projects that enhance reliability while focusing on necessary refurbishment and replacement of aging infrastructure and compliance with regulatory requirements. Accordingly, the O&M impact from the resulting CIP is negligible. Without this emphasis on repair and replacement of aging facilities, O&M expenditures could potentially be much higher.

The following figure shows the funding sources for the ten-year CIP from PAYGO (red bars), Bonds (blue bars) and PWSC contributions. PWSC capital costs are projected to be funded by Metropolitan and other partners in the projects shown in the PWSC contribution (green bars) starting in FY 2026/27.

## CIP Ten-Year Forecast and Funding Sources, \$ millions



## Capital Financing Options

The CIP will be funded from a combination of bond proceeds and operating revenues. In order to mitigate increases in water rates, provide financial flexibility, and support Metropolitan's high credit ratings including maintaining revenue bond debt service and fixed charge coverage ratios, it is anticipated that 13 to 56 percent of the CIP will be funded from current revenues, or PAYGO. This level of PAYGO funding is appropriate given that a significant portion of future CIP projects has been identified as R&R projects. This level of PAYGO also helps ensure that Metropolitan meets its coverage targets by generating a margin of revenues over operating and debt expenditures. The additional revenue required to meet Metropolitan's revenue bond debt service coverage target of 2.0 times and fixed charge coverage of 1.2 times is available to fund the CIP. PAYGO funding throughout the ten-year horizon of the planning period ensures that current customers are always contributing funds towards the capital investments from which they benefit, and not deferring these costs entirely to future generations of ratepayers.

Bond funded expenditures may include a combination of variable and fixed rate debt. Debt has been structured to mitigate near-term rate impacts and smooth out long-term debt service. The principal advantage of variable rate debt is the opportunity for a lower interest cost. Normally, short-term interest rates are lower than long-term interest rates for debt of comparable credit quality. If interest rates remain constant, Metropolitan will generally have significantly lower interest costs on variable rate debt than on fixed rate debt, even after remarketing and liquidity facility costs. Also, if interest rates decline, Metropolitan will benefit from lower interest costs without the necessity or cost of a refunding. If interest rates rise, variable rates could stay lower than the fixed rate originally avoided, and the longer the variable rate debt is outstanding at favorable spreads, the higher the break-even point becomes on fixed rate debt. Variable rate debt is used to mitigate interest costs over the long term, and provides a natural hedge against changes in investment earnings: when interest rates are high, interest costs on variable rate debt is higher but so are earnings from Metropolitan's investment portfolio. When interest rates are low, interest earnings are lower, but so are variable rate interest costs.

Typically, fixed rate bonds are only redeemable a given number of years after their issuance. Variable rate debt, on the other hand, is generally redeemable on any interest payment or reset date.

However, variable rate debt does have risks. These risks include:

- Rising interest rates. Because future interest rates are unknown, the costs of capital improvements financed with variable rate debt are more difficult to estimate for revenue planning purposes. Significant interest rate increases could cause financial stress.
- Liquidity facility renewal risk. Variable rate debt normally requires a liquidity facility to protect the investors and issuers against “puts” of a large portion or all of the debt on a single day. Liquidity facilities generally do not cover the full term of the debt. If an issuer’s credit declines or the liquidity facility capacity is not available, the issuer runs the risk of not being able to obtain an extension or renewal of the expiring liquidity facility. In that event, the issuer may have to retire the debt or convert it to fixed rate debt.

## Debt Financing

It is anticipated that there will be about \$11.6 billion of capital expenditures over the ten-year period. Of this, \$6,568.2 million, or 56 percent of future capital expenditures, are anticipated to be funded by debt proceeds. Provided below is the schedule of CIP debt issuances and interest rates assumed over the 10-year forecast period.

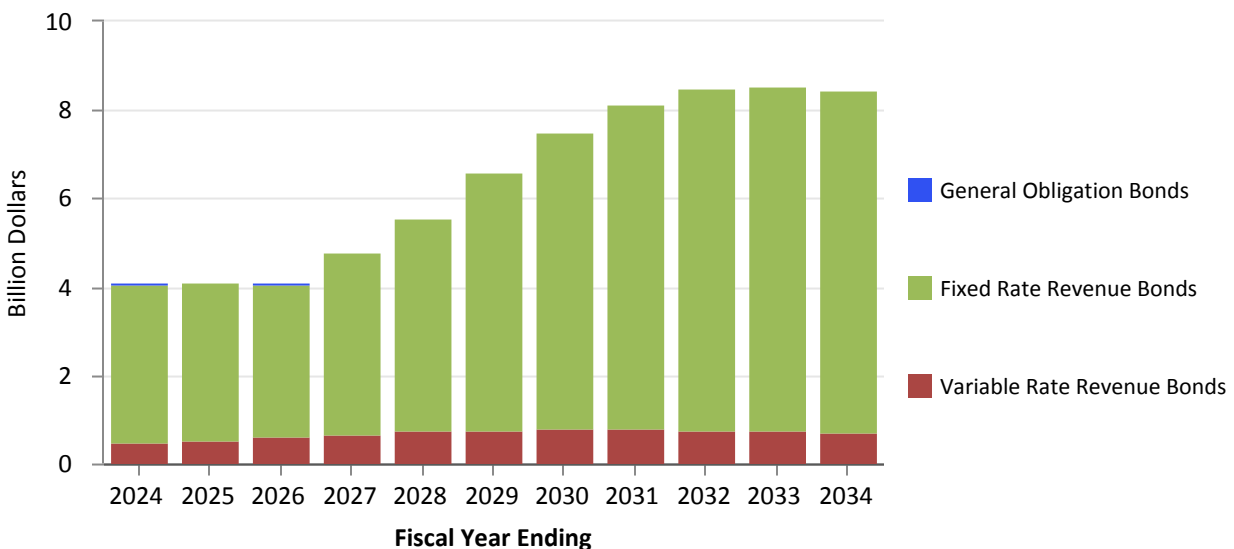
<b>Fiscal Year Ending</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>
CIP Revenue Bonds* (\$ millions)	130	150	900	950	1250	1120	880	630	340	240
Fixed Interest Rate (%)	4.75	4.75	4.75	4.75	4.50	4.50	4.50	4.50	4.50	4.50

\*All bond issuances are anticipated to be tax-exempt and have a maturity of 30 years.

Outstanding debt, including revenue and general obligation bonds (“GO bonds”), as of December 31, 2023 is \$3.9 billion. The net position of Metropolitan at June 30, 2023 was \$7.5 billion. Metropolitan is limited to not have outstanding revenue bond debt in amounts greater than 100 percent of its net position (equity). As of June 30, 2023, Metropolitan's debt to equity ratio was 58 percent.

Total outstanding debt is illustrated below. Total outstanding debt is estimated to be \$8.4 billion by FY 2033/34, approximately 85 percent higher than the current level.

## Outstanding Debt, \$ billions

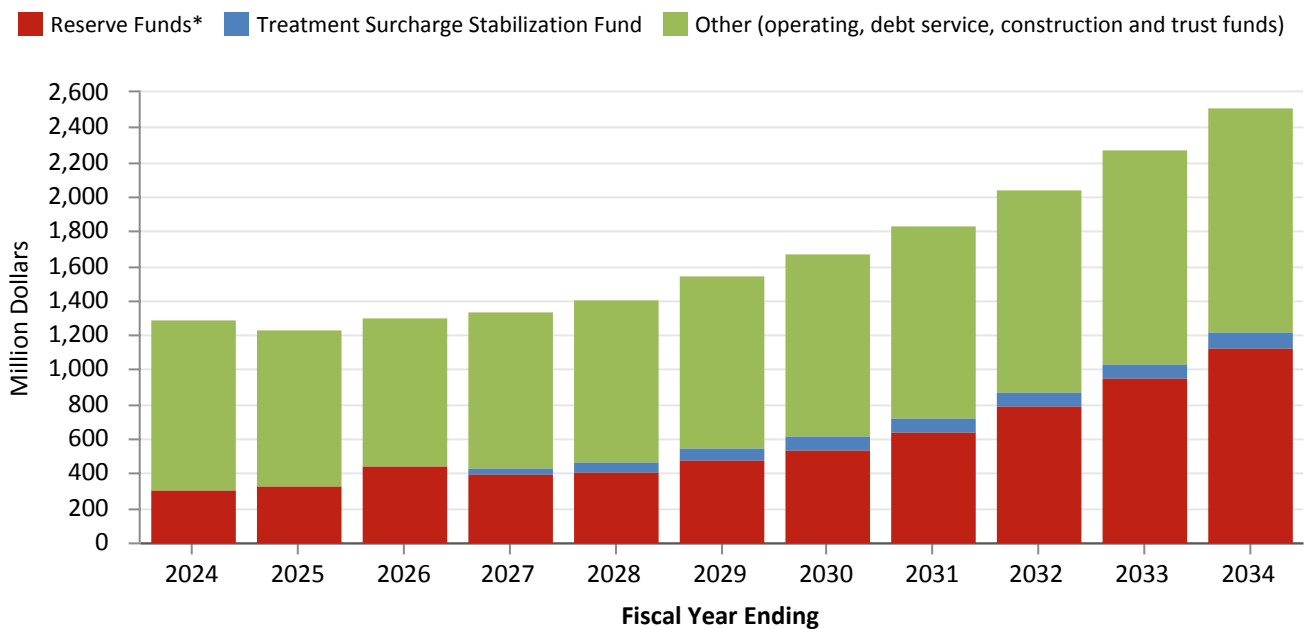


Metropolitan’s variable rate debt as a percentage of total revenue bond debt is projected to stay approximately the same at 11 percent over this time period. The appropriate amount of variable rate debt will continue to be monitored and adjusted depending on market rates, financing needs, available short-term investments, and fund levels in the investment portfolio with which variable interest rate exposure can be hedged. GO bond debt will decrease as voter approved indebtedness matures.

## FUND BALANCES AND RESERVES

As shown in the figure below, over the next ten years total fund balances are projected to increase to \$2.5 billion in FY 2033/34.

End of Year Fund Balances, \$ millions



\* includes Water Rate Stabilization Fund and Revenue Remainder Fund.

## FINANCIAL RATIOS

Revenue bond debt service coverage is one primary indicator of credit quality, and, for purposes of budget development, is calculated by dividing net operating revenues by debt service. Revenue bond debt service coverage measures the amount that net operating revenues exceed or "cover" debt service payments over a period of time. Higher coverage levels are preferred since they indicate a greater margin of protection for bondholders. For example, a municipality with 2.0 times debt service coverage has twice the net operating revenues required to meet debt service payments. The ten-year forecast projects that Metropolitan's revenue bond coverage ratio ranges from 1.6 times to 1.9 times over the period. Metropolitan’s minimum coverage policy is vital to continued strong credit ratings and low cost bond funding.

In addition to revenue bond debt service coverage, Metropolitan also measures total coverage of all fixed obligations after payment of operating expenditures. This additional measure is used primarily because of Metropolitan's recurring capital costs for the SWC. Rating agencies expect that a financially sound utility consistently demonstrate an ability to fund all recurring costs, whether they are operating expenditures, debt service payments or other contractual payments. The ten-year forecast projects that Metropolitan's fixed charge coverage ratio is at least 1.6 times over the ten-year period. These levels help maintain strong credit ratings and access to the capital markets at low cost, and provide PAYGO funding for the CIP.

Ten-Year Financial Forecast, Sources and Uses of Funds, \$ millions

Fiscal Year Ending	2025 Budget	2026 Budget	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast	2032 Forecast	2033 Forecast	2034 Forecast
<b>SOURCES OF FUNDS</b>										
Revenues										
Taxes	316.5	333.8	342.1	350.7	359.5	373.8	388.8	404.2	420.0	436.5
Interest Income	57.7	48.2	43.4	45.1	48.6	52.9	57.7	63.8	70.9	78.6
Power Sales	20.9	17.6	14.8	13.4	12.4	11.6	11.6	11.9	12.1	14.8
Fixed Charges (RTS & Capacity Charge)	213.8	230.4	241.9	280.6	335.3	369.3	388.2	404.2	422.5	445.7
Water Revenues (1)	1,399.6	1,510.7	1,659.2	1,862.3	2,018.0	2,116.4	2,231.0	2,352.6	2,478.2	2,612.1
Miscellaneous Revenue	30.8	31.6	32.4	27.8	28.5	29.2	30.0	30.8	31.6	32.5
Grants	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
IRA Bucket 1 Funding	47.3	47.3	—	—	—	—	—	—	—	—
Stored Water Sales	60.0	60.0	—	—	—	—	—	—	—	—
Bond Proceeds	158.4	168.4	895.5	945.3	1,243.8	1,114.4	875.6	626.9	338.3	238.8
Working Capital Borrowing	—	—	—	—	—	—	—	—	—	—
<b>Sub-total Revenues</b>	<b>2,325.0</b>	<b>2,468.0</b>	<b>3,249.3</b>	<b>3,545.1</b>	<b>4,066.0</b>	<b>4,087.6</b>	<b>4,002.9</b>	<b>3,914.3</b>	<b>3,793.5</b>	<b>3,878.9</b>
Fund Withdrawals										
R&R and General Fund	175.0	175.0	175.0	250.0	275.0	275.0	250.0	225.0	230.0	240.0
Bond Funds for Construction	93.2	44.3	3.8	6.5	—	2.4	2.7	—	4.5	2.1
Treatment Surcharge Stabilization Fund	—	—	—	—	—	—	2.5	—	1.6	0.6
State Funding SWRCB	28.9	25.1	8.2	—	—	—	—	—	—	—
Decrease in Required Reserves	10.4	—	—	—	—	—	—	—	—	—
Decrease in Water Rate Stabilization Fund	—	—	61.0	11.2	—	—	—	—	—	—
<b>Sub-total Fund Withdrawals</b>	<b>307.4</b>	<b>244.5</b>	<b>247.9</b>	<b>267.7</b>	<b>275.0</b>	<b>277.4</b>	<b>255.2</b>	<b>225.0</b>	<b>236.1</b>	<b>242.6</b>
<b>TOTAL SOURCES OF FUNDS</b>	<b>2,632.4</b>	<b>2,712.5</b>	<b>3,497.2</b>	<b>3,812.8</b>	<b>4,341.0</b>	<b>4,365.0</b>	<b>4,258.1</b>	<b>4,139.3</b>	<b>4,029.7</b>	<b>4,121.5</b>
<b>Water Transactions* (MAF)</b>	<b>1.34</b>	<b>1.34</b>	<b>1.34</b>	<b>1.35</b>	<b>1.35</b>	<b>1.36</b>	<b>1.37</b>	<b>1.39</b>	<b>1.41</b>	<b>1.43</b>

Totals may not foot due to rounding.

(1) includes revenues from water sales and exchanges presented on a Cash Year basis

Fiscal Year Ending	2025 Budget	2026 Budget	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast	2032 Forecast	2033 Forecast	2034 Forecast
<b>USES OF FUNDS</b>										
Expenditures										
State Water Contract*	689.0	703.9	747.4	776.8	812.8	845.1	876.4	911.8	950.3	992.9
Supply Programs (cash funded portion)	94.0	90.9	86.0	85.0	84.5	87.7	90.9	94.3	97.9	101.6
Delta Conveyance Project planning costs	11.6	—	—	—	—	—	—	—	—	—
Colorado River Power	84.5	93.3	97.0	99.5	102.1	106.2	110.1	115.9	125.6	142.9
Debt Service	340.4	353.5	373.1	422.5	479.6	535.5	583.4	650.0	665.6	710.4
Demand Management (cash funded portion)	58.6	61.1	75.7	80.4	83.4	100.6	102.1	99.4	101.7	101.6
Departmental O&M	625.6	649.7	703.9	742.1	782.5	825.1	870.0	917.5	967.7	1,020.7
Treatment Chemicals, Sludge & Power	46.4	47.1	49.2	51.6	54.1	56.7	59.5	62.4	65.6	68.9
Operating Equipment	9.6	10.1	10.8	11.5	12.2	13.0	13.9	14.8	15.7	16.7
<b>Sub-total Expenditures</b>	<b>1,959.7</b>	<b>2,009.6</b>	<b>2,143.1</b>	<b>2,269.4</b>	<b>2,411.1</b>	<b>2,569.9</b>	<b>2,706.3</b>	<b>2,866.2</b>	<b>2,990.1</b>	<b>3,155.6</b>
Capital Investments	426.6	387.7	1,074.3	1,201.7	1,517.3	1,391.8	1,128.3	844.6	572.8	480.9
Fund Deposits										
R&R and General Fund	175.0	175.0	175.0	250.0	275.0	275.0	250.0	225.0	230.0	240.0
Revenue Bond Construction	—	—	—	—	1.4	—	—	7.3	—	—
Treatment Surcharge Stabilization Fund	—	—	32.9	20.6	11.3	5.9	—	—	—	—
Interest for Construction & Trust Funds	7.4	2.8	1.7	2.3	2.8	3.2	3.3	3.4	3.6	3.5
Increase in Required Reserves	—	88.9	70.2	68.8	81.2	74.5	90.5	64.9	96.1	88.4
Increase in Water Rate Stabilization Fund	63.8	48.5	—	—	40.9	44.7	79.7	128.0	137.1	153.1
<b>Sub-total Fund Deposits</b>	<b>246.2</b>	<b>315.1</b>	<b>279.8</b>	<b>341.7</b>	<b>412.6</b>	<b>403.3</b>	<b>423.5</b>	<b>428.6</b>	<b>466.7</b>	<b>485.1</b>
<b>TOTAL USES OF FUNDS</b>	<b>2,632.4</b>	<b>2,712.5</b>	<b>3,497.2</b>	<b>3,812.8</b>	<b>4,341.0</b>	<b>4,365.0</b>	<b>4,258.1</b>	<b>4,139.3</b>	<b>4,029.7</b>	<b>4,121.5</b>

Totals may not foot due to rounding.

\* Without Delta Conveyance Costs

Ten-Year Financial Forecast, Coverage Ratios and Projected Fund Balances, \$ millions

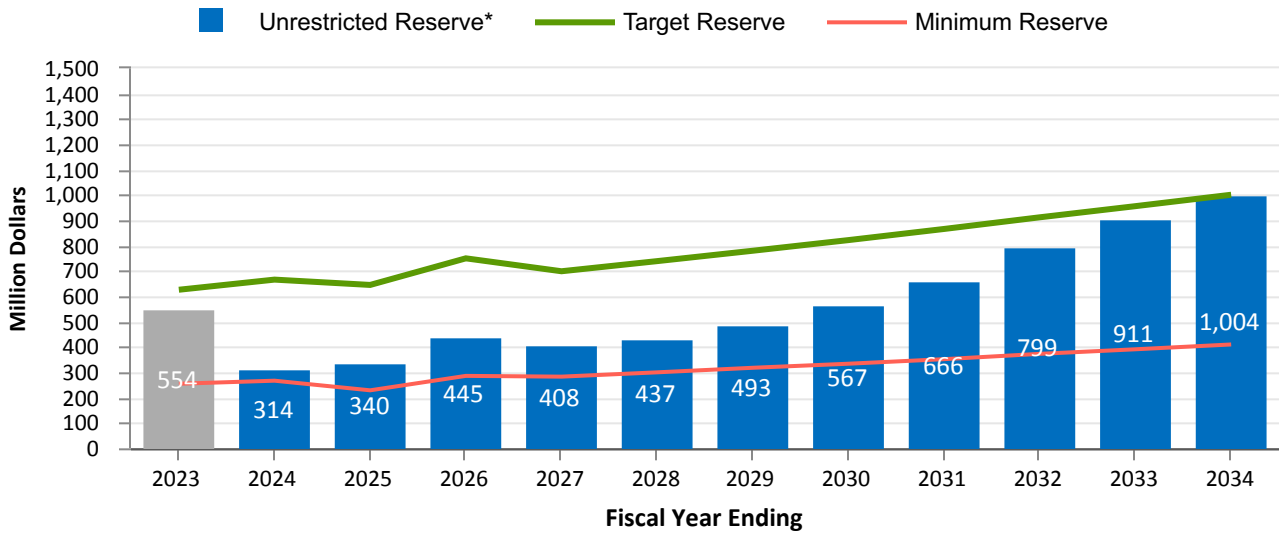
Fiscal Year Ending	2025 Budget	2026 Budget	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	2031 Forecast	2032 Forecast	2033 Forecast	2034 Forecast
<b>RATIOS</b>										
Fixed Charge Coverage	1.7	1.9	1.6	1.8	1.9	1.8	1.8	1.7	1.7	1.7
Revenue Bond Coverage	1.7	1.9	1.6	1.8	1.9	1.8	1.8	1.7	1.7	1.7
Var. Rate Debt as % of Rev. Bond Debt	13.5 %	15.4 %	14.4 %	13.5 %	11.7 %	10.6 %	9.9 %	9.3 %	9.0 %	8.5 %
<b>RESTRICTED AND DESIGNATED FUNDS</b>										
General Fund	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
State Funding SWRCB	32.4	8.1	—	—	—	—	—	—	—	—
Treatment Surcharge Stabilization Fund	—	—	33.5	55.6	68.8	77.2	77.2	79.8	80.7	82.8
Other	797.2	786.6	834.8	872.9	932.0	983.7	1,051.5	1,099.6	1,169.7	1,233.8
<b>Sub-total Restricted Funds</b>	<b>894.6</b>	<b>859.7</b>	<b>933.3</b>	<b>993.4</b>	<b>1,065.9</b>	<b>1,125.9</b>	<b>1,193.7</b>	<b>1,244.3</b>	<b>1,315.4</b>	<b>1,381.6</b>
<b>UNRESTRICTED FUNDS</b>										
Reserve Funds (1)	339.8	445.4	403.7	417.6	482.7	548.6	649.0	802.0	961.5	1,137.7
<b>Sub-total Unrestricted Funds</b>	<b>339.8</b>	<b>445.4</b>	<b>403.7</b>	<b>417.6</b>	<b>482.7</b>	<b>548.6</b>	<b>649.0</b>	<b>802.0</b>	<b>961.5</b>	<b>1,137.7</b>
<b>TOTAL FUNDS</b>	<b>1,234.4</b>	<b>1,305.1</b>	<b>1,337.0</b>	<b>1,411.0</b>	<b>1,548.6</b>	<b>1,674.5</b>	<b>1,842.8</b>	<b>2,046.3</b>	<b>2,276.9</b>	<b>2,519.4</b>

Totals may not foot due to rounding.

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

TEN-YEAR FINANCIAL FORECAST WITHOUT PWSC

Projected Financial Indicators



Overall Rate Inc.	5.0%	5.0%	8.5%	8.5%	7.5%	5.5%	4.0%	4.0%	4.0%	3.0%	3.0%	3.0%
Water Transactions *(MAF)	1.42	1.17	1.34	1.34	1.34	1.35	1.35	1.36	1.37	1.39	1.41	1.43
Rev. Bond Cvg	1.5	1.1	1.7	1.9	1.6	1.7	1.8	1.8	2.0	2.0	2.1	2.0
Fixed Chg Cvg	1.5	1.1	1.7	1.9	1.6	1.7	1.8	1.8	2.0	2.0	2.1	2.0
PAYGO, \$M	135	35	175	175	175	180	190	200	210	220	230	240

This Ten-Year Financial Forecast does not include the PWSC project costs, which affects Fiscal Years 2026/27 through 2033/34. The removal of the project has the affect of reducing overall projected rate changes from 11.5% in Fiscal Years 2026/27 and 2027/28 to 7.5% and 5.5%, respectively. Beginning in FY 2028/29, rate increases would decrease to 4.0% for three years and then reduce further to 3.0% for additional three years, approximately 1% below the rate increases forecasted when the PWSC project is included. In addition, starting FY 2030/31, the revenue bond coverage will reach the target level of 2.0.

Both 10-Year Financial Forecasts (with and without PWSC) assume the following:

- Water transactions are forecasted to climb gradually over the forecast period, from 1.34 MAF in FY 2024/25 to 1.43 MAF in FY 2033/34;
- As part of the rate mitigation measures adopted by the Board, the forecast assumes that Metropolitan will generate \$20 million annually from grants through FY 2033/34, in addition to the \$47.3 million of IRA Bucket 1 funding and \$60 million of miscellaneous revenue in the biennium;
- Demand Management Programs continue to be funded to incentivize the development of local water supplies and the conservation of water to reduce the need to transport water into the Metropolitan service area or within Metropolitan’s distribution system, and also help ensure that Metropolitan’s member agencies achieve higher water use efficiency, in compliance with state policy; and
- No funding of any other large projects like Sites Reservoir, East-West Conveyance, or the Delta Conveyance Project are included in the forecasts.

### Water Rates and Charges

Rates & Charges Effective January 1st	2024*	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Supply Rate (\$/AF)	\$332	\$290	\$313	\$438	\$469	\$482	\$513	\$529	\$536	\$542	\$549
System Access Rate (\$/AF)	\$389	\$463	\$492	\$496	\$543	\$579	\$609	\$644	\$672	\$701	\$731
System Power Rate (\$/AF)	\$182	\$159	\$179	\$179	\$179	\$180	\$182	\$185	\$185	\$185	\$185
<b>Full Service Untreated Volumetric Cost (\$/AF)</b>	<b>\$903</b>	<b>\$912</b>	<b>\$984</b>	<b>\$1,113</b>	<b>\$1,191</b>	<b>\$1,241</b>	<b>\$1,304</b>	<b>\$1,358</b>	<b>\$1,393</b>	<b>\$1,428</b>	<b>\$1,465</b>
Treatment Surcharge (\$/AF)	\$353	\$483	\$544	\$544	\$544	\$548	\$548	\$565	\$579	\$606	\$619
<b>Full Service Treated Volumetric Cost (\$/AF)</b>	<b>\$1,256</b>	<b>\$1,395</b>	<b>\$1,528</b>	<b>\$1,657</b>	<b>\$1,735</b>	<b>\$1,789</b>	<b>\$1,852</b>	<b>\$1,923</b>	<b>\$1,972</b>	<b>\$2,034</b>	<b>\$2,084</b>
<b>Readiness-to-Serve Charge (\$M)</b>	<b>\$167</b>	<b>\$181</b>	<b>\$188</b>	<b>\$188</b>	<b>\$199</b>	<b>\$213</b>	<b>\$222</b>	<b>\$231</b>	<b>\$244</b>	<b>\$252</b>	<b>\$269</b>
<b>Capacity Charge (\$/cfs)</b>	<b>\$11,200</b>	<b>\$13,000</b>	<b>\$14,500</b>	<b>\$14,500</b>	<b>\$15,300</b>	<b>\$16,300</b>	<b>\$16,800</b>	<b>\$17,400</b>	<b>\$18,100</b>	<b>\$18,100</b>	<b>\$18,500</b>

\*Supply Rate and Full Service based on Tier 1 Supply for 2024



# CAPITAL INVESTMENT PLAN

## Summary

The primary focus of the Capital Investment Plan (CIP) Appendix is to provide information on all CIP programs and projects that have been proposed, evaluated, and included in the budget forecast to begin or continue during and after fiscal year (FY) 2024/25 and FY 2025/26. Projects included in this document are referred to as “planned” and upon appropriation of the CIP budget for FY 2024/25 and FY 2025/26 are authorized to proceed by the Chief Engineer’s approval under the authority of the General Manager.

Scope, accomplishments, objectives, and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the Individual Program Summaries. However, projects in the post-construction phase or the post-deployment phase are not included but will proceed to completion and closeout under the authorization carried over from previous biennia.

The total planned capital spending for FY 2024/25 and FY 2025/26 of approximately \$636.5 million includes all anticipated costs for labor including administrative overhead, construction, and professional services contract costs, right of way, materials, operating equipment, and incidental expenses.

Annual planned capital spending for FY 2024/25 and FY 2025/26 is estimated to be approximately \$312.0 million and \$324.5 million, respectively, and is planned to be funded by a combination of current operating revenues (i.e., PAYGO) and debt. Engineering Services tracks actual spending against the plan and adjusts priorities and staff assignments to manage spending consistent with the overall CIP budget.

Capital Program	FY 2024/25	FY 2025/26	Total
Climate Adaptation	\$ 7,760,000	\$ 17,680,000	\$ 25,440,000
Colorado River Aqueduct	\$ 43,640,000	\$ 42,190,000	\$ 85,830,000
Dams & Reservoirs	\$ 36,230,000	\$ 35,880,000	\$ 72,110,000
Distribution System	\$ 59,370,000	\$ 42,590,000	\$ 101,960,000
Drought Mitigation – SWP Dependent Areas	\$ 39,320,000	\$ 27,010,000	\$ 66,330,000
Information Technology & Control Systems	\$ 24,130,000	\$ 25,950,000	\$ 50,080,000
Minor Capital Projects	\$ 8,490,000	\$ 7,720,000	\$ 16,210,000
Additional Facilities and Systems	\$ 19,120,000	\$ 10,180,000	\$ 29,300,000
Prestressed Concrete Cylinder Pipe	\$ 16,880,000	\$ 49,580,000	\$ 66,460,000
Water Treatment Plants	\$ 57,060,000	\$ 65,700,000	\$ 122,760,000
<b>Total</b>	<b>\$ 312,000,000</b>	<b>\$ 324,480,000</b>	<b>\$ 636,480,000</b>

# Capital Investment Plan Organization

## CIP Structure

The CIP is structured into three levels for clear planning and reporting in the following format:

1. PROGRAM
2. PROJECT GROUP
3. PROJECT

The highest level of the CIP structure is Program. Programs are comprised of one or more Project Groups. There are 10 capital programs described in Table 1.

Table 1 - Capital Programs

Program	Definition
Climate Adaptation	Projects under this program will replace, refurbish, upgrade, or construct new facilities to prepare Metropolitan to adjust to current and projected climate change impacts on its operation and its mission to provide its service area with adequate and reliable supplies of high-quality water in an environmentally and economically responsible way.
Colorado River Aqueduct (CRA)	Projects under this program will replace or refurbish facilities and components on the CRA system to reliably convey water from the Colorado River to Southern California.
Dams & Reservoirs	Projects under this program will upgrade or refurbish Metropolitan’s dams, reservoirs, and appurtenant facilities to reliably meet water storage needs and regulatory compliance.
Distribution System	Projects under this program will replace, upgrade, or refurbish existing facilities within Metropolitan’s distribution system including pressure control structures, hydroelectric power plants, and pipelines to reliably meet water demands.
Drought Mitigation – SWP Dependent Areas	Projects under this program will replace, refurbish, upgrade, or construct new facilities, which are identified to mitigate the vulnerability experienced by specific member agencies that are impacted during shortages on the State Water Project supplies.
Information Technology & Control Systems	Projects under this program will replace, upgrade, or provide new facilities, software applications, or technology that will enhance cyber security, reliability, flexibility, and capability of information, communication, and control systems.
Minor Capital Projects	This program is comprised of projects, with an estimated cost of less than \$400,000, that often require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities. The projects will be identified after adoption of the budget.
Additional Facilities and Systems	Projects under this program will refurbish, replace, upgrade, or provide new facilities and systems that support Metropolitan’s business and operations.
Prestressed Concrete Cylinder Pipe (PCCP)	Projects under this program will refurbish or upgrade Metropolitan’s PCCP feeders to maintain reliable water deliveries without unplanned shutdowns.
Water Treatment Plants	Projects under this program will replace or refurbish facilities and components at Metropolitan’s five water treatment plants and chlorine unloading facility (CUF) to continue to reliably meet treated water demands.

# Capital Investment Plan Development

## Background

The projects that comprise the proposed CIP have been identified from many Metropolitan studies of projected water needs as well as ongoing monitoring and inspections, condition assessments, and focused vulnerability studies. Staff continues to study operational demands on aging facilities and has made recommendations for capital projects that will maintain infrastructure reliability and ensure compliance with all applicable water quality regulations, and building, fire, and safety codes. Staff has also studied business and operations processes and proposed projects that will improve efficiency and provide future cost savings. Additionally, a number of projects have been identified and prioritized to mitigate the vulnerability experienced in the State Water Project dependent areas during the most recent drought.

## CIP Development Process

The CIP is structured to reflect Metropolitan’s strategic goals of providing a reliable supply of high-quality water at the lowest cost possible. As part of the CIP development process, all new and existing projects are evaluated against an objective set of criteria to ensure existing and future capital investments are aligned with Metropolitan’s priorities for water supply reliability, water quality, and public safety.

This rigorous evaluation process has resulted in a thorough review and assessment of all proposed capital projects by staff and managers prior to inclusion in the CIP budget. Staff continues to conduct comprehensive field investigations that identify critical replacement and refurbishment projects and a variety of necessary facility upgrades related to infrastructure reliability as well as regulatory compliance. Project schedules are evaluated regularly to plan for necessary capital investments in infrastructure reliability and to accommodate the urgency of each project. Additionally, current demand projections that account for ongoing conservation, planned increased local supply production, and the economy, have been evaluated to ensure that demand and drought-related projects are appropriately scheduled.

## Project Proposals

Project sponsors are required to submit proposals for all projects that have not yet been authorized through the completion of the project to be considered for inclusion into the CIP. For newly proposed projects, proposals must include scope, justification, alternatives, impacts of re-scheduling work for a later time, impact on operations and maintenance costs, and an estimate of total project cost. For existing projects, staff must also provide justification for continuing the project, explain any changes since the proposal was last evaluated, and describe critical phases for the upcoming years.

The projects are evaluated, scored, and prioritized based on the contents of the proposals. The key guidelines provided to the project sponsors are summarized in Table 2.

Table 2 - Project Proposal Guidelines

Section	Guideline		
Appropriation No., CIP Index No., Project No., (if existing) and Project Title	If a proposed project has been previously included in the CIP and has been assigned a CIP index number, provide the appropriation and CIP index number along with the project title and project number if one has been assigned. If not previously included in the CIP, provide a project title only.		
Sponsoring Group	Indicate the group sponsoring the project, as follows: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;">           1) Administrative Services            2) Bay Delta            3) Engineering Services            4) Finance            5) Human Resources            6) Information Technology         </td> <td style="width: 50%; vertical-align: top;">           7) Real Property            8) Security            9) Sustainability            10) Water Resource Management            11) Operations         </td> </tr> </table>	1) Administrative Services 2) Bay Delta 3) Engineering Services 4) Finance 5) Human Resources 6) Information Technology	7) Real Property 8) Security 9) Sustainability 10) Water Resource Management 11) Operations
1) Administrative Services 2) Bay Delta 3) Engineering Services 4) Finance 5) Human Resources 6) Information Technology	7) Real Property 8) Security 9) Sustainability 10) Water Resource Management 11) Operations		
Project Manager and Proposal Preparer	Enter the name of the project manager if one was assigned and enter the name of proposal preparer.		
Estimated Total Project Cost	Show the total estimate of cost from inception to completion of a project, including administrative overhead and contingency, as applicable.		
GM Business Plan	Indicate the strategic priorities under GM's Business Plan the project best supports.		
Current Project Phase	Indicate the phase (Study, Preliminary Design, etc.) as of the date proposal submitted.		
Current Phase % Complete	Current phase percent complete as of the date proposal submitted.		
Project Description	Describe the project scope of work.		
Changes to Existing Project	For an existing project, describe any changes to the project scope, budget, or schedule over the past two years.		
Justification	<p>Describe the nature of the issue to be addressed by the project. What is the problem? What is the function of the facility/component being addressed by the project? Why is the project needed? Why can't the project be postponed?</p> <p>Consider issues such as:</p> <ul style="list-style-type: none"> <li>• Operational flexibility</li> <li>• New facility expansion</li> <li>• New water supply</li> <li>• Aging infrastructure deterioration/failure</li> <li>• Process improvement/failure</li> <li>• Maintenance capability</li> <li>• Seismic vulnerability</li> <li>• Obsolescence (vendor support, parts, technology, etc.)</li> <li>• Security</li> <li>• Regulatory Compliance (water quality, environmental, health and safety, etc.)</li> <li>• Cost savings</li> <li>• Revenue generation</li> <li>• Energy savings</li> <li>• Productivity/Innovation/Sustainability</li> </ul> <p>Include an explanation of how the project addresses any of the above issues and provide documentation, when applicable, to substantiate the need for the project.</p>		

Section	Guideline
Directive	<p><b>Regulatory/Legal Settlement:</b> Indicate if this is related to a written citation, verbal/written directive (including environmental mitigation mandated by a Mitigated Negative Declaration or Environmental Impact Report), or in-house identification (including enforceable code requirement or Metropolitan standard).</p> <p><b>Special Initiative/Directive:</b> Indicate if the project is specifically identified in one of the core or strategic initiatives; identified via Area Study, System Overview Study, etc.; and/or what phase(s) of the project have been authorized such as study, preliminary design, or final design.</p>
Service Disruption	Describe how Metropolitan’s day-to-day operations could be impacted if the project is not approved. Consider business, as well as water system operations, including maintenance activities.
Cost/Sustainability/ Customer Service	Describe potential cost, water, and/or energy savings, waste reduction, revenue/energy generation, better customer service (internal or external), etc., that justify the project. Include a pay-back period.
Alternatives	Provide a brief description of any potential project scope alternatives, including any opportunities to “stage” the work. Include if it is possible to only perform a portion of a project to meet foreseeable customer needs. Consider the possibility of new technology, changing demands, as well as environmental impacts and economies of scale. Describe any reasonable projects, processes, or other initiatives available as alternatives to the project. Discuss both positive and negative aspects of each alternative. If possible, explain what other similar agencies are doing about this or similar issue.
Additional Background Information	Provide any other supplemental information (e.g. detailed history of a problem, supporting technical information, shutdown constraints, etc.) that will help in evaluating the project. This can also be attached to the proposal.
Schedule	Indicate the proposed beginning and end dates for all appropriate phases.
Detailed Project Cost Estimate	<p>Include an itemized list of all costs for the project, as follows:</p> <ol style="list-style-type: none"> <li>1) Direct Labor with additives at the indicated rate</li> <li>2) Equipment and Materials</li> <li>3) Incidental Expenses</li> <li>4) Professional/Technical Services (e.g., consultants)</li> <li>5) Right-of-Way and Land Purchases (e.g., easements, fee title, escrow fees)</li> <li>6) Operating Equipment Use and Rental</li> <li>7) Contract Payments (e.g., construction contracts)</li> <li>8) Administrative Overhead at the indicated rate</li> <li>9) Contingency</li> </ol> <p>All new project proposals and existing projects must include this estimate.</p>
Post-Implementation O&M Impacts	To the extent available/known, provide a description of the impacts, costs, and/or benefits this capital project is anticipated to have on Metropolitan’s current and future O&M expenses and services upon completion (e.g. labor, maintenance, and equipment costs; enhanced reliability; improved water quality, etc. For example, “Ozone generators will substantially increase electrical consumption by approximately \$1 million annually and the number of new pieces of equipment will require periodic maintenance per the manufacturer’s recommendations beginning in FY 2025/26. PDR and future studies will provide additional detail on the overall lifecycle costs”). This is required for projects greater than \$2 million and whose planned implementation date is within the next five fiscal years.
Approvals	<ol style="list-style-type: none"> <li>1) Person submitting the proposed project - Type name only</li> <li>2) Team manager sponsoring the project</li> <li>3) Unit manager sponsoring the project</li> <li>4) Section manager sponsoring the project (e.g., all new and existing projects)</li> <li>5) Group manager sponsoring the project (e.g., all new projects)</li> </ol>

## Evaluation Criteria

The evaluation criteria cover four characteristics or objectives for capital projects: Project Justification, Directive, Service Disruption, and Cost/Sustainability/Customer Service. In addition, a multiplier is applied to a project rating to factor in a risk assessment. Table 3 provides a description of the criteria and multiplier.

Table 3 - Evaluation Criteria and Multiplier

Criteria	Description
Justification	Assessment of the overall importance of a project. Criterion looks at whether or not a project supports the following: <ul style="list-style-type: none"> <li>- Supply reliability</li> <li>- Infrastructure reliability</li> <li>- Regulatory compliance</li> <li>- Other goals (e.g., cost savings, revenue generation, energy savings, increased productivity, innovation, and sustainability)</li> </ul>
Directive	Assessment of whether or not a project is specifically identified in one of the core or strategic initiatives, if any permitting agency such as the California State Department of Safety of Dams has issued a directive or citation to take corrective actions, the current authorized scope of work, and/or support the GM Business Plan: <ul style="list-style-type: none"> <li>- Regulatory/Legal Settlement</li> <li>- Special Initiative/Directive</li> <li>- GM Business Plan</li> </ul>
Service Disruption	Assessment of not doing a project. Criterion evaluates the following: <ul style="list-style-type: none"> <li>- Impact to Metropolitan’s business operations</li> <li>- Impact to water system operations (e.g., system delivery and/or reliability, cascading impact on system due to failure, etc.)</li> </ul>
Cost/Sustainability/Customer Service	Assessment of whether or not a project improves the following: <ul style="list-style-type: none"> <li>- Cost efficiency</li> <li>- Sustainability</li> <li>- Customer service</li> </ul>

Multiplier	Description
Risk Assessment	Assessment of the following probability. This assessment is also assisted by evaluation of risk/consequence heatmap, which provides information on the relative consequence and likelihood of failure before and after the proposed project is complete. <ul style="list-style-type: none"> <li>- Facility/component/process failure</li> <li>- Health, safety, water quality, or environmental impact</li> <li>- Missed opportunity (e.g., available resources, shutdown, revenue generation, cost savings, supply)</li> <li>- Not meeting service demands</li> </ul>

## Project Evaluation

A CIP Evaluation Committee comprised of staff from Operations, Water Resource Management, Real Property, Engineering Services, Finance, Information Technology, Environmental Planning, Safety & Regulation, and External Affairs evaluate and score all project proposals. The evaluation criterion is designed to prioritize projects that directly support reliability, quality, and safety for inclusion in Metropolitan's proposed CIP.

An iterative process is employed to first score and rank every new and existing project, and then solicit feedback from project sponsors, resource providers, and management to establish schedules and cash flow requirements. The final schedule and implementation plan for FY 2024/25 and FY 2025/26 are reflected in the budget and objectives summarized under each of the Individual Programs Summaries that appear later in this document.

## Capital Investment Plan for Fiscal Years 2024/25 and FY 2025/26

In October 2018, Metropolitan’s Board amended the Administrative Code to allow for an appropriation of the total amount of planned biennial CIP spending following the approval of the biennial budget and authorize work on all capital projects identified in the CIP subject to the requirements of CEQA and limits on the General Manager’s authority; and delegate responsibility to the General Manager to determine whether a project is exempt from CEQA. In order to be considered a planned project, the project must be included and described in this Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate appropriated CIP funds and proceed with planned capital projects are reviewed and approved by the Chief Engineer acting under the General Manager’s authority. Upon approval, such requested funds are then transferred to the pertinent capital project. These transfers are based on management decisions to initiate capital projects and/or proceed to the next phase of planned work.

To arrive at the spending plan for individual programs, the budget and schedule for each individual project is paired with project metadata (sponsor and management priorities, CIP scores, project status, etc.). The projects are then organized (or leveled) using an algorithm that combines anticipated capital spending with project prioritization. The resulting plan represents a spending model snapshot in time and is adjusted during the biennium as priorities and conditions change.

### Additions

Projects not described in this CIP Appendix are considered unplanned and are not included in the planned biennial spending. Unplanned projects require specific board authorization to amend the CIP Appendix to add unplanned projects before work can be initiated. Six unplanned projects were added to the FY 2022/23 and FY 2023/24 budget as authorized by the Board through the first quarter of FY 2023/24. These projects were identified after adoption of the budget and included projects such as Upper Feeder Santa Ana River Crossing Expansion Joint Replacement, Foothill Feeder Blowoff Valve Replacement, Diemer Helicopter Hydrant Facility, Jensen Administration Building Column Panel Replacement, Skinner Sodium Hypochlorite Tank Replacement, and Auld Valley and Red Mountain Control Structure Upgrades. The Upper Feeder Santa Ana River Crossing Expansion Joint Replacement project is complete and the remaining projects are now included in this document and are considered planned projects for FY 2024/25 and FY 2025/26.

### New Projects

Since the start of the current biennium, a total of approximately 100 new project proposals, including unplanned but excluding Minor Capital projects have been submitted and reviewed by the CIP Evaluation Committee to either proceed as proposed, or be staged to perform only a portion of the work in the biennial budget period, and have been incorporated into the current or this new CIP Appendix.

### Major Objectives

Below, grouped by CIP Program, are descriptions of some of the capital project major activities anticipated to be underway or completed over the next two fiscal years.

#### Climate Adaptation

Complete construction of Jensen and Skinner Battery Energy Storage Systems and Delta Properties Infrastructure Improvements. Complete design and construction of the Demonstration Plant Direct Potable Reuse Modifications project.

#### Colorado River Aqueduct

Complete construction of CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain, and Iron Mountain, CRA Pumping Plants Water Treatment Systems Replacement, CRA Pumping Plants Crane Improvements, and CRA Conduit Structural Protection. Complete design and begin procurement for the CRA Main Transformer Rehabilitation project.



### Dams & Reservoirs

Complete design and begin construction of Diamond Valley Lake and Garvey Reservoir dam monitoring system upgrade projects. Complete design of the Jensen and Mills finished water reservoir rehabilitation projects and design of the Garvey Reservoir Rehabilitation project.

### Distribution System

Complete construction of Perris Valley Pipeline Interstate 215 Tunnel Crossing, Foothill Hydroelectric Power Plant Seismic Upgrade, and Rialto Pipeline Rehabilitation. Complete delivery of the Lakeview Pipeline Relining - Stage 2 steel pipe. Begin design of the Lake Mathews Forebay Pressure Control Structure and Bypass project utilizing progressive design-build project delivery.

### Drought Mitigation – SWP Dependent Areas

Complete construction of Badlands Tunnel Surge Protection Facility, Inland Feeder-Rialto Pipeline Intertie, and Wadsworth Pumping Plant Bypass Pipeline. Start construction of the Inland Feeder-San Bernardino Valley Municipal Water District Foothill Pump Station Intertie project. Complete design and commence construction on the Sepulveda Feeder Pump Stations project.

### Information Technology & Control Systems

Complete construction of Gene Communication System Upgrade. Complete deployment of Maximo Mobile Upgrade, Payroll-Timekeeping Reimplementation, and WiFi Upgrade. Complete design and begin construction of the Desert Microwave Tower Site Upgrades project.

### Additional Facilities and Systems

Complete construction of Diamond Valley Lake Floating Wave Attenuator – Stage 2 and La Verne Shops Improvements – Equipment Installation and Building Completion. Complete preliminary design of the La Verne Water Quality Laboratory Upgrades project. Complete planning and preliminary design of the District Housing Improvements and Employee Village Enhancement at Hinds, Eagle Mountain, Iron Mountain, and Gene Pumping Plants project.

### Prestressed Concrete Cylinder Pipe

Continue design and construction to rehabilitate the remaining PCCP portions of the Second Lower Feeder. Continue final design and start construction to rehabilitate the PCCP portions of the Allen-McColloch Pipeline and Sepulveda Feeder. Continue preliminary design to rehabilitate PCCP portions of Calabasas Feeder and Rialto Pipeline. Continue annual electromagnetic inspections of all PCCP pipelines.

### Water Treatment Plants

Complete construction of Mills Electrical Upgrades – Stage 2, Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation, and Weymouth Wheeler Gate Security Improvements. Complete design of the Diemer Filter Rehabilitation, Weymouth Administration Building Upgrades, and Jensen Solids Mechanical Dewatering Facility projects.

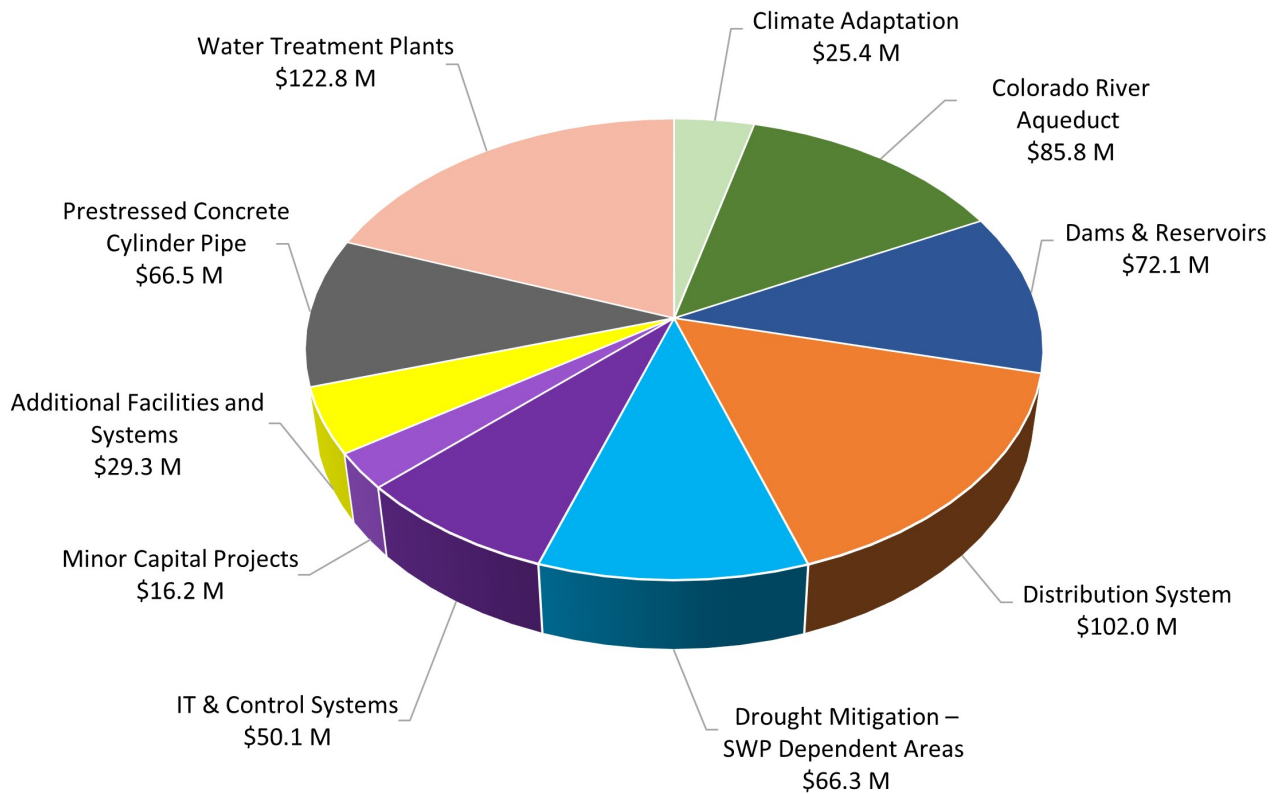
## Financial Projections

Planned capital spending for FY 2024/25 and FY 2025/26 is estimated to be \$312.0 million and \$324.5 million, respectively, and are planned to be funded by a combination of current operating revenues (R&R and PAYGO) and debt. Considerations for timing of nearby projects and facility shutdowns, urgency, aging infrastructure, updated service demand projections, and regulatory requirements are taken into account. Estimated capital spending is updated on a regular basis as new projects are added, other projects are completed, construction cost estimates are refined, or contracts awarded. From time to time, projects that have been undertaken are delayed, redesigned or deferred for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule.

The total planned spending for the FY 2024/25 and FY 2025/26 biennium is approximately \$636.5 million as shown in Figure 1 by Program. Planned spending has been estimated based on anticipated project progress and estimated costs for all ongoing and planned work for the new biennium budget period.

Figure 1 - Capital Investment Plan for FY 2024/25 and FY 2025/26 by Program

### Capital Investment Plan for FY 2024/25 and FY 2025/26



Figures 2 and 3 depict the 10-year CIP projected cash flow from FY 2024/25 through FY 2033/34 with or without the projected cash flow for Pure Water Southern California (PWSC) and Table 4 provides a more detailed two-year outlook. Currently, activities associated with the PWSC are limited to operations and testing at the Advanced Water Treatment Demonstration Plant (demo plant) and environmental permitting. Ongoing modifications to the demo plant are included in the CIP, while preparation of a Programmatic Environmental Impact Report is funded under the O&M budget via the \$80 million state grant. The capital work on the PWSC will require specific Board decisions prior to funding and authorization to proceed.

Figure 2 - CIP 10-year Window by Program

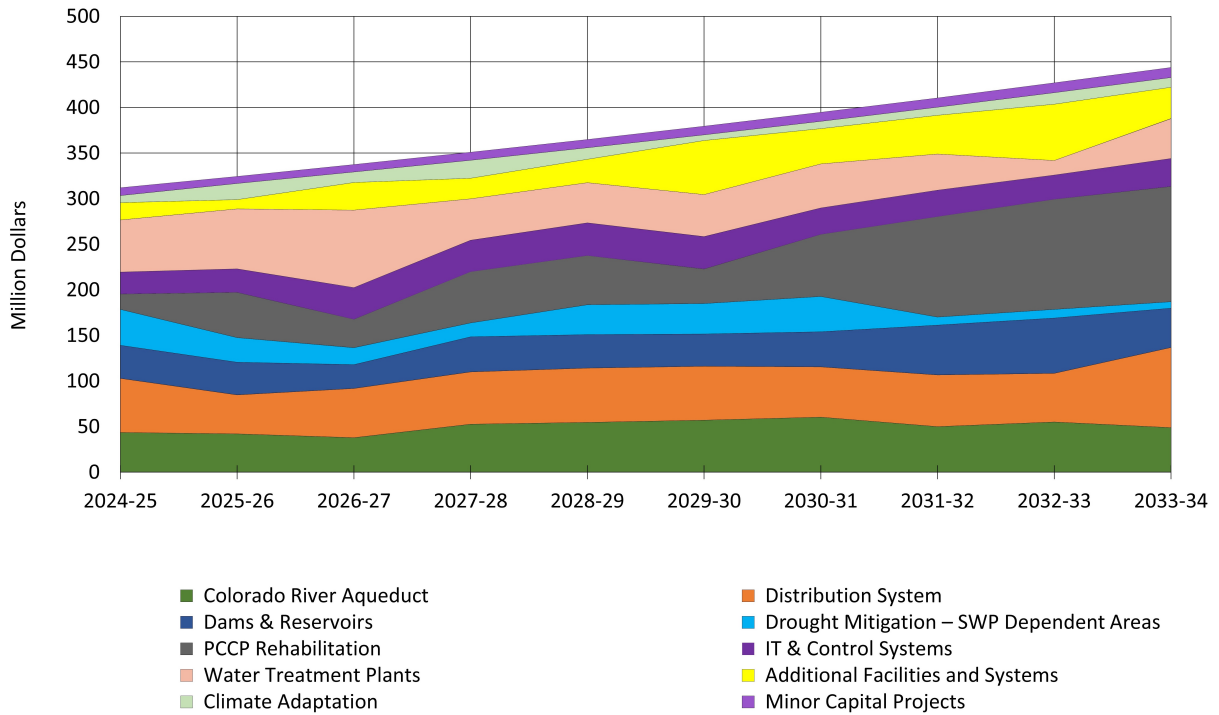


Figure 3 - CIP 10-year Window by Program with Pure Water Southern California - Phase 1

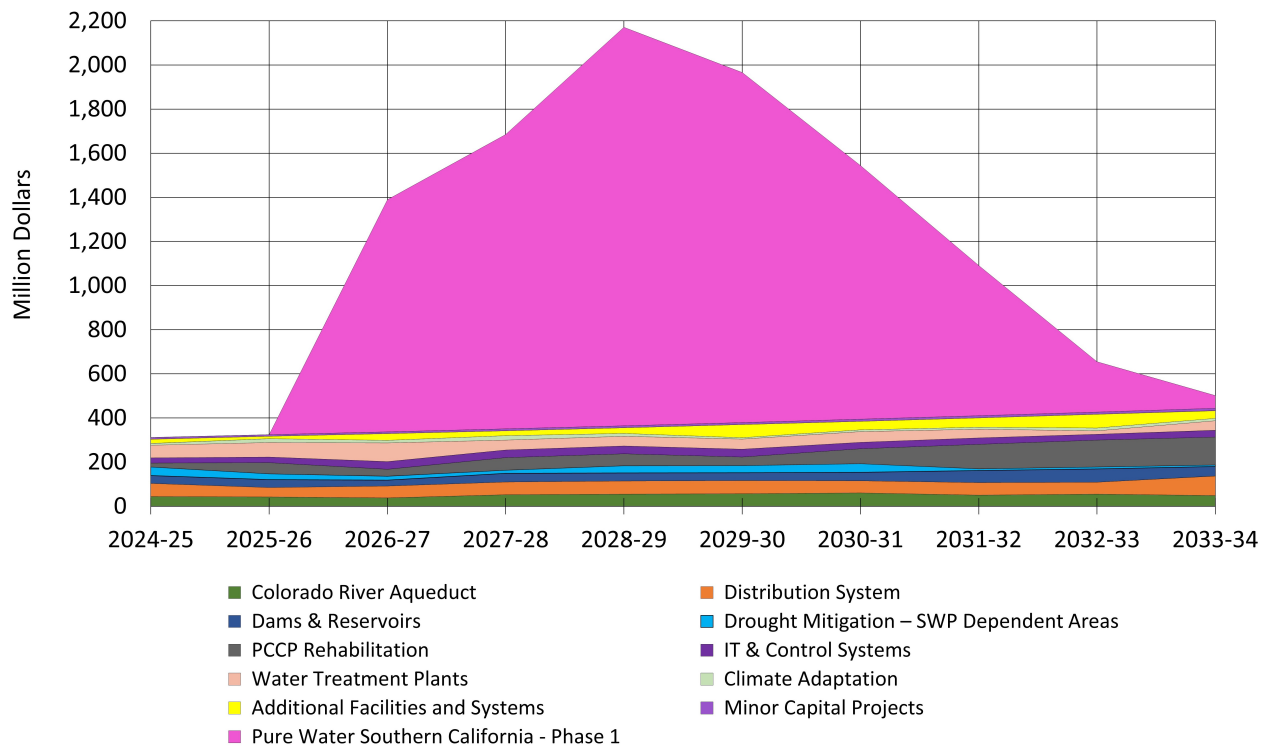


Table 4 - Two-Year Outlook

<b>Capital Program and Project Groups</b>	<b>FY 2024/25</b>	<b>FY 2025/26</b>
<b>Climate Adaptation</b>	<b>\$ 7,760,000</b>	<b>\$ 17,680,000</b>
Climate Adaptation - All	\$ 7,760,000	\$ 17,680,000
<b>Colorado River Aqueduct</b>	<b>\$ 43,640,000</b>	<b>\$ 42,190,000</b>
CRA - Conveyance	\$ 4,050,000	\$ 2,490,000
CRA - Electrical Systems	\$ 1,290,000	\$ 12,930,000
CRA - Pumping Plants	\$ 38,300,000	\$ 26,770,000
CRA - Other	\$ —	\$ —
<b>Dams &amp; Reservoirs</b>	<b>\$ 36,230,000</b>	<b>\$ 35,880,000</b>
Dams & Reservoirs - All	\$ 36,230,000	\$ 35,880,000
<b>Distribution System</b>	<b>\$ 59,370,000</b>	<b>\$ 42,590,000</b>
Pipelines, Tunnels, Canals	\$ 17,350,000	\$ 6,350,000
Pump Stations/Pressure Control Structures/Hydroelectric Plants/ Service Connections/Flow Meters/Valves & Gates Structures	\$ 31,960,000	\$ 29,400,000
Right-of-Way & Infrastructure Protection	\$ 8,200,000	\$ 2,740,000
Distribution System - Other	\$ 1,860,000	\$ 4,100,000
<b>Drought Mitigation – SWP Dependent Areas</b>	<b>\$ 39,320,000</b>	<b>\$ 27,010,000</b>
Drought Mitigation – SWP Dependent Areas - All	\$ 39,320,000	\$ 27,010,000
<b>Information Technology &amp; Control Systems</b>	<b>\$ 24,130,000</b>	<b>\$ 25,950,000</b>
IT Applications	\$ 8,080,000	\$ 6,680,000
IT Infrastructure	\$ 4,160,000	\$ 4,600,000
IT Security	\$ 1,890,000	\$ 3,260,000
Control Systems/SCADA	\$ 10,000,000	\$ 11,410,000
<b>Minor Capital Projects</b>	<b>\$ 8,490,000</b>	<b>\$ 7,720,000</b>
Minor Capital Projects - All	\$ 8,490,000	\$ 7,720,000
<b>Additional Facilities and Systems</b>	<b>\$ 19,120,000</b>	<b>\$ 10,180,000</b>
Employee Housing	\$ 430,000	\$ 530,000
Recreation	\$ 1,240,000	\$ —
Districtwide & Additional Facilities & Systems	\$ 17,450,000	\$ 9,650,000

<b>Capital Program and Project Groups</b>	<b>FY 2024/25</b>	<b>FY 2025/26</b>
<b>Prestressed Concrete Cylinder Pipe</b>	<b>\$ 16,880,000</b>	<b>\$ 49,580,000</b>
Allen McColloch Pipeline	\$ 2,900,000	\$ —
Calabasas Feeder	\$ —	\$ —
Rialto Feeder	\$ —	\$ —
Second Lower Feeder	\$ 1,010,000	\$ 3,410,000
Sepulveda Feeder	\$ 9,820,000	\$ 43,630,000
PCCP - Other	\$ 3,150,000	\$ 2,540,000
<b>Water Treatment Plants</b>	<b>\$ 57,060,000</b>	<b>\$ 65,700,000</b>
Diemer	\$ 11,930,000	\$ 44,560,000
Jensen	\$ 9,720,000	\$ 9,940,000
Mills	\$ 5,170,000	\$ 2,200,000
Skinner	\$ 1,440,000	\$ 2,040,000
Weymouth	\$ 28,800,000	\$ 6,230,000
Water Treatment - General	\$ —	\$ 730,000

## CIP Funding

Funding for CIP is becoming more diverse than it has ever been as Metropolitan continues to seek outside sources of funds to support infrastructure projects. Listed below are funding sources other than the funds Metropolitan's Board will approve and appropriate for the next biennium.

### Battery Energy Storage System

In October 2020, Metropolitan's Board authorized to amend the CIP Appendix to add unplanned battery energy storage system (BESS) projects to enhance the efficiency of Metropolitan's long-term power use, provide a hedge against projected electricity price increases, and improve the resiliency of electric supply at the Jensen, Skinner, and Weymouth Water Treatment Plants. This decision was aided by the California Public Utilities Commission's enhanced incentives for microgrid-capable BESS at critical facilities, which are expected to reimburse Metropolitan for \$10.3 million of project costs.

Weymouth BESS construction is estimated to be completed in the second half of FY 2023/24 and Jensen & Skinner BESS construction is estimated to be completed in FY 2024/25.

### Webb Tract Delta Island Flooded Wetlands and Rice Field System

In May 2023, Metropolitan was awarded a \$20.9 million grant from the Delta Conservancy to fund design, environmental documentation, permitting, and construction of the Webb Tract Delta Island Flooded Wetlands and Rice Field System project.

### Diamond Valley Lake Recreation

The Diamond Valley Lake (DVL) Recreation Program is a unique appropriation. The program was fully funded with \$92.8M in 2004 with the intent of constructing recreational facilities at the East and West Dams. One condition placed on the appropriation was that proceeds from the sale of any surplus DVL properties would be used as additional funds to the program. In 2021, Metropolitan sold DVL land valued at \$4.5M and this amount was added to the DVL Recreation appropriation. Future sales will be addressed similarly. The proposed projects under this program are described in the Additional Facilities and Systems Program section.

## Capital Investment Plan Detail

The core of this section is the Individual Program Summaries, which provide information for each capital project that has been proposed, evaluated, and included in the budget forecast to begin or continue during and after FY 2024/25 and FY 2025/26. Scope, accomplishments, objectives and financial projections are provided for each capital program. Every project with work planned for the two budget years and beyond is listed under the appropriate Program Summary by Project Group. The information provided reflects project details current as of the time of publication and is subject to change. The Individual Program Summaries are ordered alphabetically by program title. The information contained in the Individual Program Summaries is described in further detail below.

### Key Information

For each program, key information is highlighted at the top of the Individual Program Summary page and includes the FY 2024/25 and FY 2025/26 biennial estimate. Table 5 provides an explanation of each item.

Table 5 - Key Program Information

Item	Description
Program Description	A brief explanation of the types of projects included in the Program
Fiscal Year 2024/25 Estimate	Estimate of planned spending from July 2024 through June 2025. It does not include a contingency amount.
Fiscal Year 2025/26 Estimate	Estimate of planned spending from July 2025 through June 2026. It does not include a contingency amount.
Accomplishments for FY 2022/23 and FY 2023/24	Listing of new projects initiated and major milestones achieved during the last biennium
Objectives for FY 2024/25 and FY 2025/26	Listing of key projects with major milestones planned during the budget biennium with the total project estimate, estimated construction completion, and the planned milestone for FY 2024/25 and FY 2025/26

### Narratives

Each Individual Program Summary also contains a narrative portion that includes a description of each project planned to be underway during the two-year budget period and beyond.

Table 6 - Program Summary Index

Program Title	Page No.
Climate Adaptation	<a href="#">251</a>
Colorado River Aqueduct	<a href="#">255</a>
Dams & Reservoirs	<a href="#">270</a>
Distribution System	<a href="#">281</a>
Drought Mitigation – SWP Dependent Areas	<a href="#">311</a>
Information Technology & Control Systems	<a href="#">314</a>
Minor Capital Projects	<a href="#">326</a>
Additional Facilities and Systems	<a href="#">327</a>
Prestressed Concrete Cylinder Pipe	<a href="#">338</a>
Water Treatment Plants	<a href="#">341</a>

# Individual Program Summaries

## Climate Adaptation Program

Fiscal Year 2024/25 Estimate: \$7.8 million

Fiscal Year 2025/26 Estimate: \$17.7 million

**Program Information:** *The Climate Adaptation Program is composed of projects to replace, refurbish, upgrade, or construct new facilities to prepare Metropolitan to adjust to current and projected climate change impacts on its operation and its mission to provide its service area with adequate and reliable supplies of high-quality water in an environmentally and economically responsible way.*

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - Delta Properties Infrastructure Improvements Phase 5
  - Delta Smelt and Native Species Preservation
  - Webb Tract Delta Island Flooded Wetlands and Rice Field System
  - Zero Emissions Fleet Pilot Infrastructure – Stage 1
- Major milestones achieved or estimated to be achieved:
  - Advanced Water Treatment Demonstration Plant
    - Technical memoranda for phased DPR implementation and tertiary membrane bioreactor (tMBR) modification plan - completed
    - Direct potable reuse (DPR) bench scale testing - completed
  - Delta Properties Infrastructure Improvements - completed installation of twenty-five additional flow meters
  - Delta Properties Infrastructure Improvements Phase 5 – awarded flow meter procurement contract
  - Weymouth Battery Energy Storage System – construction to be completed



## Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Delta Islands Pump Station Rehabilitation	\$ 15,000,000	2024	Complete design
Delta Properties Infrastructure Improvements	\$ 1,000,000	2024	Complete construction
Delta Smelt and Native Species Preservation Wetlands	\$ 12,700,000	2025	Complete design and construction
Demonstration Plant Direct Potable Reuse Modifications	\$ 18,000,000	2025	Complete testing, design, and construction
Jensen and Skinner Battery Energy Storage Systems	\$ 18,600,000	2025	Complete construction
Webb Tract Delta Island Flooded Wetlands and Rice Field System	\$ 21,600,000	2026	Complete design and begin construction

## Climate Adaptation - All

### Delta Islands Pump Station Rehabilitation

In 2016, Metropolitan purchased five islands/tracts (about 20,400 acres) in the central Delta: Bacon, Bouldin, Holland Tract (portion), Webb Tract, and West Chipps Islands (sold in 2021 to DWR). Collectively, these lands represent a crucial part of the Delta for multiple potential values that are consistent with the State’s co-equal goals of ecosystem restoration and water supply reliability for California. As part of this purchase, each property has an existing infrastructure that contains a system of individual siphons that bring diverted river water onto the property, through irrigation canals for agriculture purposes, and eventual conveyance of net water by gravity to pump stations, which pumps remaining water off the property through discharge pipes to prevent flooding. This project will construct new pump stations to replace aging pump stations to increase system reliability and minimize the service disruption that could result in loss of revenue if tenant operations are impacted.

### Delta Properties Infrastructure Improvements Phase 5

California State Senate Bill (SB 88) requires monitoring and reporting of certain diversions within the Delta. Metropolitan’s Delta properties will need to comply. Approximately up to 88 meters with telemetry and support equipment are necessary to comply with the regulation. Total of 38 flow meters were installed and this project will install the remaining flow meters and support equipment.

### Delta Smelt and Native Species Preservation Wetlands

The Delta Smelt is a small, euryhaline fish species endemic to the San Francisco Estuary. Since the 1980s, the Delta Smelt population has exhibited significant declines in abundance leading to it being listed as endangered under the California Endangered Species Act, which may potentially create additional regulatory operational constraints on Delta water exports for state and federal water contractors. Metropolitan is working with multiple state and federal government agencies and researchers from UC Davis to advance research objectives through multiple collaborative study efforts. This project will utilize natural pond habitats located on Metropolitan’s Delta island(s) to construct tule marsh wetlands, supplementation ponds, and associated hydraulic water conveyance systems including irrigation ditches and potential groundwater wells to address issues and questions including methods for potential successful reintroduction of Delta smelt in the Delta. An evaluation determined that Bouldin Island is the most suitable location for this project. Other goals related to this project could involve use of floating peat wetlands, setting back the existing levee, and reintroduction of tidal energy gradients.

### **Demonstration Plant Direct Potable Reuse Modifications**

Metropolitan's Advanced Water Treatment Plant (AWT) at the Los Angeles County Sanitation Districts' Warren Water Resource Facility (Warren Facility) in Carson was originally designed to demonstrate testing of potential treatment processes for Indirect Potable Reuse (IPR) applications, as part of the Pure Water Southern California Program (PWSC), formerly known as Regional Recycled Water Program (RRWP). This project will expand the existing process train to facilitate additional testing and data collection aiming at process optimization and incorporation of Direct Potable Reuse (DPR) treatment options for regulatory acceptance and full-scale implementation. DPR treatment processes will be added for pathogen and chemical controls in accordance with the latest DPR framework provided by the California Division of Drinking Water. This project will also include design and construction/installation of permanent exhibits, equipment, and accessible tour routes to support public outreach functions at the Demonstration Plant.

### **District-wide Zero and Near-Zero Emissions Fleet Infrastructure**

Identifying new ways to reduce greenhouse gas (GHG) emissions and reduce Metropolitan's carbon footprint is essential to the implantation of Metropolitan's Climate Action Plan (CAP). This project will design and construct infrastructure to meet mandated Zero Emission (ZE) and Near-Zero Emission (NZE) state and local regulations and comply with California Environmental Quality Act (CEQA) GHG reductions identified in CAP. This project would be implemented in phases, starting with development of a comprehensive transition plan to a ZE and NZE fleet, implementation of transition plan that includes interim and long-term infrastructure design, installation of recommended infrastructure (e.g., charging and/or dispensing stations), and installation of infrastructure related to solar and/or battery energy storage and other sustainability opportunities. The fleet includes passenger vehicles; light-, medium-, and heavy-duty on-road vehicles, off-road construction vehicles/equipment; forklifts; and employee and rideshare vehicles. The initial step to implement the transition includes a pilot approach to install two Level-2 electric vehicle charging stations with two ports each to charge two zero emission vehicles at Union Station and the Weymouth plant, and all associated cable and conduit required to power these charging stations.

### **Groundwater Treatment**

Local groundwater supplies within Metropolitan's service area are currently underutilized due to contamination, political constraints, or cost concerns. This project will add water treatment systems where needed to treat contaminated groundwater. The addition of the treatment systems will be primarily focused for State Project Water (SWP) dependent areas. This project will improve resiliency against severe drought or earthquake and reduce dependency on imported water supplies.

### **Hayfield Groundwater Storage and Extraction**

This project will improve the spreading basin and construct a well field extraction and conveyance system to withdraw stored CRA water and discharge it back into the CRA at the Hinds Pumping Plant. The initial stage of the project will focus on installing a limited conveyance system capable of extracting the 100,000 acre-ft stored in the Hayfield Groundwater Basin. This stage will include a groundwater well installation, pump and motor, and approximately 1,500 feet of small diameter pipe. The Hayfield basin is located south of the Julian Hinds Pumping Plant, adjacent to the CRA. The project will improve drought resilience and enhance reliability of CRA operation.

### **Inglewood Lateral Improvement**

The project would provide additional capacity to the existing Inglewood Lateral via an upsized or parallel pipeline. The purpose of the project is to remove an existing constraint in the distribution system that would enable increased deliveries from the Jensen Water Treatment Plant during high State Water Project allocations and maximize deliveries during low State Water Project allocations using two expanded Sepulveda Feeder pump stations.

### **Jensen, Skinner, and Weymouth Battery Energy Storage Systems**

In 2020, Metropolitan completed the Energy Sustainability Plan effort to identify new projects and initiatives within the Energy Management Policies' framework. The plan combined an analysis of Metropolitan's electricity charges and a holistic multi-criteria decision analysis framework, in which potential projects were vetted against a range of future scenarios based upon historical water and power demands and time-of-use tariff updates. Through this effort, battery energy storage systems (BESS) facilities at the Jensen, Skinner, and Weymouth plants were recommended for near-term implementation.

BESS is a peak-load reduction technology, which stores energy during off-peak hours and discharges stored energy for use during peak hours. This system will be paired with existing solar facilities of which the excess solar energy will be stored for later use instead of sending this energy to the nearby off-site electrical grid. The construction of the BESS facilities will enable Metropolitan to reduce exposure to energy price volatility, electrical supply reliability, improve operational reliability and resiliency, and support Metropolitan's Climate Action Plan by reducing greenhouse gas emission. The cost of this project will be offset by incentives from the Self-Generation Incentive Program, which is administered by California Public Utilities Commission.

### **Webb Tract Delta Island Flooded Wetlands and Rice Field System**

Located in the Sacramento-San Joaquin Delta region, Webb Tract was purchased by Metropolitan in 2016. The island is deeply subsided due to current agricultural practices. Metropolitan plans to develop a multi-benefit project on Webb Tract that will grade up to 1,500 acres of land for rice cultivation and restore up to 3,500 acres to wetland. The expected benefits from the project are stopping and/or reversing subsidence, reduction in greenhouse gas emissions, and increased revenue from rice cultivation leases and carbon credits realized from the reduction in greenhouse gas emissions in addition to protecting the State Water Project's freshwater pathway. Land leveling will be required for the rice cultivation area to ensure a uniform land elevation for agricultural use. Wetland construction will require excavation of surface soil and using that soil to build berms around the excavated area to contain the wetland. Earth movement will be required to contour earth surface elevation to ensure flow across the wetland and to ensure a controlled water depth and adjustable weirs will be constructed and installed at the outflow to control the water depths in the wetland. Construction of small ponds may be required to facilitate tule cultivation that will be used to seed the wetland plants. Equipment pads and access roads to the pads will also be constructed. This project will be funded in combination by a \$20.9 million grant from the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy) in addition to Metropolitan's CIP.

### **Weymouth Energy Management Dashboard**

In 2020, Metropolitan completed the Energy Sustainability Plan (ESP) proposing an adaptive energy management strategy to: contain costs and reduce Metropolitan's exposure to energy price volatility; increase operational reliability and flexibility; move Metropolitan towards energy independence and sustainability; and support Metropolitan's Climate Action Plan effort to reduce greenhouse gas emissions (GHG). In support of that effort, this new project will develop and implement a comprehensive energy monitoring system that will bring access, awareness, and knowledge to operations staff regarding energy usage and cost of the water treatment process, promote sustainable operational decision making, and reduce energy costs at Weymouth plant and other Metropolitan facilities at the La Verne site.

### **Yorba Linda Power Plant Power Supply to Diemer Water Treatment Plant**

This project will modify the Yorba Linda Power Plant to directly supply power to the Diemer Water Treatment Plant and sell excess power to the wholesale energy market. The scope of work includes installation of new 4.16 kV feeder between the power plant and the Diemer switchgear, breakers, power meters; reprogramming of programmable logic controllers; and modification of switchgears and auxiliary equipment.

## Colorado River Aqueduct (CRA) Program

Fiscal Year 2024/25 Estimate: \$43.6 million

Fiscal Year 2025/26 Estimate: \$42.2 million

**Program Information:** *The CRA Program is composed of projects to replace or refurbish facilities and components of the CRA system to reliably convey water from the Colorado River to Southern California.*

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - CRA Freda Siphon Barrel No. 1 Restoration
  - CRA Pumping Plants Crane Improvements
  - CRA Pumping Plant Pump Lower Guide Access Improvements
  - Eagle Mountain Utilities Replacement
  - Eagle Mountain Village Paving Replacement
  - Hinds Village Paving Replacement
- Major milestones achieved or estimated to be achieved:
  - Construction:
    - CRA Conveyance System Flow Monitoring Stations – to be completed
    - CRA Pumping Plants Crane Improvements – to be completed
    - CRA Pumping Plant Sump System Rehabilitation - completed
    - Eagle Mountain 230 kV Local Breaker Failure Backup – completed
    - Eagle Mountain 230 kV Physical Security Upgrades - completed
    - Hinds Transformer Bank Protection Relays Replacement – to be completed
    - Iron Mountain Transformer Bank Protection Relays Replacement – to be completed
    - Iron Mountain & Eagle Mountain 230 kV Transmission Line Pilot Relay - completed
    - Mile 12 Flow and Chlorine Monitoring Station Upgrades - completed
  - Construction contracts awarded:
    - CRA Conduit Structural Protection
    - CRA Conveyance System Flow Monitoring Stations
    - CRA Freda Siphon Barrel No. 1 Restoration
    - CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain, and Iron Mountain

## Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Copper Basin Reservoirs Discharge Valve Rehabilitation	\$ 27,100,000	2026	Begin construction
CRA 6.9 kV Power Cables Replacement for Pump Units 6 to 9	\$ 26,300,000	2027	Begin construction
CRA Conduit Structural Protection	\$ 15,200,000	2025	Complete construction
CRA Desert Region Security Improvements	\$ 8,200,000	2027	Begin construction
CRA Main Transformer Refurbishment	\$ 107,100,000	2032	Begin equipment procurement
CRA Pumping Plant Sump System Rehabilitation	\$ 41,800,000	2026	Begin construction
CRA Pumping Plants Crane Improvements	\$ 19,600,000	2024	Complete construction
CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain	\$ 21,800,000	2026	Complete construction
Eagle Mountain Pumping Plant Village Utilities & Paving Replacement	\$ 9,200,000	2025	Begin construction
Gene Pumping Plant Village Utilities & Paving Replacement	\$ 20,400,000	2027	Begin construction
Hinds Pumping Plant Discharge Valve Pit Platform Replacement	\$ 9,400,000	2026	Begin construction
Hinds Pumping Plant Village Utilities & Paving Replacement	\$ 11,600,000	2025	Begin construction

## CRA - Conveyance Project Group

### Cabazon Radial Gate Facility Improvements

The Cabazon Radial Gate facility is located on the CRA in the city of Cabazon within Riverside County and approximately one mile upstream of the San Jacinto Tunnel. The Cabazon Radial Gate facility was constructed in 1936 and consists of a 17-foot-wide by 16-foot-tall radial gate controlled by an electric motor actuator. The facility was designed to protect the downstream conduits and tunnels from becoming over-pressurized in the event of a blockage by diverting water into an 800-foot long, concrete-lined channel which flows into the San Gorgonio Wash. The existing radial gate, motor, and controls have reached the end of their service life and are no longer reliable. This project will replace the radial gate, motor, and controls.

### **CRA Canal Rehabilitation**

The CRA is a 242-mile-long conveyance system comprising five pumping plants, 124 miles of tunnels, 63 miles of canals, and 55 miles of conduits, siphons, and reservoirs. The aqueduct is routinely shut down and inspected for signs of deterioration and to perform needed repairs. This project will conduct a comprehensive audit investigation of the approximate 63 miles of open CRA canal sections, looking into the need for any possible upgrades or replacements to address deficiencies in the existing CRA canal system, which may include the replacement of portions of concrete, improvements to instrumentation and controls, communication, and electrical systems that serve CRA canal, replacement or improvements of the security fencing spanning 125 miles around the perimeter of canals, and road and drainage improvements.

### **CRA Conduit Structural Protection**

The CRA has 55 miles of cut-and-cover conduits where vehicles and storm water flows can cross over the aqueduct. These conduits are unreinforced concrete horseshoe-shaped structures placed upon an invert slab. At some locations, these conduits are subject to heavy vehicle loading or over pressurization due to friction inside the conduits during high pump flow. Few locations include existing dirt roads that cross the aqueduct with insufficient soil cover over the conduit; including locations where heavy equipment must be placed over or near the conduit for access into tunnels or siphons. This project will install new protective structures such as reinforced concrete slabs that span over the unreinforced conduits and epoxy lining the conduits at specific locations. New pressure sensor systems will be installed to monitor the pressure inside the conduits during the high pump-flow operation. The slabs will protect the conduits from damage by distributing the equipment loading to the surrounding soil and epoxy liner will decrease internal friction to allow increased flow through the CRA conveyance system.

### **CRA Conveyance System Flow Monitoring Stations**

CRA pumping system upgrades performed in the early 1990s increased pumping capacity above the design flow of the CRA. Close monitoring of the CRA system is needed to reliably maintain 8-pump flow. This project will add new gauging stations along the conveyance system that will be tied into Supervisory Control and Data Acquisition (SCADA) system to provide flow data and information that will assist with maintaining uniform and steady-state flow conditions through the CRA system.

### **CRA Conveyance System High Flow Reliability Upgrades**

With recent drought conditions and low State Project Water allocations, Metropolitan has needed to maximize flow through the CRA. With climate change impacting regional hydrology, this operational flexibility will continue to be a priority. This project will strengthen the conveyance portion of the CRA system and make other improvements to provide reliable flow through eight CRA pumps year-round. Some of the options that will be considered include carbon fiber lining, polyurethane lining, epoxy lining, steel lining, and structural strengthening from the outside of the conduits. Additional options include installation of orifice gates at Hinds and Iron Mountain pumping plants along with a recirculation system at Eagle Mountain Pumping Plant to reduce heightened vibration along the discharge structures during 8-pump flow conditions.

### **CRA Erosion Protection**

The CRA is comprised of 55 miles of cut-and-cover conduits. The cut-and-cover conduits are arch or horseshoe shape, unreinforced, cast-in-place concrete. In most locations along the CRA, the overlying soil protects the cut-and-cover conduits from rock and debris flows. However, at narrow ravine crossings, heavy storm events often erode the soil and expose the conduits making them vulnerable to structural damage from the rock and debris flows. This project will provide erosion protection features such as gabion structures or concrete slabs, including grading of the eroded areas to protect the conduit. In addition, diversion berms or concrete swales will be constructed to divert storm flows over the concrete slabs.

### **CRA Flow Measuring Stations Security Upgrades**

Metropolitan has several remote sites along the CRA that are used to monitor and control the aqueduct. Due to the remote location, these sites have solar panels, electrical panels, and solar batteries to power the control systems. These systems have been the target of vandalism and theft. This project will furnish and install concrete buildings at remote locations along the Colorado River Aqueduct and move pole mounted electrical panels and battery cabinets inside the buildings. These precast buildings will be installed at the Coxcomb, Rice, and Vidal wasteway Radial gate locations.

### **CRA Freda Siphon Barrel No. 1 Improvements**

Like many of the CRA's 146 siphons, the Freda Siphon was constructed of cast-in-place reinforced concrete in the 1930s. Freda Siphon, like many of the other siphons, develop minor surface leaks. This project will investigate methods to permanently address reoccurring leaks and will perform improvements that are cost-effective, long-term, and require minimal shutdown time and maintenance.

### **CRA Freda Siphon Barrel No. 1 Restoration**

Surface investigations of the CRA Freda Siphon Barrel No. 1 conducted over the past two years revealed as many as eight leakage locations. This project will install internal seals along the siphon during the 2024 CRA scheduled shutdown, reducing the risk of future unplanned outages and costly emergency repairs.

### **CRA Iron Mountain and Eagle Mountain Pumping Plant Reservoirs Floor Relining**

The Iron Mountain and Eagle Mountain CRA Pumping Plants each have approximately 9.3-acre forebay reservoirs, constructed in the 1930s. Recent geotechnical investigations of the asphalt reservoir floor liners found them to be in poor condition. This project will replace the liners at each plant with a material that precludes seepage water loss and extends the life of the facility.

### **CRA Sodium Hypochlorite Injection Improvements**

Sodium hypochlorite is added along the Colorado River Aqueduct (CRA) to control algal growth, which could damage downstream process equipment and reduce flow through the aqueduct. The existing process of providing weekly chlorine addition into the canal produces spikes in chlorine concentrations, which causes the Colorado River water to be more corrosive to conveyance systems and plant equipment and produces higher concentrations of trihalomethanes (THMs). This project will construct new chlorine storage and injection facilities to provide a steady rate of chlorine addition at five locations along the CRA. Each new chlorine injection facility will be upgraded to include a sodium hypochlorite tank and pump skid, chemical storage building with climate control and spill containment, delivery driveway with spill containment area, piping, chlorine injection system, security cameras, fencing, electrical and Supervisory Control and Data Acquisition (SCADA) upgrades, and other appurtenances.

### **CRA Tunnels - Seismic Resilience Upgrades**

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews in Riverside County, including 124 miles of tunnels which were constructed in the late 1930s and was placed into service in 1941. While the CRA was constructed in accordance with current seismic codes of that time, recent seismic risk assessments of the CRA identified that some tunnels are vulnerable to damage from a strong earthquake on the southern San Andreas Fault. The scope of this project includes detailed seismic evaluations and completion of upgrades to strengthen vulnerable tunnel sections.

### **Eagle Lift & Eagle West Siphons Seismic Improvements**

The CRA was placed into service in 1941. As the aqueduct traverses the desert, it must cross numerous drainage channels, ravines, and other natural depressions. At each crossing, the aqueduct's open channel transitions into a buried conduit (an inverted siphon) which drops below ground and passes beneath the natural surface feature. At the downstream end of the siphon, water re-emerges into the open aqueduct. Typically, siphons are cast-in-place reinforced concrete conduits, which vary in length from 150 feet to 5 miles. An initial assessment of the Eagle Lift and Eagle West Siphons identified potential slope failure of the soil covering the siphons as a result of a strong seismic event. This project will perform a detailed slope stability analysis and evaluate and implement mitigation options.

### **Iron Mountain Tunnel Rehabilitation**

The Iron Mountain Tunnel was constructed between 1933 and 1938 as part of the CRA system. The tunnel is located downstream of the Iron Mountain pumping plant and is eight miles long. The tunnel's cross-section is horseshoe-shaped, with overall dimensions of 16 feet high by 16 feet wide. Longitudinal and transverse cracks up to one inch wide have developed along a 2,500-foot-long stretch of the tunnel. This project will mitigate the cracks with focus on tunnel strengthening and corrosion protection.

### **West Portal Perimeter Security Upgrade**

The West Portal site of the San Jacinto Tunnel does not have a continuous perimeter fence. The location is susceptible to intruders. This project will install a complete and continuous anti-cut anti-climb perimeter fence with barbed wire top guard at West Portal to meet security standards and will install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site.

### **Whitewater Tunnel No. 2 Seismic Upgrades**

The CRA consists of five pumping plants, 124 miles of tunnels, 63 miles of canals, and 55 miles of conduits, siphons, and reservoirs. One of the tunnels, CRA Whitewater Tunnel No. 2, is a 1.5-mile-long; 16-feet-high by 16-feet-wide horseshoe-shaped tunnel that parallels closely to the southern San Andreas Fault and crosses a splay of the fault approximately one-third mile from its west portal. A recent seismic risk assessment of the CRA identified that this tunnel is vulnerable to major damage from a strong earthquake on the southern San Andreas Fault. This project will perform near-term upgrades to strengthen vulnerable tunnel sections at the east and west portals of this tunnel and will improve access at the west portal. Furthermore, to expedite post-earthquake repairs of damaged tunnel sections, the design of a new bypass tunnel will be prepared in advance, steel sets will be procured and stockpiled, and tunnel repair contractors will be prequalified so that specialized equipment and crews may mobilize rapidly.

## **CRA - Electrical Systems Project Group**

### **Black Metal Mountain 2.4 kV Electrical Power Upgrade**

Black Metal Mountain (Black Metal) Site No. 1 and Site No. 2 are two of Metropolitan's communication sites, located in the San Bernardino Mountains. The sites are situated on top of a mountain and provide line-of-sight propagation to subsequent communication sites. Given their prime location, the communication sites on Black Metal Mountain house communication equipment for Metropolitan, several state and local government agencies, and local radio stations and cellular service providers. The existing power line that serves the two communication sites is aging and deteriorated, and is located in rocky, mountainous terrain, with some poles on the edge of 600-foot cliffs. This project will design and construct the replacement of the existing 2.4 kV power line that serves Metropolitan's Black Metal Mountain communication sites. The work will include installation of new power poles and larger conductors to increase the available power to the sites; and improvements to the service roads to improve access for maintenance and safety.



### **CRA 230 kV Transmission Line Rehabilitation and Improvements**

The CRA has an extensive 230 kV transmission system that originates from Hoover Dam and supplies power to all five pumping plants. This 305-mile-long transmission system was installed in the 1930s and consists of approximately 75-foot-high steel towers with concrete and wood footings, aluminum and copper conductors and supports to attach the conductors and insulators to the towers. Spans between the towers average 1,200 feet with varying ground elevations. Vertical clearances between the lowest conductor and the ground in a span can vary with temperature, wind speeds, and power loads. Over the years, operating under maximum power loads and extreme desert temperatures has led to insufficient vertical clearances as required by the current electrical standards. This project will assess ground clearances of the conductor spans and increase clearances, as needed, by raising the heights of existing towers and/or adding new towers between spans, and construct tower refurbishment or replacement.

This project will also rehabilitate and improve substations, switching stations, and control rooms related to the CRA's 230 kV transmission system to comply with NERC (North American Electric Reliability Corporation) standards, increase system reliability, and reduce the risk of unplanned CRA outages. Rehabilitation and upgrades include new relays at Eagle Mountain Pumping Plant to mitigate potential cascading power outages from a stuck breaker scenario at Eagle and installation of physical and cyber security systems at Gene and Eagle Mountain pumping plants control rooms and switch yards (NERC requirements); replacement of outdated bank protection relays at Intake, Gene, Iron Mountain and Hinds pumping plants; replacement of outdated 230 kV disconnect switches at Camino Switching Station and at the Gene and Iron Mountain 230 kV transfer buses; installation of a new 230 kV circuit breaker at Iron Mountain to enable isolation of the Iron-Eagle 230 kV transmission line without disruption of CRA water deliveries; and, purchase of SCE circuit breakers which are integrated with the CRA's 230 kV system at Gene and Eagle Mountain pumping plants to give Metropolitan greater flexibility without having to rely on SCE. Additional scope may be added as a result of the planned assessment of the existing system.

### **CRA 6.9 kV Power Cable Replacement for Pump Units 6 to 9**

There are a total of 45 primary pumps and motors at the five CRA pumping plants. Power is transmitted to the motors via 3-inch-diameter cables which run through a tunnel that connects each switch house to each pump house. The quantity of cables varies from nine to 27 per plant. These cables were installed in four phases from 1939 through 1959. After 59 to 79 years of continuous service, the power cables have deteriorated and need to be replaced. Oil has begun to leak through cracks in the lead jacket, at the cable connection joints, and at the cable termination points. Frequent repairs are required to address the leaks and maintain the cables' insulating capacity. The cables for pump units 1 to 5 have been replaced. This project includes the replacement of the deteriorated main power cables for pump units 6 to 9 at each of the five CRA pumping plants.

### **CRA Automated Trash Rack Cleaning System at Three Pumping Plants**

The Iron Mountain, Eagle Mountain, and Hinds pumping plants have trash racks protecting the plant intake siphons. These trash racks are critical for CRA reliability by preventing stringy weeds, vegetation, sticks, and other larger debris from entering the plants. If these weeds and debris pass through the trash rack, it can result in emergency failures to equipment like circulation water pumps and sand strainers, increased labor for maintenance, and decreased equipment service life. This project will install automated trash rack cleaning systems, which would resolve these issues, facilitating thorough removal of the debris from the rack while allowing plant staff to be more productive with other tasks.

### **CRA Auxiliary Power Systems**

All five CRA pumping plants have medium and low voltage systems that were constructed to the design standards of the 1930s-1950s. They provide power for general lighting, cranes, computers, shop equipment, and critical equipment such as the pumping plant sump pumps and lubrication oil pumps. Over the years, numerous additional electrical loads have been added to the auxiliary power systems. As a result, the distribution panel capacity limits have been exhausted, and some wiring is now undersized. The scope of this project includes upsizing the distribution panels to allow additional capacity and space for future loads and replacing the cables and conduits to comply with current National Electrical Code and safety standards. Additional scope may be added as a result of preliminary assessment of each of the sites to make the auxiliary power systems reliable.

### **CRA Hinds Sand Trap & Wasteway Radial Gate Power Cable Replacement**

The power cables that feed the Hinds sand trap and wasteway radial gate are installed in a shallow ductbank that is deteriorating due to heat, in a conduit that is overfilled. This project will construct a new ductbank with power conductors designed to address these deficiencies.

### **CRA Main Transformer Rehabilitation**

Seven transformers provide electrical power to each CRA pumping plant to maintain continuous operation. All existing transformer units are original equipment, with many dating from the 1940s. Recent inspections revealed oil leakage and other signs of aging for some of the transformers. Failure of an existing transformer would disrupt power supply to a pumping plant and interrupt water delivery. The scope of the project includes replacement of the transformers along with spill containment structures. This work also includes rehabilitation of transformer cranes, upgrade of transformer monitoring and protection equipment, and secondary spill containment for the transformer banks. Additional scope may be added as a result of preliminary assessment to ensure reliable and safe operation of the CRA pumping plants.

### **CRA Pumping Plants 2.3 kV and 480 V Switchrack Rehabilitation**

All five CRA Pumping Plants have a 2.3 kV and 480 V switchracks that are the central power distribution for the 2.3 kV, 480 V and 120 V that feed multiple medium and low voltage critical equipment within the pumping plants. These switchracks have been in service since the original construction of the CRA. The equipment is old, obsolete and replacement parts are difficult to obtain. This project will rehabilitate or replace the 2.3 kV and the 480 V switchracks and associated support systems at all five CRA pumping plants to ensure the equipment meets the current safety and electrical codes and provides a reliable power supply to the plants.

### **CRA Pumping Plants 6900V Circuit Breaker Replacements**

Each of the CRA pump plants has eleven 6.9 kV circuit breakers. These circuit breakers provide a method to isolate portions of the electrical system for maintenance and provide surge protection. The circuit breakers installed in the 1960s and 1970s require extensive maintenance and cannot be replaced because they are no longer being manufactured. This project replaces the existing air-breaker-type circuit breakers. The project will include new control wiring, improved safety features, and new weather-proof doors to the switch houses where they are located.

### **CRA Standby Diesel Engine Generator Replacements**

Back-up power for critical auxiliary systems at the Iron Mountain, Gene, and Intake pumping plants is provided by stand-by diesel generators. The standby generators are over 50 years old, require frequent repairs, and have reached the end of their service lives. In addition, upgrades to the generators' ancillary equipment are planned to meet current fire codes and environmental regulations. This project will improve the reliability of emergency power for critical auxiliary systems at the pumping plants. The scope of the project includes relocation and installation of new generators. The replacement generator will include alarms, valves, meters, and a control system capable of automatic start-up upon loss of primary power, automatic transfer back to primary power once the normal source is reestablished, and remote status monitoring.

### **Gene, Iron Mountain, Eagle Mountain, and Hinds Pumping Plants Electrical Power Distribution Upgrades**

The 2.4 kV electrical power distribution system at all five Desert pumping plant facilities conveys power from the Metropolitan-owned 2.4 kV switchyard to all areas within the property confines, including the operations and maintenance (O&M) areas and the villages. The power is stepped down from 2.4 kV, typically by a pole-mounted transformer, to the required voltage based on the end-user's requirements, usually 120 V for houses and buildings, or 480 V for workshops. The existing breakers are no longer common in the power industry, and spare parts are difficult to obtain.

This project will replace the existing electrical power distribution systems at Gene, Iron Mountain, Eagle Mountain and Hinds Pumping Plants with new distribution systems. The work will include replacing existing 2.4 kV breakers with 4160 V breakers, and replacing associated cables, conduits, feeders, risers, wooden poles and transformers, and appurtenances. Underground power distribution will be used when feasible. This project will improve the reliability of water deliveries and will optimize maintenance.

## **CRA - Pumping Plants Project Group**

### **CRA Asphalt Replacement**

The existing asphalt pavement at the desert facilities has deteriorated from the many years exposed to the harsh desert environment. The subject project will remove and replace existing deteriorating roadways and paved working areas surrounding the pump plant, maintenance/storage yards within all five CRA pumping plant locations. The proposed rehabilitation will include survey of existing conditions and replacement of existing asphalt concrete with new engineered asphalt pavement mix, roadway striping, grading and potential stormwater drainage system improvements.

### **CRA Desert Region Communications Building**

The existing communications infrastructure and facilities were part of the plant's original construction in the 1930s and have gradually been extended across multiple facilities over the years. Therefore, there is no centralized location at the Desert Headquarters (the Gene Pumping Plant) capable of housing all server equipment, batteries, and emergency generator. While there is an existing communication building at the Gene Pumping Plant, it is undersized to accommodate all the various server racks necessary for IT, SCADA, security, and NERC, and it does not have space for a backup generator or adjacent battery room. The backup batteries and generators are critical to ensure redundancies during a power failure. This project will construct a new communications building that includes a generator room, a battery room, and a large room for communications and electrical equipment. The communications rooms will be sized to accommodate multiple rows of racks for IT, SCADA, security, and telecommunication equipment and wiring, and possibly NERC-compliant electrical equipment.

### **CRA Desert Region Security Improvements**

CRA facilities are critical components of Metropolitan's water delivery system. These facilities include five pumping plants and the El Camino Electrical Substation. These facilities have inadequate perimeter fencing. This project will install physical security improvements such as fencing, signage, cameras, motion detectors, remote speakers, card readers, and lighting at Metropolitan's CRA pumping plants and at the El Camino Electrical Substation. This project will also include road and access control improvements at the main entrances to the pumping plants and integration of security devices with Metropolitan's security system. Construction of permanent guard stations will be also considered.

### **CRA Fall Prevention Swing Gate Installations**

The project will furnish and install over 300 Cal-OSHA compliant, self-closing swing gates to replace non-OSHA compliant fall prevention chains located on fixed-ladder ways and elevated work platforms at the five CRA pumping plant facilities (Intake, Gene, Iron Mountain, Eagle Mountain, and Hinds). The scope will include removing and disposing of the existing chains and clamping on the new swing gates. The new swing gates will be installed at every fixed ladder way, including at each unit's discharge sump, suction valve sump, heat exchange catwalks, distribution pipe, headgate catwalks, and other miscellaneous locations.

### **CRA Hinds Pumping Plant Sand Trap Slide Gate Installation**

Hinds sand trap creates a plant vulnerability because it cannot be opened (like a sluice gate) during an emergency, such as a severe leak in the plant or a plant outage. Consequently, the water volume stored in the sand trap's outlet channel and the additional plant inlet conduit and canal would be gravity-fed into the plant continuously. This can potentially overwhelm the circulating water sump pumps and flood the plant, resulting in catastrophic damage to the plant facility. This project will replace a steel plate that covers the 3-foot square opening with a sluice gate, allowing staff to open it in case of an issue that could flood the plant, such as a power outage.

### **CRA Intake Pumping Plant Shore Protection**

The existing shore protection consisting of rocks and concrete was installed around the time the Intake Pumping Plant was constructed in the 1930s and has exceeded its service life. This project will improve the shore adjacent to the Intake Pumping Plant to protect the access road and facilities and mitigate against short and long-term coastal erosion due to wave attack, flooding, and water surface level changes in Lake Havasu.

### **CRA Intake Pumping Plant Substructure Improvements**

An inaccessible sub-structure cavity containing utility piping is located beneath the HVAC equipment room located on the north end of the Intake Pumping Plant Control House. This project will install a new concrete access manway and wall at this location along the exterior of the Intake Control House to provide maintenance access and prevent lake water intrusion. The project will also evaluate options for creating a base surface for maintenance by installing a platform or filling the cavity void above Intake Delivery Line No. 3 and determine the extent of the required plumbing replacements. Intruding soil and water in the substructure will be removed before the upgrades, paving will be replaced, and existing surface structures, such as the HVAC condenser units, will be relocated as needed to accommodate the work.

### **CRA Main Pump, Motor & Discharge Valve Refurbishment**

Each of the five CRA pumping plants has nine main pumps that lift the water to the required elevation necessary to continue flow down the aqueduct. The 45 main pumps rely on multiple auxiliary systems including lubricating oil systems, circulating water systems, controls and instrumentation systems, discharge valves, electrical and control panels, and individual equipment components. In the mid-1980s, a major rehabilitation project was undertaken on the 45 main pumps. As a result, the 45 main pumps have performed well over the nearly 30 years since the rehabilitation work was completed. However, the pumps are now showing signs of deterioration caused by continuous operation over that length of time. While that project successfully extended the service life of the pumps and increased their hydraulic capacity, the pump auxiliary systems were not addressed at that time. The pump auxiliary systems are from the original CRA construction and are now deteriorating and need to be replaced. An assessment of the main pumps, motors, and their auxiliary systems at all five CRA pumping plants will capture current operating conditions, create updated baseline documents of all existing equipment and systems, and provide replacement or rehabilitation recommendations for all pump and auxiliary system components. This project will refurbish the 45 main pumps and their auxiliary systems, including lubricating oil systems, circulating water systems, controls and instrumentation systems, discharge valves, electrical and control panels, and individual equipment components, as deemed appropriate by the assessment.

### **CRA Main Pumping Plants Sand Removal System**

At each of the five CRA pumping plants, water is withdrawn from the CRA, filtered to remove large debris and sand, and then pumped through a circulating water system. The circulating water system feeds the pump house service water system, the cooling system at each pump unit, the fire water system, the irrigation water system, and the domestic water treatment system. The existing filtration system is not designed to strain out fine silts. Consequently, the fine silt has built up as sediment in the circulating water systems leading to excessive wear and failure of equipment such as pump packing, cooling water piping, and heat exchangers. This project will upgrade the filtration system to remove fine silt and eliminate sediment build up and refurbish or replace any identified damaged components.

### **CRA Main Pumping Plants Unit Coolers and Heat Exchangers**

Each of the five CRA pumping plants has nine main pumps. Each main pump has a cooling system to cool various components of the pump system. At each pump house, water is pumped through a circulating water system, which feeds multiple unit coolers and heat exchangers for each individual main pump unit. Over the years, the unit coolers have developed many leaks. Lack of sufficient cooling water could cause equipment overheating, and the leaks could damage nearby electrical equipment. This project will replace, refurbish, or upgrade the cooling and heat exchange system at each pump unit.

### **CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain**

Between 1950 and 1955, several metal-sided buildings with timber frames were built at the CRA pumping plants to store equipment, spare parts, and maintenance supplies. Two of these buildings have been replaced at the Gene Pumping Plant; however, four original buildings still remain in service. These buildings have deteriorated after close to 70 years of service in the harsh desert environment and no longer seal properly to prevent rain and dust from entering the interiors. This project will replace the four remaining deteriorated storage buildings and add asphalt paving leading to and around each of the buildings.

### **CRA Pumping Plants Access Road Rehabilitation**

The Colorado River Aqueduct (CRA) pumping plant access roads must accommodate heavy traffic loads for deliveries of chemicals, materials, equipment, and staff. The existing asphalt roads are distressed and show numerous areas of longitudinal and alligator cracking. The harsh desert climate conditions have caused the pavement to age and become distressed more quickly. These roads are the sole means of access to the pumping plants, making reliable use of the roads critical to allow equipment, chemical, and material deliveries, ingress for first responders, and general access. This project will rehabilitate approximately 11 miles of the existing access roads leading to the Intake, Iron Mountain, Eagle Mountain, and Hinds Pumping Plants using a combination of pavement overlay and pavement replacement with new aggregate base subgrade. This project will also include pavement markings.

### **CRA Pumping Plants Circulation Water Systems**

Each of the five CRA pumping plants has nine main pumps. Each of these pump units use cooling equipment to cool various components of the pump system that feeds from the plant's circulating water system. This system has a loop with branch connections and an isolation valve at each unit. The piping and the valves that supply the circulating water systems run through the entire length of the plants and are all from the original CRA construction. The piping and the valves are now showing signs of deterioration. They are clogged, corroded and leaking. This project will replace and upgrade the circulation water systems for each pumping unit. Additional scope may be added as a result of preliminary assessment to ensure reliable operation of the CRA pumping plants.

### **CRA Pumping Plants Delivery Line Rehabilitation**

Each of the nine main pumps at the five CRA pumping plants discharges the water into individual six-foot diameter discharge lines. The nine discharge lines then merge and transition into three 10-foot diameter pipelines, Delivery Line Nos. 1, 2 and 3, that convey flow to the top of the lift and then discharge into a headgate structure which empties the water into the next section of the aqueduct. These delivery lines vary in length from 500 feet to 1,400 feet up steep and rocky slopes. The five Delivery Line No. 1s were constructed in the 1930s and were lined with coal tar enamel to protect the interior of the pipe from corrosion. After 82 years of service, the existing coal tar enamel lining on Delivery Line No. 1 at each plant is cracking, flaking, and the steel is starting to corrode. The mortar linings for Delivery Line Nos. 2 and 3 are still in good condition and do not require repair.

Depending on the length of each delivery line, there are a total of three or four expansion joints located along the line. These expansion joints are deteriorated and showing signs of corrosion. A number of the most deteriorated joints have been rehabilitated recently. This project provides a comprehensive rehabilitation of the remainder of delivery lines at each of the five CRA pumping plants, including replacement of the coal tar enamel with a cement mortar lining, expansion joints, and minor coating refurbishment.

### **CRA Pumping Plants Public Address and Alarm Communication System Upgrades**

The existing communication signals at each of the five CRA pumping plants are currently separated into different systems including: the public address system; plant alarms; evacuation, fire, and carbon dioxide alarms; and phones. The signals in these systems were originally installed to utilize the existing 1930's era phone line systems and is becoming increasingly difficult to maintain as replacement parts are becoming harder to find and troubleshooting is difficult. This project will replace the existing communication systems with a new integrated and modernized auditory communication system with alarms that are able to be identified based on different distinct alarm tones. Signal wires will be routed to a network enabled public address and general alarm system and new speakers will be added at each plant to improve ability to hear audible alarms throughout the plants, even when loud pumps are operating.

### **CRA Pumping Plants Pump Lower Guide Access Improvements**

At each of the CRA pumping plants, maintenance staff performs a monthly inspection of the lower guides below each main pump. The access hatch utilized for this inspection is located about twenty feet above the deck and situated where it is difficult for workers to reach and inspect the lower guides. This project will design, fabricate, and install new work platforms/mezzanines to improve safety and to facilitate the routine inspections.

### **CRA Pumping Plants Rollup Door and Window Replacements**

Over the past 80 years, the desert has taken its toll on the windows and rollup doors at all five CRA pumping plants. Many windows can no longer be opened, making it difficult to keep the main pump motors cool on 120-degree summer days. And the rollup doors in the pumphouses and head gate structures require continual maintenance to keep them operable. This project will replace these building features while remaining consistent with architectural standards.

### **CRA Pumping Plants Reservoir Spillway Auto Rejection - Iron Mountain and Eagle Mountain**

The Iron Mountain and Eagle Mountain Reservoirs are located on the upstream side of the Iron Mountain and Eagle Mountain pumping plants, respectively. The reservoirs dampen fluctuations in flow between the five pumping plants. Each reservoir contains a spillway which allows discharge of water to the desert in the event of a power outage of the main pumps. The two spillways were designed in the 1930s to safely reject up to approximately 1,200 cubic feet per second (cfs). The pumping plants were expanded in the 1950s and the aqueduct can now operate up to approximately 1,750 cfs. Rejection of flows greater than 1,200 cfs would cause uncontrolled release of water at these two reservoirs, which could damage nearby facilities and public roads or property. This project will modify the reservoir spillways to allow safe rejection of up to 1,750 cfs of water in the event of a power outage of the main pumps.

### **CRA Pumping Plants Sand Trap Traveling Bridge Cranes Control Upgrades**

Three of the CRA pumping plants (Iron Mountain, Eagle Mountain, and Hinds) have a sand trap facility located upstream of the plants. These sand trap facilities are critical to minimizing sand entering the pump plant facility. The CRA system's sandy terrain combined with high-velocity wind gusts results in large quantities of sand blown into the CRA canal system, where it gets suspended in the moving water. If this sand is not removed, it can flow in the water into plant intakes, results in pipe walls and turbines being damaged by this abrasive sand and water mixture, ultimately resulting in premature equipment failures. This project will provide upgrades to the existing three sand trap facilities (Iron Mountain, Eagle Mountain, and Hinds) to convert the traveling bridge pump systems to an automated system that can be controlled by staff remotely or scheduled to run autonomously, equipped with safeguard protections to self-disable, alarm systems to alert plant staff of failures, SCADA and camera system upgrades, and programmable logic controller (PLC) programming to allow plant monitoring and control.

### **CRA Pumping Plants Sump System Rehabilitation**

Each of the five CRA pumping plants has two independent main sumps that collect water leakage from the main pumps and discharge valves. Each main sump is approximately 9 feet wide, 20 feet long, and 35 feet deep, and can hold up to 48,000 gallons, or approximately one day's worth of leakage water. The sump system pumps this water back to the pumping plant's main intake manifold or to its forebay, depending on the plant. The 72-year-old sump piping systems and support structures are deteriorating and have exceeded their service lives. Failure of the sump piping systems has the potential to cause extensive flooding and damage to valves and pumps within the pumping plants. This project will rehabilitate the pumping plant sump systems, including replacement of corroded sump mechanical equipment, piping, and access structures at all five CRA pumping plants. Access features will be upgraded by replacing corroded catwalks, ladders and handrails within the sumps. This project will also rehabilitate circulating water equipment and piping systems, which are in the sump area. A construction contract was awarded by the Board in December 2018, but construction activities were suspended in March 2020 due to the COVID-19 pandemic, which led to cancellation of the construction portion of the contract. The delivered equipment and materials will be installed by another contractor.

### **CRA Pumping Plants Water Tanks Rehabilitation**

Each of the five CRA Pumping Plants has three concrete water storage tanks for circulating water, irrigation/fire water, and domestic water. The tanks are 85 years old and are critical to operation of the plants. This project will upgrade all 15 tanks to address seismic deficiencies, leakage, and temperature issues. Work will also include improvements to linings, coatings, and appurtenances such as ladders, vents, piping, and wall penetrations.

### **CRA Pumping Plants Water Treatment Systems Replacement**

All five of Metropolitan's Pumping Plants are located in remote areas of Riverside and San Bernardino Counties where municipal water treatment systems are not available. Each plant is instead served by a community on-site water treatment system. These on-site treatment systems are skid-mounted membrane filtration units that include a strainer, a pair of activated carbon vessels, and a domestic water storage tank. These systems have been in continuous operation for almost 30 years and now suffer from frequent membrane and pipe failures. This project will replace the skid-mounted water treatment systems in its entirety including replacement of water quality monitoring instrumentation and laboratory equipment, upgrading electrical and instrumentation control systems for the disinfection system, construction of a temperature-controlled building to house granulated active carbon vessels and disinfection equipment, and construction of ancillary support systems.

### **CRA Village Utilities & Asphalt Replacement**

All five of Metropolitan's pumping plants are located in remote areas of Riverside and San Bernardino Counties where municipal water distribution systems are not available. Each plant is instead served by a community on-site water treatment system. Water from the CRA is treated and conveyed to each village house and to the industrial portions of the pumping plants through a gravity-fed water distribution system which consists of distribution piping, isolation valves and valve boxes. Recent inspections of the distribution systems have found blockages, leaks, taste and odor problems, and root intrusion. This project will replace the domestic water distribution systems at all five CRA pumping plants which include the main line pipes, building laterals, new backflow prevention devices, valves, meters, remote water quality analyzers, and other appurtenances to deliver quality water reliably.

Municipal wastewater collection and treatment facilities are not available where the pumping plants are located. The pumping plants are served by community on-site wastewater systems. These on-site systems collect, treat, and dispose of domestic wastewater generated from bathrooms, kitchen facilities, maintenance buildings, guest lodges, and staff residences at the plants. The on-site systems consist of three primary components: community septic tanks and leach fields; collector lines located throughout the pumping plants which convey wastewater to the septic tanks; and sewer laterals which convey wastewater from individual buildings to the collector lines. The existing wastewater systems at the plants have deteriorated through continual use and need to be replaced. This project will replace the wastewater systems at the pumping plants. The systems will include new main-line pipes, building laterals, septic tanks and leach fields, and other appurtenances to reliably collect and treat wastewater.

The asphalt roadways at the pumping plants provide access between buildings and the villages for Metropolitan staff, residents, and visitors. There is a total of approximately 30 acres of asphalt-paved roadways and surfaces at all five pumping plants, and these asphalt surfaces are over 30 years old. Due to the harsh desert conditions and deterioration of the subgrade over time, potholes and cracks have developed throughout the villages. The planned upgrades to the roadway pavement include placement of a new layer of asphalt on less distressed areas throughout the CRA villages; removal and replacement of more heavily damaged roadways; and grading and installation of culverts to improve drainage.

### **Erosion and Drainage Control Protection for CRA Switchracks and Ancillary Structures**

The five CRA pumping plants are located in remote areas of the California desert which are periodically subjected to flash floods that carry high volumes of water, silt, and debris. During major storm events, the pumping plants' pump houses and support facilities are susceptible to flooding and deposition of silt and debris. In recent years, at several of the plants, debris flows have affected various critical electrical facilities. This project will include site grading, addition of perimeter drainage channels to intercept offsite flows, upsizing of storm drain culverts and extension of patrol roads to access the new storm drain facilities for maintenance. Additional scope may be added as a result of the preliminary assessment to ensure reliable operation of the CRA pumping plants.

### **Gene and Intake Pumping Plant Outlet Structure Gate Rehabilitation**

Each of the five CRA pumping plants has nine main pumps that lift water from the pump house through a series of converging delivery lines that convey water from the pump house to a headgate structure located at the top of a hill. These structures then convey water to the downstream portion of the aqueduct. Flow from each headgate structure is regulated by three nine-foot square steel gates. Recent inspections at the Intake and Gene pumping plants have revealed that the protective coatings on various components of the gates have begun to crack and peel. This project will recoat the headgate structure outlet gates at the Intake and Gene pumping plants to prevent metal loss due to corrosion. Additional scope may be added as a result of the preliminary assessment to ensure proper operation and maintenance of the outlet gates.



### **Gene Pumping Plant Warehouses Storage Rack Rehabilitation**

Existing materials storage racks located within the Gene Pumping Plant Warehouse and Spare Parts Warehouse buildings needs additional anchorage to the concrete floors and are susceptible to toppling or movement that causes heavy items to fall in the event of an earthquake. Retrofits of these racks are needed primarily to ensure worker safety in the two warehouses at the Gene Pumping Plant and minimize the potential of damage to materials/equipment during a failure by ensuring secure racks. This project will evaluate structural and seismic deficiencies in existing storage racks, including anchorage and structural members, and provide retrofits as needed to bring the storage racks to meet the latest code. There are approximately 42 storage racks in and around the Spare Parts Warehouse and approximately 10 storage racks inside the Main Warehouse at the Gene Pumping Plant.

### **Hinds Pumping Plant Discharge Valve Pit Platform Replacement**

At each of the CRA pumping plants, water is pumped from the plants' intake manifold through the main pumps and out of the discharge valves. From the discharge valves, water travels through the delivery lines and into the aqueduct. The discharge valves are located in small concrete pits below the pumping plant floor room. At the Hinds Pumping Plant, the concrete pit is equipped with a raised platform due to the deep pit. The platform is necessary to maintain the discharge valve's ancillary equipment. After close to 80 years of service in a humid environment created mainly from the pump cooling water discharge, the metal platform has corroded significantly and needs to be replaced. This project will replace the discharge valve platform and relocate cooling water discharge piping in all nine discharge pits at the Hinds Pumping Plant. Additional scope may be added as a result of the preliminary assessment to replace the platform that will ensure the safety of the workers as well as improving access to maintain the discharge valves.

### **Intake Pumping Plant Road Improvements**

The 1.75-mile-long asphalt access road into the Intake Pumping Plant travels between a large hill and Lake Havasu. At approximately the midpoint of the access road, it crosses a culvert that drains storm runoff from the hillside into the lake. This culvert is undersized, has partially collapsed, and fills with debris from an unlined wash during rain events. After rain events, Metropolitan staff must clear debris from the culvert to prevent rainwater from overtopping the culvert and eroding the access road. This project will replace the existing culvert with a new culvert and deteriorated portions of the asphalt road. The project will also add traffic safety rails along the road to enhance safety.

### **Iron Mountain, Hinds & Eagle Mountain Hazardous Waste Containment**

Hazardous wastes such as chemicals, oil, paint, paint thinners and antifreeze are generated through routine operations at the Iron Mountain Pumping Plant. Hazardous wastes are collected and placed into either metal or plastic drums ranging in size from five to 55 gallons. The existing hazardous wastes are then stored in a fenced temporary storage area. This project will replace the existing hazardous waste storage facility with a code-compliant hazardous waste storage facility.

## **CRA - Other Project Group**

### **Desert HVAC Replacement**

This project will replace heating, ventilation, and air conditioning (HVAC) systems throughout the desert region for CRA support facilities, which are less energy efficient and past their useful life, with newer, more energy efficient units. The new systems will consist of certified energy efficient equipment with modernized HVAC controllers that ties into a cohesive building automation network. This integration will allow Metropolitan staff to more efficiently respond to HVAC interruptions, more quickly troubleshoot problems, provide early detection of problems before catastrophic failures, and ensure optimal performance of the HVAC systems. This project will also include addition of any appurtenances and construction of support facilities for more reliable and efficient HVAC operation.

**Seismic Upgrades of CRA Support Facilities**

A recent initial seismic risk assessment has revealed that several CRA support structures may be vulnerable from a major seismic event. These support structures include office and maintenance buildings, guest lodges, and dining and recreation halls located at Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants. This project will perform detailed seismic assessments and retrofit the support structures if necessary.

## Dams and Reservoirs Program

Fiscal Year 2024/25 Estimate: \$36.2 million

Fiscal Year 2025/26 Estimate: \$35.9 million

**Program Information:** The Dams & Reservoirs Program is comprised of projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities to reliably meet water storage needs and regulatory compliance.

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - Diamond Valley Lake Dam Monitoring System Upgrades - Stage 3
  - Diemer FWR Slope Protection Improvements
  - Eastern Region Security Camera System Upgrade – Area 3
  - Eastern Region Security Camera System Upgrade – Area 4
  - Garvey Reservoir Dam Monitoring System Upgrades
  - Lake Skinner Dam V-Ditch Replacement
  - Western Region Security Camera System Upgrade – Area 1
  - Western Region Security Camera System Upgrade – Area 5
- Major milestones achieved or estimated to be achieved:
  - Diamond Valley Lake Dam Monitoring System Upgrades - Stage 3 – final design and equipment installation to be completed
  - Garvey Reservoir Dam Monitoring System Upgrades – final design to be completed
  - Garvey Reservoir Rehabilitation – preliminary design completed
  - Lake Skinner Outlet Tower Seismic Upgrade – valve procurement contract awarded

### Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Diamond Valley Lake Dam Monitoring System Upgrades – Stage 3	\$ 2,500,000	2025	Begin construction
Garvey Reservoir Rehabilitation	\$ 101,500,000	2027	Complete Design
Jensen Finished Water Reservoir Rehabilitation	\$ 16,600,000	2027	Complete design
Live Oak Reservoir Rehabilitation	\$ 19,800,000	2026	Begin construction
Mills Finished Water Reservoir Rehabilitation	\$ 25,000,000	2026	Complete design

## Dams & Reservoirs - All Project Group

### **Copper Basin Reservoir Discharge Valve Rehabilitation & Meter Replacement**

The Copper Basin Reservoir provides critical storage that enables flowrates along the CRA to be stabilized and controlled. If the reservoir needed to be drained rapidly in the event of an emergency, the discharge valves located at the base of the dam would be opened to safely release the water. Following 72 years of continuous service, the valves have begun to leak and need to be replaced. The dam is under the jurisdiction of the California Division of Safety of Dams (DSOD), which requires that the discharge valves be fully operational at all times. The project scope includes replacement of the fixed cone valves at the base of the dams; refurbish hydraulically operated gate valve, refurbish pipes, upgrade of the electrical and control systems; install cathodic protection system, replace ladders on the dam, and improve access road to safely enable construction personnel, materials, and equipment to reach the work site.

### **CRA Copper Basin Road Improvements**

The Copper Basin road provides operational access to the facility, and notably enables critical sodium hypochlorite deliveries used to disinfect the downstream CRA facilities, preventing growth of quagga and zebra mussels. This existing access road is commonly closed for maintenance after a storm event, so sodium hypochlorite tankers are unable to make deliveries. Among other improvements, this project will improve the 4.2-mile dirt road by providing an enhanced driving surface, erosion protection, and adding turn-out areas.

### **CRA Copper Basin Sodium Hypochlorite Tank Expansion**

Quagga mussels are an invasive species in the Colorado River that breed and grow in layers on CRA System surfaces. This has a detrimental effect on CRA conveyance structures (canals, conduits, siphons, tunnels, reservoirs) and pump plant facilities and equipment (pump impellers, valves, circulation water systems, motors, headgates, etc.). The best defense to prevent the growth of Quagga Mussels is dosing with sodium hypochlorite at Copper Basin. Copper Basin has a facility with two 15,000-gallon tanks to store sodium hypochlorite. However, this volume can only accommodate two days of CRA operations when at 8-pump flow and high temperatures. This limited volume can require three deliveries of 5,000 gallons of sodium hypochlorite tankers per day, which is an operational vulnerability if the chemical cannot be delivered for some reason. This project will expand the existing Copper Basin Sodium Hypochlorite tank farm, doubling the capacity with two new 15,000-gallon storage tanks.

### **Dam Monitoring System Upgrades at Lake Mathews and Lake Skinner**

Metropolitan relies on extensive instrumentation and regular inspections as a cornerstone of its dam monitoring program. The instrumentation provides warning signs of dam distress and provides real-time monitoring of the embankments and foundations. Extensive monitoring equipment has been installed at Lake Skinner and Lake Mathews over the last 48 years and 83 years, respectively. Recent inspections have noted that several of the piezometers and weirs at these facilities no longer function reliably and require rehabilitation or replacement.

Field surveys and condition assessments will be conducted at both dams to develop a staged replacement schedule. Based on the results of the assessments, installation of automated dam monitoring systems and upgraded communications system with remote monitoring units at each dam may be required. This project will also rehabilitate embankment surfaces to address erosion and surface drainage issues.

### **Diamond Valley Lake Crane Rehabilitation**

The scope of the project is to rehabilitate the 25-ton gantry crane at the Diamond Valley Lake Inlet/Outlet Tower. The project will also include a study to evaluate the possibility of increasing the crane capacity to enable it to be used as an alternative lifting device for the emergency drop gate in the event of a failure of the drop gate's normal hydraulic lifting system. This project will enhance infrastructure safety, security, and resiliency, and will enhance the reliability of water deliveries.

### **Diamond Valley Lake Dam Monitoring System Upgrades**

The three rock-fill dams which form Diamond Valley Lake (DVL) are monitored continuously by the facility's geodetic deformation monitoring system, which transmits real-time displacement data to Metropolitan's Headquarters at Union Station and to the Operations Control Center at Eagle Rock. This data is collected to provide early indication of a potential problem within the dam embankments or foundations, and to prepare mandatory reports on the dams' performance for submission to DSOD. After 21 years of continuous operation, the existing monitoring equipment has deteriorated and needs to be replaced. The planned upgrades will maintain the capability to continuously monitor dam performance in compliance with the DSOD operating permit.

Upgrades to the dam monitoring network at DVL will be accomplished in three stages. Stage 1 - procurement and installation of the weir level sensors and strong motion accelerographs; Stage 2 - design and preparation of procurement documents for the geodetic deformation monitoring system; and Stage 3 - design and procurement of automated data acquisition system, upgrades to the communication network, and replace sensors, remote monitoring units, and ancillary equipment. Stage 2 has been completed. Stages 1 and 3 will upgrade the West Dam, East Dam, and Saddle Dam areas.

### **Diamond Valley Lake Forebay Concrete Joint Seal Replacement**

The concrete joint seals in the Diamond Valley Lake (DVL) Forebay have been in service for over 20 years and have far exceeded the typical service life of two to five years. Division of Safety of Dams (DSOD) had previously directed Metropolitan to address seal replacement at the DVL Spillway; that replacement was completed in 2018. Based on a Metropolitan inspection in July 2018, the Forebay seals are in similar condition to the Spillway seals. This project will remove deteriorated and de-bonded joint seals at the DVL Forebay (approximately 150,000 linear feet), and replace with a new, cost-effective and high-performance MWD-approved sealant.

### **Diamond Valley Lake Network Security Detection Systems**

In 2018, a serial arsonist set 11 fires in the Diamond Valley Lake (DVL) area. This project will install multiple network detection security systems around DVL to cover areas with historically high security incidents. The network detection security system will utilize ground-based radar and thermal imaging as necessary to monitor for trespassing, criminal activity, security incidents, illegal dumping, fire, and medical emergencies.

### **Diamond Valley Lake Oxygenation System**

This project will construct a liquid oxygen (LOX) storage and feed system at Diamond Valley Lake to improve water quality, reduce impacts of cyanobacterial blooms, and maintain operational flexibility to ensure reliable and high-quality water deliveries under drought and emergency conditions. The LOX system will maintain oxygenated conditions in the deeper waters of DVL and prevent the formation of reduced compounds (sulfides, metals) that interfere with water treatment processes. This will allow for high-quality water to be released from the reservoir year-round. The system consists of: (1) a LOX tank; (2) evaporators to convert LOX to gas; (3) supply lines to deliver oxygen; (4) diffusers to mix the oxygen; and (5) a control system to regulate oxygen flow. Also, a cost benefit analysis will be performed during the early stage of the project to compare the life-cycle cost of purchasing LOX from a vendor versus installing a LOX generation facility at DVL.

### **Diamond Valley Lake Secondary Inlet Sleeve Valve Refurbishment**

Diamond Valley Lake (DVL) is used for operational and dry-year, and emergency storage. The existing sleeve valve at the DVL Secondary Inlet is corroding, which will eventually make the valve inoperable. This is the only control valve for the secondary inlet, which is used to refill DVL. This project will remove, refurbish, and replace the existing sleeve valve; recoat existing appurtenant piping; and replace associated couplings.

### **Diemer FWR Slope Protection Improvements**

The California Division of Safety of Dams' annual inspection of the Diemer Finished Water Reservoir (FWR) noted that the existing dense vegetation on the abutting slope was obscuring dam safety inspections and providing shelter for burrowing rodents. This project will remove the existing 2.5-acre dense vegetative ground cover on the embankment slopes of the Diemer FWR and rehabilitate the embankment surface with a new slope protection system that minimizes surface erosion, prevents rodent burrowing, and maintains the stability and integrity of the reservoir embankment slopes.

### **Eastern Region Security System Upgrade – Area 3**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Chemical Unloading Facility, Lake Mathews, Temescal HEP, Cactus City Communication Site, and Pleasant Peak.

### **Eastern Region Security System Upgrade – Area 4**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Detention Peak Communications Site, Diamond Valley Lake, San Diego Canal, West Portal, PC-1 PCS, Perris HEP/PCS, Red Mountain HEP/PCS, and Badlands Tunnel.

### **Etiwanda Reservoir Rehabilitation**

The Etiwanda Reservoir has been in operation for 28 years. The liner and appurtenances are in need of refurbishing to maintain their integrity and prevent excessive seepage as noted during periodic inspections. This project will rehabilitate the reservoir by replacing the reservoir liner with a geomembrane liner, replacing the sub-drain sump pump system, and installing new electronic monitoring instrumentation and equipment to better monitor operational status of the sump pump system. The project scope will also include inspection, evaluation, and rehabilitation or replacement of: (1) the asphalt pavement for the reservoir perimeter roads and parking lot; and (2) various valves and gates.

### **Etiwanda Reservoir Security Upgrades**

Etiwanda Reservoir has experienced incidents of trespassing and illegal dumping. This project will replace the gate near residences with a high security gate that is cut and climb resistant and install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site.

### **Garvey Reservoir Dam Monitoring System Upgrades**

Garvey Reservoir is impounded by three earthfill embankment dams: the North Embankment, Southeast Embankment, and the Southwest Embankment. The reservoir is equipped with an automated data acquisition system (ADAS) to collect data from instruments in and around the dams including piezometers, underdrains, and leakage detection system flowmeters. Data collected from the instruments is used to monitor the performance of the dams and the reservoir liner, and to detect early warning signs of any dam distress. Monitoring data is reported to the DSOD annually and is transmitted to the City of Monterey Park on a near real-time basis. Over the last decade, the existing system hardware and power components have been deteriorating with increasing frequency, and repairs have become increasingly more difficult as the units are no longer manufactured and spare parts are no longer readily available. This project will upgrade the monitoring system at Garvey Reservoir by replacing the existing ADAS equipment and associated sensors. The project will also include the development of a data management and dashboarding system with the ability to automatically transmit the data to the City of Monterey Park.

### **Garvey Reservoir Rehabilitation**

Garvey Reservoir was placed into operation in 1954. It is located at the junction of the Middle Feeder and the Garvey-Ascot Cross Feeder in the city of Monterey Park. Garvey Reservoir provides hydraulic grade stabilization, pressure relief, and operational and emergency storage for the Central Pool portion of the distribution system. A flexible membrane liner and reservoir floating cover were installed in 1999. The service life of a reservoir floating cover is approximately 20 years. The existing floating cover at Garvey Reservoir has become increasingly difficult to repair and needs replacement.

This project will replace the reservoir's aging floating cover and flexible membrane liner. In addition, this project will refurbish the existing inlet/outlet tower; modify circulation piping; replace the standby generator and upgrade the electrical system; replace/fix perimeter and security fences; improve surface drainage and erosion controls; rehabilitate the outdated on-site water quality laboratory building; install additional sodium hypochlorite storage tank plus containment and appurtenances; replace valves at the junction structure; and other improvements necessary to rehabilitate the reservoir and support facilities.

### **Gene Wash and Copper Basin Dams Safety Monitoring Improvements**

The Copper Basin and Gene Wash Dams are in a very remote area with difficult access requiring four-wheel drive vehicles and boats. Both dams are visually inspected twice per year by Engineering Services including the annual inspection by the California Division of Safety of Dams (DSOD). This project will improve the safety monitoring system at the Gene Wash and Copper Basin dams to maintain compliance with DSOD regulations and Metropolitan's ability to detect dam safety issues in a timely manner. The project scope includes installation and implementation of a modern dam monitoring system that utilizes automatic data acquisition system (ADAS) for continuous monitoring. This project also will perform dam concrete condition assessments, geological evaluations of dam abutments, inspection, survey, and stability analysis. This is a new project for this budget cycle.

### **Jensen Finished Water Reservoirs Rehabilitation**

The Jensen plant has two 50-MG finished water reservoirs. Reservoir No. 1 is a concrete structure with a concrete roof that was completed in 1972. Reservoir No. 2 has a polypropylene floating cover that was installed in 1997. The concrete roof of Reservoir No. 1 has a bituminous built-up roofing system and lightweight concrete cap made of perlite. Portions of the perlite cap have deteriorated over time due to weathering. The floating cover at Reservoir No. 2 is showing significant signs of wear and needs to be replaced, and turbulent flow at the inlet has torn holes in the floating cover on several occasions near the corners of the fixed metal air vents. Inadequate mixing contributes to chloramine decay, which in turn increases the nitrite levels within the reservoirs and downstream distribution system causing bacterial regrowth.

The rehabilitation work for Reservoir No. 1 will include refurbishment of the areas of the roof where the existing material has failed from significant weathering damage and implementation of measures to protect the roof. The rehabilitation work for Reservoir No. 2 will include installation of a new finished water reservoir liner and floating cover with a rainwater removal system, modification of plant domestic water system connection, and refurbishment of the effluent gate and dewatering system. To enhance mixing and reduce the occurrence of nitrification within Reservoir No. 2, the work will implement modifications to the existing inlet configuration, replacement of instruments and flow meters, and installation of inlet diffuser pipe system. In addition, within both reservoirs, this project will replace perimeter fence, install bollards and posts, rehabilitate asphalt concrete and access road, and provide other improvements necessary to enhance security and reliability.

### **Lake Mathews Area Paving**

The Lake Mathews site serves as the central location for Metropolitan force construction staff, equipment, and supplies. These resources provide construction and maintenance capabilities for projects requiring rapid response or specialized expertise throughout Metropolitan's service area. After 46 years of service the paving throughout Lake Mathews now shows extensive signs of deterioration including alligator cracking, upheaval, swell, settlement, grade depressions, rutting, and potholes. This project will remove, haul away, repave, re-stripe, and improve drainage within multiple severely deteriorating pavement areas of the Lake Mathews site, including the maintenance/yard area between Buildings Nos. 1 and 23, entrance road, area east of Buildings Nos. 7 and 8, and the administration building area including the access roads.

### **Lake Mathews Dam Erosion Control**

Lake Mathews is impounded by three embankment dams: Main Dam, Dike No. 1, and Dike No. 2. The Main Dam and Dike No. 1 were originally constructed in 1938, and raised to their current height in 1961, when Dike No. 2 was constructed. Over the years, erosion issues were encountered on the crest, downstream faces of the dam and dikes and surrounding areas. The erosion in these areas has impacted the effective drainage of surface water runoff away from the dam and dike structures and has caused the loss of dam materials from the crest and downstream face. This project will install erosion control features at the Lake Mathews dam and dikes to address the drainage issues to minimize further erosion of the dam materials and to minimize maintenance efforts after storm events.

### **Lake Mathews Electrical Reliability**

The existing electrical distribution system at Lake Mathews constructed during the 1930s needs to be upgraded for reliability. This system has been in service for over 79 years and serves the lake's outlet towers and junction shaft, hydroelectric plant, forebay, chlorination system, administrative offices, and maintenance and repair shops. The electrical distribution system is outdated, has experienced numerous overloads, and lacks capacity for planned additional equipment. The system needs to be upgraded to maintain reliability and meet future power demands. This project will evaluate and upgrade power distribution system, which may include use of alternate medium power distribution voltage (4.16 kV) in line with other Metropolitan facilities, underground and overhead power lines and condition of electrical poles, voltage stability for all facilities, the ability to isolate feeders to provide selective isolation and safer maintenance, and emergency generators capability to provide adequate backup. This project also plans to integrate the upgraded electrical system with Metropolitan's system-wide supervisory control and data acquisition system.

### **Lake Mathews Forebay Pressure Control Structure and Bypass**

Lake Mathews is the terminus of Metropolitan's CRA and was constructed in the 1930's. Untreated water stored in the reservoir is withdrawn through the lake's forebay and hydroelectric plant and is then conveyed through the Upper Feeder and Lower Feeder to the Weymouth and Diemer plants, respectively. The Lake Mathews forebay discharge valves and outlet tower have gradually deteriorated over 77 years of operation. Portions of the facilities need to be replaced to maintain reliable deliveries from Lake Mathews into the Central Pool. The ten 32-inch-diameter Howell-Bunger valves that are used to withdraw water from the lake have gradually deteriorated through continuous use. The frequency of repairs is increasing, while replacement parts are difficult to obtain. These 64- to 79-year-old valves need to be replaced.

Upgraded facilities may include a new bypass system with pressure control structure, which includes new headworks regulating valves, upgraded outlet tower gates, and a new overflow spillway structure. This project will also include seismic retrofit of the existing forebay, forebay tower, and dike; and replacement of mechanical equipment including slide gates as these facilities are used with the existing turbine operation. The system is expected to provide full-service capacity and deliver water to the Upper and Lower Feeders year-round.

### **Lake Mathews Junction Shaft Gate Hydraulic Power Unit Study - Outlet Tower No. 2 Isolation**

The roller gates at the Lake Mathews junction shaft do not operate consistently and reliably. The large isolation gates utilize hydraulic power units (HPUs) to operate under normal conditions and store energy for use in emergency conditions when electric power is not available. Although maintained in accordance with the manufacturer's recommendations, the gates no longer function as designed. This project will evaluate the two roller gate operators at the Lake Mathews junction structure that provide isolation for Outlet Tower No. 2 and rehabilitate the HPUs and support systems. This project also includes instrumentation and controls upgrade at Outlet Tower No. 2 to obtain accurate readings of the valve positions. The study will focus on the condition of hydraulic power unit equipment, safety elements related to pressurized hydraulic reservoirs/tanks, and operating procedures/practices.



### **Lake Mathews Network Security Detection Systems**

Existing portions of the current perimeter fencing at the Lake Mathews facility are deteriorated and do not prevent intruders. The inability to properly monitor the area has resulted in incidents of theft and illegal dumping. This project will install multiple network detection security systems around Lake Mathews to cover areas with historically high security incidents. The network detection security system will utilize ground-based radar and thermal imaging to monitor for trespassing, criminal activity, security incidents, illegal dumping, fire, and medical emergencies.

### **Lake Mathews Perimeter Fencing Upgrade**

Lake Mathews is the terminus of the CRA. Water is stored in Lake Mathews Reservoir, withdrawn through the lake's main outlet towers into the forebay, and is then conveyed through the Upper Feeder and Lower Feeder to the Weymouth and Diemer plants, respectively. The existing chain link fencing along the approximately 15-mile perimeter of the Lake Mathews facility has deteriorated and is ineffective at preventing intrusions. The fencing can be easily cut, resulting in an increase in break-ins and illegal dumping through the fencing. This project will replace the existing five-foot tall chain link fencing with eight-foot tall, anti-cut, anti-climb security fencing, constructed of steel or wrought iron. This project will enhance infrastructure safety, security, and resiliency, and will improve security and emergency response.

### **Lake Mathews Outlet Tower No. 2 Valve Rehabilitation**

The outlet tower valves operate intermittently and do not open and close completely. Without proper operation of the valves, tier selection and flow rates are impacted which may adversely affect system operations including raw water quality, water treatment processes at the downstream Weymouth and Diemer plants, and secure isolation of the tower from the lake needed for maintenance and inspection work. This project will complete a comprehensive study and implement recommendations on replacement or refurbishment of the butterfly valves on the Lake Mathews Outlet Tower No. 2, which may include replacement or refurbishment of 30 butterfly valves.

### **Lake Mathews Reservoir Dredging and Emergency Dewatering Facilities**

Sediment has accumulated in the reservoir since it was first built and filled in 1938. Sediment is a result of continual erosion within the Lake Mathews watershed and has led to increased turbidity at water treatment plants, reservoir storage loss, and plugged the main dam diversion tunnel into Cajalco Creek. In addition, the California Department of Water Resources, Division of Safety of Dams (DSOD), has specific outlet dewatering requirements for large dams/reservoirs that impound over 5,000 acre-feet of water. Although the current dewatering method at the forebay meets DSOD's requirement, there is a possibility that the Upper Feeder and Lower Feeder that take water from the forebay may be damaged and become unusable during a seismic event. It is now recommended to reestablish access to the diversion tunnel at the bottom of the main dam by dredging. This project will evaluate dredging options for Lake Mathews Reservoir. Dredging will remove decades of accumulated sediment that reduces reservoir storage capacity, contributes to decreased water quality, and blocks access to dewatering infrastructure at both Outlet Tower No. 1 and the main dam diversion tunnel. The evaluation will identify and prioritize dredging locations through bathymetric surveys and other remote methods, as well as identify mitigation options for the environmental hazards of dredging. The project will also determine the condition of the main dam diversion tunnel and all its mechanical equipment and perform a comprehensive refurbishment to restore its full function.

### **Lake Mathews Sodium Hypochlorite Injection System**

Update and redesign the Lake Mathews sodium hypochlorite injection system to relocate the injection point to a location that will minimize the impacts of chlorine injection on the forebay and appurtenant structures. The design will also consider effective Quagga Mussel control, enhancing safety and reliability of the injection system, and adherence to water quality goals and requirements. The project will develop options to replace the existing interim sodium hypochlorite system at the Lake Mathews Forebay with a system at Lake Mathews Outlet Tower No. 1 and Outlet Tower No. 2, and to provide continuous chemical injections from the towers through the Lake Mathews Forebay, Power Plant, and into the Upper and Lower Feeders.

### **Lake Skinner Dam V-Ditch Replacement**

Lake Skinner is impounded by an embankment dam 109 feet high and 5,150 feet long, constructed in 1973. The original construction of the dam incorporated concrete v-ditches on the downstream face and the toe of the embankment dam. The purpose of the v-ditches is to provide drainage control from surface runoff to prevent erosion of the dam materials. Over the years, the existing v-ditches have deteriorated and are not functioning as intended, and the DSOD indicated the need for repair or replacement of the v-ditches in several of their annual inspection reports for the facility. This project will replace the v-ditches and other erosion control features along the downstream face and the toe of the Lake Skinner Dam to restore the functionality of the drainage system.

### **Lake Skinner Outlet Tower Butterfly Valve Replacement**

The Lake Skinner Outlet Tower is a critical component of the Skinner plant and distribution system operations and is equipped with five tiers of submerged butterfly valves. The valves have been in operation for 45 years and are approaching the end of their service lives. Replacement parts are not available and must be custom fabricated. This project will replace or rehabilitate all the butterfly valves at the Lake Skinner Outlet Tower. Although there is a plan to potentially add a new outlet tower to Lake Skinner, improving the condition of the existing outlet tower valves will allow for operational flexibility and maintain operational reliability at the lake. This is a new project for this budget cycle.

### **Lake Skinner Outlet Tower Seismic Upgrade**

Lake Skinner was constructed in the 1970s and is located in the city of Temecula, in Riverside County. Water is delivered from the lake through its outlet tower to the Skinner Water Treatment Plant. If the lake needed to be drained rapidly in the event of an emergency, the outlet tower would be used to safely release the water. The outlet tower is under the jurisdiction of the California Division of Safety of Dams (DSOD) which requires that the tower meet current seismic codes.

Metropolitan has an ongoing program to evaluate the seismic stability of its facilities to maintain reliable water deliveries and to meet current design practices and building codes. Under Metropolitan's seismic assessment program, staff conducted an initial assessment of the Lake Skinner Outlet tower. Seismic analyses of the Lake Skinner Outlet Tower have identified that the tower may be damaged during a major earthquake. This project will (1) replace two valves located at tier 5 of the outlet tower, which are currently not operational, (2) develop an emergency dewatering plan for DSOD's review and approval; and (3) conduct detail seismic evaluation of the tower, develop options to mitigate impacts to the tower if necessary, and to implement a preferred option to mitigate the seismic impact to the inlet/outlet operation.

### **Lake Skinner Oxygenation System**

Lake Skinner is subject to seasonal thermal stratification when the lake water temperature prevents mixing of vertical layers resulting in anaerobic conditions and cyanobacteria blooms. These conditions in the lake can ultimately affect water treatment operations and the quality of the finished drinking water due to taste and odor compounds and sometimes cyanotoxins produced by the cyanobacteria. Lake Skinner currently has a compressor-based aeration system that pumps air to the bottom of the lake in an attempt to mix the water and prevent the thermal stratification but the system is undersized and has been at times, ineffective. This project will construct a hypolimnetic oxygenation system at Lake Skinner including an oxygen supply or liquid oxygen facilities, an anchored diffuser piping assembly in the lake, and associated electrical modifications to improve water quality conditions in Lake Skinner and ensure water supply reliability.

### **Live Oak Reservoir Rehabilitation**

The Live Oak Reservoir has a 2,500-acre-foot capacity and is located in the city of La Verne. The main purpose of the reservoir is to allow peaking of the Devil Canyon Power Plant and to provide for outages. The reservoir water surface controls the upstream hydraulic gradient for the San Dimas Hydroelectric Power Plant. An inspection identified the following: (1) several valves that are leaking; (2) the reservoir liner is damaged in several areas; (3) the emergency backup generator is no longer manufactured and parts are obsolete; (4) the existing HVAC system including the ductwork for the control room has exceeded its expected service life; (5) improvements to provide access control, intrusion alarm, and surveillance are needed; and (6) improvements to the grading, surface drainage, and paved roads adjacent to the Live Oak Reservoir are also needed. This project will replace leaking valves, reline the influent manifold with reinforced mortar, rehabilitate the fire loop, rehabilitate the existing asphalt concrete (AC) liner and install liner subdrainage system as necessary, replace the existing Emergency Standby Generator and hydraulic power pack unit, replace the existing Heating, Ventilation, and Air Conditioning (HVAC) system, improve surface drainage and erosion controls for the facility, identify and restore all electrical components to new condition or replace with new, including electrical, panel boards and grounding, sump pumps, and associated instrumentation, replace instruments in piezometer room, conduct a security assessment of the facility to reinforce or upgrade physical features and protect infrastructure, which includes replacement of the inner fencing for the reservoir with security type fencing, and other improvements necessary to rehabilitate the reservoir and support facilities.

### **Mills Finished Water Reservoir Rehabilitation**

The Mills plant relies on two finished water reservoirs with floating covers and geomembrane liners to provide storage for the downstream distribution system. Their capacity is approximately 25 million gallons (MG) each. The Hypalon cover on Reservoir No. 1 was installed in 1997, while the polypropylene cover on Reservoir No. 2 was installed in 1996. Over the past seven years, an increasing number of rips and pinhole leaks in the covers were discovered and repaired. Due to their deterioration, the floating covers and geomembrane liners at both reservoirs need to be replaced. The rehabilitation work will include installation of new finished water reservoir liners and floating covers with a rain removal system, refurbishment or replacement of existing reservoir gates, installation of a new drop gate, and installation of a permanent bulkhead at Modules 1 & 2 in the combined filter effluent (CFE).

To enhance mixing and reduce the occurrence of nitrification within the reservoirs, the work will also include the installation of an inlet diffuser pipe system, replacement of reservoir instrumentation and influent flow meters. In addition, within both reservoirs, this project will replace perimeter fence, install bollards and posts, rehabilitate asphalt concrete and access road, and provide other improvements necessary to enhance security and reliability.

### **Palos Verdes Reservoir Groundwater Management**

This project will address long-term groundwater management at the Palos Verdes Reservoir. The project will evaluate monitoring and disposal options for groundwater seepage, install monitoring instrumentation, develop groundwater and stormwater handling systems, if needed, and provide a connection to the sewer.

### **Palos Verdes Reservoir Modifications**

The Palos Verdes Reservoir provides operational flexibility by maintaining deliveries to nearby service connections LA-21 and WB-32 when major feeders in Metropolitan's distribution system are shut down for maintenance. The PV reservoir is used to regulate flows from the PV Feeder. The Palos Verdes Reservoir is challenging to operate since water cannot be stored without experiencing nitrification. This project will investigate the causes of nitrification and implement solutions to mitigate or abate this issue. The solution may involve designing and modifying the reservoir's inlet/outlet structures and valves and other modifications and improvements needed to ensure water quality that meets Metropolitan standards. The project will also include evaluating permanent dewatering facilities to allow reservoir drainage during nitrification.

### **Palos Verdes Reservoir Sodium Hypochlorite Storage and Chemical Feed System and Security Upgrades**

This project will replace the 12,000-gallon fiber-reinforced plastic (FRP) sodium hypochlorite (NaOCl) storage tank and appurtenant fittings at the Palos Verdes Reservoir (PVR). The existing FRP tank, manufactured in 1992, is well past its recommended service life of 6-10 years. The FRP tank will be replaced with two 6,000-gallon titanium tanks, which are designed to last 50-70 years and do not corrode in the presence of sodium hypochlorite. Further, modifications to the tank farm feed systems are required to meet revised minimum flow and dosage requirements recently directed by Water Quality and Member Agency demands. Lastly, security cameras will also be added around the PVR facility to provide increased security monitoring.

### **Skinner Dam Embankment Stability Evaluation and Mitigation**

Skinner Dam is used to impound water from Lake Skinner to supply raw water to the Skinner Water Treatment Plant and San Diego Pipeline Nos. 3, 5, and 6. Previous evaluations recommended further detailed assessment of the dam embankment under seismic loading. A large magnitude earthquake could prevent Metropolitan from being able to store water behind the dam, disrupting water supply to Skinner Water Treatment Plant and San Diego Pipeline Nos. 3, 5, and 6. Damage to the dam's internal drainage system will necessitate dewatering of the reservoir until repairs can be made. Otherwise, progressive failure of the dam could initiate, ultimately resulting in an uncontrolled release of water. A detailed analysis of the dam embankment is required to refine the findings of the previous evaluations and identify seismic deficiencies and rehabilitation alternatives if necessary. This project will conduct a detailed seismic evaluation of the Skinner Dam embankment. Establish seismic design criteria and ground motions, perform detailed seismic analyses, identify any necessary seismic mitigation alternatives, and design and construct necessary improvements.

### **Skinner Finished Water Reservoir Slide Gates Rehabilitation**

The three operational slide gates (Inlet, Outlet, and Bypass) that control the inlet and outlet flows from the Skinner Finished Water Reservoir have been exposed to a corrosive and wet environment since 1991. Visual inspections identified leaking gates and continuing deterioration of the slide gates' exterior coatings. These gates have been in service for 30 years and have not been recoated. This project will rehabilitate the three Skinner Finished Water Reservoir slide gates. The gates will be removed from the gate frames, thoroughly inspected for carbon steel material loss, blasted and recoated to extend their service life. The existing gate frames will be replaced with new frames and other installation components (i.e., guides, wedge blocks, and seals). In addition, the rejection structure will be modified to separate the stormwater and rejection water pipelines and prevent potential stormwater from flowing into the finished water reservoir.

### **Spillway Upgrades - Lake Mathews and Lake Skinner**

Following the incidents at Oroville Dam in 2017, the California Division of Safety of Dams (DSOD) is now requiring that dam owners in California assess the condition of dam spillways to confirm that they meet minimum safety standards. In July 2017, DSOD issued an initial list of 93 dams requiring comprehensive spillway assessments to evaluate hydraulic capacity, geotechnical stability, structural integrity, and potential erosion from dam releases. Of the 20 Metropolitan facilities that are permitted by DSOD, two have been directed to undergo the comprehensive assessments: Lake Mathews and Lake Skinner.

Metropolitan submitted the required work plans for re-evaluation of the spillways at Lake Mathews and Lake Skinner and received approval of those plans in September 2017. For each dam, a comprehensive spillway assessment report was prepared and is currently under review by the DSOD. Based on the input from DSOD, the dam spillway and underdrain system will be rehabilitated.

### **Western Region Security System Upgrade – Area 1**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at 108<sup>th</sup> PCS, Advanced Purification Center at Carson, Oak Street PCS, Palos Verdes Reservoir (PVR), PVR Relief Structure, Second Lower Spillway at PVR, and Carson/Alameda PCS.

**Western Region Security System Upgrade – Area 5**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Cayote Creek HEP, Deodora PCS, Orange County Reservoir, Santiago Tower, and Valley View HEP.

**Weymouth Finished Water Reservoir Rehabilitation**

The Weymouth plant's 50-million-gallon finished water reservoir was built in 1964 to meet then-current building code. Because the finished water reservoir's concrete roof was constructed with no expansion joints, numerous cracks in the roof slab continue to open and close with the expansion/contraction cycles caused by daily fluctuation in temperature. Rehabilitation is required to protect the concrete and to prevent corrosion of the exposed reinforcing steel. In addition, a rapid seismic assessment conducted in 2000, indicated that the reservoir was marginally stable under seismic loading conditions of that time. Since then, seismic evaluations for the Weymouth facilities and revised building codes have indicated that greater ground motions should be considered.

This project will fix cracked and spalling concrete on the underside of the finished water reservoir roof slab, support beam connections, and entry staircase. The project will also perform seismic evaluation and any needed seismic retrofit to meet the latest DSOD standards.

## Distribution System Program

Fiscal Year 2024/25 Estimate: \$59.4 million

Fiscal Year 2025/26 Estimate: \$42.6 million

**Program Information:** *The Distribution System Program is comprised of projects to replace, upgrade, or refurbish existing facilities within Metropolitan's distribution system, including pressure control structures, hydroelectric power plants, and pipelines, to reliably meet water demands.*

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - Auld Valley and Red Mountain Control Structures Upgrades
  - Foothill Feeder Blowoff Valve Replacement
  - Lower Feeder Air Entrainment Improvement
  - San Diego and Auld Valley Canals Concrete Replacement – Site No. 622
  - San Diego and Auld Valley Canals Concrete Replacement – Site No. 1055
  - San Diego Pipelines 1 and 2 Rehabilitation
  - Service Connection A-02 Rehabilitation
  - Service Connection EM-14 Meter Replacement
  - Service Connection EM-21 Meter Replacement
  - Upper Feeder Santa Ana River Crossing Stainless Steel Slip Joint Upgrade
  - Wadsworth Pumping Plant Fire Protection System Upgrades
  - Western Region Security Camera System Upgrade – Area 2
  - Western Region Security Camera System Upgrade – Area 3
  - Western Region Security Camera System Upgrade – Area 4
  - Western Region Security Camera System Upgrade – Area 7
  - Western Region Security Camera System Upgrade – Area 9

- Major milestones achieved or estimated to be achieved:
  - Construction:
    - Casa Loma Siphon Barrel No. 1 Seismic Retrofit – completed
    - Etiwanda Pipeline Lining Replacement – Stage 3 – completed
    - Garvey Reservoir Drainage & Erosion Control Improvements Areas 6, 7, 8, 10, and 11 – completed
    - Garvey Reservoir Sodium Hypochlorite Feed System Upgrades – completed
    - Lake Mathews Administration and Warehouse Building Roof Replacement – to be completed
    - Lake Mathews Facility Wastewater System Replacement – to be completed
    - Live Oak Reservoir Bypass Pipeline Cathodic Protection – completed
    - OC-88 Pumping Plant Chiller Replacement – to be completed
    - Orange County Feeder Relining – Reach 3 – to be completed
    - San Diego Canal Concrete Liner Replacement – Site No. 622 – to be completed
    - San Diego Canal Concrete Liner Replacement – Site No. 1055 – to be completed
    - San Diego Pipeline No. 1 Rainbow Tunnel Concrete Liner Rehabilitation – completed
    - Sepulveda Feeder/East Valley Feeder Interconnection Electrical Upgrades – to be completed
    - Skinner Bypass Pipelines Cathodic Protection – completed
    - Upper Feeder Santa Ana River Crossing Expansion Joint Replacement – completed
    - Western San Bernardino Region – Stage 1 Improvements – completed
  - Procurement contract awarded:
    - Lakeview Pipeline Relining – Stage 2 Pipe Procurement
    - Orange and Riverside/San Diego County Operating Regions Valve Replacement – Orange County Area Pressure Control Structures Globe Valve Procurement
    - Rialto Feeder Rehabilitation – Valve Procurement for Service Connection CB-11
    - San Diego Pipelines 3 & 5 Vacuum Valve Replacement – Valve Procurement
    - San Jacinto Diversion Structure Slide Gates V-01, V-02, & V-03 Rehabilitation – Slide Gate Procurement
  - Final design completed:
    - Etiwanda Pipeline Lining Replacement – Stage 3
    - Foothill Hydroelectric Plant Seismic Upgrade
    - San Diego Canal Concrete Liner Replacement – Site No. 622
    - San Diego Canal Concrete Liner Replacement – Site No. 1055
    - San Diego Pipeline No. 1 Rainbow Tunnel Concrete Liner Rehabilitation
    - Western San Bernardino Region – Stage 2 Improvements

## Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Foothill Hydroelectric Power Plant Seismic Upgrade	\$ 9,700,000	2024	Complete construction
Lake Mathews Forebay Pressure Control Structure and Bypass	\$ 177,500,000	2025	Initiate Stage 1 progressive design-build agreement
Perris Valley Pipeline I-215 Tunnels Crossing	\$ 7,830,000	2025	Complete construction
Rialto Pipeline Rehabilitation	\$ 3,500,000	2024	Begin construction
Right-of-Way Infrastructure Protection Program – Los Angeles County Operating Region	\$ 9,200,000	2025	Begin construction of Stage 1
San Gabriel Tower and Spillway Improvements	\$ 16,200,000	2026	Complete design
West Valley Feeder No. 1 - Access Road and Valve Structure Improvements	\$ 4,700,000	2025	Begin construction

## Pipelines, Tunnels, Canals Project Group

### Casa Loma Siphon Barrel No. 1 Seismic Retrofit

In November 2016, leaks were detected on Barrel No. 1 of the Casa Loma Siphon. It was determined that the pipe has had significant horizontal and vertical movements. The leaks do not immediately jeopardize the structural integrity of the aqueduct but if repairs are not performed, the continued leakage over time could erode soil, undermine the siphon, and cause damage to the siphon structures. The Casa Loma Siphon Barrel No. 1 is vital to Metropolitan’s conveyance system moving water from the desert pumping plants to Lake Mathews. The work is conducted in two stages. Under Stage 1, internal seals were installed on 13 joints as an interim measure to address the leaks. These repairs were completed in February 2017, during a planned shutdown of the CRA. Stage 2 will permanently restore the pipe joints within the siphon by replacing 148-inch diameter steel and concrete pipe segments that cross the Casa Loma Fault zone with two parallel barrels of 104-inch diameter earthquake resistant ductile iron pipe segments and steel pipe, which will accommodate relatively large ground displacements from an earthquake and the ongoing ground settlement.

### Casa Loma Siphon No. 1 and San Jacinto Pipeline Protection

The Casa Loma Siphon No. 1 and the San Jacinto Pipeline cross the San Jacinto River in Hemet, CA. The river experiences periodic high flows during severe storms, exposing the pipelines at the river crossing to damage due to exposure, undermining, or flotation. The scope of the project is to construct a weighted protective cover system, consisting of cable-connected articulated concrete blocks, spanning approximately 200 feet in length over Casa Loma Siphon No. 1 and the San Jacinto Pipeline. This project will enhance infrastructure safety, security, and resiliency, and will improve the reliability of water deliveries.



### **Cone Camp Intertie Bypass Rehabilitation**

This project will rehabilitate the Cone Camp Intertie including the existing 24-inch bypass pipe around the 78-inch butterfly valve. Work may include replacement of the 24-inch bypass pipe and associated valves, and other features necessary to support the bypass operation. The Cone Camp Intertie was constructed in 2002 as a part of the Inland Feeder Highland Pipeline to allow the Inland Feeder to receive State Project Water (SPW) through San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pipeline. At the intertie, a bypass pipeline is used to equalize pressure on both sides of the 78-inch butterfly shutoff valve prior to operating the valve. This bypass pipeline has been taken out of service due to pinhole leaks caused by microbiological corrosion due to stagnant water. Although normal operation of the Inland Feeder does not require the intertie, the intertie may be used to convey water for the Inland Feeder when Devil Canyon 2nd afterbay is offline.

### **Etiwanda Pipeline (South) Protection - Sta. 332+00 to 349+00**

The City of Rancho Cucamonga is planning to construct a grade separation on Etiwanda Avenue where the Etiwanda Pipeline is located, south of the Etiwanda Reservoir near the tie-in point to the Upper Feeder. Metropolitan is required to either relocate or protect its pipeline, at its own expense, to allow for improvements by the City. The option to protect the pipeline was selected over the relocation option due to time constraints imposed by the grade separation project. The City will install cast-in drilled hole piles (CIDH) in isolation casing within the main bridge span to protect the pipeline. Metropolitan is responsible for the cost of the City's relocation of rectifier and electrical service cabinets, underground conduits, electrolysis test stations, anode well, and patrol road to access manholes; modification of manholes and vent piping for flowmeters and air release vacuum valves, and sump discharge lines.

### **Etiwanda Pipeline Lining Replacement**

The Etiwanda Pipeline was constructed in 1993 to convey untreated water from the Rialto Pipeline to the Upper Feeder. This 6.4-mile-long welded steel pipeline is 144 inches in diameter. The northern portion of the pipeline, which is 5.4 miles long, conveys high-pressure water to the Etiwanda Power Plant. From that facility, the southern portion of the pipeline continues for one mile to an interconnection with the Upper Feeder. During an internal inspection, staff discovered that approximately 37 percent of the northern portion of the line has missing or delaminated mortar lining. At the present time, the structural integrity of the pipeline remains sound. Over time, however, the loss of mortar lining will expose the pipeline to accelerated rates of corrosion and eventual leakage. This project will remove existing and failing cement mortar lining and install a flexible polyurethane lining system. Stages 1 and 2 of this three-stage project have been completed, and rehabilitation of the remaining 2.5 miles of the middle reach of the feeder will be completed under Stage 3, which will also include installation of 1,200 feet of steel liner.

### **Garbani Water Delivery Pipeline**

Metropolitan is required to provide water to Domenigoni Properties for agricultural usage as a settlement due to the Diamond Valley Lake's construction. Water is currently being fed to the Domenigoni property from the canal using pumps. During high algae bloom, the system gets clogged and must be cleaned every few hours. If the system is not cleared, water is provided to the property through an Eastern Municipal Water District (EMWD) connection. Metropolitan is responsible for the EMWD water bill, which costs up to \$20,000 monthly. This project will construct an interconnection with the San Diego Canal and a pipeline with a gravity-fed system to deliver water to Domenigoni Properties.

### **Lake Perris Seepage Water Conveyance Pipeline**

Metropolitan and Department of Water Resources (DWR) have partnered to design and construct facilities to capture and convey Lake Perris leakage water to the CRA. DWR will design and construct a seepage collection wellfield near the foot of the Lake Perris Dam, and this project will design and construct a conveyance pipeline extending from the DWR wellfield to the CRA.

### **Lakeview Pipeline Relining**

The Lakeview Pipeline was constructed in 1973 to provide water from the East Branch of the State Water Project (SWP) to the Skinner area. Since it was completed, the Lakeview Pipeline has been shut down on numerous occasions to repair leaking joints. The line has experienced significant deformation which has caused leaks at pipe joints and loss of mortar lining. Due to the significant potential for corrosion of the pipeline, and the lack of structural integrity in many locations, permanent restorations should proceed expeditiously. In March 2015, in response to the ongoing state-wide drought, the Stage 1 restorations were completed. This work included lining a one-mile portion of the Lakeview Pipeline known as the Bernasconi Tunnel with a steel liner. In conjunction with the recently completed Lakeview Pipeline/Inland Feeder intertie, this improvement enables up to 200 cubic feet per second (cfs) of water stored in Diamond Valley Lake to be delivered to the Mills plant. In May 2021, a 133-inch diameter section of pipe referred to as a “wye” branch near the east portal of the Bernasconi Tunnel was relined and a 60-inch diameter “tee” section of pipe located at the Lake Perris Control Facility was replaced. Completion of this work enabled reliable delivery of up to 120 cfs of water stored in Diamond Valley Lake to the Mills plant, while maintaining overall pipeline structural integrity. The Stage 2 work includes lining 3.7 miles of the Lakeview Pipeline between the Inland Feeder’s PC-1 control structure and the Perris Control Facility, along with installation of a 1,000-foot-long reach of 9.5-foot-diameter pipe to bypass the Perris Control Facility. Upon completion of the Stage 2 work, the Lakeview Pipeline will be capable of delivering up to 340 cfs from Devil Canyon through the Inland Feeder to the Mills plant, providing an alternate delivery route to the plant as backup to the Santa Ana Valley Pipeline. The Stage 3 work will include lining the remaining 6.7 miles of the Lakeview Pipeline that extends from PC-1 to the San Diego/Casa Loma Canal junction structure.

### **Orange County Feeder Dewatering Improvements**

The Orange County Feeder originates at the Weymouth plant in La Verne and extends south for 41 miles to its terminus in the City of Newport Beach. Operations staff struggles with dewatering the pipeline due to development-driven relocations and aging infrastructure. This project will perform the analyses, equipment and facility modifications, and documentation to facilitate future pipe dewatering operations.

### **Orange County Feeder Flushing Upgrades**

When the Orange County Feeder is dewatered, Service Connection CM-01 is used as a primary location to release water in the storm drain at a rate of 2 cfs. Service Connection CM-01 is on a narrow, heavily populated street in Corona Del Mar in Orange County. Due to the location, the dewatering setup takes a large street footprint, inconveniencing the community. Furthermore, releasing water into the storm drain has resulted in community inquiries and concerns, primarily due to drought conditions. Solutions such as a hose directly to the drain have been explored, but due to local business and driveway, it has been deemed unsafe and an impractical option. This project will install a dewatering pipe that connects directly to the storm drain and other appurtenances for dewatering.

### **Orange County Feeder Relining**

The Orange County Feeder conveys treated water from the Weymouth Water Treatment Plant in La Verne to six member agencies in Los Angeles and Orange Counties. Recent internal inspections of the feeder have identified significant deterioration of the existing coal-tar enamel lining, which is 79 years old. While the pipeline’s structural integrity remains sound at present, the interior lining displays blistering and disbonding, which expose the pipeline to accelerated rates of corrosion and eventual leakage. The lining needs to be rehabilitated to maintain long-term reliability of the pipeline.

This project replaces the lining on the 11-mile-long Feeder, which is being accomplished in three stages. Stages 1 and 2 of this three-stage project have been completed. Stage 3 will reline the remaining four miles of the middle reach of the feeder. Stage 3 work includes replacement of the lining, welding of corroded pipe joints, and replacement of deteriorated valves along the feeder.

### **Perris Valley Pipeline I-215 Tunnel Crossing**

The objective of the Perris Valley Pipeline is to supply additional water deliveries from Mills plant to EMWD and WMWD per their request. Construction of this 6.5-mile-long pipeline was initiated in 2007, to be implemented under two contracts: the North Reach consisting of 2.7 miles of pipeline and two service connections (WR-24 and EM-23), and the South Reach consisting of 3.8 miles of pipeline and two additional service connections (WR-35 and EM-24). In 2009, the North Reach was completed and placed in service. In 2010, 3.3 miles of the South Reach were completed. This project will connect northern and southern reaches of Perris Valley Pipeline by micro-tunneling and constructing approximately 3,000 linear feet of 97-inch diameter welded steel pipe. This project will also construct four access shafts, cathodic protection test stations, and geotechnical instrumentation and monitoring equipment.

### **Rehabilitation of Metallic and Concrete Pipelines Phase 1 - Select High Priority Feeders**

Metropolitan's water delivery system consists of 830 miles of pipelines, of which 670 miles are comprised of reinforced concrete, welded steel, and cast-iron pipe. The majority of Metropolitan's non-PCCP lines were installed over 50 years ago. Experience has shown that degradation from corrosion of reinforced concrete and metallic pipelines can often develop undetected. Some of these pipelines are also showing signs of deterioration, as evidenced by several recent lining and joint restoration projects (e.g., Etiwanda Pipeline, Orange County Feeder, and Lakeview Pipeline).

Phase 1 for high priority pipelines, including Santa Monica Feeder, Upper Feeder, Lower Feeder, and Middle Feeder, will include a complete risk assessment and prioritization of pipeline inspections, condition assessment of these high priority pipelines using prequalified inspection technologies, and recommendations for inspection technologies to be used for future condition assessments. This project also includes installation of permanent pipeline appurtenances required to access the pipeline and rehabilitation of pipelines to reduce the risk of failure, minimize repair costs, and prevent unplanned shutdowns. During the course of this project, other feeders may be identified and added to the high priority list.

### **Rialto Pipeline Rehabilitation**

The Rialto Pipeline conveys untreated water from Lake Silverwood to the Live Oak Reservoir in La Verne. The pipeline supplies water from the East Branch of the State Water Project to the Weymouth Water Treatment Plant, and directly services three member agencies through 11 service connections. The size of the pipeline ranges in diameter from 96 to 120 inches and is part of the greater Rialto Pipeline System, which includes the Rialto Pipeline, Etiwanda Pipeline, and La Verne Pipeline.

In February 2010, an internal condition assessment of the pipe mortar lining and remote field eddy current inspection of prestressed concrete cylinder portions were performed. One pipe section with significant mortar damage was observed at Station 2986+09 through Station 2986+44, exposing roughly 26 linear feet of steel. This pipe segment was again inspected in December 2018 and 2020 where it was discovered that an entire 30-foot segment of pipe was devoid of mortar lining with a significant amount of the exposed steel needing immediate weld rehabilitation. This project will perform extensive weld rehabilitation of pipe wall and replacement of missing mortar lining. This project will also replace a pipe spool and isolation valve at CB-11 service connection, eight 72-inch butterfly valve seats at San Dimas Pressure Control Structure, and six lubricated plug valves ranging in size from 4 inches to 16 inches; reconfigure CB-15 service connection to allow blowoff discharge and provide access to one blowoff and one pump well structure; and install internal pipe seals at San Dimas Pressure Control Structure.

### **San Diego and Auld Valley Canals Concrete Replacement**

The scope of this project is a comprehensive rehabilitation of damaged concrete liner within the San Diego and Auld Valley Canals. The work will need to be performed during an extended shutdown of the two canals, to the extent that demands, and storage can be accommodated. An extended outage of approximately 30 days will facilitate rehabilitation of priority areas and reaches of the canals, will shorten the overall project timeline, and will reduce the risk of further deterioration. Failure of the liner in either canal will interrupt or reduce raw water deliveries to the Skinner plant and to various downstream member agencies and sub-agencies. The canals are the sole conveyance route for Colorado River water and State Project water to the Skinner plant.

### **Rainbow Tunnel Rehabilitation**

The San Diego Pipelines 1 and 2 were built in the 1940s and have multiple diameters and pipe materials consisting of steel, precast concrete cylinder pipe, and precast non-cylinder pipe. The Rainbow Tunnel has an approximate 72-inch diameter, and is horseshoe-shaped. A recent inspection identified sections where the lining needs replacement. Several valves at turnout structures have reached the end of their service lives and require replacement. This project will perform a detailed evaluation of the tunnel and appurtenant structures, replace damaged lining, and refurbish or replace other components as needed.

### **San Diego Pipelines 1 and 2 Rehabilitation**

The San Diego Pipelines 1 and 2 were built in the 1940s and have multiple diameters and pipe materials consisting of steel, precast concrete cylinder pipe, and precast non-cylinder pipe. Some of the steel section have cement mortar lining, the remaining sections all have coal tar lining. Several valves at turnout structures have reached the end of their service lives and require replacement. This project will perform a detailed evaluation of the pipelines appurtenant structures, replace damaged lining, and refurbish or replace other components as needed.

### **Upper Feeder - Lining Replacement at the Santa Ana River Bridge**

The Upper Feeder was constructed between 1933 and 1941 with a 116-inch-diameter steel pipe and lined with coal tar enamel liner (CTE). This portion of the Upper Feeder is located above ground and crosses the river bed via a bridge. Exposure to the sun subjects the pipeline to a thermal cycle that is continuous heating and cooling of the pipe material. Over the past seven years, staff have performed inspections on this segment of the Upper Feeder and determined that approximately 90% of the pipe's internal lining has failed. Mild to moderate pitting on the interior of the pipe indicate rust tuberculation and corrosion. This project will reline approximately 1,000 feet of the 116-inch diameter pipeline with an approved liner material.

### **Upper Feeder Santa Ana River Crossing Stainless Steel Slip Joint Upgrade**

The original expansion joint on the Upper Feeder was replaced with a bellows-style expansion joint in January 2018. The bellows expansion joint then developed a leak in April of 2022 and was replaced with a new expansion joint under an emergency project in September 2022. The new expansion joint was designed for an expedited fabrication and construction schedule, so readily available materials were used and the design was simplified to meet the emergency replacement schedule. The new expansion joint will be fabricated with upgraded materials and a more robust design. In addition, the movement of the bridge itself will be studied using survey data collected during the emergency replacement project to determine the best placement of the upgraded expansion joint, or any additional structural upgrades to the bridge that might be needed. This project will install a new stainless steel (or equal) expansion joint or multiple joints in place of the expansion joint installed under the emergency replacement project in September 2022. Also, the work may require modifications to the bridge structure.

## [Pump Stations/PCSs/HEPs/Service Connections/Flow Meters/Valves & Gates Project Group](#)

### **108th Street Pressure Control Structure Valve Replacement**

The 108th Street Pressure Control Structure (PCS) located on the Palos Verdes Feeder was constructed in 1941. The pipeline has a design capacity of 80 CFS in this area and provides the flexibility to deliver water through the Inglewood Lateral and Culver City Feeders to member agencies, including the city of Los Angeles, Central Basin Municipal Water District, and West Basin Municipal Water District. This project will rehabilitate the control structure including replacing valves, a corroded ladder, and catwalk grating; restoring electrical components to new condition; installing an emergency backup generator and security features; and refurbishing or replacing other appurtenances. Electrical components consist of electrical panel boards and grounding, sump pumps, and associated instrumentation.

### **Appian Way Valve Replacement**

The Appian Way Sectionalizing Valve Structure on the Palos Verdes Feeder was constructed in 1937. The pipeline has a design capacity of 60 CFS in this area and delivers water to Metropolitan's member agencies, Central Basin Municipal Water District, and the city of Los Angeles. The sectionalizing valve provides Metropolitan the flexibility to isolate flows on the Palos Verdes Feeder between the Long Beach Lateral Turnout Structure and Appian Way Sectionalizing Valve Structure to perform preventive maintenance, planned shutdowns, and emergency activities if required. This operational reliability allows for continued delivery of water to Metropolitan's central pool. The failing sectionalizing valve is 82 years old. Over the past few years, the 24-inch valve has been rebuilt several times to extend its service life. This valve can no longer be rebuilt and has become extremely difficult to operate as it gets stuck and does not fully open or close. The body and cone have eroded, which prevents the valve from properly sealing. This project will replace failing valves, dresser couplings, corroded pipe spools, and install a new precast concrete roof slab at the Appian Way Sectionalizing Valve Structure. Additionally, the project would identify and restore all electrical components add 240-volt electrical service, provide for SCADA control of the valves, and refurbishment or replacement of other appurtenances. Electrical components include electrical panel boards and grounding system, sump pumps, and associated instrumentation.

### **Auld Valley and Red Mountain Control Structures Upgrades**

The Red Mountain and Auld Valley PCS facilities control flows in pipelines to the San Diego area. Due to a lack of isolation valves, the pipelines must be shutdown to perform work on the sleeve valves. The sleeve valves are worn and in need of refurbishment or replacement. This project will include procurement or replacement of sleeve valves for the Red Mountain PCS and the Auld Valley PCS. The scope will also include adding isolation butterfly valves upstream and downstream of the sleeve valves at the Auld Valley and Red Mountain PCSs to make future maintenance possible without taking their respective pipelines out of service.

### **Conveyance and Distribution System Electrical Structures Rehabilitation**

Metropolitan's distribution system includes over 1,000 structures which house equipment used to measure pipeline flow, control pipeline flow and/or pressure, relieve pressure or vacuum, and isolate or sectionalize a pipeline. The conduits and electrical equipment inside the structures have corroded and no longer provide adequate grounding. In addition, the wiring inside the conduits may be compromised. These electrical components have been in continuous service in a damp, underground environment for over 50 years, and need to be upgraded. The rehabilitation for the Conveyance and Distribution System Electrical Structures has been prioritized and will be completed in five stages. Upgrades of the first 15 highest priority service connection structures within Orange County have been completed as Stage 1. Stage 2 improvements will upgrade the remaining 244 structures within Orange County. Stage 3 improvements will upgrade 258 structures in northern Los Angeles County. Stage 4 improvements will upgrade 258 structures in southern Los Angeles County. Stage 5 improvements will upgrade 301 structures in Riverside, San Diego, and San Bernardino Counties. The precise number of structures to be improved may vary depending on condition assessments. The planned work includes identification and restoration of all electrical components to new conditions including service panels, conduits, wiring lights, and receptacles; and providing new grounding systems, sump pumps, exhaust fans, remotely monitored flood alarms at each structure, and other appurtenances.

### **Conveyance and Distribution System Hydraulic Pilot Valve Standardization**

There are approximately 265 pilot valves within the conveyance and distribution system, located at pressure relief or pressure control structures. A pilot valve works together with a control or relief globe valve to set pressures within the distribution system. Currently, several different types of valve and superstructure assemblies exist throughout the system and as they age, lack of a common design makes replacement difficult. This project will develop, fabricate, and install a standardized hydraulic control/relief pilot valve and superstructure at pressure control structures District-wide across the conveyance and distribution system. Utilizing a standardized valve and superstructure assembly will increase productivity and reliability.

### **Covina Pressure Control Structure Rehabilitation**

The Covina Pressure Control Structure (PCS) controls flow in the Middle Feeder North and multiple service connections. It has recently experienced numerous valve failures and pin-hole leaks. This project will replace valves, pipes, and control and electrical systems; rehabilitate the restroom and structural components; install security features and other work necessary to restore reliability of the pressure control structure. The work will be performed in stages to allow for replacement of critical flow control valves in advance of the remaining improvements.

### **Coyote Creek Hydroelectric Plant/PCS Emergency Standby Generator Replacement**

The existing emergency stand-by generator was installed when the Hydroelectric Plant/Pressure Control Structure (HEP/PCS) was constructed in 1982. The emergency generator is 39 years old and has deteriorated with age. This project will replace the existing emergency generator with a new 150 kW, 3-phase 480-volt, diesel engine driven generator and construct an additional manual transfer switch outside the stationary generator room to provide for a secondary portable generator hookup. This project will also upgrade electrical and mechanical system to the generator building to meet current emission and fire code regulations under the Environmental Protection Agency's Tier 3 Emission and Fuel Standards Program.

### **Coyote Creek PCS HEP Perimeter Security Upgrade**

The Coyote Creek Pressure Control Structure (PCS) and Hydroelectric Plant (HEP) facility falls under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to critical infrastructure regulations set by these agencies. The current perimeter security fencing and security measures at this site do not meet the NERC/FERC security standards. This project will replace all perimeter fencing and both entry gates, relocate the rear vehicle gate to the front of the driveway at Lambert Road, and install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site.

### **Diamond Valley Lake and Skinner Area Flow Meter Replacement**

The flow meters at the Diamond Valley Lake (DVL) Inlet/Outlet Tower, DVL Connection Canal, DVL Secondary Inlet, Cabazon Radial Gate Facility, Lake Skinner Inlet, and DVL North and South siphons are critical to operation of Metropolitan's distribution network in the vicinity of DVL and the Skinner Plant. This project will either replace or refurbish these aging flow meters making them either new or like-new.

### **Districtwide Valve Rehabilitation and Improvements**

Several Metropolitan distribution system valves are approaching, or have reached, the end of their service lives. There is an inability to operate an increasing number of motor-operated valves and gates due to the failure of obsolete electric motors, which cannot be repaired due to the lack of available spare parts. Failures of valves often do not have visible indications or warnings that can be observed before an incident. Staff is currently operating in a reactive mode, replacing valves as they fail, which causes unplanned shutdowns and obstacles in operating the distribution system. This project will establish a method to systematically assess the condition of all valves and supporting infrastructure located throughout Metropolitan's conveyance and distribution systems, identify valves that require rehabilitation or replacement, and implement a rehabilitation or replacement plan.

### **Dominguez Channel Pressure Relief Structure Improvements**

The Dominguez Channel Pressure Relief Structure is located on the Palos Verdes Feeder near the Harbor Freeway and Hoover Street at the Dominguez Channel Crossing. Recent inspections have found leaking valves, inoperable needle valves, failed electrical services, and failed communication cables. This project will replace valves, modify piping and concrete, and construct new underground electrical and communication service as necessary to restore reliability of the relief structure.

### **Eagle Rock Tower Distribution System Upgrades**

Eagle Rock Tower diverts the flow of water from the Weymouth plant into the Palos Verdes Feeder, Santa Monica Feeder, and the Eagle Rock Lateral. The tower is also used to maintain the required hydraulic grade to the service connections upstream of the tower. This project will perform needed rehabilitation of various components of the Eagle Rock Tower distribution system. The project will include the following: (1) replace the leaking control and isolation valves at the interconnections to the Palos Verdes and Santa Monica Feeders, (2) replace corroded slide gate, and tower access ladder and cover, (3) refurbish slide gate rails and associated components, (4) fabricate and install new drop gate at inlet side of Eagle Rock Tower to improve isolation capability, (5) extend Santa Monica Feeder interconnection blowoff structure and install isolation valves to improve maintenance flexibility, (6) construct new access road from main access road to the Palos Verdes and Eagle Rock Interconnection Structure to facilitate safe access to the structure, (7) replace corroded work platforms and ladders in interconnection structures to improve worker safety, and (8) refurbishment and upgrades of other appurtenances as they are identified during the facility assessments.

### **East Orange County Feeder No. 2 Service Connection OC-44A Valve Replacement**

The East Orange County Feeder #2 is a 25-mile-long pipeline which delivers treated water from the Diemer plant to the cities of Anaheim, Orange, Santa Ana, and Irvine. Service Connection OC-44A, which is located in Newport Beach, was constructed in 1967 and delivers water to the Municipal Water District of Orange County. Gradual corrosion and wear from over 52 years of operation has led to the deterioration of the 16-inch plug valve. The valve is currently leaking and needs to be replaced. The plug valve shaft was installed in the horizontal position to allow placement of the valve within the vault. This unconventional position may have accelerated the deterioration of the valve. This project will replace a 16-inch-diameter plug valve, flowmeter, and appurtenant piping and equipment as required in the Service Connection OC-44A Structure. This project will also identify and restore all electrical components to new condition. Electrical components consist of electrical panel boards and grounding system, sump pump, and associated instrumentation.

### **Flow Meter Replacement**

Metropolitan has over 500 flowmeters used for water revenue metering at service connections, operation of the conveyance and distributions, and for process control. Many flowmeters have been in operation over 50 years. Some of these meters are exhibiting signs of deterioration. Spare parts for older meters are increasingly difficult to procure.

This project will be conducted in three stages. Under Stage 1, a comprehensive evaluation of the flowmeters will be conducted to assess their current condition and availability of spare parts. Under Stage 2, deteriorating meters in critical services will be replaced. Under Stage 3, a comprehensive, risk-based approach will be implemented to replace the remaining flow meters.

### **Foothill Feeder Blowoff Valve Replacement**

The Foothill Feeder conveys untreated water from the West Branch of the State Water Project into the western portion of Metropolitan's service area. To maintain delivery reliability and identify any prestressed concrete cylinder pipe (PCCP) segments that may become distressed, the pipe is inspected every five to seven years. Current state-of-the-art inspection techniques require dewatering of the pipe using seven blowoff structures. Each blowoff structure has two valves, one for isolation and the other to control flows. The existing blowoff valves are from the original construction and have been in service continuously since 1968. Although the valves have been maintained, they have deteriorated to the point that they are no longer repairable, are unable to provide a positive seal, and as a result, leak. This project will replace the blowoff valves and associated appurtenances.

### **Foothill Feeder PCS Valve Replacement**

Foothill Pressure Control Facility (PCF) is located at Castaic Lake in northern Los Angeles County. The structure takes untreated water from the west branch of the State Water Project system and controls all untreated water flows into the Jensen plant. Foothill PCS consists of two turbines, two 60-inch inline sleeve valves, and three parallel trains of conical plug valves. Each plug valve train consists of three 48-inch conical plug valves in series, that are throttled to dissipate pressure. Although the conical plug valves are currently used to control flow, these types of valves are not well-suited for this application. In addition, recent valve inspections have identified leaks, cracks, and corrosion. This project will replace the conical valves with valves that are better suited for flow control and will replace all other valves that are at the end of their service life and other facility improvements.

### **Foothill Hydroelectric Plant Discharge Elimination**

The Foothill Hydroelectric Plant (HEP) facility uses a raw water lubricating and cooling water system directed to the turbine shaft seals. The water flow is discharged from the plant under a permit governed by the Regional Water Quality Control Board. Metropolitan has received discharge permit violations for water quality constituents directly from Castaic Lake that are outside of Metropolitan's control. The objective is to eliminate or reduce to the most practical extent possible the seal water discharge flow at Foothill HEP.

### **Foothill Hydroelectric Plant Refurbishment**

The Foothill Hydroelectric Plant was constructed in 1981. An assessment has identified that the facility is seismically vulnerable and should be upgraded. In addition, the electrical and mechanical systems are exhibiting signs of normal wear and tear after 34 years of service. This project will provide structural strengthening including reinforcing the roof, replacing a cracked beam, and installing connectors and seismic restraints to the roof, columns, and walls. Retrofit work will include upgrades for non-structural components such as equipment anchors, pipe/conduit supports, and crane rail bracing. This project will also refurbish control and electrical protection systems, mechanical piping for the generator cooling water systems, add a Programmable Logic Controller, install on-line data acquisition and monitoring system, refurbish runner, replace wicket gates, and refurbish or replace other deficient equipment.

### **Hollywood Tunnel North Portal Equipment Upgrades**

Built as part of the Santa Monica Feeder in 1937, the North Portal of the Hollywood Tunnel is one of three control points along the feeder, which delivers water to the cities of Burbank, Beverly Hills, Los Angeles, and Santa Monica. The valves and mechanical control system at the North Portal of the Hollywood Tunnel are obsolete. Repair parts are not available and must be fabricated at a machine shop. This project will replace the existing sleeve valves and hydraulic actuators at the North Portal of the Hollywood Tunnel with new control valves with electric actuators. The upgrade includes replacing the mechanical controls with electronic, PLC/SCADA controls, which will allow the facility to be monitored and controlled from the Eagle Rock Operations Control Center, and replacement of the isolation valves. This project will also replace control valves for the bypass, install new electrical service to support the load necessary for the new control systems, and other improvements necessary to upgrade and rehabilitate the equipment and support systems.



### **Hydroelectric Plant Rehabilitation**

Metropolitan owns and operates 15 hydroelectric power plants with a total installed capacity of 130 megawatts. Approximately 10% of Metropolitan's income is derived from these power plants. The first plant to be commissioned was the Greg Avenue Power Plant in 1979, and the last was the Wadsworth Hydroelectric Power Plant in 2002. Many of these plants have been in operation over 37 years and have not undergone refurbishment or upgrade. Several plants are beginning to show signs of deterioration and several have already been refurbished. A comprehensive approach to rehabilitation of the other hydroelectric plants is needed to protect Metropolitan assets and fortify infrastructure reliability.

This project will assess and evaluate Metropolitan's hydroelectric plants, determine the rehabilitation requirements for each plant, identify needed pilot efforts, prioritize the needed rehabilitation, and develop a multi-phase plan to complete the rehabilitation. New facilities or those that have already undergone rehabilitation will not be included in the evaluation. For the included hydroelectric plants, the assessment will evaluate the following equipment and systems: turbine, generator, power equipment and switchyard, control system, protection system, auxiliary systems such as lube oil and cooling water, and the overall facility. This project will also perform seismic evaluation and improvements as necessary to safeguard the hydroelectric plants from known seismic risk.

### **Inland Feeder and Perris Control Structures Refurbishment**

The Inland Feeder Pressure Control Structure (PC-1) and Perris Pressure Control Structure (Perris PCS) provide the mechanism to properly manage the flow of water through the Inland Feeder and Lakeview Pipeline, respectively. The PC-1 was built in the 1990s and is located along the Inland Feeder pipeline, between stations 1986+00 and 1999+00. It interconnects to the CRA at approximately mile marker 225.0, 16 miles north of DVL. The PC-1 controls the flow of water through the Inland Feeder to target destinations. It regulates State Water Project (SWP) flow from Devil Canyon through the Inland Feeder to Diamond Valley Lake, where water can be diverted into the lake or delivered to the San Diego Canal via the DVL Forebay. The Perris PCS was built in the 1970s and is located at the base of Perris Dam. The facility is used to regulate the flow of State Project water through the Lakeview Pipeline. The two lines deliver water from the Lake Perris Outlet Tower to the Perris PCS. Each of these lines has a butterfly valve, one or both of which remain open during normal operation, depending on flow requirements. The valves in PC-1 and Perris PCS have recently experienced excessive torquing due to debris which has led to damage of the valves and their components. This project will rehabilitate these valves, pipes, control and electrical systems, and other work necessary to restore the reliability of the pressure control structures. This is a new project for this budget cycle.

### **LADWP Connection in Magazine Canyon**

The Los Angeles Department of Water and Power (LADWP) connection in Magazine Canyon is rated for 400 cfs and was designed to supply water to the Jensen plant from LADWP's aqueduct system. However, the connection is unreliable as the bar screen located in the LADWP piping builds up debris and clogs. This project will redesign and build new flow control equipment downstream of the LADWP turnout valve with the capability to collect and remove debris. This equipment would allow the LADWP bar screen to be removed and the LADWP turnout valve to be left in the fully open position during operation providing the Jensen plant with a reliable, back-up source water supply to limit disruptions during unforeseen events.

### **Lake Mathews and Temescal Hydroelectric Plants Circuit Breaker and Oil Circuit Recloser Replacement**

The Lake Mathews & Temescal Sulfur Hexafluoride (SF<sub>6</sub>) circuit breakers have operated for the last 40 years and are at their end of life. Sulfur Hexafluoride is an ozone depleting greenhouse gas with annual leakage reporting requirements. This project will replace the Temescal and Lake Mathews Hydroelectric plant electrical interrupting devices with vacuum circuit breakers and replace damaged switchyard disconnects which will satisfy Metropolitan's regulatory requirements under new proposed regulations to phase out SF<sub>6</sub> gas insulated equipment.

### **Lakeview Delivery Structure Isolation Gates**

The Lakeview Delivery Structure diverts water to the San Diego Canal or the Casa Loma Canal. Isolation and diversion are done manually by staff working over open and active canals installing wooden weirs. The installation of the weirs is cumbersome and time-consuming. Furthermore, the weirs leak excessively, which means they allow water to enter work zones when used as isolation. This project will fabricate and install four new isolation gates for the Lakeview Delivery Structure on the Lakeview Pipeline.

### **Oak Street Pressure Control Structure Rehabilitation**

The Oak St. Pressure Control Structure (PCS) is one of two control facilities on the Second Lower Feeder (SLF) and provides water to the Palos Verdes Reservoir and several service connections. Recent inspections have identified various work to be performed to restore reliability of the pressure control structure. This project will replace valves, gratings, fasteners, and control and electrical systems; rehabilitate structural components; install security features; and other work necessary to restore reliability of the pressure control structure.

### **OC 76 Flow Control Facility**

The OC-76 flow control facility is located in a residential neighborhood in Lake Forest. Over the last eight years, the home next to the structure has complained about the noise emanating from the structure when water flows. After some investigation, it was determined that water flowing at a low rate through the existing 16-inch flow control valve causes the valve to vibrate loud enough to bother the homeowner next door. Further investigation showed that the structure was designed and built with an 8-inch valve for low-flow scenarios. The 8-inch valve was removed at some point, leaving only the pedestal. This project will procure and install a new 8-inch flow control valve at the OC-76 flow control facility. The project will also include additional piping and SCADA to return the pressure control structure to its original design.

### **OC-88 Pumping Plant Rehabilitation**

The OC-88 Pumping Plant, consisting of the OC-88 and OC-88A pump stations, was constructed in 1990 and is located in the city of Lake Forest. Treated water from the Diemer plant is conveyed through the Allen-McColloch Pipeline (AMP) to the OC-88 Pumping Plant, which in turn pumps water directly into the Municipal Water District of Orange County's (MWDOC's) South County Pipeline. The surge tank system protects the AMP and the South County Pipeline from pressure surges. Two new surge tanks were added when the OC-88 Pumping Plant modifications were completed in 2005. However, the air compressor was not upgraded at that time. A recently completed high-flow test at the OC-88 Pumping Plant identified that a second air compressor should be installed to adequately protect the AMP and the South County Pipeline. In addition, Southern California Edison performed an efficiency test on the three existing pump motors located at the OC-88A pump station and found that improvements in motor efficiency could result in annual savings of approximately \$25,000 in electricity costs, and an estimated 235 tons of CO<sub>2</sub> emissions. Lastly, the chiller units and ultrasonic flow meters have exceeded expected useful service lives and are in need of replacement. This project will upgrade the OC-88 Pumping Plant's surge tank system, install a second air compressor, replace flow meters and pumps with ones that have high-efficiency motors equipped with variable frequency drives, perform overhead crane improvements, fire protection, and HVAC systems; and perform other associated facility improvements.

### **Olinda Pressure Control Structure Valve Replacement**

The Olinda Pressure Control Structure was constructed in 1969 to provide regulation of flows in the Lower Feeder between the Santiago Control Tower and Diemer Filtration Plant. This project will replace two conical plug valves to increase efficiency, reliability, and mitigate the vibrations caused by operating the valves. The structure's electrical and instrumentation components and other facility components will also be evaluated and refurbished or replaced. Replacing the existing 53-year-old valves will improve operational control of the Lower Feeder between the Santiago Control Tower and the Diemer plant. If cost-effective, relocation of the PCS will also be considered.

### **Orange and Riverside/San Diego County Operating Regions Valve Replacement**

Metropolitan's distribution system includes over 830 miles of pipelines and 5,400 individual structures that require regular maintenance and monitoring. The system is comprised of four regions: the Los Angeles County, Orange County, Riverside/San Diego County, and Western San Bernardino County regions. The subject project will replace valves within the Orange and Riverside/San Diego County operating regions. Replacement of these valves is a priority due to the age of the feeders and the number of critical valves that need to be replaced.

The valves on the Second Lower Feeder, Orange County Feeder, East Orange County Feeder, Lower Feeder, Santiago Lateral, the Allen-McColloch Pipeline, Lakes Skinner Outlet Conduit, San Diego Pipelines Nos. 3, 4, and 5 have been in service up to 54 years and have reached the end of their useful and expected service life. Failure of these valves or their associated components may result in an unplanned emergency shutdown of one of these pipelines impacting delivery to our member agencies. The valves to be replaced include air release/vacuum valves that are installed at high points in the lines to exhaust or admit air during pipeline filling or dewatering operations, and small globe, plug, and butterfly valves. The latter valves are used for isolation of air release/vacuum valve assemblies, blowoff structures, and pressure control structures. Closing these isolation valves allows inspection and maintenance activities to proceed without requiring a shutdown of the feeder. The scope of work is to replace approximately 120 deteriorated valves ranging in size from 1 to 12 inches in diameter on various pipelines in the Orange, Riverside, and San Diego County Operating Regions. This project will also include relocation of air release/vacuum valves from underground to above-ground structures.

### **Palos Verdes Feeder - Long Beach Lateral Turnout Structure Sta. 1442+15 Valve Replacements**

The Palos Verdes Feeder - Long Beach Lateral turnout structure, located in the County of Los Angeles, was constructed in 1938. The Long Beach Lateral turnout structure consists of seven valves that allows Metropolitan to continue delivering water upstream and downstream to member agencies during preventive maintenance, shutdowns, and emergencies. This project will replace the seven valves on the Palos Verdes Feeder/Long Beach Lateral Turnout Structure that are 84 years old. The structure will also be refurbished and include replacing the existing catwalk grating, a new precast concrete roof slab, lifting mechanism, security type entry hatches, and identify and restore all electrical and instrumentation components to like new condition. Electrical components consist of electrical panel boards and grounding system, sump pump and associated instrumentation.

### **Perris Control Facility & Hydroelectric Plant Upgrades**

The Lake Perris Control Facility (LPCF) includes a pressure control structure, pump back system with four electric and two diesel pumps, and a hydroelectric plant. This facility controls flows from delivered from the Department of Water Resources Silverwood Reservoir located at Devil's Canyon, and Lake Perris to the Lakeview Pipeline. To improve Mills Plant reliability, water from Diamond Valley Lake and Inland Feeder can be delivered to Mills plant by gravity flow but would require some modifications to the Lake Perris Control Facility's pressure control structure and HEP. The project will upgrade the LPCF systems to handle the maximum head of 1934 feet (from the Inland Feeder) by upgrading components of the pressure control structure and replacement of the hydroelectric plant.

### **Perris Pressure Control Structure Perimeter Security Upgrades**

The current fencing at the Perris Pressure Control Structure (PCS) is inadequate, evidenced by a recent intrusion. This project will replace all perimeter fencing with a high security fence that is cut and climb resistant with a 3-strand barbed wire top guard, and install multiple network security detection systems with the intent to lower the District's exposure to theft, arson, and vandalism.

### **Prevention of CRA Water Migration to SPW at Weymouth Junction Structure**

Recently, quagga mussel veligers were discovered at the USG-03 service connection necessitating coordination with local water agencies and implementation of a control and mitigation plan. The affected areas were flushed and chlorinated, groundwater recharge basins were desiccated, and no additional veligers were found. It was determined that Colorado River Water (CRW) was able to inadvertently migrate through the Weymouth Water Treatment Plant (WTP) Junction Structure's sectionalizing valves into the La Verne Pipeline and travel through the Glendora tunnel to service connection USG-03. This project will install pressure monitoring devices connected to nearby existing Remote Terminal Units at key locations along the La Verne Pipeline. Pressure ranges and set points for alarms will be determined to provide adequate time for operations and field staff to respond to abnormal conditions in the system to detect CRA water intrusion. This project would minimize the potential for CRW to enter unaffected facilities that normally move State Water Project (SWP).

### **Ramona Pressure Control Structure Rehabilitation**

The Ramona Pressure Control Structure (PCS) is located on the Middle Feeder and controls the pressure in the pipeline. Staff is no longer able to repair the aging equipment because replacement parts are no longer available. There has also been a dramatic increase in vandalism and theft at the facility. This project will rehabilitate the Ramona PCS facility including replacement of valves, actuators, motors, control systems, lighting, electrical components, corroded piping, platforms, ladders, sump pumps, and other facility appurtenances. This project will also include security upgrades.

### **Rio Hondo Pressure Control Structure Valve Replacements**

The Rio Hondo Pressure Control Structure (PCS) on the Middle Feeder pipeline was constructed in 1983. Construction of the Rio Hondo PCS incorporated an existing valve structure, so the valves at this location have been in operation since 1953 as part of the original underground valve structure. The existing valves have been in continuous service for approximately 69 years, and over time have required frequent repairs/rebuilding.

The Eagle Rock Operations Control Center utilizes the Rio Hondo PCS to maintain the lower pressure zone on the southern half of the Middle Feeder, and to assure deliveries to member agency water demands in the southwestern service area. This project will replace failing valves at the Rio Hondo PCS. The work will include replacing dresser couplings, pipe spools and fittings, and pipe supports; providing improved ventilation, insulation, equipment access, and structural resiliency for the structure; rehabilitating the existing wastewater system; upgrading various security features, and identifying and restoring all electrical components to new condition. Electrical components consist of electrical panel boards and grounding system, sump pumps, and associated instrumentation. This project will also perform condition assessment of inlet and outlet manifold piping as well as remaining control lines to identify rehabilitation needs and evaluate hydraulic impact on the adjacent hydroelectric plant resulting from this project.

### **San Diego Canal Radial Gates V-06 and V-08 Rehabilitation**

The protective coatings on the radial gate at the San Diego Canal and the operating components of the gates have begun to fail, and significant metal loss has occurred. In addition, the performance of the existing motor actuators used to open and close the gates has diminished. Should this gate fail, there would be loss of control to regulate flow into Lake Skinner from the San Diego Canal, along with loss of control in surface elevation that regulates flows through the Lake Skinner Bypass screening structures. The bypass structures supply the Skinner area raw water pipelines and the Skinner plant when Lake Skinner is being bypassed, typically due to a taste and odor issue in the lake. This project will rehabilitate or replace the San Diego Canal Radial Gates V-06 and V-08. The rehabilitation may include strengthening or replacing steel members as needed, replacing the radial gate actuator and controls, modifications to the seals and guide rails, and preparing and coating steel surfaces with an approved coating, such as a galvanic metalized coating. This project will also add sensors and software to report the elevation of the gates relative to the water elevation and percent opening of the gates.

### **San Diego Pipelines 3 & 5 Vacuum Valve Replacement**

This project will remove and replace over seventy existing vacuum valves on San Diego Pipeline No. 3 (SDPL3) and San Diego Pipeline No. 5 (SDPL5). The existing valves on SDPL3 have been in service for almost 64 years, while those on SDPL5 have been in use for almost 44 years. All the valves have reached the end of their services lives, and the majority are not in a condition to be rehabilitated. All valves will be replaced in-kind. This project will lower corrective maintenance costs, and the risks of valve failures resulting in property or pipeline damage or unscheduled pipeline outages.

### **San Dimas and Red Mountain Power Plants Standby Diesel/Engine Generator Replacements**

The emergency generator at Red Mountain Hydroelectric plant was installed during the original plant construction in 1983. The generator at the San Dimas Hydro Electric Power Plant was installed during original Pressure Control Structure construction in 1975. These generators are necessary to ensure all operating equipment performs the required flow transfers between the Hydroelectric Power Plant (HEP) and the Pressure Control Structure (PCS) during un-scheduled HEP interruptions and San Diego Gas & Electric (SDGE) station-power failures. The scope of work is to design, procure, and construct two standby diesel engine generators, one each at the San Dimas and Red Mountain Power Plants. The project scope includes removal of the existing generators and fuel tanks, construction of a new unloading facility with spill containment, steel overhead canopies, and electrical and mechanical system upgrades to the replacement generator to meet current emission and fire code.

### **San Dimas Hydroelectric Plant Rehabilitation**

The San Dimas Hydroelectric Plant was constructed in 1981, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 43 years of service. The scope of work is to rehabilitate the electrical and mechanical systems including turbine, generator, generator cooling system, all bearing and bearing lubrication systems, switchgear, protection and control relays, speed controller, data logger, annunciator, vibration and exciter systems, and to provide associated controls. This project will also include seismic evaluation and upgrades consistent with current building and safety codes and other facility upgrades.

### **San Jacinto Diversion Structure Slide Gates V-01, V-02, and V-03 Replacement**

The San Jacinto Diversion Structure, located at the base of the San Jacinto Mountains, was completed in 1939. The diversion structure divides incoming flow from the CRA to three different outlets, using slide gates to control each flow. Although the existing gates were originally designed for open/close operation only, they had historically also been used for throttling the flow, which had caused substantial damage to the gates. This project will replace the existing V-01, V-02, and V-03 cast iron slide gates with stainless-steel slide gates designed for throttling, install a new stainless-steel drop gate at the valve structure V-04, and appurtenances at both facilities. This project will increase the operational reliability of the structure and the connection to the Casa Loma Siphon No. 1 and CRA.

### **Santa Monica Feeder and East Valley Feeder Bypass for Sectionalizing Valves**

The lack of a bypass line at the Santa Monica Feeder and East Valley Feeder creates the potential for damage to the valves and their operators due to the inability to equalize pressure across the valves before operating. Further operation of these valves, without installing a bypass, will continue to place the valves and pipeline at risk for damage and potential emergency or unplanned shutdown. This project will design, fabricate, and install bypass lines at three sectionalizing valve locations that currently do not have a bypass line, and replace existing sectionalizing valves.

### **Santiago Lateral Station 216+40 Butterfly Valve Replacement**

The Santiago Lateral is a pre-cast concrete pipeline, ranging in size from 60-inch to 72-inch in diameter, and was constructed in 1955. It extends southerly from the Santiago Control Tower in the Anaheim Hills approximately 7.4 miles to Irvine Lake. The pre-cast concrete pipeline provides raw CRA water to Anaheim, IRWD and Irvine Lake. The 42-inch sectionalizing butterfly valve currently leaks, resulting in unwanted flows to the south portion of the Santiago Lateral. This project will investigate alternatives to replace the existing sectionalizing butterfly valve, which could also be able to handle lower flow rates. The options may include replacing with the same type of valve and motor with construction of a bypass or expansion of the existing valve vault, or construction of a new vault to accommodate a multi-orifice valve with a knife gate valve for better flow control.

### **Sepulveda Canyon Control Facility Electrical and Mechanical Rehabilitation & Seismic Upgrades**

The Sepulveda Canyon Facility consists of a pressure control structure, hydroelectric plant, and two water storage tanks. The pressure control structure was constructed in the early 1970s to reduce pressure in the 9-foot-diameter Sepulveda Feeder as it conveys treated water from the Jensen Plant. The two water tanks have a combined capacity of 18 million gallons of water and are used to regulate flows through the pipeline. The hydroelectric plant, which was constructed in 1982, takes advantage of excess pressure in the Sepulveda Feeder to generate up to 8.6 megawatts of electricity with its single turbine. The facility is located on top of a large pad that was constructed by filling a steeply sloped V-shaped ravine. The pad is approximately 120 feet above the toe of the slope. The site is located within one mile of the Santa Monica Fault, which is capable of generating a 6.8 magnitude earthquake. Preliminary slope analyses indicate that the fill could slide down the slope during a major earthquake, causing significant damage to the pressure control structure, the water tanks, and the hydroelectric plant. This project will consolidate all seismic upgrade efforts for the entire Sepulveda Canyon Control Facility and seismically upgrade the facility. This project will also consider construction of a 96-inch diameter bypass line and new pressure control structure at the Sepulveda Canyon Facility to continue water deliveries if the existing facility is out-of-service due to a major earthquake.

The Sepulveda Canyon Hydroelectric Plant was constructed in 1982, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 32 years of service. The scope of work is to perform an investigation and survey of the facility, and rehabilitate the electrical and mechanical components, including the turbine/generator and upgrades to the protection and control systems. The project also includes replacement of cooling water piping for the generator enclosure, rehabilitation and structural improvements to the switchyard, and rehabilitation of other facility components.

### **Sepulveda Canyon HEP Flow Transfer System Upgrade**

Automatic flow transfer is needed whenever the hydroelectric plant (HEP) trips offline. Due to current limitations, the Sepulveda Canyon HEP is unable to operate in low-flow conditions. This project will modify the flow transfer system to increase the operational flexibility of the facility. The modification will include the installation of altitude pilot valves and associated piping.

### **Sepulveda-Culver City Feeder Intertie Valve Replacement**

The Sepulveda-Culver City Feeder Intertie Structure provides isolation between the two pipelines. The facility and its equipment are over 55 years old, are no longer operable, and cannot be repaired. This project will replace valves at the Sepulveda-Culver City Feeder Intertie Structure including valves, actuator, motors, control systems, electrical components, corroded piping, platforms, ladders, sump pumps, buried roof slabs, and other facility appurtenances.

### **Sepulveda Feeder/East Valley Feeder Interconnection Electrical Upgrades**

The East Valley valve structure is located on the north sidewalk of the Rinaldi Street and Hayvenhurst Avenue intersection in Granada Hills. During the wet season, this structure receives intrusive storm water leakage causing the junction boxes, electrical enclosures, and conduits to corrode and short circuit. The extent of damage has accelerated, and storm water now enters the structure. This project will install new wiring and control panels for operation of the existing valve, remove the existing aboveground disconnect switch and install a new power distribution panel, install new duct banks and conduits to supply power to each of the critical structures, install additional bollards around the distribution panel to minimize damage from vehicles, replace damaged sidewalk, and assess potentially relocating the existing metering structures. This project will also replace access ladder, modify stairs and install a platform to meet current Cal OSHA requirements, install guardrail at the upper landing of the ladder, install a swing-gate for the catwalk, and mitigate water infiltration into the vaults by replacing curbs and gutters around the valve structures, sealing the interior of the manway riser joints, and implementing other mitigation measures.

### **Sepulveda-West Basin Interconnection Valve Replacements**

The Sepulveda-West Basin Interconnection was constructed in 1970. The interconnection allows Metropolitan's Sepulveda Feeder pipeline the flexibility to convey supplemental flow to the West Basin Feeder. The structure includes two 16-inch lines with sleeve valves and one 12-inch line with a globe valve. Each line may be isolated at either end with plug valves. This project will replace failing valves at the Sepulveda-West Basin Interconnection structure. The work will include replacing associated dresser couplings, pipe spools, and pipe supports. Additionally, work on the structure will include installing a new precast concrete roof slab, providing adequate ventilation for the structure, replacing a sump pump, structure modifications to address algae accumulation on adjacent sidewalk due to frequent water discharge from the sump pump, identifying and restoring all electrical components to new condition, and refurbishing other facility components. Electrical components will consist of electrical panel boards and grounding, sump pumps, and associated instrumentation.

### **Service Connection A-02 Rehabilitation**

A recent inspection of service connection A-02 in the City of Anaheim, revealed that piping in the meter vault had displaced, resulting in misalignment of a coupling and damage to the check valve support pedestal. If not addressed, continued movement of the piping could result in a leak, flooding, disruption of service, and costly repairs. This project will refurbish or replace the Service Connection A-02 Meter Vault piping, thrust restraint(s), meter, coupling, check valve, and plug valve in adjacent isolation valve vault.

### **Service Connection CENB-36 Rehabilitation**

Service Connection CENB-36 delivers treated water for groundwater replenishment. This facility last delivered water in 1998. Much of the equipment is not operational. Improvements at the facility are also required to meet current regulations and standards. This project will rehabilitate Service Connection CENB-36 including replacement of valves, actuators, motors, control systems, lighting, electrical components, corroded piping, platforms, ladders, sump pumps, and other facility appurtenances. This project will also include security upgrades. This project will rehabilitate the chemical injection system used for dechlorination operation including replacement of the chemical tank, chemical unloading pad, pumps, injection lines, containment systems, control systems, electrical components, eye wash stations, and associated appurtenances.

### **Service Connection EM-01 Relocation**

Service Connection EM-01 is located after a CRA's canal section. Over time, debris like tumbleweeds land in the water and break into smaller pieces inside the EM-01 service connection piping. The debris flows into the valves, causing them to get clogged, which stops the water flow out of the service connection to Eastern Municipal Water District (EMWD). The clogging increases in frequency in the summer and fall when the heat dries out tumbleweeds and other vegetation in the area, and crews have to unclog the valves every other day. Returning the service connection to service after it is clogged can take up to eight hours. This project will relocate Service Connection EM-01 to a debris-free area of the CRA.

### **Service Connection LA-17 Rehabilitation**

Service Connection LA-17 is located in the city of Los Angeles at the terminus of the Eagle Rock Lateral. It includes three lines: (1) 17A is a 24-inch line with a capacity of 30 cfs, (2) 17B is a 48-inch line with a capacity of 100 cfs, and (3) 17C is an 85-inch line with a capacity of 310 cfs. Three venturi tubes at the LA-17 service connection have been in service for more than 64 years and require significant rehabilitation or replacement.

Significant coating deterioration and metal loss with extensive pitting and corrosion were identified on the bottom side of the 48-inch venturi tube. The wall thickness of this venturi tube is approximately 30% of its original thickness. Failure to replace this venturi tube will lead to eventual leakage, flooding the structure, and impacting water deliveries to the member agency. This project will replace the deteriorating LA-17B welded steel venturi tube located at the Service Connection LA-17 structure along with installation of new 24-inch piping and a mechanical coupling. The work will also recoat the LA-17A and LA-17C venturi tubes within this structure. Additionally, work will include replacing the sump pump and identifying and restoring all electrical components to new condition. Electrical components will consist of electrical panel boards and grounding, and associated instrumentation.

### **Service Connection P-01 Valve Replacement**

The isolation valve for the Service Connection P-01 along the Upper Feeder is unable to properly isolate flows. Positive isolation is needed for upcoming planned work by the member agency. This project will replace the service connection isolation valve, check valve, and associated appurtenances at Service Connection P-01. Appurtenances include piping, bypass system, including air release, vacuum, and lubricated plug valves.

### **Service Connection WB-06 Fall Protection**

This project will replace existing grating platforms and ladders inside Service Connection WB-06 structure. The replacement will provide the highest level of protection ensuring safety, limiting liability, improving staff productivity, and ensuring compliance with the latest Cal-OSHA requirements.

### **Upper Feeder Blowoff Structure Replacement**

Blowoff structures provide a means to completely drain a pipeline for emergencies, inspections, repairs, and general maintenance. The Upper Feeder Blowoff Structure, located in the city of Sierra Madre, discharges the Upper Feeder directly into the Little Santa Anita Wash. The valves and piping in this structure have been in service for almost 80 years and have reached the end of their service life. One valve is stuck in the closed position, and another is experiencing leakage. In addition to a variety of different sizes and configurations of pipe within the structure, the structure itself does not comply with some of the safety and design features of more modern structures. This project will replace and enhance the Upper Feeder Blowoff Structure to ensure reliable dewatering capability and comply with OSHA standards. The work includes but is not limited to replacement of manhole, access ladder, and various valves and valve stem extensions; and addition of various pipe couplings, various valves, pumps, pipes, and catwalk platforms.

### **Upper Feeder Raw Water Vacuum Valves and Blowoff Improvements**

Isolation valves along the sections of Upper Feeder that conveys untreated (Raw) water have failed to isolate due to a service life of nearly 80 years and there is a need to install sectionalizing valves in strategic locations along the feeder to facilitate isolation and access to the feeder for internal inspections and repairs without having to shut down the Weymouth plant. Further, a higher hydraulic grade is required to pass Upper Feeder flows through the ozone contactors since the ozone facility at the Weymouth plant was commissioned. The grade difference has impacted various systems and operations along the Upper Feeder. This project will study the hydraulic grade elevation changes and impacts to the Upper Feeder and associated systems (Etiwanda and La Verne Pipelines, and Glendora Tunnel); update feeder operations manual, dewatering profiles, and plan and profile drawings; replace various vacuum valves with improved self-closing units; identify new design flow rates at Upper Feeder service connections; replace isolation valves with regulating type valves; install sectionalizing valves to isolate flows to the Weymouth plant; install inflatable rubber dam on the Etiwanda bypass channel to restore bypass channel flow capabilities; and replace failed blowoff and vacuum valve isolation valves.



### **Upper Newport Bay Blowoff Structure Rehabilitation**

The existing blowoff structure on the Orange County Feeder enables the pipeline to be dewatered in the event of an emergency and provides access for routine maintenance and inspection. Following 77 years of continuous operation in a moist environment near Upper Newport Bay, the blowoff valves and piping inside the structure have corroded and need to be replaced. In addition, due to ongoing erosion, the only road available to access the blowoff structure has been damaged and requires restorations. This project will restore access to the structure and replace its internal valves and piping. The planned rehabilitation includes regrading of the existing access road and reinforcement of crossings where the road intersects drainage channels; strengthening of the existing turn-around area adjacent to the blowoff structure, which will allow maintenance vehicles to set up for construction activities; installation of new valves and replacement of corroded piping; and modification of piping to ensure continued compliance with current California Division of Drinking Water regulations to prevent potential cross connections.

### **Valley View Hydroelectric Plant Rehabilitation**

The Valley View Hydroelectric Plant was constructed in 1986. The mechanical components were rehabilitated in 2019. The electrical and control systems are yet to be rehabilitated and have been requiring increased maintenance. Many of the components are no longer manufactured or supported. This project will replace the electrical protection and control relays, data acquisition equipment, electrical panels, annunciator, vibration system, automated voltage regulator, governor and speed controller, switchyard circuit breakers, and other improvements to extend the service life and improve reliability.

### **Valley View Pressure Control Structure HEP Perimeter Security Upgrades**

The Valley View Pressure Control Structure (PCS) and Hydroelectric Plant (HEP) facility falls under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to critical infrastructure regulations set by these agencies. Upgrades to perimeter security fencing and security measures are needed to comply with NERC/FERC security standards. This project will replace fencing and gates to meet security standards and will install multiple network security detection systems to detect and deter unauthorized individuals from accessing the site.

### **Venice Hydroelectric Plant Rehabilitation**

The Venice Hydroelectric Plant (HEP) was constructed in 1982, and the electrical and mechanical systems are exhibiting signs of normal wear and tear after 34 years of service. The scope of work is to rehabilitate the electrical and mechanical components including the turbine generator, the protection and control systems, and other facility components. The project also includes rehabilitation and structural improvements to the switchyard.

### **Venice Pressure Control Structure Valve and Security Upgrades**

Venice Pressure Control Structure (PCS) is the second of two pressure control structures located along the Sepulveda Feeder. Venice PCS performs the critical operational functions of reducing grade and controlling flows in the Sepulveda Feeder. The PCS consists of multiple control valves and associated piping. The valves are almost 51 years old and have been experiencing increased failures over the last 12 years. This project will refurbish valves and other appurtenances. This project will also install multi-hazard security features for facility infrastructure protection.

### **Wadsworth/DVL Control & Protection System Upgrade**

This project is the final phase of the Wadsworth Pumping Plant/DVL control system upgrade and includes replacement of the entire Diamond Valley Lake (DVL) control and communications systems, the protection relay system, uninterruptible power supply (UPS), vibration monitoring system, and pump/turbine drive controls.

### **Wadsworth Pumping Plant Fire Protection System Upgrades**

The Wadsworth Pumping Plant is located near Hemet at Metropolitan's Diamond Valley Lake (DVL). The pumping plant includes 12 vertical turbine pumps that are used to pump water into DVL or to generate electricity when water flows out of DVL into the forebay/San Diego Canal. Each pump/generator has a dedicated CO<sub>2</sub> fire suppression system to prevent fires from spreading from one unit to another. However, the system is designed so that if the fire suppression system is inactive, the pump/generator will not operate. Some components of the current fire suppression system and control panels have been in service for almost 22 years and need to be replaced. In addition, the fire alarm system for the Wadsworth building is antiquated, and replacement parts are no longer available. This project will upgrade Wadsworth's fire suppression system by: (1) replacing the existing individual CO<sub>2</sub> fire suppression systems for the operational vertical turbine pumps, and (2) upgrading the Wadsworth building fire alarm system.

### **Wadsworth Pumping Plant Sleeve Valve Refurbishment**

Recent inspections have identified numerous deteriorated sleeve valves at the Wadsworth Pumping Plant. The sleeve valves originally installed in 1999 control the flow of water from DVL to the San Diego Canal. While operation of the pumping plant has not yet been impacted, failure of the valves could lead to an unplanned shutdown and interruption of water delivery to member agencies. This project will refurbish seven 66-inch by 42-inch sleeve valves at the Wadsworth Pumping Plant at DVL.

### **Wadsworth Pumping Plant Stop Logs**

The Wadsworth Pumping Plant was built with 12 pump/generation units. Units 1, 5, and 9 were decommissioned to allow DVL generation to be certified as "renewable energy" by the California Energy Commission. Hydroelectric plants are required to have a nameplate capacity of 30MW or less to be certified. At 3.3MW per unit, the nine remaining units provide a generation capacity of 29.7MW. Generated energy must be certified renewable for electric utilities to meet the requirement that 33% of their energy come from renewable resources by 2020. The stop logs would provide a means to isolate the three decommissioned pumps from the DVL forebay keeping them out of the water and dry. Isolating the pumps from water contact reduces corrosion damage to the pumps and provides flexibility in the event pump/generation units need to be re-commissioned or repaired. This project will fabricate stop logs to isolate three decommissioned Wadsworth plant generation/pumping units from the forebay.

### **Walnut Pressure Control Structure Drainage Improvements**

The top of the Walnut Pressure Control Structure (PCS) is about five feet below the surrounding grade. Water ponds in this depression and leaks into the structure, which may leak onto electrical and control systems. This project will place drainage improvements at Walnut PCS to prevent ponding over the structure.

### **Washington Street Pressure Control Structure Valve Replacement & Security Upgrades**

The Washington Street Pressure Control Structure (PCS) located on the Palos Verdes Feeder was constructed in conjunction with the Palos Verdes Feeder pipeline in 1941. The pipeline has a design capacity of 100 CFS in this area. This project will replace two failing hydraulically operated and three electronically operated globe valves at the Washington Street PCS. The work will also include replacing all block valves, identifying and restoring all electrical components to new condition, and moving electric meter from outside to inside the structure. Electrical components consist of electrical panel boards and grounding, sump pump, and associated instrumentation. Additionally, a security assessment of the facility will be conducted to determine the need to reinforce or upgrade physical features for enhanced infrastructure protection.

### **West Coast Feeder WC-0 Interconnection Structure Upgrades**

The WC-0 interconnection structure controls flows from the Lower Feeder into the West Coast Feeder. Stagnant flows in this area cause water quality issues. Installation of a bypass line at this location will improve water quality. This project will upgrade the West Coast Feeder WC-0 structure and install a new bypass line. Upgrades will include valves, actuators, motors, control systems, electrical components, piping, platforms, ladders, sump pumps, and other facility appurtenances.

### **West Orange County Feeder OC-09 Rehabilitation**

The West Orange County Feeder was constructed in 1956 as a component of the Lower Feeder system. It delivers treated water from the Robert B. Diemer Water Treatment Plant in Yorba Linda to the northwestern portion of Orange County. Service Connection OC-09 on the West Orange County Feeder consists of a turnout tee, a venturi meter, and a shutoff valve. The turnout tee is encased in concrete and is located beneath the traffic lanes of Katella Avenue in the city of Garden Grove, adjacent to the boundary line with the city of Stanton. The meter vault is located below Dale Street. This structure contains a 14-inch conical plug valve, a venturi meter, and associated piping and electrical systems. Gradual corrosion from over 64 years of operation in a damp underground environment has led to deterioration of the equipment within the vault. This equipment needs to be replaced and other facility components rehabilitated to maintain reliable deliveries from the service connection.

### **West Orange County Feeder Valve Replacement**

The West Orange County Feeder was constructed in 1956 as a component of the Lower Feeder system. It delivers treated water from the Diemer plant in Yorba Linda to the northwestern portion of Orange County. A recent condition assessment identified that 13 structures require rehabilitation, including the replacement of air release/vacuum valve assemblies and adjacent plug valves. These valves were installed during the original construction of the feeder and have been in service for over 64 years. Six of the air release/vacuum valves will also be relocated from a manhole to an above ground cabinet within the street-side parkway zone to prevent the potential of treated water in the distribution system becoming exposed to stormwater under certain operating conditions. Refurbishment or replacement of other facility components, including meter replacement or relocation, may be implemented based on the additional site evaluations.

### **West Valley Feeder No. 1 - Access Road & Valve Structure Improvements**

The West Valley Feeder No. 1 and appurtenant valves were constructed and installed by Calleguas Municipal Water District in 1962. Metropolitan acquired the feeder in 1970. Most of the deteriorated valves were replaced and valve structures improved between 2006 and 2012. This project will replace the remaining deteriorated valves located in Chatsworth Park, add new valve structures to house isolation valves that are presently directly buried, install enclosures for air release/vacuum valves, and perform grading of an all-weather access road to support maintenance activities.

### **Western Region Security System Upgrade – Area 2**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Foothill PCS, Sepulveda Canyon HEP, Venice HEP/PCS, and Ballona Creek Relief Structure.

### **Western Region Security System Upgrade – Area 3**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Hollywood Portal North, Hollywood Portal South, Washington Street PCS, Soto Street Facility, Greg Avenue HEP, Service Connection B-06, Fenton/Maclay AMR, Ascott North, Ascott South, San Fernando Gate Structure, and Scholl Canyon Spillway.

### **Western Region Security System Upgrade – Area 4**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Carbon Creek PCS, Coastal Junction PCS, Irvine Regulating Structure, OC-88 PCS, and Santiago Creek HEP.

### **Western Region Security System Upgrade – Area 7**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Covina PCS, Garvey Reservoir, Live Oak Reservoir, Puddingstone Spillway, Ramona PCS, and San Gabriel PCS.

### **Western Region Security System Upgrade – Area 9**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Rio Hondo HEP and Service Connection CB-14.

### **Whitewater DWCV-1 Flow Control Valve Replacement**

The existing 36-inch butterfly valve has been in service at the DWCV-1 service connection since 1973, when the structure was built. The valve is used to throttle, which is not the correct application for a butterfly valve. A sleeve valve is preferable. The valve is also leaking, so not all water that is being delivered is metered. This project will remove and replace the existing butterfly control valve at the Whitewater DWCV-1 service connection and update the electrical components to operate the valve remotely.

### **Willits Street Pressure Control Structure**

The Willits Street Pressure Control Structure (PCS), located in the city of Santa Ana, was built in 1944. This pressure control structure located on the Orange County feeder regulates pressure and conveys treated water to the Irvine Regulating Structure. This PCS is an underground structure consisting of three parallel trains of pressure control valves. At full capacity, two trains are in operation while the third train acts as a stand-by. The existing structure is congested and does not provide suitable access for maintenance, repairs or the replacement of valves. The maintenance access was impacted during street widening that required the size of the structure to be reduced. The modified structure configuration does not have a lifting mechanism to remove or transport these valves out of the structure for replacement or repairs. Additionally, the existing catwalk does not have adequate coverage. This project will construct a new pressure control structure to replace the existing Willits Street PCS located on the Orange County Feeder. The work includes a new concrete substructure, relocating and replacing the control and isolation valves, new sampling connections for water quality, and all necessary electrical and ventilation equipment. Once the new structure is complete, the older structure will be abandoned, and the pipeline will be attached to the new structure during a brief outage.

### **Yorba Linda Pressure Control Structure Rehabilitation**

The Yorba Linda Pressure Control Structure (PCS) was constructed in 1975 and controls pressure on the Yorba Linda Feeder prior to the influent flow reaching the Diemer plant. A recent inspection of the facility revealed extensive corrosion at the sleeve valves, damage and failure of mortar lining in appurtenant piping, observed damage to the valve body seat on the butterfly valves, and inadequate cathodic protection. This project will rehabilitate this PCS to restore reliability.

### **Yorba Linda Power Plant Improvements**

The Yorba Linda Power Plant is located on the Yorba Linda Feeder at the inlet to the Diemer plant and can generate up to 5 megawatts. Installation of a new turbine generator was completed in November 2015, and generator enclosure in May 2020. This project will improve emergency shutdown, alarm, and public address systems; and upgrade Human Machine Interface (HMI) panel to improve reliability and safety of the plant operation by replacing the existing shutdown system that requires operator intervention that could cause undesired pipeline pressure surges to a redundant and automated system that will engage in the event of wicket gate closing system failure. Extension of the Diemer plant's public announcement system into the Yorba Linda Power Plant and addition a new alarm system in key locations will enhance personnel safety and improve operator's response time. This project will also install a new wicket gate drive system and rehabilitate the turbine shutoff valve actuator system.

## Right-of-Way & Infrastructure Protection Project Group

### **Right-of-Way & Infrastructure Protection - Colorado River Aqueduct**

The Right-of-Way Infrastructure Protection Program (RWIPP) identifies, prioritizes, and executes site improvements throughout Metropolitan's service area. This project encompasses site improvements along the CRA and addresses access limitations, erosion-related improvement work, and security needs along the surface of the CRA's rights-of-way. Under the initial stage of the program, site improvements needed along the CRA will be identified, a comprehensive regional compliance and permitting program will be developed, and environmental document will be prepared to secure environmental approval for multiple projects along the CRA rather than pursuing individual approvals on a project-by-project basis. This project will add the CRA to the RWIPP, which already includes the Orange County, Western San Bernardino, Riverside/San Diego, and Los Angeles operating regions.

### **Right-of-Way & Infrastructure Protection - Los Angeles County Region**

This project identifies and addresses right-of-way and security issues; identifies and executes needed improvements within the Los Angeles County Operating Region; prepares environmental documentation; acquires regional environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. To expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

### **Right-of-Way & Infrastructure Protection - Orange County Region**

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Orange County Operating Region; prepares environmental documentation; acquires regional programmatic environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. To expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

### **Right-of-Way & Infrastructure Protection Program - Property Acquisition**

The scope of this project includes procurement of right-of-way or property to support access or needed repairs to pipelines and facilities. Activities include developing conceptual solutions, layout drawings, and final design criteria of needed improvements; preparing pre-appraisal documentation for acquisition of easements and right-of-way; conducting field surveys and topographic mapping; ordering and reviewing title reports and supporting recorded documents; initiating consultations with permitting agencies for required permits; preparing legal descriptions, exhibit maps, and other exhibits as needed for acquisition planning, permits, and real estate negotiations; completing right-of-way mapping and preparing Record of Survey maps to be filed with the county of origin; and setting monuments and witness posts.

### **Right-of-Way & Infrastructure Protection Program - Riverside and San Diego County Region**

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Riverside and San Diego County Operating Region; prepares environmental documentation; acquires regional environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. To expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

### **Right-of-Way & Infrastructure Protection Program - Western San Bernardino County Region**

This project identifies and addresses right-of-way, access, and security issues; identifies and executes needed improvements within the Western San Bernardino County Operating Region; prepares environmental documentation; acquires regional environmental permits; and monitors and reports to permitting agencies for ten years following completion of construction. To expeditiously complete this project, sites within this region are grouped and prioritized and staged for construction depending on the site requirements.

## Distribution System - Other Project Group

### **Chloramine Booster Station at Three Locations within the Treated Water Distribution Systems**

Metropolitan uses chloramines, formed by combining chlorine and ammonia, as a disinfectant in our distribution systems. Internal research has determined the most effective chloramine concentration to prevent microbial growth at low flow conditions. Addition of chlorine and liquid ammonium sulfate (LAS) in the treated water distribution systems will allow the total chlorine residual within the distribution system to be maintained at or above 1.8 mg/L, especially during low demand periods. LAS is recommended instead of aqueous ammonia because LAS has fewer regulatory requirements, as well as lower construction and operating costs. The project will determine the three optimum locations to install: (1) sodium hypochlorite and LAS tanks, (2) feed pumps and appurtenances, (3) piping, and (4) instrumentation and control systems to ensure the safety and reliability of the feed systems.

### **Distribution System Online Analyzers Replacement**

Online analyzers continuously monitor water quality in the treated water distribution system and help ensure that safe reliable water reaches our member agencies. They provide prompt indication of water quality issues and an early warning to allow actions to be taken to minimize impacts. The existing online analyzers are almost 20 years old and have exceeded their typical service life. They are outdated, no longer sold or supported by vendors, and replacement parts are becoming increasingly difficult to obtain. At approximately 23 locations, this project will (depending on the location): decommission existing analyzers, install analyzers which measure various water quality constituents, and install prefabricated sheds.

### **Distribution System Structure Security Improvements**

Metropolitan's distribution system includes 830 miles of pipelines and over 5,000 structures. The number of break-in and vandalism incidents has been increasing. This project includes physical security improvements to all conveyance and distribution system facilities. These facilities include access hatches, access covers, AMR cabinets, air release and vacuum valve cabinets, and other enclosures. The project will be implemented in multiple stages.

### **East Lake Skinner Bypass & Bypass No. 2 Screening Structure Upgrade**

The East Lake Skinner Bypass Slide Gates were built 56 years ago in 1967 and are in need of rehabilitation. The gates are binding during operation which is rendering them inoperable. In addition, the East Lake Skinner Bypass Afterbay Trash Rack needs to be replaced with a new stainless-steel rack to minimize the corrosion which caused the existing galvanized material to collapse under the weight of a severe algae bloom during bypass operations. The scope of work consists of reconditioning three of the East Lake Skinner Bypass Slide Gates, and to replace the East Lake Skinner Bypass Afterbay trash rack which is severely corroded and partially collapsed. In addition, this project will modify the East Lake Skinner Bypass Algae Screening Mechanisms Discharge Piping to bypass the Algae Shakers and upgrade the Lake Skinner Bypass No. 2 Forebay Trash Rack Lifting Mechanisms.

### **East Orange County Feeder No. 2 Cathodic Protection System Rehabilitation**

The existing cathodic protection systems for East Orange County Feeder No. 2 were installed in 1994. Recent surveys of the existing systems have indicated that they no longer provide adequate cathodic protection due to the gradual deterioration of their anodes after years of service. The typical design life of an impressed-current cathodic protection system is 25 years. Therefore, the time in service and recent surveys indicate the systems have reached the end of their useful life and require rehabilitation. This project will rehabilitate the impressed-current cathodic protection anode wells and rectifiers on East Orange County Feeder No. 2.

### **East Orange County Feeder No. 2 Seismic Retrofit at Diemer Water Treatment Plant**

A recent assessment identified a slope near the south-western pad at the Diemer plant as having the potential to damage the East Orange County Feeder No. 2 pipeline during a significant earthquake. This structure requires further analysis to ensure that it meets Metropolitan's current structural standards and the facility is reliable in the event of seismic activity. This project will assess, design, and complete seismic retrofit construction near the south-western pad at the Diemer plant.

### **Foothill Feeder Erosion Protection at Newhall Creek**

The Foothill Feeder supplies water from the West Branch of the State Water Project to the Jensen plant. The pipeline crosses under the Santa Clara River and several tributaries. Recent heavy storms and high flows in Newhall Creek have eroded the soil over the Foothill Feeder and have exposed the pipeline. This project will redirect flows away from the pipeline, restore the soil cover, and install armoring to protect the pipeline.

### **Holland Road Drainage Modification**

An open channel in Metropolitan right-of-way, in the vicinity of Diamond Valley Lake (DVL), has allowed for the growth of a habitat. In its current condition, it contains approximately 0.7 acres of riparian habitat that supports several species. Allowing water to continue to move in an open channel has the potential for an increase in the size of the habitat. A larger habitat would inhibit Metropolitan maintenance as permits would be required. Installing a drainage pipe would substantially reduce vegetation growth within the existing channel by redirecting the drainage from Wadsworth/DVL and San Diego Canal areas. It would also prevent the expansion of established habitat within the existing channel where environmental and regulatory restrictions prohibit the performance of routine maintenance and removal.

Additionally, excessive growth within the channel could restrict flow and potentially cause flooding to adjacent private property owner's houses or land. This project will install a drainage system adjacent to the open channel ditch parallel to Holland Road. The purpose of the drain system is to allow seepage flow from the West Dam and excessive surface runoff from the Wadsworth Facility to flow uninterrupted to the end of the open channel.

### **Lake Mathews Administration and Warehouse Building Roof Replacement**

The Lake Mathews Administration and Warehouse Buildings have been in operation since the 1970s. The administration building provides essential offices, breakroom, and restrooms, while the warehouse building provides central storage of materials and equipment to support Metropolitan's construction activities. The existing metal roofing systems, installed on each building at the time of their original construction, have exceeded their service life and show significant signs of deterioration and leakage. This project will replace the roofs on these two buildings.

### **Lake Mathews, Garvey and Chlorine Unloading Facility Support Facilities Seismic Upgrade**

As part of Metropolitan's seismic upgrade program, a rapid evaluation was conducted and identified seismic deficiencies in the Garvey microwave station; the Lake Mathews Hazardous Materials Building, meter shop, auto shop, and heavy equipment shop; the Chlorine Unloading Facility Main Office; and other buildings at these locations. This project will construct improvements to address these deficiencies as well as, should it provide value to the District, improve non-structural features in each building such as roofing, insulation, and other building characteristics.

### **Lake Mathews Facility Wastewater System Replacement**

The wastewater system at Lake Mathews has been in operation for nearly 84 years and is no longer reliable. Despite receiving regular maintenance, the system is exhibiting signs of failure including plumbing and septic tank backups, clogged leach fields, and slow-draining collection pipes. On-site treatment of the wastewater via septic tanks will be discontinued, and new collector lines will be connected to the local sewer system that was installed in the early 2000s. Western Municipal Water District has a nearby sewer main that includes a connection point specifically installed for Metropolitan's future use. This connection can accept wastewater by gravity from the entire on-site system. This project will remove the on-site wastewater system and construct a wastewater system that ties into the Western Municipal Water District's sewer line to reduce the risk of costly unplanned repairs and to maintain system reliability.

### **Lake Skinner Conveyance and Distribution Building Roof Replacement**

Lake Skinner Conveyance and Distribution (C&D) building, still has its original roof from the time when the building was built. The roof has developed several holes the size of a quarter that led to leaks during the rainy season. Furthermore, the gutters are not draining as designed and are routing water into the building, and the water has saturated the walls and caused them to crack inside the building. This project will replace the roof and rain gutters on the C&D building.

### **Lake Skinner West Bypass Screening Structure Rehabilitation**

The San Diego Canal West Bypass Screening Structure is located at the terminus of the San Diego Canal and is the starting point for water which bypasses Lake Skinner to downstream users. The bypass screening structure is fitted with an electrically powered revolving screen extending across the channel, which dips into the channel to intercept and collect algae mats and other floating debris. This system prevents algae mats and other debris from entering the treatment plant or member agency water systems via the bypass pipelines. The screening equipment was installed in the 1960s and has now been removed due to operational difficulties. The concrete support structure for the screening equipment constricts flow entering the bypass pipeline and canal must be operated near spill elevation to achieve the maximum flow of 280 cfs in the canal/pipeline under current conditions. This project will demolish the concrete support structure for the bypass screening structure to remove the flow constriction point and replace the deteriorated trash rack located upstream of the bypass pipeline entrance.

### **Lower Feeder Air Entrainment Improvement**

When operated at flows higher than 300 cfs, air becomes entrained in the water traveling through the Lower Feeder due to large elevation drops within the conveyance system. When coagulant is added to this inflowing water in the rapid mixers at the Diemer plant, the result is clusters of floating foam mats on the water surface in the coagulation and sedimentation basins which causes operational, maintenance, and aesthetic concerns. Entrained air also increases filter run time. This project will reduce or eliminate entrained air through modifications and addition of components along the Lower Feeder including at the Corona and Temescal power plants, pressure control structures, pipelines, air stacks, and air release/vacuum valves.

### **Lower Feeder Cathodic Protection System Rehabilitation**

The existing cathodic protection systems for the Lower Feeder were installed in 1995. Recent surveys of the existing systems have indicated that they are no longer providing adequate protection due to gradual deterioration of their anodes. This project will rehabilitate or replace the equipment, such as impressed-current anode wells and rectifiers; and remove existing equipment as required by law.

### **Middle Feeder North Drainage and Protection Restoration**

The Middle Feeder North from Station 1067+00 to Station 1071+00 lies within both a Metropolitan fee parcel and easements between Graves Avenue and Mooney Drive in the unincorporated Los Angeles County community of South San Gabriel. A recent visual inspection and survey of the area determined that the current soil cover over the feeder has eroded to less than design minimums. This project will restore the design soil cover over Middle Feeder North conduit and improve drainage features to preclude this problem in the future.

### **Orange County Feeder Cathodic Protection System Rehabilitation**

The Orange County Feeder conveys treated water from the F. E. Weymouth Water Treatment Plant in La Verne to its terminus at service connection CM-1 in Newport Beach. The feeder is approximately 41 miles long and was installed in 1942. The feeder consists of approximately 21 miles of welded and un-bonded steel pipe, 19 miles of precast concrete pipe, and one mile of prestressed concrete cylinder pipe. Previously, cathodic protection could not be effectively applied to the subject reach; however, recent pipeline rehabilitation has made cathodic protection a viable option to prevent external corrosion and thus prevent future pipe leaks. The first three locations that were identified during the routine testing, which were no longer providing corrosion protection to the pipeline, have been replaced. This project will install a new cathodic protection system on the remaining portion of Orange County Feeder to protect approximately 11.2 miles of feeder. The scope of work includes design and installation



### **Rialto Pipeline Cathodic Protection System Rehabilitation**

The existing cathodic protection systems for Rialto Pipeline were installed between 1988 and 1995. Recent surveys of the existing systems have indicated that they are no longer providing adequate protection due to gradual deterioration of their anodes. This project will rehabilitate or replace the equipment such as impressed-current anode wells and rectifiers; and remove existing equipment as required by law.

### **San Diego Pipeline 1 and 2 Station 1214+00 Exposure Rehabilitation**

On February 14, 2019, the Temecula area experienced heavy and sustained precipitation followed by additional storm events over the 2019-2020 storm season. The resulting accelerated stream flows exposed the buried San Diego Pipeline Nos. 1 and 2 where the pipelines cross an ephemeral stream channel. Emergency repairs were made in October 2020 under an emergency permit from the Regional Water Quality Control Board. As a condition of the permit, a permanent solution for the site must be constructed within two years of the authorization of the emergency permit. This project will develop and construct a permanent erosion control solution for the pipeline exposure on San Diego Pipeline Nos. 1 and 2.

### **San Gabriel Tower and Spillway Improvements**

The San Gabriel Tower (SGT), 86-foot-tall free-standing with a 24-foot by 14-foot rectangular base, was constructed in 1936, north of the city of Azusa. It sits at the base of the steep and weathered San Gabriel Mountains, between the west portal of Monrovia Tunnel No. 1 and the east portal of Monrovia Tunnel No. 2. The tower is surrounded by Angeles National Forest and is adjacent to Morris Reservoir. The function of the SGT is to regulate and isolate flows from the Weymouth plant via the Upper Feeder pipeline to the Eagle Rock Control Facility located in the city of Los Angeles. It is situated between two active faults, the Sawpit and the Sierra Madre faults, which are both capable of generating a magnitude 6.5 earthquake. While the tower was designed and constructed to the codes and standards in place during the 1930s, significant advancements have been made since that time in predicting the response and performance of structures as a result of seismic ground shaking. Planned upgrades to the San Gabriel Tower include: (1) reducing the height of the tower to increase its structural stability; (2) replacing the slide gates and actuators to restore isolation capability for the Upper Feeder; (3) improving access to the tower and spillway, including the river crossing; (4) restore the spillway's concrete; (5) stabilizing the adjacent rocky slope; and (6) installing a barrier such as new fencing or protective screen to prevent animal entry into the spillway. This project will also evaluate and upgrade the Morris Dam connection, which includes large needle and isolation butterfly valves, and evaluate condition of the conical plug valve at groundwater replenishment connection USG-03 before deciding to upgrade to control valves or installation of a crane system that allows safe installation of the various orifice plates to control flow.

### **Santa Ana River Discharge Pad - Upper Feeder**

Severe storm events eroded the north slope of the Santa Ana River near the Upper Feeder crossing. This damage resulted in large voids in the riverbank to the footing supporting the bridge span and the foundation of the emergency discharge bunker valve. The damage was repaired, and a recommendation was made during the repair to construct a concrete pad to prevent a reoccurrence of this type of damage. This project will construct a concrete discharging pad to prevent erosion from storms and discharge from the bunker valve.

### **Santa Monica Feeder Cathodic Protection**

The Santa Monica Feeder is a mortar coated welded steel pipeline with a diameter of 49 inches and is approximately 4.25 miles long. The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the Santa Monica Feeder would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water to several member agencies. The scope of work is to design and install a comprehensive cathodic protection system in the Santa Monica Feeder.

### **Santiago Control Tower Seismic Improvements**

The Santiago Control Tower acts as a control and diversion facility for water supplied to the Santiago Lateral pipeline, the Santiago Lateral Spillway Discharge Pipeline, and the Lower Feeder pipeline. This project will evaluate the Santiago Control Tower's ability to resist expected seismic forces based on the latest geotechnical and geological considerations and retrofit the tower. A detailed geotechnical analysis is required to determine the structure's interaction with surrounding soil and analyze the soil stability of the structure. The structure is located close proximity to the Whittier Fault on a raised area adjacent to a slope.

### **Skinner Area Physical Security Upgrades**

An increase in housing adjacent to the Skinner area has resulted in an increased population and has the potential to increase criminal trespassing events. The Skinner area has many industrial hazards that are properly identified and handled by Metropolitan staff. However, trespassers are not likely to understand hazard signs or have appropriate equipment and training to deal with them. Recently, trespassers have been caught swimming in the San Diego Canal and traversing restricted areas of Lake Skinner. This project will install security upgrades around the Skinner area perimeter, including fencing improvements with view-blocking PVC slats, patrol road improvements, additional signage and safety warnings, and additional lighting.

### **Soto Street Facility - Security & HVAC Replacement**

The Soto Street Facility serves as the main headquarters for staff and equipment that support the Western Region Unit (WRU) Conveyance and Distribution System. The WRU Incident Command Post, located in the Administration Building, also serves as the backup Emergency Operations Center for the Eagle Rock Operations Center. The Soto Street Facility currently has two layers of access control protection during business hours: a single card reader at the outer vehicle gate, and a single contracted security guard. During periodic foot patrols of the facility, the access gate is left unmanned. In addition, the alarm system is currently inoperable, and there are no access card readers on any of the exterior building doors, which remain unlocked during business hours. There have been recent multiple security events at this facility. Finally, the existing air handling unit that serves the Soto Street Administration Building has been in service since the 1960s, when the building had a different configuration. The current HVAC system does not provide adequate airflow to all parts of the building.

This project will improve the security of the Soto Street Facility by adding access card readers and security cameras, providing security lamination to glass doors and windows, providing a fenced secure outdoor storage yard, replacing the alarm system, and upgrading the HVAC system for the Administration Building.

### **Upper Feeder Cathodic Protection System Rehabilitation**

The existing cathodic protection system for the Upper Feeder was installed in 2012. An external corrosion condition assessment performed in July 2021 concluded that the anodes are depleted, and the current system is not providing adequate cathodic protection to the Upper Feeder. The existing soil conditions are considered a high-resistance environment, depleting the anodes faster. A more efficient design, which includes conductive cement, would extend the life of the new anodes. The survey results also indicated stray current interference due to the proximity of Southern California Gas pipelines. This project will construct an impressed current cathodic protection system on approximately 10.45 miles of the Upper Feeder. The project will include abandoning the existing deep anode wells per the California Well Standards and installing new deep anode wells, steady-state rectifiers, and remote monitoring equipment.

### **West Orange County Feeder Cathodic Protection**

The West Orange County Feeder (WOCF) was constructed in 1956 and is mortar and dielectrically coated welded steel pipeline with a diameter of 43 inches and 55 inches. The pipeline is approximately 13 miles long. The WOCF connects to the cathodically protected Orange County Feeder (OCF), prestressed and steel reaches of the Second Lower Feeder (SLF), and the cathodically protected Lower Feeder (LF). The pipeline is one of the few reaches of welded steel pipe that is not yet cathodically protected. A failure of the WOCF would inhibit Metropolitan's ability to convey water through its system and potentially disrupt Metropolitan's ability to deliver water. The scope of work is to design and install a comprehensive cathodic protection system in the WOCF.

**Western Conveyance and Distribution Region - Blind Flange Structures Washdown Improvements**

Currently, a substantial number of blind flange pipeline access and turn-out structures in the western conveyance and distribution region do not have an accessible and reliable water connection for washdown of piping, valves, and equipment during preventive maintenance. This project will modify or enhance structures that contain blind flanges to provide washdown capabilities.

**Yorba Linda Feeder Cathodic Protection System Rehabilitation**

The existing cathodic protection systems for Yorba Linda Feeder were installed in 1990. Recent surveys of the existing systems have indicated that they no longer provide adequate cathodic protection due to the gradual deterioration of their anodes after years of service. The typical design life of an impressed-current cathodic protection system is 25 years. Therefore, the time in service and recent surveys indicate the systems have reached the end of their useful life and require rehabilitation. This project will install an impressed-current cathodic protection system on approximately 7.2 miles of Yorba Linda Feeder to replace the depleted anodes. This project will include the installation of new anode wells and rectifiers and abandoning the existing anode wells as required by the Department of Water Resources - California Well Standards.

## Drought Mitigation – SWP Dependent Areas Program

Fiscal Year 2024/25 Estimate: \$39.3 million

Fiscal Year 2025/26 Estimate: \$27.0 million

**Program Information:** The Drought Mitigation – SWP Dependent Areas Program is comprised of projects to replace, refurbish, upgrade, or construct new facilities, which are identified to mitigate the vulnerability experienced by specific member agencies that are impacted during shortages on the State Water Project supplies.

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - Sepulveda Canyon PCS to Venice PCS Valve Replacements
  - Sepulveda Feeder West Area Water Supply Reliability Pipeline Improvements
- Major milestones achieved or estimated to be achieved:
  - Construction contracts awarded:
    - Badlands Tunnel Surge Protection Facility
    - Inland Feeder/Rialto Pipeline Intertie
    - Wadsworth Pumping Plant Bypass Pipeline
  - Procurement contracts awarded:
    - Inland Feeder/San Bernardino Valley Municipal Water District Foothill Pump Station Intertie – Valve Procurement
    - Rialto Pipeline Water Supply Reliability Improvements – Large Diameter Isolation Valve Procurement
  - Progressive design-build services agreement authorized:
    - Sepulveda Feeder Pump Stations

### Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Badlands Tunnel Surge Protection Facility	\$ 17,800,000	2025	Complete construction
Inland Feeder – Foothill Pump Station Intertie	\$ 23,100,000	2025	Complete design
Inland Feeder – Rialto Pipeline Intertie	\$ 11,900,000	2025	Complete construction
Wadsworth Pumping Plant Bypass Pipeline	\$ 21,400,000	2025	Complete construction
Westside Water Supply Reliability - Sepulveda Feeder Pump Stations Stage 1	\$ 110,000,000	2026	Complete design and initiate construction

## Drought Mitigation – SWP Dependent Areas - All

### **Badlands Tunnel Surge Protection Facility**

This project will add a surge protection system to protect the Inland Feeder from pressure surges. After completion of completion of Inland Feeder-Rialto Pipeline Intertie and Inland Feeder-San Bernardino Valley Municipal Water District Foothill Pump Station Intertie and New Pump Station, up to 107 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline.

### **Burbank Pump Station for Delivery to Service Connection B-5A**

The project consists of constructing a new pump station at the City of Burbank's Valley Blending Facility to allow the city to switch its demand from service connection B-5 to B-5A. Switching to B-5A enables Metropolitan to deliver the entire flow of the Greg Avenue Pump Station to the Western State Water Project Dependent Area during drought operations to maximize its benefits.

### **East West Conveyance System Improvements**

The project would improve system flexibility to provide the Western State Water Project Dependent Areas greater access to existing and potential new supplies and storage. The improvements will include new or upgrades of existing pipelines, new or expanded existing pump stations, and additional facilities to provide surge protection.

### **Inland Feeder-Rialto Pipeline Intertie**

This project will construct an intertie pipeline between the Inland Feeder and the Rialto Pipeline south of Department of Water Resources (DWR) Devil Canyon. The intertie will be approximately seven feet in diameter and 200 feet long, and will include a large diameter valve, meter, and valve and meter structures, and other features necessary to support the intertie operation. Currently flows from the Inland Feeder must pass through higher elevation DWR facilities which reduces flow and expends more energy. An intertie will allow delivery of up to 60 cfs of water from San Bernardino Valley Municipal Water District (SBVMWD) and DWR via a water exchange program. After completion of this project along with completion of Wadsworth Pump Discharge Eastside Pipeline Bypass and Inland Feeder/San Bernardino Valley Municipal Water District Foothill Pump Station Intertie, up to 107 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. This project will improve resiliency against severe drought or earthquake by proving the Rialto Pipeline region a second source of water besides State Water Project (SWP) supplies.

### **Inland Feeder/San Bernardino Valley Municipal Water District Foothill Pump Station Intertie and New Pump Station**

This project will construct an intertie between the Inland Feeder and Foothill Pump Station, which is owned and operated by San Bernardino Valley Municipal Water District (SBVMWD). The intertie will include pipelines, valve vaults with valves, electrical and control systems, and other features necessary to support the intertie operation. Construction of an intertie between the Inland Feeder and Foothill Pump Station would enable Metropolitan to deliver higher volume of water from DVL to the Rialto Pipeline service area. After completion of Stage 1, which will construct the intertie system and support features, along with completion of Inland Feeder-Rialto Pipeline Intertie and Wadsworth Pump Discharge Eastside Pipeline Bypass, up to 107 cfs will be able to be delivered from Diamond Valley Lake to the Rialto Pipeline. Stage 2 will construct a new pump station necessary to pump up to an additional 120 cfs of flow at the Foothill Pump Station site. This project will improve resiliency against severe drought or earthquake by providing the Rialto Pipeline region a second source of water besides State Water Project (SWP) supplies.

### **La Verne Pipeline & Weymouth Plant Intertie and Upper Feeder Modification**

This project will provide an alternate source of supplies for groundwater replenishment at Service Connection USG-03. USG-3 is a replenishment connection located at the end of the Glendora Tunnel and is typically fed by the Rialto Feeder/Live Oak Reservoir, which is untreated State Project Water (SPW). In times of low SPW supplies, an alternative connection from CRA supplies will allow continued delivery of supplies. This project may include an intertie between the Weymouth plant and the La Verne Pipeline, and modification of a blowoff and/or air release & air vacuum valve on Upper Feeder near Azusa Canyon, and other features necessary to provide an alternate source of supplies at USG-3. This project will improve resiliency against severe drought or earthquake.

### **Three Valley MWD Miramar Pumpback Operation Upgrade**

The project would upgrade and expand the Three Valleys Municipal Water District's existing pumpback capacity to increase deliveries from the Weymouth Water Treatment Plant to its Miramar Treatment Plant. The expanded pumpback operation would offset the use of State Water Project supplies during droughts caused by low State Water Project allocations.

### **Wadsworth Pumping Plant Bypass Pipeline**

The Wadsworth Pumping Plant is located near Hemet at DVL. The pumping plant includes 12 vertical turbine pumps that are used to pump water into DVL or to generate electricity when water flows out of DVL into the forebay/San Diego Canal. This project will construct a bypass pipeline connecting the Wadsworth Pumping Plant discharge pipeline to the Eastside Pipeline to allow continuous pumping from the Diamond Valley Lake (DVL) forebay to supply DVL water to the Mills plant and the Rialto Pipeline via PC-1 Pump Station, while filling the forebay with water from DVL at the same time, in case of a supply disruption from the State Water Project's (SWP) East Branch due to severe drought or earthquake. The bypass will be 96-inch in diameter and approximately 600 feet long and will include a large diameter valve with a valve structure, and other features necessary to support the bypass operation.

### **Westside Water Supply Reliability**

This project will enable Metropolitan to convey treated CRA and DVL water from its Central Pool northward along the Sepulveda Feeder to the west service area, supplementing deliveries from the Greg Avenue Pump Station. This concept requires two new pump stations along the Sepulveda Feeder: one each located adjacent to the existing Venice and Sepulveda Canyon Control Facilities. The project will be implemented in multiple stages. The initial stage (i.e., Sepulveda Feeder Pump Stations) of the larger project includes the construction of two pump stations capable of moving up to 30 cfs northward from the Central Pool to the west service area. However, once operational, the water supply benefits of the project to the west service area will be approximately 60 cfs of water supply as there will no longer be a need to send "operational water" southward on the Sepulveda Feeder from the Jensen plant during periods of low SWP demands. These operational water flows in the Sepulveda Feeder are currently necessary to maintain water quality in the feeder during low SWP allocations. Therefore, once the initial phase of this project is complete, the operational flows can be diverted to the west service area.

The capacity of the initial stage of the project is based on the current pressure limitations of the Sepulveda Feeder, which is primarily comprised of prestressed concrete cylinder pipe (PCCP). The pump station sites will be planned so that additional pumping capacity, up to a potential maximum capacity of approximately 160 cfs, could be added in future stages within Metropolitan's current property holdings. This expansion could take place after the second stage of work, which will reline PCCP portions of the Sepulveda Feeder with welded steel pipe and steel pipeline associated with the increased pressure after the completion of the first stage of this project, is complete.

## Information Technology and Control Systems Program

Fiscal Year 2024/25 Estimate: \$24.1 million

Fiscal Year 2025/26 Estimate: \$26.0 million

**Program Information:** *The Information Technology and Control Systems Program is comprised of projects to replace, upgrade, or provide new facilities, software applications, or technology that will enhance cyber security, reliability, flexibility, and capability of information, communication, and control systems.*

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - CIP Budgeting System Improvements
  - CIP Budget System SharePoint Enhancement
  - Control System Upgrade Phase 6 - Skinner Final Design
  - Eastern Region Security System Upgrade – IT Infrastructure Upgrades
  - Fiber Installation at Iron Mountain, Eagle Mountain, and Hinds Pumping Plants
  - Oracle Database Upgrade
  - Oracle EBusiness Suite Upgrade
  - Western Region Security System Upgrade – IT Infrastructure Upgrades
- Major milestones achieved or estimated to be achieved:
  - Desert Microwave Tower Site Upgrades – major equipment received and design completed
  - Enterprise Content Management – Phase I – deployment completed
  - Fuel Management System Upgrade – deployment to be completed
  - Gene Communication System Upgrade – construction started
  - Security Operation Center – deployment completed

## Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Applications-Servers Upgrade from Old Windows OS	\$ 3,500,000	2024	Complete deployment
Control System Upgrade – Mills Plant	\$ 22,600,000	2024	Begin final design
Desert Microwave Tower Site Upgrades	\$ 13,700,000	2024	Complete design and begin construction
Enterprise Content Management – Phase II	\$ 10,300,000	2025	Complete deployment
Enterprise Data Analytics	\$ 3,300,000	2025	Complete deployment
Gene Communication System Upgrade	\$ 2,500,000	2024	Complete construction
Maximo Mobile Upgrade	\$ 500,000	2024	Complete deployment
Payroll-Timekeeping Reimplementation	\$ 1,800,000	2024	Initiate project and complete deployment
Two-Way Radio System Upgrade	\$ 11,300,000	2025	Complete deployment
WiFi Upgrade	\$ 5,200,000	2025	Complete deployment
WINS Water Billing System Upgrade	\$ 3,800,000	2024	Complete deployment

### IT Applications Project Group

#### Applications-Servers Upgrade from Old Windows OS

A significant number of Metropolitan’s systems, including a number of critical enterprise-level business and water applications, are currently running on outdated Microsoft Windows platforms (e.g., Windows 2003, 2007, and 2008). These platforms are either already no longer being supported or will shortly cease to be supported by the Microsoft Corporation. Microsoft’s support includes software updates and security-related patches to fix technical issues and mitigate potential new security risks. Losing these software and security updates will increase cyber security risks for the unsupported platforms. This project will upgrade all older application environments to versions of operating systems currently under support. Phase 1 of the project will identify and document required changes, and will group applications into deployment waves. Phase 2 will deploy the upgrades on each of the groups identified in Phase 1.

#### Arc Flash Software Model Development

An arc flash is the light and heat discharge from a high-voltage electric source with enough electrical energy to cause substantial damage, harm, fire, or injury. Arc flash risk analysis is required per National Fire Protection Association (NFPA), National Electrical Code (NEC), and Occupational Safety and Health Administration (OSHA) standards. Metropolitan currently uses a generic tabular approach to quantify the arc flash hazard; this approach no longer complies with the latest NFPA 70E standards. Comprehensive modeling that considers the effects of the surrounding equipment and accurately identifies the arc flash hazards is now required. This project will develop software models for Metropolitan facilities that are susceptible to arc flash hazards. The models will provide complete and consistent information to identify equipment improvements to improve safety and meet regulatory compliance. This project will also install arc flash labels for all equipment as required per NFPA.



### **Asset Monitoring and Management System**

This project will establish the foundation for leveraging data already maintained by Metropolitan (under multiple different software platforms) into a common framework to efficiently conduct future infrastructure reliability projects and assessments across Metropolitan. This project is needed to support a common condition monitoring framework across Engineering Services (ESG) and Operations groups, as well as to support condition-based maintenance initiatives as part of the General Manager's initiatives and Operations' business plan.

This project includes building software tools to access and aggregate ESG, Operations, and other asset-related data, such as data from finance, to facilitate infrastructure reliability investigations on one class of assets (revenue meters). Eventually, the software tools developed as a part of this project will be used for future condition assessments in ESG and Operations.

### **Asset Monitoring System Stage 1 Conveyance and Distribution**

Currently, asset condition and performance data are maintained in multiple data systems. At times, data is redundant, not consistent, or missing resulting in delays in decision-making and increased uncertainty. This project will create an integrated dashboard interface inter-connected with existing disparate data systems and utilize geographic information system (GIS) functionality to visualize key information related to asset health, condition, performance, location, and other key data in the conveyance and distribution system. Subsequent stages will address treatment plants, reservoirs, power transmission lines, support facilities, communication sites, fleet, real property, and advanced water purification.

### **BDMS Rewrite**

This project will upgrade 2013 on-premise solution of the Board Document Management System (BDMS) to Office 365 SharePoint. This will require a complete rework since the cloud version does not support the on-premises code. This upgrade will provide additional functionality such as a mobile and tablet friendly user interface, improved process automation, and possible integration with the board agenda system.

### **Computerized Maintenance Management System (CMMS) Upgrade**

This project will upgrade Metropolitan's Computerized Maintenance Management System (CMMS). Support for the 7.x versions of Maximo, Metropolitan's current version, will end in September 2025. To move to the cloud, the Maximo integrations with other applications need to be recreated using the Maximo Integration Framework and documenting all related business processes. These integrations include time keeping, the financial system (Oracle EBS), Facility and Equipment Availability (FEA) watermain shutdown application, the Maximo Business Intelligence (BI) data warehouse, and others. This project will also assess Metropolitan's Maximo on its readiness for upgrading, conduct the upgrade, and accommodate reporting needs.

### **CIP Budgeting System Improvements**

The Capital Investment Plan (CIP) process has been in place for over 20 years and since inception, the process has been largely manual. The scope of this project is to consolidate the CIP proposal, risk form, and cash flow form into one seamless single proposal form. This project will also automate submittal tracking and create a new evaluation form, which will be designed to leverage the available historical evaluation data, new scores suggested by the proposal form, risk/consequence data to provide a clearer reference of information when evaluating projects, and other improvements necessary to streamline the budget process. This project will reduce staff time to generate proposals and required CIP documents, and also reduce the administrative and scoring efforts.

### **Clear Orbit Bar Coding System Replacement**

This project will replace end-of-life Clear Orbit bar coding system at Metropolitan's eight inventory warehouses. As part of the new system, a new mobile hand-held solution including ancillary hardware and equipment such as charging stations and bar code printers will be deployed. In addition, the new system will be integrated with Oracle OCI and enhance IT infrastructure for wireless connectivity.

### **Enterprise Asset Planning System**

Currently, short-term asset renewals are addressed by staff submitting Capital Investment Plan (CIP) proposals that identify upcoming needs to maintain a reliable system. This project will acquire a software application and implement a comprehensive solution to forecast long-term asset lifecycle costs. The resulting decision support tool will support the strategic planning for renewal of Metropolitan assets based on condition, performance, outage constraints, staff resource limitations, planned budget, shutdown schedules, relative value, and risk.

### **Enterprise Content Management**

The Enterprise Content Management (ECM) application will classify and manage electronic documents and other media to allow for easy retrieval, review, and destruction of information in accordance with Metropolitan's records retention schedule. In addition, the new ECM application will allow Metropolitan to more effectively and efficiently manage its digital asset needs for business needs to respond to requests under the California Public Records Act (CPRA), and for eDiscovery purposes, and will automate compliance with records retention policies. Phase I of this project is complete, which designed a taxonomy for storing unstructured data and developed a thesaurus to support the implementation of Metropolitan's ECM application. Phase II of this project completes the design and delivers the initial deployment of the enterprise content management software into the Metropolitan environment. The system will allow for the organization, collaborations and automated enforcement of records retentions policies to non-structured electronic media. The final phase III will deliver the balance of the deployment of the enterprise content management software throughout Metropolitan.

### **Enterprise Data Analytics**

The project's objective is to modernize Metropolitan's data and analytics portfolio enabling Metropolitan to be a data-centric organization that harnesses the potential of data across the enterprise and delivers value through analytics and insights at all user levels (including leadership roles) and across multiple business groups. It would establish an agile, cross-functional operating model that delivers business value quickly and effectively, setting up a personalized and anticipatory environment that enables user/insights and discovery "by business groups." This project would enable data-driven decision-making, and eliminate mishandling of data across the enterprise, which results in data quality issues and in turn needs extensive manual intervention in fixing data problems when determining and reporting key metrics to management teams. The Enterprise Data Warehouse that will be built will contain both business and operational data. It will be designed to combine financial dimension to operational data. By linking data like EBS (Financial), Supervisory Control and Data Acquisition (SCADA), GIS and Water Supply/Demand, Metropolitan staff can model different scenarios to answer questions and to discover trends and anomalies previously not visible due to isolated reporting.

### **Enterprise Software Management**

The IT Business Management Team currently uses an in-house developed tool (Access Database) to track "desktop" software licensing. The current tool is limited to only "desktop" software and no other tool exists for tracking "Enterprise" licensing. This project will facilitate compliance by having an enterprise software management tool, which will include various categories including physical, software, hardware, mobile, and the cloud. This project will also ensure ongoing support of these various categories and increase efficiency across Metropolitan.

### **HR Information System Improvements**

With the future of Metropolitan's hybrid working environment (telecommute & onsite) initiatives, improved self-services are needed that require less printing, secured electronic transactions, and allowing proper approvals from managers, while working remotely. This project will enhance the current Human Resource (HR) interface with mobile interface capabilities, enhance the Manager Self-Service Module; and implement a new Performance Management Module. This system will provide employees and managers the tools and technology to improve business operations, promote collaboration, and enhance workforce productivity by simplifying access to HR information.

### **Hydraulic Model Enhancements**

Metropolitan uses its current state-of-the industry hydraulic model daily in support of operational and facility planning requests. While the model has significant hydraulic simulation capabilities, this project proposes to enhance the software to better address water quality analyses, hydroelectric power plant power production estimating, hydraulic surge transient analysis, flood simulations, and other studies. The proposed enhancements also include storing this information on the cloud for improved data access.

### **Hydraulic Modeling Analysis Toolkit and Water Quality Calibration**

Metropolitan's Engineering Services Group completed development of a system-wide hydraulic model in January 2017 after a multi-year development effort. Even while model development was still underway, many uses for the hydraulic model were identified. This project includes developing tools to support hydraulic model analysis to increase efficiency and enhance productivity while using the hydraulic model for analysis. The project also includes development and calibration of water quality modeling capabilities.

### **Maximo Mobile Interface Software**

Metropolitan uses Maximo software to schedule, plan, and execute maintenance work. Currently, Maximo web-based software is not designed for mobile use and desktop or laptop computers are used to generate work orders as the primary method to distribute and plan work for field staff. This project will install and configure a mobile software system that will allow field employees to interact with the Maximo Computer Maintenance Management System from iPad mobile devices. The new system will maximize the value of the new mobile devices, increase the options and opportunity to implement a proactive data driven maintenance strategy, improve response time for corrective actions, and improve timely access to information such as manuals, construction plans, and work plans.

### **MWD Intranet Upgrade**

The Intranet is a restricted and internal network that enables Metropolitan employees to store, share, and organize information. Initially developed in 1997, the Intranet is built on technologies which have become obsolete. This project will replace Metropolitan's Intranet with newer technologies to serve as a central hub that performs a broad range of purposes which the current Intranet site is not able to. This includes cloud-based file sharing, document management, content management, inclusion of social technology, employee profiles, live messaging, forums, status updates, and Group sites coupled with published data catalogs to allow data sharing which is accessible from any type of device such as laptop, tablets, and mobile phones.

### **MyWarehouse Shopping Cart Replacement Project**

Staff currently uses an outdated system for checking availability and acquisition of Metropolitan owned inventory items that lacks an easy-to-use interface and integration with financial systems. The proposed innovative system will provide staff with a fully integrated, "Amazon-like" user experience to improve efficiency of field, warehouse, and financial staff in checking the inventory in real-time, advance ordering of items in low inventory, and by allowing mobile device capability.

### **Oracle Database Upgrade**

Metropolitan currently owns over 50 Oracle databases containing critical systems that will no longer be supported after December 2022. Any database affected by a performance or security issue would have to be removed from the production environment, rendering the associated application inoperable. This project will upgrade all the associated Oracle databases and update or reconfigure the connection points of all affected applications.

### **Oracle EBusiness Suite Upgrade**

Metropolitan's Oracle e-Business Suite (EBS) is an integrated set of business applications for automating Metropolitan's financials, procurement, project management, and grants management activities. Metropolitan's e-Business Suite was last upgraded in 2016 and since then, the technology has been superseded by newer hardware, operating systems, and Oracle database versions. This project will upgrade soon-to-be unsupported, end-of-life EBS to the newer version with more functionality and capabilities.

### **Payroll-Timekeeping Reimplementation**

This project will re-implement PeopleSoft payroll and will replace the current timekeeping software with a package that provides better integration with the payroll software and a better user interface. The current payroll and timekeeping applications both have deficiencies that have caused significant compensation issues for employees and have resulted in the need for excessive manual corrections by payroll staff. This project will enhance workforce productivity by simplifying access to business information and will maintain sound business practices and fiscal integrity.

### **Services Procurement Implementation**

In the current Oracle Business Suite (EBS), it is difficult to automate and record certain transactions such as retention payments, Stop Notices, and Liquidated Damages. These transactions are tracked separately by Finance and Engineering. The Oracle on-premise Service Procurement Module is part of the Oracle E-Business Suite. The module automates retention transactions at the time of payment, and can, through customization, accommodate the need to hold other payments as liabilities in the General Ledger (GL).

This project will implement the Oracle Service Procurement Module, as part of the Oracle E-Business Suite, to automate retention or other withholdings required as liabilities in the GL.

### **Supplier Portal Implementation**

This project will implement Oracle's web-based Supplier Portal, which provides self-service capabilities to Metropolitan's supplier community. Suppliers have access to a secure area that provides complete visibility to transactions, including purchase orders, payments and planned payments, offers collaboration with Metropolitan staff, and allows the electronic submission of invoices and other documents. The implementation of the portal will reduce repetitive inquiries from vendors, saving staff time and reducing vendor frustration.

### **Water Planning Application Upgrade**

Water planning staff makes decisions every day that affect storage, cost, and movement of water within our system. The current software tool used is inefficient and obsolete, which was initially launched more than 20 years ago and last partially updated in 2008. This project will replace the existing water planning application with a new cloud-based application, which will build a foundation needed for innovative solutions addressing water supply and operational challenges. The new application will also be able to automate the process of gathering, categorizing, cleaning, validating, and reporting of critical data used by planners and meet today's cyber security standards. This is a new project for this budget cycle.

### **WINS Water Billing System Version 2.1**

In support of Metropolitan's water billing system, conduct design, development, and deployment activities to add new functionalities and enhancements outside of WINS 2.0 based on new business user requirements.

### **WINS Water Billing System Upgrade**

The Water Information System (WINS) bills Metropolitan's member agencies on a monthly basis for approximately \$75 million. WINS is known as Metropolitan's "cash register". The custom application is over 10 years old and needs to be updated. The billing logic is complicated and "hard-coded" into the application, requiring assistance from Metropolitan's Information Technology to make even minor modifications, such as adding new meters or programs. Member agencies have also requested additional functionality. This project will replace the WINS to add needed enhancements to the system to add security and functionality for both Metropolitan and member agencies.

## IT Infrastructure Project Group

### **Data Center Backup Infrastructure Upgrade**

Critical business and water applications rely on backup processes to restore the applications as soon as possible in an emergency. As Metropolitan's data volume progressively increases, so does the duration of the processes to backup, restore, and recover operations. Metropolitan's current backup software was deployed over 15 years ago and uses magnetic tape as the storage medium. This project will replace the backup infrastructure with newer and faster technology and will redesign the backup/restore processes and procedures using the latest components of the backup software.

### **Data Storage Infrastructure Refresh**

IT data storage infrastructure currently has a number of storage arrays that provide disk storage for the primary and secondary datacenters. This project will procure and install new data storage equipment to replace older equipment that will soon reach end-of-support-life by the manufacturer.

### **Desert Microwave Tower Site Upgrades**

This project will improve the reliability, performance, and capacity to Metropolitan's microwave radio wide-area-networks (WANs) in the desert region. Lessons learned from the Diamond Valley Lake (DVL) microwave proof-of-concept will be used in this project. The microwave network uses wireless transmission over radio frequency energy in the 6-18 Gigahertz range. This project will decrease the frequency of microwave system troubleshooting and repair activities and provide an increase in network service reliability.

### **Emergency Generators for Mountaintop Communication Sites**

The purpose of this project is to replace our existing emergency stand-by generators at Metropolitan's basin and mountaintop communication sites. Many of Metropolitan's generators have been in service since 2003 and they are experiencing engine part failures. Some of the parts are no longer manufactured and are difficult to obtain. These failures have resulted in longer downtimes and the temporary use of backup generators to ensure our communication sites continue to operate.

The purchase of new generators engines will eliminate the mechanical issues we are currently facing and eliminate the need to permit the engine with the AQMD (Air Quality Management District). This will also eliminate the regulatory operating restrictions as well as reducing Metropolitan's regulatory footprint. This project will also include the procurement of propane tanks that will allow the generators to continue to operate during long durations of time in the event of an extended power outage.

### **Enterprise GIS Disaster Recovery**

This project will add the Enterprise GIS (EGIS) infrastructure to the secondary datacenter. This includes the purchase, installation, and configuration of new hardware and software to meet Business Impact Analysis (BIA) study requirements for the EGIS infrastructure. The current recovery time for EGIS infrastructure is estimated at greater than a week. The BIA Recovery Time Objective (RTO) for the EGIS infrastructure is less than 72 hours, meaning that the EGIS infrastructure should be functional within 72 hours after an outage. This project will reduce the RTO for the EGIS infrastructure from 72 hours to 1 hour, so that EGIS data could potentially be used to assist in emergency operations.

### **Fiber Installation at Iron Mountain, Eagle Mountain, and Hinds Pumping Plants**

Metropolitan currently relies on microwave radio equipment to provide a voice and data communication backbone for the business network, the Supervisory Control and Data Acquisition (SCADA) network, Automated Meter Reading (AMR), and two-way radio network. Information Technology Group's strategic vision is for more reliable fiber optic cables to become the primary communications path connecting all desert sites. This project will connect Iron Mountain, Eagle Mountain, and Hinds Pumping Plants to the public telecommunications network using fiber optic cable thereby enhancing reliability and increasing bandwidth of communications for desert facilities. The fiber optic would follow the paths of existing power transmission lines and terminate in the areas near switchyards and may require repeater stations. A separate project to install a fiber optic line from Gene Pumping Plant to Parker Dam, the Gene Communication System Upgrade, is scheduled for completion in 2024.

### **Gene Communication System Upgrade**

Metropolitan's microwave radio wide-area network (WAN) transmits telephone, voice, data, and video communication between all Metropolitan facilities, utilizing point-to-point microwave transmission. While microwave transmission is highly effective, it is limited to line-of-sight propagation; thus, it cannot pass through mountains or other similar obstacles.

Gene Pumping Plant relies on a microwave tower at Black Metal Mountain and does not have a redundant site to support the plant if the system at Black Metal Mountain were to fail. Furthermore, the desert region now requires high-capacity carrier-grade communication links to provide reliable data, voice, and video transmission to support the need of new IT and supervisory control and data acquisition system (SCADA) infrastructures. The type of information that rely on this network are real-time data from the supervisory control and data acquisition system, automated meter reading system, security cameras and teleprotection, and system alarms to Metropolitan's control facilities, and provides access at remote sites to the email, geographical information system, Oracle financials, timekeeping, and PeopleSoft applications. This project will install approximately 22 poles and two miles of fiber optic cable from Parker Dam to Gene Pumping Plant administration building to connect to high-quality, high-speed data system to improve a variety of technological challenges at the desert facilities.

### **Maximo Mobile Upgrade**

The goal of this project is to replace existing mobile devices used in Operations with latest tablet technology. The project will enable the use of capabilities of the existing mobile software system that are not available on the existing hardware devices. The project includes an initial pilot followed by purchase of several hundred devices. The new devices will eliminate or reduce the need for desktop computers at field sites and vastly increase the functionality of the existing Maximo mobile devices.

### **Pasadena Microwave Project Phase II**

This project will improve stability and reliability of the data transmission within Metropolitan's network by replacing the existing microwave tower and communication equipment at Pasadena Water and Power property with a new tower and equipment. New microwave frequencies and modification to existing Federal Communications Commission (FCC) licenses will also be required for a new communication link to be established within the Metropolitan network.

### **Replacement of Network Switches at MWD Headquarters Building**

Network switches are the backbone of the Information Technology (IT) network and connect all IT systems and infrastructure components. Several network switches which were installed at Metropolitan Headquarters in 2014 have reached end of their life cycle and are going out of support. Replacement of these network switches is needed to mitigate risks presented by old and out of support switches. This project will consist of multiple deployments of replacement network switches at Metropolitan Headquarters.

### **Standby Generator Relocation at Six WAN Sites**

Metropolitan's Wide Area Network (WAN) provides a critical communication and data link between facilities across the distribution system. The Standby generators at six WAN sites must be relocated for consistency with the current fire codes and to enhance safety. These generators are needed to provide backup power in the event of loss of primary power. The planned improvements will reduce the risk of damage to communication equipment and the buildings in the event of a fuel leak. Metropolitan forces will relocate the standby generators at six WAN sites to reduce the risk of fire damage to Metropolitan's communication systems. The standby generators will be moved to new locations in separate outdoor enclosures, consistent with current fire codes.

### **Two-Way Radio System Upgrade**

Metropolitan's current Two-Way Radio system is approaching the end of its service life, and both vendor and after-market support have recently ceased. The existing Two-Way Radio system is Metropolitan's essential communication system for public/employee safety, and for communications when Metropolitan performs tasks involving member agencies. This project, also referred to as the Emergency Radio Communications System Upgrade, will upgrade or replace specific components of the Two-Way Radio system, reusing the majority of the infrastructure; replace some unsupported radios; and will provide improvements to address poor reception at some locations. The upgraded Two-Way Radio system will include features anticipated to provide higher capacity, higher levels of cybersecurity, additional management and monitoring features, and multi-level resiliency.

### **Western Region Microwave Tower Sites Upgrade Project**

The western region microwave network consists of communications sites with microwave radios that provide a voice and data communication backbone for the business network, the Supervisory Control and Data Acquisition (SCADA) network, Automated Meter Reading (AMR), and the two-way radio network. A majority of Metropolitan's current microwave radios have reached the end of their service lives, are no longer supported by the manufacturer, and replacement parts and software updates are no longer available, leaving microwave infrastructure vulnerable to equipment failure. Also, inspection of the electrical grounding systems has revealed deficiencies in grounding requirements of some sites and, due to regulatory changes, some propane generators may require upgrades. The scope is to procure microwave radio equipment and associated antennas with waveguides; design microwave network and system infrastructure; install equipment on towers and inside buildings; design and install battery backup systems; rectify any grounding issues; and review the condition and level of code compliance of the propane generator systems and upgrade as necessary.

### **Weymouth Communication Room Relocation**

This project will relocate the existing communication room at the Weymouth plant administration building to an upgraded location where appropriate heating, ventilation, and air conditioning (HVAC), redundant power, and a fire suppression system is available to properly support Metropolitan's IT equipment at the Weymouth plant.

### **WiFi Upgrade**

This WiFi Upgrade project will improve the reliability, performance, and capacity to Metropolitan's wireless access point (WAP) local-area-networks (LANs) at Headquarters and various field facilities. It will also provide a secure, reliable and robust WiFi System to support increasing business demands and reliance on Metropolitan's wireless infrastructure. The scope for this project includes (1) migration and implementation design plan, (2) removal of obsolete access points and controllers, (3) installation of cable in building ceiling for access points, (4) installation of new access points, and (5) configuration and installation of new controllers.

## IT Security Project Group

### **Cyber and IT Governance Risk and Compliance Implementation**

Cyber and IT Governance Risk and Compliance Implementation will focus on establishing robust frameworks and processes to manage cyber and IT risks effectively. This project involves implementing a Governance Risk and Compliance (GRC) tool, developing comprehensive policies, procedures, and controls to enforce compliance with regulations and industry standards. The GRC tool will integrate with our existing applications like Microsoft Office 365 and allow for cybersecurity compliance processes by generating reports that will support digital audits: 1) top layer - compliance audits: laws, regulations, industry standards, internal policies, vendor management; 2) middle layer - IT audits: data security, network integrity, access controls; 3) bottom layer - operational audits: process documentation, workflow optimization. The GRC will enable IT teams to identify the missing items to achieve compliance, establish workflow automation to handle employee access requests, access reviews, and software license removals.

### **Data Loss Prevention**

Data Loss Prevention will establish a robust Data Loss Prevention (DLP) program within Metropolitan. This project entails several critical components, including data classification, enforcement mechanisms, and ongoing support. Data classification involves identifying and categorizing sensitive information based on its level of confidentiality and importance. Enforcement mechanisms such as access controls, encryption, and data monitoring are implemented to prevent unauthorized access and data leakage. The project aims to successfully implement a comprehensive DLP solution, ultimately safeguarding sensitive data and mitigating the risk of data loss.

### **Eastern Region Security System Upgrade – IT Infrastructure Upgrades**

The existing security system that serves the Eastern Region of Metropolitan's distribution system requires frequent maintenance, is obsolete, and is not integrated with the current enterprise system, and its coverage is incomplete. This project will replace the existing security system with a new enhanced camera system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings.

### **Network Access Control**

Network Access Control (NAC) will ensure that Metropolitan will have the ability to specifically control the exact devices that will be allowed to connect to any one part of the Metropolitan enterprise or operational technology. This project will establish a comprehensive system to manage and control network access within Metropolitan. The NAC solutions will enforce authentication, authorization, and security policies for all devices seeking network connectivity. The NAC system verifies device compliance, checks for vulnerabilities, and ensures that only authorized and secure devices are granted access to the network. It includes features such as user authentication, device profiling, endpoint security checks, and policy enforcement mechanisms. Implementing NAC will enhance network security, protect against unauthorized access, and mitigate the risk of security breaches or data loss caused by compromised or non-compliant devices.

### **Network Visibility and Situational Awareness Upgrades**

This project will implement Network Visibility and Situational Awareness Upgrades to enhance the organization's network monitoring capabilities through the implementation of advanced technologies such as Traffic Access Points (TAP), Extended Detection and Response (XDR), and Network Detection and Response (NDR). TAPs are deployed strategically within the network infrastructure to capture and analyze network traffic, providing comprehensive visibility into data flows and network behavior. XDR platforms are leveraged to collect and correlate data from multiple security tools, enabling holistic threat detection and response across various endpoints. NDR solutions use advanced analytics and machine learning algorithms to identify and mitigate network threats, including anomalous activities and potential breaches. By implementing these technologies, the project aims to improve network visibility, enhance situational awareness, and strengthen the organization's ability to detect and respond to emerging cyber threats effectively.



## **Security Operations Center - Cyber Security Upgrade Phase 2**

Cyber security remains a high priority and is a key part of the Information Technology Strategic Plan. Cyber criminals, including cyber terrorists from rogue nations, are launching increasingly sophisticated threats targeting critical infrastructure agencies such as water utilities. This project will assess and remediate exposures and cyber threats throughout Metropolitan with special emphasis on the business and Supervisory Control and Data Acquisition (SCADA) networks. The proposed security measures will enhance incident response times, protect against social engineering attacks, enhance SCADA security, and protect the rapidly growing network of Metropolitan's connected objects including SCADA sensors and telemetry data.

## **Security Service Edge Implementation**

Security Service Edge (SSE) Implementation will ensure that Metropolitan can shift its security perimeter closer to the edge of the network, enabling real-time threat detection and mitigation. Through SSE, Metropolitan will integrate security functionalities directly into the network edge, eliminating the need for backhauling traffic to centralized security appliances. This will also facilitate centralized policy enforcement, monitoring, and management, resulting in increased visibility and control over Metropolitan's security ecosystem. This project will involve three key transitions: from domain-joined to non-domain-joined computers; from virtual private network (VPN) to SSE; and from Shared Drives to virtual Shared Drives. The project will include an Active Directory Hardening process, adhering to the best practices recommended by National Institute of Standards and Technology (NIST) and help prevent breach due to a compromise of user accounts and access controls.

## **Smartbadge Implementation**

This project will replace current employee badges with new smartbadges to bring all Metropolitan access controls, whether physical or electronic, under a single pane for management for greater flexibility and to enhance physical and cyber security posture. The smartbadges will tie employee user accounts within Metropolitan's Active Directory (AD) infrastructure and would allow transitioning away from Yubikeys. This project will also include upgrading Public Key Infrastructure (PKI) of operating system version.

## **Western Region Security System Upgrade – IT Infrastructure Upgrades**

The existing security system that serves the Western Region of Metropolitan's distribution system requires frequent maintenance, is obsolete, is not integrated with the current enterprise system, and its coverage is incomplete. This project will replace the existing security system with new enhanced camera system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings.

## **Control Systems/SCADA Project Group**

### **AMR System RTUs and Radio Modem Upgrade**

The Automatic Meter Reading (AMR) system is a critical component for transmitting meter information to allow for billing of member agency water deliveries and analysis of official meter instrumentation. The current system was mostly installed between 2008 and 2009. Portions of the AMR System must be updated because of equipment obsolescence and diminishing vendor support, as parts of the system have reached end of life. This project is planned to be completed in three phases. The first phase consists of a pilot study to evaluate various communication technologies, field test each of the selected communication technologies, and installation of 900 MHz radio modems and master radio station near Garvey Reservoir. The second phase consists of replacement of the remaining radio modems and radio master stations. The third phase consists of replacement of the AMR Remote Terminal Units (RTUs), operator interface terminals, digital displays, configuration laptops, battery chargers for Uninterruptible Power Supply (UPS), associated networking equipment and servers, and other appurtenances to complete the upgrades. It is anticipated that Control System Upgrade project will coordinate technology used in the AMR system with technology used in the SCADA (Supervisory Control and Data Acquisition) system.

### **Control System Upgrade**

Metropolitan's control system spans the CRA, Metropolitan's five water treatment plants, and the entire conveyance and distribution system. This project is planned to be implemented in a phased approach through the following projects to upgrade hardware, software, and a communications network. Currently, the phases are planned to consist of the following projects:

- Preliminary investigations
- Conceptual design of the new control system
- Selection and demonstration testing
- Final Design and Implementation of Mills Area
- Final Design and Implementation of Skinner Area
- Continued final design and installation/construction of the new control system in multiple staged contracts

## Minor Capital Projects Program

Fiscal Year 2024/25 Estimate: \$8.5 million

Fiscal Year 2025/26 Estimate: \$7.7 million

**Program Information:** The Minor Capital Projects (Minor Cap) Program is comprised of projects, with an estimated cost of less than \$400,000, that often require rapid response to address unanticipated failures, safety or regulatory compliance concerns, or to take advantage of shutdown opportunities. The Minor Cap Program authorizes the General Manager to execute projects that meet defined criteria without seeking additional Board approval.

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated thru September 2023
  - Thirty-four projects were initiated
- Major milestones achieved or estimated to be achieved:
  - Twenty-one projects were completed

### Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Various projects	\$46,160,000 for two open and new Minor Cap Appropriations	2029	Complete all projects within 3 years of initiation

## Additional Facilities and Systems

Fiscal Year 2024/25 Estimate: \$19.1 million

Fiscal Year 2025/26 Estimate: \$10.2 million

**Program Information:** *The Additional Facilities and Systems Program is composed of projects to refurbish, replace, upgrade, or provide new facilities and systems that support Metropolitan's business and operations.*

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - Apprentice Training Center Facility
  - Diamond Valley Lake Boat Dock Anchoring System Replacement
  - Diamond Valley Lake Floating Restroom Replacement
  - Eagle Rock Security Upgrade – Stage 1
  - Headquarters Building Interior and Exterior Lighting and Control System Upgrade
  - Headquarters Chiller Plant Upgrade
  - Headquarters HVAC System Equipment Upgrades
  - HQ Video Room Suite Renovation
  - Western Region Security Camera System Upgrade – Area 10
- Major milestones achieved or estimated to be achieved:
  - Diamond Valley Lake Floating Wave Attenuator – Stage 2 – final design completed
  - Diamond Valley Lake to Lake Skinner Trail – final design to be completed
  - Employee Village Enhancement - engaged a community planner to interview desert staff and management to develop a comprehensive plan for current and future desert housing needs.
  - Headquarters Building Improvements – construction completed
  - Headquarters Building HVAC System Equipment Upgrades – Phase 1 – construction completed
  - Headquarters Building Fire Alarm and Smoke Control Improvements – construction to be completed
  - Headquarters Building Fire Sprinkler Level P1 Replacement – construction to be completed
  - Headquarters Building Physical Security Improvements - Stage 1 – construction completed
  - Headquarters Building Physical Security Improvements - Stage 2 – construction completed
  - Headquarters Building Physical Security Improvements - Stage 3 – construction to be completed
  - Headquarters Cafeteria Walk-in Refrigeration System – construction completed
  - HQ Video Room Suite Renovation – construction to be completed

## Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
CRA Kitchen and Lodging Improvements	\$ 11,700,000	2027	Complete preliminary design for Eagle and Iron Mountain pumping plants
Diamond Valley Lake Floating Wave Attenuator – Stage2	\$ 10,500,000	2026	Complete construction
District Housing Improvements	\$ 63,100,000	2027	Complete preliminary design for Gene, Iron Mountain, Eagle Mountain, and Hinds pumping plants
Employee Village Enhancement	\$ 34,100,000	2027	Complete preliminary design for Gene, Iron Mountain, Eagle Mountain, and Hinds pumping plants
La Verne Shops Improvements - Equipment Installation and Building Completion	\$ 26,700,000	2024	Complete construction

### Employee Housing Project Group

#### CRA Kitchen and Lodging Improvements

Eagle Mountain and Iron Mountain Pumping Plants have kitchens and guest lodges that are used by staff during shutdowns and construction projects and during extended periods of condition assessments and design of rehabilitation work. These facilities will be used frequently over the next decade as the planned rehabilitation of the 45 main CRA pumps moves forward.

The kitchen at Iron Mountain Pumping Plant has been in service for decades and while still functioning, its equipment is deteriorated and obsolete. The kitchen at Eagle Mountain Pumping Plant does not currently meet San Bernardino County Health Services' requirements for large-scale food storage, refrigeration, or handling. As a result, it has been removed from service. The 10-room guest lodge at Eagle Mountain Pumping Plant and the 16-room guest lodge at Iron Mountain Pumping Plant have both deteriorated after more than 44 years of service and require frequent short-term repairs.

An initial assessment discovered that replacement of these facilities would be more economical since renovation would require significant seismic, electrical, plumbing, and roofing upgrades to meet current codes. This project will replace the kitchen and lodge facilities with new buildings with higher capacity in preparation of increasing work to upkeep the facilities out in the desert to maintain the CRA conveyance system reliability.

### **District Housing Improvements**

Metropolitan owns 99 houses throughout the five CRA pumping plants and rents to employees involved in operation and maintenance of the CRA. A pilot renovation of 11 houses was completed in 2019 and construction of ten new houses was completed in 2018. In the same year, the Board authorized an assessment to determine whether the best course forward was to replace or renovate the remaining 78 houses. The assessment revealed that replacement of the houses was the best option. In addition, a recent housing analysis determined that only 75 of 78 remaining houses need to be replaced at four of the five pumping plants along with construction of two maintenance and two storage buildings, one each at Eagle Mountain and Iron Mountain Pumping Plants, to support the long-term corrective and preventative maintenance activities after the houses have been replaced. A community planner has been engaged to re-evaluate the desert housing program and provide recommendations. Adjustments to the scope of work will be made based on the recommendations.

### **Employee Village Enhancement**

Metropolitan owns houses throughout the five CRA pumping plants and rents to employees involved in operation and maintenance of the CRA. In addition, due to the remote location of the pumping plants, each of the pumping plants has an employee village to provide a sense of community and offer the residents a space away from the work areas. Amenities such as a swimming pool and tennis courts are also part of these villages.

These villages and their current amenities are deteriorating due to the age and exposure to the harsh desert environment. This project will replace and enhance the village amenities at four CRA pumping plants (Hinds, Eagle Mountain, Iron Mountain, and Gene) that would focus on building a vibrant, healthy, and sustainable community for Metropolitan's staff. A community planner has been engaged to re-evaluate the employee village enhancements and provide recommendations. Adjustments to the scope of work will be made based on the recommendations.

### **Recreation Project Group**

#### **Diamond Valley Lake Boat Dock Anchoring System Replacement**

The floating boat dock system at the Diamond Valley Lake (DVL) marina is nearly 20 years old and past its service life. Multiple anchor cables have failed in recent years and other system components are rapidly deteriorating. The anchor cables run from the top of the boat launch ramp, through the floating boat docks, and terminate at the anchor blocks on the lake floor to secure and stabilize the marina docks for individuals boarding and disembarking vessels. Some of the cables were replaced in 2015 due to the need to extend the boat launch ramps but the remaining system components such as the anchor blocks and the pontoons were not addressed. This project will replace or rehabilitate the DVL marina boat dock and/or anchoring system consisting of galvanized steel cables, associated connectors, anchor blocks, associated dock components, and other appurtenances to ensure the continued operation of the boat launching facilities at the marina.

#### **Diamond Valley Lake Domestic Water System Improvements**

Potable water used in the Diamond Valley Lake (DVL) facility is conveyed through a 16-inch diameter pipeline, sized to meet fire system demand. This configuration is oversized for domestic water usage and often results in low chlorine residual levels that requires regular flushing of the system. A volume of approximately 700,000 gallons of potable water is flushed into the DVL Forebay each month to ensure adequate disinfectant is available to inactivate pathogens and prevent recontamination. This project will install approximately 2,500 linear feet of 4-inch domestic water pipe to convey potable water to the DVL facility to address the ongoing low chlorine residual caused by high detention time in the existing larger diameter potable water line that currently serves the facility.

### **Diamond Valley Lake East Marina Utilities**

Diamond Valley Lake (DVL) offers recreational opportunities to the region including boating, fishing, hiking, and biking. The facility supports 4,500 acres of on-water activity, 28 miles of trails, and 13,500 acres of protected open space. This project will extend the existing water, sewer, gas, and communication facilities from the intersection of Searle Parkway and Angler Avenue to the DVL East Marina to support existing operations and future development. The construction of the new infrastructure will replace existing failing tanks which are filled with trucked-in water to service the Marina store, enhance utility service reliability, and serve to comply with flows and pressures required to develop the Marina into a self-sustainable recreational facility.

### **Diamond Valley Lake Floating Restroom Replacement**

The floating sanitation facilities at Diamond Valley Lake (DVL) are 18 years old and are at the end of their service life. The restroom equipment requires constant maintenance, particularly because failure of the holding tanks could lead to sewage leaking into the reservoir. New facilities would eliminate these concerns. This project is also needed for Metropolitan to continue to provide operable floating restroom facilities to recreational boaters in accordance with the Recreation Activity Plan approved by the Department of Drinking Water.

### **Diamond Valley Lake Floating Wave Attenuator**

The existing floating wave attenuator (FWA) has been operational since 2006 as part of a two-stage approach. Stage 1 was completed by installing one 800-foot FWA. Stage 2 was to provide an additional attenuation system but was not implemented. Water levels at Diamond Valley Lake have fluctuated with severity and frequency for the last several years due to draw-down activities during drought conditions, then rebounding during the rainy seasons. Due to age and changing conditions, the concrete sections of the FWA have significantly degraded and the reinforcing bars are exposed to the elements which have accelerated corrosion of the existing FWA system. The original FWA has been refurbished to original condition in Spring of 2021. This project will construct the additional attenuation system originally planned under Stage 2.

### **Diamond Valley Lake-Lake Skinner Trails**

This project will create a recreational link between Diamond Valley Lake (DVL) and Lake Skinner as identified in the initial reservoir planning documents and will connect to the existing network of trails that includes the North Hills Trail at DVL and Riverside County's Salt Creek Trail. Metropolitan jointly funded a trails study with Riverside County Regional Park and Open-Space District to investigate the feasibility of connecting trail alignments that would expand public access to the area's natural resources in an environmentally sustainable manner. The proposed trail alignment minimizes impacts to the Southwestern Riverside County Multi-Species Reserve through the joint use of the east side of the San Diego Canal Patrol Road. This trail will provide parking at several locations, amenity areas and improved fencing along the San Diego Canal. Planned trail uses will include hiking and bicycling.

## **Districtwide & Additional Facilities & Systems Project Group**

### **Apprentice Training Center Facility**

The current apprentice training center has come to the end of its useful life and lacks the needed space for break rooms and training without reconfigurations. As a result, some training modules are outsourced to other vocational training colleges and programs. This project will refurbish and make modifications to the former Diamond Valley Lake Visitor Center building to enable its use as Metropolitan's apprentice training center facility. The former visitor center building was completed in 2008 and shares several building components with the adjacent Western Science Center Museum. The project will address the need for additional space dedicated to individual apprentice training center functions such as break rooms, classrooms, restrooms with added capacity and ample space for library and storage areas. The project will also address the aging and obsolete building systems that are currently shared with the adjacent Western Science Center Museum. To meet Metropolitan building standards, upgrades will be made to security, access, architectural, mechanical, electrical, plumbing systems, and other building features and equipment. Completion of this project will provide the necessary facilities for apprentice training well into the future for the development of the workforce that will operate and maintain Metropolitan's conveyance, distribution, and treatment systems.

### **CRA Aircraft Facility Improvements**

Metropolitan owns and operates several airstrips along the Colorado River Aqueduct (CRA) that are deteriorating with age. There is also no designated landing area for helicopters or an enclosed area to store aircraft. Currently, planes must be taken offsite for hangar storage in Lake Havasu. The project will design and construct various improvements to runway pavement and landing communication systems at the four aircraft facilities located near the CRA Pumping Plants (Gene, Iron Mountain, Eagle Mountain, and Hinds). This includes (1) rehabilitation of the existing asphalt paved runway, (2) rehabilitate the existing asphalt paved access road leading to the runway and construct new asphalt paved access road to replace the existing access road without asphalt pavement, (3) replacement of the existing incandescent bulb lighting along the runways at Iron Mountain and Eagle Mountain with energy efficient Light Emitting Diode (LED) bulbs, (4) installation of a weather reporting station at Eagle Mountain and Hinds Pumping Plants, (5) construction of a new helipad at Eagle Mountain Pumping Plant and, (6) construction of a new aircraft hangar and parking area at the runway facility near Gene Pumping Plant.

### **Data Protection to Enhance Resilience and Emergency Response**

This project will install smaller fire and moisture resistant containers at the entrance of all Metropolitan essential facilities to securely store physical memory drives that contain digital files of design drawings and documents. In the event of a natural disaster, such as a major seismic event, the information contained in the memory drives will help the first responders assess facility conditions and develop restoration measures if facilities are not accessible.

### **Districtwide Fall Protection Improvements**

Working at elevated areas within 6-feet of an edge that have 6-feet falling height, requires fall protection per California Occupational Safety and Health Administration (Cal-OSHA) regulations. The current procedures require that when employees need to enter a rooftop area to service equipment, they must develop and implement a specific plan for safe access; complete a job safety hazard checklist to address all fall hazards; and utilize safety belts, lanyards, or other approved fall protection systems as required. This project will construct guardrail and skylight fall protection on building rooftops, and other types of fall abatement projection for other serviceable areas on facilities with fall protection deficiencies at the District's five Colorado River Aqueduct pumping plants, five water treatment plants, and other miscellaneous facilities throughout the service area per Cal-OSHA Title 8 requirements. Engineered controls such as guardrails and skylight screens will provide the highest level of protection ensuring safety, limiting District liability, improving staff productivity, and ensuring compliance with Cal-OSHA requirements.

### **Districtwide Pressure Vessel Rehabilitation and Improvements**

Metropolitan has over 500 pressure vessel containers used for functions such as surge suppression, chemical storage, or valve actuation. California regulates pressure vessels as they hold gasses or liquids above the ambient pressures. Certain pressure vessels can have a long lead time to procure or may require custom engineering work to fabricate. Approximately 40 of Metropolitan's pressure vessels are over 25 years old, roughly ten percent are over 60 years old, and the oldest pressure vessel found was built in 1937. Failure of a single vessel can cause the pumping station to be inoperable. Other vessel failures can reduce operational flexibility and put facilities at risk of violating water quality requirements. This project will establish a method to systematically assess the condition of all pressure vessels and supporting infrastructure throughout Metropolitan's conveyance, distribution, and water treatment systems; identify pressure vessels that require rehabilitation or replacement; and implement a rehabilitation or replacement plan.

### **Districtwide Underground Storage Tank and Fueling System Upgrades**

Metropolitan currently has 39 underground storage tanks (USTs). Metropolitan's fleet is reliant on these USTs to provide fuel for vehicles and equipment to maintain Metropolitan's infrastructure throughout its service area. The USTs also service emergency generators to provide backup power in case of a loss of electrical power or black/brown out at each facility. Most of Metropolitan's USTs have exceeded their service life, and they or their associated components can fail anytime. This project will assess and upgrade 39 underground storage tank (UST) systems and their related sensors, probes, alarms, and fuel dispensers, under dispenser containment, piping, vent systems, tank monitoring systems, and other appurtenances to keeping the USTs reliable.



### **Eagle Rock Security Upgrade**

The Eagle Rock Operations Control Center (OCC) was built in 1995 in the City of Pasadena. The OCC coordinates and controls Metropolitan's water conveyance and distribution system throughout its entire service area. As the main hub of this system, the OCC is pivotal for the management of water deliveries through Metropolitan facilities. The site currently consists of (1) a two-story building that houses the OCC, the Emergency Operations Center, and several staff offices, (2) a two-story older structure that holds the Business Incident Command Post, Security Water Center, several offices, and a Control Systems shop, and (3) several concrete structures used for transporting water. A vulnerability assessment of the OCC site was conducted in 2017. This assessment identified several security issues of concern as a result of trespassing onto the property. A security assessment identified the site's use by hikers in the area, site accessibility by individuals who have established homeless encampments in the area, and illegal dumping. Proposed site improvements include replacement of the main and lower entrance gates, and existing intercom system at the gates; replacing existing software, existing cameras and associated equipment, such as card readers, door contacts, communication fiber, switches, control panels, and control room monitors; and installation of additional security cameras, lighting fixtures, flood lights with motion detectors, fencing, gates around the perimeter of building, signage, new electrical and communication conduits, and other related security features.

### **Etiwanda Test Facility**

Metropolitan had previously used its Yorba Linda Facility to evaluate equipment, test operational concepts and qualify equipment. The water used for testing was obtained from the Santiago Lateral and discharged into the Santa Ana River. Environmental constraints on the discharge of water made the facility's use impractical, and the test facility was shut down. This project constructs a new test facility at Etiwanda Reservoir to test new emerging technologies, emerging regulations related to metering, and to validate non-standard service connections. Specifically, a new facility would allow staff to test equipment such as valves, meters, coatings, and other treatment and distribution devices; conduct expedited tests to maintain a pre-approved equipment list for low bid procurement; simulate problematic flow meter installations and low flow conditions; and test the accuracy of existing flow meter installations.

### **Headquarters Building Automation System Upgrades**

The building automation system controls all lighting, carbon monoxide monitoring system, HVAC, and associated mechanical equipment in Metropolitan's Headquarters Building. The system is required to operate the building in an energy efficient manner, consistent with Title 24 energy efficiency standards. In the event of a building automation system failure, thermal control within the data center would be lost and garage exhaust fans within the parking garage would become inoperable, resulting in damage to critical facilities and unsafe conditions, respectively. The existing building automation system is obsolete and is no longer supported by the manufacturer.

This project will replace the existing building automation system with a new nonproprietary system and will support integration of the new fire and smoke control systems that will be installed under the Headquarters improvements project.

### **Headquarters Building Interior and Exterior Lighting and Control System Upgrade**

The existing fluorescent lighting fixtures in the Metropolitan Headquarters building are 23 years old and past their service lives. In July 2019, a fire incident occurred on the first floor due to the deterioration of fixture components. As the fixtures and components continue to age, the risk of fire hazard will increase. This project will replace and upgrade interior and exterior lighting with new energy efficient light emitting diode (LED) fixtures controlled by a new lighting control system which allows for programmable on/off, dimming, daylight harvesting, and occupancy sensing. This project will bring the building lighting up to the current California Title 24 building standards and may qualify for Los Angeles Department of Water and Power's Commercial Lighting Incentive Program.

### **Headquarters Building Physical Security Improvements - Stage 3**

The comprehensive security upgrades for Metropolitan's Union Station Headquarters have been prioritized and staged to minimize rework and impacts to operations. The Stage 1 work is complete, which enhanced perimeter windows and doors by providing needed blast protection. The Stage 2 work is complete and provides security system upgrades inside the building with entry validation, surveillance and intrusion protection, and additional security features in the main entry rotunda area, board room, executive dining lounge, and security control room. Stage 3, currently in construction, will enhance perimeter security along the exterior of the building and courtyard including bollards and gates.

### **Headquarters Chiller Plant Upgrade**

Metropolitan's Headquarters' original central plant cooling equipment was installed in 1997 when the building was constructed. This equipment provides the comfort cooling requirements for the Metropolitan Headquarters Building. Chillers and cooling tower equipment typically have a lifespan of 10 to 25 years and the existing equipment in the building is no exception. Costs to maintain the aging, obsolete, and inefficient equipment continue to increase. This project will replace the central plant cooling equipment with new chillers, cooling towers and related mechanical, electronic and electrical systems that meet today's energy efficiency and seismic standards.

### **Headquarters Elevator Modernization**

The 13 vertical lift elevators at the Metropolitan's Headquarters Building are 25 years old, and the elevator control systems have reached the end of their service life. Moreover, the existing elevator components are obsolete and no longer manufactured. Equipment failure may render the elevator out of service indefinitely. This project will modernize the aged and obsolescent operating equipment and elevator door closures on all elevators, replace the HVAC heat pump that services the 6-bay elevator machine room, and other appurtenances to reliability operate the elevators.

### **Headquarters Facility Replacement of Modular Furniture**

The service life of office modular furniture is about 20 years and the existing furniture in Metropolitan Headquarters Building predates the building since it was originally purchased and used when Metropolitan worked out of Cal Plaza. Additionally, the furniture supplier has discontinued this line of products. This project includes space planning, which will develop new furniture standards and guidelines that address changing organizational needs; replacement of obsolete modular furniture; installation of new common use space/privacy rooms/meeting rooms/storage; additional enclosed offices; associated power, communication and network installations in walls, ceilings, and floors; and other work to comply with safety codes.

### **Headquarters Improvements**

The Headquarters Building is over 22 years old, and some of its features need to be upgraded or replaced. These features include the fire/life safety systems including existing fire sprinkler piping at the parking garage, some of the kitchen equipment and ceiling/wall finishes, HVAC system equipment including cooling towers, air handler units, chillers, air disinfection systems, and associated mechanical, electrical, and control systems, restroom facilities on several floors, and video rooms and video production equipment.

### **Headquarters Landscape Improvements**

The exterior landscaping irrigation system at Metropolitan's Headquarters Building is beyond its useful life and increasingly requires component repairs and replacement. The system is less efficient compared to drip irrigation systems. The irrigation nozzles and underground lines are outdated and not correctly oriented to maximize plant growth and minimize water waste. In addition, the flora surrounding the headquarters is not native to California and thus is not optimal for California's climate conditions. The outdated irrigation system, combined with the non-optimal plant life and sprinkler type/orientation, needs immediate replacement. This project will include the installation of a bioswale infiltration area, installation of a high-efficiency drip line irrigation system, landscape grading, and planting with California native drought tolerant plants with guidance from Metropolitan's Water Resource Management, and in alignment with the Model Water Efficient Landscape Ordinance (MWELO) established by the Green Building Code.

### **HVAC System Assessments & Upgrades - Field Facilities**

Metropolitan's facilities include nearly 700 structures with over 2,000 pieces of heating, ventilation, and air conditioning (HVAC) equipment. Approximately 80% of the HVAC equipment used by Metropolitan supports process systems that are required to treat or distribute water, and for regulatory compliance. The majority of Metropolitan's HVAC equipment is over 32 years old, requiring more corrective maintenance to remain operational, and consuming more electricity than newer, more energy efficient units. This project consists of a five-year, phased replacement of outdated HVAC infrastructure with certified energy efficient equipment, and will address regulatory changes in EPA guidelines, which are phasing out the refrigerants currently used in most of Metropolitan's HVAC systems. The project will also (1) modernize HVAC controllers into a cohesive building automation network to allow Metropolitan staff to more efficiently respond to HVAC interruptions, more quickly troubleshoot problems, provide early detection of problems before catastrophic failures, and ensure optimal performance of the HVAC systems; and (2) upgrade existing or install new air filtration systems with high efficiency particulate air (HEPA) filtration and germicidal equipment such as UV disinfection to occupied buildings to provide enhanced protection from airborne viral and bacterial particulates.

### **La Verne Conveyance and Distribution Region Service Center Building**

The La Verne Conveyance and Distribution Team currently occupies shop facilities scattered throughout the Weymouth plant. This project will construct a new centralized service center facility. The facility will include a central meeting area, computer room, offices, kitchen, restrooms, and shop areas. Shops will include welding, machining, coating, valve rehabilitation, and storage.

### **La Verne Field Engineering Building Replacement**

This project provides a new Field Engineering Building to replace the existing one, which does not meet Metropolitan's current seismic building standards, and is limited in function due to HVAC deficiencies and workspace constraints. The Field Engineering Building, located at Metropolitan's La Verne Facility, was designed and built over 52 years ago in accordance with building codes current at that time.

This project will include a detailed value engineering study to confirm the recommended approach to construct a new building in lieu of retrofits to the existing structure. This project will also include a comprehensive siting study to ensure that the proposed footprint of the new building does not interfere with the current and future requirements of Metropolitan's La Verne Facility. This project will enhance infrastructure safety, security, and resiliency.

### **La Verne Shops Improvements**

The La Verne Shops are located on the grounds of the Weymouth plant and have been in service since 1941. The shops were expanded in the 1960s, and were expanded again in the 1980s to support a major rehabilitation of the pumps along the CRA.

A shop modernization program was started in 2002, and included building expansions and upgrades, and shop equipment replacement or refurbishment. Most of the shop equipment is 29 to 39 years old, with a few pieces close to 49 years old, and a 20-year-plan to replace and refurbish the shop equipment has been developed. The building expansions and upgrades included expanding the existing shop buildings, upgrading portions of the existing buildings, and replacing and refurbishing shop equipment. The first four stages of this project are complete, which included building expansion and refurbishment/replacement of most of the equipment.

The fifth and sixth stages focus on the procurement and installation of new fabrication and machine shop equipment, including a hydraulic shear, hydraulic press brake, waterjet cutting system, horizontal band saw, and vertical machining center. This new equipment will replace existing equipment that is up to 37 years old and is not viable to refurbish. These stages will also include refurbishment of various remaining existing machines; safety upgrades to roof ladders and walkways; and installation of new electrical circuit, unit power center for an uninterruptible power supply, ductbanks for various utilities, shop heaters, air compressors, various utilities, and other appurtenances to support the shop operations.

### **La Verne Support Buildings Seismic Improvements**

As part of Metropolitan's seismic upgrade program, a rapid evaluation was conducted and identified seismic deficiencies in Weymouth Softener Buildings Nos. 1, 2, and 3, Weymouth Central Stores Storage/Paint Shop - Building 32/32A, and the Weymouth General Storage Building - Building No. 33. This project will evaluate future uses of these structures, construct improvements to address these deficiencies as well as, should it provide value to the District, improve non-structural features in each building such as roofing, insulation, and other building characteristics.

### **La Verne Water Quality Laboratory Building Upgrades**

Metropolitan's Water Quality Laboratory at the La Verne site was constructed in two phases, with the original portion of the building being constructed nearly 40 years ago. While the building was constructed in accordance with the building codes at the time of construction, industry knowledge of earthquakes and seismic design has greatly improved over the years, leading to the development of more stringent, modern seismic codes for this type of facility. In addition, future regulations and newly identified contaminants of emerging concern such as per- and polyfluoroalkyl substances and microplastics, will require dedicated facilities such as clean-rooms and properly separated work areas to avoid cross-contamination, which are not available within the current open concept building configuration.

This project will provide seismic upgrades, a building expansion and functional layout improvements such as laboratory and office space reconfiguration, lab equipment replacements, accessibility improvements, HVAC and roof replacements, and other related building improvements necessary, including technology components to renovate and upgrade the building to support Metropolitan to meet current and future water quality regulations.

### **Lake Mathews Aboveground Storage Tank Replacement**

The Lake Mathews existing diesel aboveground storage tank does not conform to current regulations and needs to be removed from service. In its present condition, the tank cannot be operated in a safe manner. The Lake Mathews Spill Prevention Countermeasure and Control Plan cannot be certified if the diesel aboveground storage tank remains in service. This project will replace the existing 10,000-gallon diesel fuel aboveground storage tank (AST) with its associated containment dike, venting, fill system, level monitoring, fuel dispensing system, catwalk, and continuous release detection system with a new 6,000-gallon AST system, and design and construct a roof over the storage tank containment and unloading area. This project will also install an eyewash station.

### **Lake Mathews Facility Office Modernization**

Lake Mathews was constructed in 1940. Since the 1960s, the facility has been modified and is centrally used for various disciplines. It contains multiple buildings which house essential large equipment related to water operations. Moreover, the facility has become more critical with the additions of the administration and data center buildings. Most of the Lake Mathews buildings are reclaimed buildings left over from the contractor who completed the second lift of the Lake Mathews dam in 1961. The existing buildings are subject to weather intrusion and have over-extended their useful life. This project will improve, centralize, and modernize the staffing buildings by constructing a new office complex at the Lake Mathews Facility.

### **Metropolitan Water District Headquarters Museum**

The Metropolitan Water District of Southern California was formed in 1928 to provide a reliable and sustainable water source to the rapidly growing population of Southern California. In 2028, Metropolitan will celebrate its 100th Anniversary, and this proposal outlines the construction of a museum to commemorate this important milestone in the organization's history. This project will identify a potential museum site at the headquarters, select objects, imagery, and artifacts to display in the museum and construct and install exhibits, displays, walkways, security, and lighting.

### **New La Verne Warehouse**

The Central Stores Warehouse at La Verne is Metropolitan's main warehouse for storing materials, supplies and equipment used by field personnel to support Metropolitan's operations. It is comprised of four main buildings (Buildings 30, 31, 32A, and 33). A recently completed seismic evaluation found that the buildings may be damaged from a maximum credible earthquake. The cost to retrofit all four buildings is prohibitive. In addition, the buildings lack the storage space necessary to house Metropolitan's materials, supplies and equipment. The buildings are also not suitable to safely store adequate supplies of medical grade supplies and essential commodities for emergency preparedness, such as for pandemics. Furthermore, they lack equipment to handle large assets like the large-diameter specialty valves. This project will construct a new warehouse, which will provide approximately 55,000 square feet of indoor floor space with approximately 30,000 square feet of outdoor storage yard covered under canopies. This project will also demolish Buildings 30 and 31 and restore and seismically retrofit Buildings 32A and 33 to meet the current building code. The new warehouse and retrofitted buildings will support Metropolitan's ongoing operations and maintenance, capital construction efforts, and emergency preparedness.

### **Orange County Region Service Center Storage Yard**

The existing Orange County Region Service Center Storage Yard storage area is gravel-based and is challenging to use in its current condition. Metropolitan's maintenance team is placing heavy equipment on the crushed aggregate base and moving it around. In doing so, the gravel needs to be spread out and maintained to ensure even distribution. Furthermore, the equipment being used is not rated for all-terrain use, causing it to get stuck in the gravel and increasing the need to maintain the equipment. Placing a concrete pad will ensure less maintenance for the area and the equipment. The storage area also stores valves and other materials needed for operations and maintenance needs. The material is subject to the elements that cause wear on them before they are installed. This project constructs a concrete pad and installs a canopy at the Orange County Service Center.

### **Power Switch Yard Protection**

Several of Metropolitan's switch yard facilities fall under North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) oversight and must adhere to infrastructure regulations set by these agencies. This project will install ballistic barriers and chain link roofs at all power switch yards throughout Metropolitan to protect equipment from projectiles and drone attacks.

### **Security System Upgrade**

The electronic security system is the backbone of Metropolitan's physical security system. Studies indicate that replacement of the 17-year-old system is not yet required; however, incremental upgrades are needed to extend the life of the system. Work includes hardware and software upgrades to network controllers, computer servers, card readers, and the video management system.

### **System-wide Paving & Roof Replacements**

Similar to infrastructure throughout Metropolitan, pavements and roofs deteriorate over time due to wear and tear from use, weathering and precipitation. The planned pavement and roofing rehabilitation projects will encompass water treatment plants, pumping plants, various maintenance facilities and access roads within Metropolitan's service areas. These projects will also improve the subgrade and drainage systems as required.

This project will allow various paving and roof replacements throughout Metropolitan's facilities to be authorized by the General Manager similar to the Minor Capital Projects Program. Establishing a project to fund a limited amount of paving and roof replacement on an annual basis will allow these needed replacement projects to proceed expeditiously.

### **Western Region Security System Upgrade – Area 10**

This project will replace the existing security system with new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at Sacramento Headquarters.

**Wildfire Smoke Control at Eagle Rock Operations Control Center, Mills, Skinner, and Weymouth Water Treatment Plants**

During recent wildfire events, it was observed that existing heating, ventilating, and air conditioning (HVAC) systems do not meet the objective of reliably maintaining air quality in the control rooms that must be staffed at all times. This project will improve air quality at Eagle Rock Operations Control Center (OCC), Mills, Skinner, and Weymouth plants control rooms to ensure these facilities can be reliably operated during poor outdoor air quality periods such as wildfires. This project will install a dedicated high-efficiency HVAC system for control rooms and provide other appurtenances to ensure safety of staff during wildfire events.

## Prestressed Concrete Cylinder Pipe (PCCP) Program

Fiscal Year 2024/25 Estimate: \$16.9 million

Fiscal Year 2025/26 Estimate: \$49.6 million

**Program Information:** The PCCP Program is composed of projects to refurbish or upgrade Metropolitan’s PCCP feeders to maintain water deliveries without unplanned shutdowns.

### Accomplishments for FY 2022/23 and FY 2023/24

- New projects initiated:
  - Allen-McColloch Pipeline Urgent Relining – 2023
  - Allen-McColloch Pipeline Urgent Relining – 2024
  - Electromagnetic Inspections of PCCP Lines - Fifth Cycle
  - Foothill Feeder Acoustic Fiber Optic PCCP Monitoring System
  - Second Lower Feeder Reach 3B
  - Sepulveda Feeder PCCP Urgent Relining at Stations 569+40, 760+33, and 921+69
- Major milestones achieved or estimated to be achieved:
  - Allen-McColloch Pipeline PCCP Rehabilitation – preliminary design completed
  - Allen-McColloch Pipeline Urgent Relining – 2023 – design and construction to be completed
  - Allen-McColloch Pipeline Urgent Relining – 2024 – design and construction to be started
  - Electromagnetic Inspection of PPCP Lines – Fifth Cycle – pipeline inspection agreement authorized
  - Electromagnetic Inspections of PCCP Lines – Fourth Cycle – pipeline inspections completed
  - Lake Mathews PCCP Rehabilitation Valve Storage Building – construction to be completed
  - Second Lower Feeder PCCP Rehabilitation Reach 3A – construction completed
  - Second Lower Feeder PCCP Rehabilitation Reach 3B – final design completed and construction started
  - Sepulveda Feeder PCCP Urgent Relining at Stations 569+40, 760+33, and 921+69 – final design completed and construction to be completed

### Objectives for FYs 2024/25 and 2025/26

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Electromagnetic Inspections of PCCP Lines	\$ 8,900,000	Ongoing	Continue inspections in conjunction with pipeline shutdowns
Second Lower Feeder PCCP Rehabilitation - Reach 3B	\$ 105,600,000	2025	Complete construction
Sepulveda Feeder PCCP Rehabilitation Reach 2	\$ 94,800,000	2026	Complete final design and begin construction

## Allen-McColloch Pipeline Project Group

### **Allen-McColloch Pipeline PCCP Rehabilitation**

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe or with other materials such as carbon fiber reinforced polymer (CFRP) designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Allen-McColloch Pipeline to as close as possible to a “Like New” condition. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of all valves associated with the pipeline, including but not limited to sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

## Calabasas Feeder Project Group

### **Calabasas Feeder PCCP Rehabilitation**

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe or with other materials such as carbon fiber reinforced polymer (CFRP) designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Calabasas Feeder to “Like New” condition. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

## Rialto Feeder Project Group

### **Rialto Pipeline PCCP Rehabilitation**

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe or with other materials such as carbon fiber reinforced polymer (CFRP) designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Rialto Pipeline to “Like New” condition. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

## Second Lower Feeder Project Group

### **Second Lower Feeder PCCP Rehabilitation**

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe or with other materials such as carbon fiber reinforced polymer (CFRP) designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Second Lower Feeder to “Like New” condition. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating, installation of new isolation valve structures, construction of bypasses, and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.



## Sepulveda Feeder Project Group

### **Sepulveda Feeder PCCP Rehabilitation**

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe or with other materials such as carbon fiber reinforced polymer (CFRP) designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line. The project includes restoring the Sepulveda Feeder to “Like New” condition. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all pressure control structures, master meters, and meter structures.

## PCCP - Other Project Group

### **Electromagnetic Inspections of PCCP Lines – Fifth Cycle**

All PCCP lines within the distribution system are inspected every three to seven years. The frequency is based on the condition and history of repairs for each feeder. Four cycles of electromagnetic testing have been completed to date on Metropolitan’s PCCP feeders. This project will perform the fifth cycle of inspections over the six-year period. Planned activities for the inspections include: scheduling and coordination of shutdowns; conducting the electromagnetic inspections; conducting internal visual inspections; shutting down and dewatering the feeders and returning them to service; analyzing the inspection results; and preparing comprehensive inspection reports.

### **Foothill Feeder Acoustic Fiber Optic PCCP Monitoring System**

Prestressed concrete cylinder pipe (PCCP) is well-known in the waterworks industry to be at risk of sudden failure from loss of strength due to the breaking of pre-stressed wires. Currently, staff must dewater the Foothill Feeder to inspect the pipeline’s condition manually. The proposed project installs an innovative acoustic fiber optic system that will provide continuous condition monitoring over approximately 11 miles of the Foothill Feeder without having to dewater and enter the pipeline, along with other associated monitoring work.

### **West Valley Feeder No. 1 PCCP Rehabilitation**

An electromagnetic inspection conducted in April 2021 identified an increase in wire breaks since the previous 2014 inspection of the 54-inch Prestressed Concrete Cylinder Pipe (PCCP) portion of the West Valley Feeder No. 1. The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line and replacing any identified damaged lining in non-PCCP segments. The project includes restoring the West Valley Feeder No. 1 from approximately Station 1277+27.68 to the De Soto Avenue Sectionalizing Structure at Station 1290+16.70 to “as like new condition.”

## Water Treatment Plants Program

Fiscal Year 2024/25 Estimate: \$57.1 million

Fiscal Year 2025/26 Estimate: \$65.7 million

**Program Information:** *The Water Treatment Plants Program is comprised of projects to replace or refurbish facilities and components at Metropolitan's five water treatment plants and chlorine unloading facility to continue to reliably meet treated water demands.*

### Accomplishments for FY 2024/25 and FY 2025/26

#### Diemer Plant

- New projects initiated:
  - Diemer Helicopter Hydrant Facility
  - Western Region Security Camera System Upgrade – Area 6
- Major milestones achieved or estimated to be achieved:
  - Diemer Filter Rehabilitation – preliminary design completed

#### Jensen Plant

- New projects initiated:
  - Jensen Administration Building Column Panel Replacement
  - Jensen Electrical Upgrades – Stage 3
  - Jensen Sulfuric Acid Tank Farm Rehabilitation
- Major milestones achieved or estimated to be achieved:
  - Jensen Site Security Upgrade – final design to be completed
  - Jensen Administration Building Column Panel Replacement – construction to be completed
  - Jensen Vehicle Maintenance Building Roof Replacement – construction completed
  - Jensen Ozone Critical Components Upgrade – Stage 1 – construction to be completed

#### Mills Plant

- New projects initiated:
  - Eastern Region Security Camera System Upgrade – Area 2
- Major milestones achieved or estimated to be achieved:
  - Mills Ozone PLC Control and Communication Equipment Upgrade – construction completed
  - Mills Maintenance Building Roof Replacement – construction to be completed
  - Mills Modules 3 & 4 Flash Mix Chemical Containment Upgrades – construction completed

### Skinner Plant

- New projects initiated:
  - Eastern Region Security Camera System Upgrade – Area 1
  - Skinner Area Paving– construction completed
  - Skinner Sodium Hypochlorite Tank Replacement
  - Skinner Sulfuric Acid Transfer Line Rehabilitation
- Major milestones achieved or estimated to be achieved:
  - Skinner Ozone Contactors 1-2 and Influent Channel Concrete Refurbishment – construction completed

### Weymouth Plant

- New projects initiated
  - Western Region Security Camera System Upgrade – Area 8
- Major milestones achieved or estimated to be achieved:
  - Weymouth Administration Building Upgrades – preliminary design completed
  - Weymouth Wheeler Gate Security Improvements – preliminary design completed
  - Weymouth Hazardous Waste Staging and Containment Facility – final design completed

### Water Treatment - General

- New projects initiated
  - CUF Dechlorination System Upgrade

## Objectives for FYs 2024/25 and 2025/26

<b>Project</b>	<b>Total Project Estimate</b>	<b>Estimated Construction Completion</b>	<b>Major Milestones</b>
Diemer Chemical Feed Systems Improvements	\$ 17,700,000	2027	Complete design
Diemer Filter Rehabilitation	\$ 84,300,000	2027	Complete design
Diemer Helicopter Hydrant Facility	\$ 1,000,000	2025	Complete construction
Diemer Power and Distribution Panel Upgrade	\$ 1,300,000	2026	Complete construction
Jensen Electrical Upgrades – Stage 3	\$ 77,000,000	2028	Complete Stage 3 preliminary design
Jensen Modules 2 & 3 Basin Solids Removal System Rehabilitation	\$ 34,800,000	2029	Complete preliminary design
Jensen Site Security Upgrade	\$ 10,900,000	2025	Complete construction
Jensen Solids Mechanical Dewatering Facility	\$ 48,400,000	2029	Complete design
Mills Basin Solids Removal System Rehabilitation	\$ 8,900,000	2028	Complete preliminary design
Mills Electrical Upgrades - Stage 2	\$ 16,800,000	2025	Complete construction of Stage 2
Mills Fluorosilicic Acid Tank Replacement	\$ 3,100,000	2026	Complete construction
Mills Perimeter Security and Erosion Control Improvements	\$ 10,200,000	2027	Begin construction
Skinner Fluorosilicic Acid Tank Replacement	\$ 1,300,000	2027	Begin construction
Skinner Sodium Hypochlorite Tank Farm Rehabilitation	\$ 1,500,000	2027	Begin construction
Skinner Ozone Contactor Roof Elastomeric Coating	\$ 2,900,000	2026	Complete construction
Skinner Sulfuric Acid Transfer Line Rehabilitation	\$ 1,700,000	2027	Complete design
Weymouth Administration Building Upgrades	\$ 33,600,000	2027	Complete design
Weymouth Basin 5-8 and Filter Building No. 2 Rehabilitation	\$ 116,100,000	2025	Complete construction

Project	Total Project Estimate	Estimated Construction Completion	Major Milestones
Weymouth Filter Valve Replacement	\$ 16,700,000	2028	Complete design of filter valve replacement for Filter Building No. 1
Weymouth Hazardous Waste Staging and Containment	\$ 3,200,000	2025	Complete construction

## Diemer Project Group

### Diemer Administration Building HVAC Replacement

The existing HVAC system in the Diemer plant's Administration Building consists of two 20-ton, chilled and hot water coiled air-handling units, which maintain multi-zone work-space environments on both floors. The 59-year-old units are beyond their expected operating life and have caused issues with regular maintenance activities. This project will replace the existing HVAC units with new energy efficient units and upgrade the temperature control system for the building. The project will also replace chiller, boiler, compressor, and make ductwork modifications. Seismic anchorage of the equipment will be incorporated to meet the current building code.

### Diemer Basin 8 Slope Toe Rehabilitation

At the Diemer plant, a relatively small mass of soil near the toe of the fill downslope north of Basin 8 was found to have mobilized, slumped, and displaced downslope. Since Basin 8 is within the State of California Department of Water Resources Division of Safety of Dams (DSOD)'s jurisdiction, Metropolitan has coordinated with DSOD an action plan to stabilize the slope toe and rehabilitate the slump failure. This project will implement DSOD recommended rehabilitation work at the top of the slope supporting Basin 8, which includes slope benching completed with engineered backfill, strengthening of the upper Basin 8 slope, and drainage improvements along Basin 8 slope.

### Diemer Chemical Feed System Improvements

The chemical feed equipment for ammonia, alum/ferric chloride, sodium hydroxide, fluorosilicic acid, liquid polymer, and dry polymer at the Diemer plant has aged and its reliability has deteriorated over the years. Most equipment is over 24 years old and has experienced failures. Some of the repair parts are no longer manufactured and are difficult to obtain. Loss of chemical feed or inadequate feeding capacity could disrupt plant operations. In addition, design criteria for some of the chemicals have changed and the existing equipment is unable to cover the required range for chemical feed. This project will replace the worn-out feed equipment and optimize the system design to improve system reliability and to protect treated water quality.

A canopy over the caustic soda tank farm and a new fluoride tank farm is needed to improve operations at the Diemer plant. Heat tracing around caustic feed lines is required to feed 50% caustic soda during the winter months. However, rainwater trapped within the chemical containment area could submerge the heat tracing wires. A canopy will minimize rainwater accumulation within the containment area and eliminate electrical hazards. The plant's fluoride tanks have reached the end of their service life and lack access for inspection and maintenance. This project will install a canopy over the existing caustic soda feed equipment; and replace the two fluoride storage tanks, associated feed equipment, and the roof over the fluoride tank farm.

### **Diemer Chemical Tank Farm Rehabilitation**

The Diemer plant uses tanks to store the chemicals used during the treatment process. Most chemical tank farms were installed or rehabilitated between 2000 and 2010. Polymer and fiber reinforced plastic (FRP) tanks are past the end of the design life of 10 years. The expected life for steel tanks can be several decades long, but once corrosion begins, it rapidly worsens when the chemical and metal are exposed to air. Many of the Diemer plant chemical storage tanks and associated equipment are near or have already reached the end of their life. Changes in water use and related flows outside of the original design intent shorten the expected life of the equipment. This project will rehabilitate the chemical storage tanks, equipment, and support infrastructure located within the vicinity chemical tank farms at the Diemer plant.

### **Diemer Erosion Control Improvements**

The Diemer plant is located on the top of a hill in the city of Yorba Linda and consists of numerous fill slopes. Due to the large water-bearing structures at the Diemer plant, some of these slopes are within the State of California Department of Water Resources Division of Safety of Dams (DSOD)'s jurisdiction. Some slopes within the Diemer plant have eroded and are in need of rehabilitation. This project will provide site improvements for grading, drainage, and erosion/sediment control to erosion-damaged slopes at the plant site.

### **Diemer Filter Rehabilitation**

The Diemer plant has 48 independent filter units that are normally operated from the main control room, although they also have the capability to be operated locally if needed. Over the life of the Diemer plant, staff has performed regular maintenance on the filters to support reliable plant operation. However, as regulations and source water conditions have changed, filter performance reliability has decreased. Metropolitan's Water Quality recently developed recommendations for the rehabilitation of all Weymouth filters, including reconfiguration of underdrains, media, troughs and surface wash systems. This project will rehabilitate all of the Diemer plant's filters to improve their performance and enhance treatment plant reliability. The planned rehabilitation work includes replacing the filter media with optimized size and depth specifications; replacing the surface wash system with larger piping and improved flow configuration; replacing the underdrains; modifying flow distribution flumes; and raising and replacing the existing troughs to accommodate a higher depth of filter media.

### **Diemer Filter Valve Actuator Refurbishment**

As part of the Diemer plant's filter valve rehabilitation work completed in recent years, the existing SMB-00 actuators from the plant's west side filter valves were removed. These actuators were installed in 1969 and have components which are still being manufactured, and they are in satisfactory condition for continued operation. To extend their service life, some of their parts need to be refurbished or replaced with parts provided by the original equipment manufacturer (OEM). This project will refurbish the 131 actuators removed from the Diemer plant's west filter valves. Once refurbished by the OEM, the actuators will return to the Diemer plant for installation onto the recently installed east valves. This project will also implement needed improvements for actuator installation, including replacement of the transformer in control consoles to power space heaters with 120V, installation of dedicated heaters on transformer, and upgrades to control consoles with local readouts, gauges, push buttons, to match the recently completed improvements at the Diemer plant's west side filters.

### **Diemer Helicopter Hydrant Facility**

In November 2008, the Freeway Complex Fire burned westward from Corona past the Diemer plant. Slopes on the east, north, and west sides of the plant were burned, which prompted the Orange County Fire Authority (OCFA) to classify the Diemer site as a high fire hazard risk area. Metropolitan continuously implements feasible initiatives to enhance safety and reduce the risk of damage or disruption to plant operations in the event of fire, in coordination with the OCFA. This project will design and construct a new helicopter hydrant facility at the Diemer plant site, including an engineered water tank system to allow water-dropping helicopters to fill up with water while the helicopters are in the air during a fire event, site preparation and installation of a premanufactured tank with a concrete tank foundation, a helicopter pad, and other related infrastructure to operate the hydrant tank.

### **Diemer Industrial and Potable Water System Upgrades**

The Diemer plant uses raw, industrial, and potable water sources to support the treatment processes throughout the plant. However, raw water is not ideal to use at the filter inlet since it bypasses the ozonation, flocculation, and sedimentation stages of the treatment process. Industrial water is used as an additional water source for chlorine ejectors, power generator cooling, belt presses, and hose bibs in the contactor galleries on the roofs of the ozone and contactor buildings. The industrial water system consists of a network of piping, valves, and pumps installed throughout the plant. The current industrial water system is undersized and unreliable. When an industrial water pump is in service, it must operate at over 95 percent speed to maintain pressure. The Diemer plant cannot perform simultaneous tasks that require industrial water, causing it to be an unreliable source. This project will remove the raw water system at the filter influent chlorine ejectors and upgrade the industrial and potable water systems to support the treatment processes throughout the Diemer plant. The work will include replacing the filter-influent chlorine ejectors' raw water system with potable water. This includes demolishing the raw water system and installing new piping, pipe supports, valves, pumps, and appurtenant equipment.

### **Diemer Ozone Network Upgrade**

Ozone is the primary disinfectant at Metropolitan's water treatment plants. At the Diemer plant, the programmable logic controllers (PLCs), which control the ozone process, have exceeded their service lives, are discontinued, and the existing firmware has security flaws. This project will replace the PLC processors, upgrade the network modules to ethernet, modify the existing fiber optic cable infrastructure to support the new district standard ethernet, and other appurtenances necessary to complete the upgrade. The existing PLC configuration will be migrated to the new processors and the operations manual will be updated to reflect the associated changes.

### **Diemer Power and Distribution Panel Upgrades**

Power and distribution panels that were installed during the original Diemer plant construction, are more than 59 years old. These panels, circuit breakers, and feeder conductors (wires that feed the panels) have exceeded their normal life span and have deteriorated. This project will upgrade the aged electrical equipment to meet the current electrical code and enhance the plant's reliability. The improvements will allow the electrical equipment to be taken out of service for preventive maintenance, replacement, and testing in a safe working condition.

### **Diemer Sewer Metering Upgrades**

The Diemer plant has two metered sewer discharge points, one located at the main entrance, and the second one on the south slope. Diemer's current sewer flow meters do not use technology approved by Orange County Sanitation District (OCSD) and require frequent intervention to maintain performance. The new sanitation requirements specify enhanced metering functions, which the current meters lack. Upgrading the sewer metering system to a magnetic flow type is essential to comply with new OCSD permitting requirements, meet regulatory accuracy requirements, and enhance safety and metering reliability. This project will upgrade the Diemer plant's main and south sewer metering structures. Upgrades include the demolition of existing meters, modifications to piping and structures, and installation of new structures, flow meters, and associated equipment.

### **Diemer Turbidimeter Replacement**

The Diemer plant uses turbidimeters to monitor turbidity and comply with water quality regulatory compliance requirements. Most of the turbidity instrumentation in the Diemer plant is deployed at the filtration phase of the water treatment process. A dedicated turbidimeter is deployed at each of the 48 parallel filter units, which comprise the Diemer filtration phase of treatment. These turbidity indications are closely monitored, and the resulting data is subject to compliance requirements. Additional turbidity monitoring points include the plant influent and effluent, the settling basins, the reservoir, and the washwater reclamation plant. The existing turbidimeters were installed between 2009 and 2014 and are no longer supported by the original equipment manufacturer. This project will procure and replace obsolete turbidimeters, controllers, and appurtenant equipment at the Diemer plant to comply with regulatory requirements.

### **Diemer Washwater Reclamation Facilities Reliability Improvement**

Approximately 40 percent of Diemer plant's existing Washwater Reclamation Plant (WWRP) is constructed on long slender piles and earthen fill, which form a level surface at the top of a slope. Seismic rehabilitation is required to ensure reliability of the WWRP facility. In addition, submerged WWRP equipment is continually subjected to abrasive and corrosive operating conditions caused by the solids in the used filter backwash water. The WWRP's two identical treatment trains share a common influent channel and both must be removed from service during maintenance. This project will retrofit the WWRP with reliability improvements, including a new coal grit removal facility and new headworks to allow independent shut-down of each individual process trains. This project will add an L-shaped caisson wall to stabilize the seismically vulnerable fill portion of the pad. The project also includes modifications to the existing chemical feed system, sludge line, and utilities at the west slope.

### **Western Region Security System Upgrade - Area 6**

This project will replace the existing security system with a new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at the Diemer plant.

## **Jensen Project Group**

### **Jensen Administration Building Column Panel Replacement**

The structure of the Jensen plant administration building was strengthened in 2010 to withstand a major seismic event. During the seismic strengthening project, the eight columns which support a clerestory roof at the entrance of the building were reinforced and covered with glass fiber-reinforced concrete (GFRC) panels. These panels are made of a cement-based composite material, reinforced with alkali-resistant glass fibers. The GFRC panels have cracked due to weathering, expansion, and contraction caused by temperature fluctuations, and due to movement caused by seismic vibrations. While these cracks do not impact the structural integrity of the building, the GFRC panels require replacement to protect the steel columns from corrosion and maintain the appearance of the building entrance. This project will replace the GFRC panels with new panels that have an upgraded material specification that reduces the likelihood of future cracking, an increased strength requirement, and new panel connection details.

### **Jensen Aqua Ammonia Tank Farm Upgrades**

The Aqua Ammonia Tank Farm at Jensen is located on the west side of the plant near the Module 3 basins. This tank farm was constructed in 1998 and houses four chemical storage tanks. Aqueous ammonia is injected into the Combined Filter Effluent channel after chlorine injection to form chloramines. Metropolitan practices chloramination to meet federal and state water quality standards for the total trihalomethane maximum contaminant level. A seismic preliminary assessment recently conducted by Metropolitan staff, revealed that the steel moment frames and braced frame connections, including their lateral bracings, will not withstand a major earthquake. Further detailed seismic evaluation will be conducted to develop upgrade options. This project will upgrade the tank farm structural component to meet current seismic standards and retrofit the Jensen aqua ammonia feed system.

### **Jensen Buildings Fall Protection Improvements**

The Jensen buildings were built to meet current regulations at their time of construction. Temporary fall protection, tethers and safety harnesses are currently used to provide maintenance for the skylights on several of these buildings. This project will install permanent guard rails to enhance fall protection around building edges, skylights, and process areas.



### **Jensen Bull Creek Rehabilitation**

The Bull Creek channel located on the east side of the Jensen plant has suffered significant erosion from continued stormwater flow during the past wet seasons. This project will rehabilitate approximately 800 feet of the Bull Creek channel to prevent erosion through the use of biological and engineered solutions. The work includes installation of rip rap and slurry backfill along the channel, restoration of the damaged concrete liner on the channel sides, restoration of the broken apron next to the railroad bridge, and revegetation of native species to keep sediments in place and reduce erosion. In addition, a catch basin and other stormwater management infrastructure will be constructed along the San Fernando service road to the Jensen plant, to mitigate excessive erosion on the north bank of the Bull Creek.

### **Jensen Chemical Feed Improvements**

This project will improve several chemical feed systems at the Jensen plant and rehabilitate facilities to maintain treatment plant reliability. Currently at the Jensen plant, sulfuric acid is added to suppress the pH and control bromate formation and then caustic soda is added to reduce corrosion in the distribution system. This project will modify the chemical feed system by adding ammonia and chlorine upstream of the ozone contactor. This approach would significantly reduce the plant's usage of both sulfuric acid and caustic and reduce overall chemical costs, which is consistent with current water quality design criteria for bromate control. To efficiently implement the ammonia-chlorine process to control bromate formation, the existing caustic soda tank farm will be decommissioned and replaced with a new facility built specifically for adding caustic soda to the filtered water line. Rehabilitation work required for the sulfuric acid tank farm includes refurbishment of the sulfuric acid storage tanks and reconfiguration of the transfer piping and basket strainer to minimize clogging and facilitate chemical transfer between the tanks. Other improvements addressed include removal of the liquid polymer building and decommissioned tanks farms.

### **Jensen Chemical Tank Farm Rehabilitation**

The Jensen plant uses tanks to store the chemicals used during the treatment process. Losing a single tank would, at the minimum, reduce operational flexibility at a local level and put the plant at risk of violating water quality requirements. The Jensen chemical tank farms were installed or rehabilitated between the 1970s and 1990s. Polymer and fiber reinforced plastic (FRP) tanks are past the end of their design life of 10 years. For steel tanks, the expected life can be several decades long, but once corrosion begins, it rapidly worsens when the metal is exposed. The chemical storage tanks and associated equipment at Jensen are nearing, or have reached, the end of life. This project will rehabilitate the chemical storage tanks, equipment, and support infrastructure near the Jensen plant's chemical tank farms.

### **Jensen Chlorine System Rehabilitation**

The chlorination system at the Jensen plant was originally constructed in 1972 and upgraded in 2005. The existing system components are nearly 20 years old and have reached the end of their service life. Replacement parts for equipment such as the evaporator system have become increasingly challenging to source and will soon be unavailable. Additionally, the scrubber tanks leak at the access flanges and piping has deteriorated beyond repairs. The system also lacks appropriate metering to determine the inventory within the railcars upon their return to the manufacturer. This project will rehabilitate the Jensen chlorination and feed system components, and other appurtenances to reliably operate the chlorine system.

### **Jensen Control Room HVAC**

The Jensen plant was placed into service in 1972. During recent wildfire events, it was observed that existing HVAC systems do not meet the objective of reliably maintaining air quality in the control rooms that must be staffed at all times. This project will provide improved air quality in the Jensen control rooms to ensure that the plant can be reliably operated during periods of poor outdoor air quality. This project will: (1) install dedicated high-efficiency heating, ventilating, and air conditioning (HVAC) system for the main plant control room in the administration building and the secondary plant control room in the ozone generator building, and (2) seal the two control rooms from other portions of the building to reduce smoke or other air quality contaminants from entering the control room.

### **Jensen Electrical Upgrades**

The Jensen plant's electrical system was designed to meet then-current electrical codes when the plant was constructed over 44 years ago. The aging electrical equipment has deteriorated through long-term continuous use, lacks redundancy, and is difficult to maintain and repair. Much of the original equipment is underrated by current standards and does not have adequate short-circuit interrupting capability, which results in an elevated risk of unplanned outages and equipment damage. This project will replace aging equipment and provide needed redundancy for critical components of the plant's electrical system. To expedite completion of the most critical electrical upgrades while minimizing impacts to plant operations, the upgrade work has been prioritized and staged. The Stage 1 work is complete and improved the medium voltage switchgear on the western portion of the plant and provided electrical infrastructure for the Jensen Solar Power Plant. Stage 2 work is also complete and included upgrades to UPC-7, UPC-9, and their associated motor control centers to support critical process equipment such as the washwater pumps, service water pumps, washwater return pumps, filters, thickeners, sludge pumps, and ammonia facilities. Stage 3 improvements are underway, and will upgrade the remaining components of the electrical system on the eastern portion of the plant, including a geotechnical seismic analysis of the east side of the plant to determine areas of seismic vulnerability.

### **Jensen Entrance Improvements**

Both main Jensen plant gates at San Fernando and Balboa entrances need to be redesigned to improve security and traffic flow consistent with Metropolitan's other Treatment Plants. This project will enhance security of the Jensen plant's entrances. Project scope includes replacement of security gates; installation of traffic control devices to improve security at the entrance points of the Jensen plant; and installation of fire-resistant plants and irrigation along the west side of the plant.

### **Jensen Hazardous Waste Containment Facility**

The Jensen plant currently stores its hazardous waste in a storage area that was repurposed from a general equipment storage area. The existing site has inadequate storage space for the facilities' needs. In addition, the waste containment area roof covering does not provide adequate protection from the rain and sun. This project will replace and relocate the Jensen plant Hazardous Waste Consolidation Site (commonly known as 90-day storage).

### **Jensen Low Flow Capacity Improvements**

Due to persistent drought conditions and system-wide water conservation efforts to reduce State Project Water (SWP) usage, Metropolitan is implementing projects to reduce the minimum sustainable plant flow at Jensen. The existing infrastructure must be upgraded/modified to meet these turndown requirements, ensure reliable operation, and maintain regulatory compliance. If the treatment equipment and infrastructure are not upgraded/modified, the Jensen plant will not be able to reliably meet the low-flow treatment requirements, resulting in the need to utilize more SWP supplies than would otherwise be necessary. This project will upgrade critical components of the Jensen plant to reduce the minimum sustainable flow to below 90 cfs to support system-wide water conservation efforts during low SWP allocation years.

### **Jensen Maintenance and Machine Shop Facility**

At the Jensen plant, the mechanical team's workstations are immediately adjacent to machine shop equipment. During maintenance activities, team members are subject to loud noises, fumes from lubrication and machining activities, and flying chips and sparks from cutting operations. In addition, mechanical storage is currently spread between the basement at the administration building, portable shipping containers, and an open canopy. None of these areas provide adequate coverage and safe storage for replacement parts and maintenance equipment. This project will construct a new building to house electrical and mechanical staff shops, a new machine shop area, equipment storage, and a dedicated chlorine maintenance room.

### **Jensen Module 1 and Washwater Pump Rehabilitation**

Washwater pumps are used to pump water from the combined filter effluent to the washwater tanks. The tank water is then used to back wash filters. If washwater pumps are unavailable, the plant cannot perform filter backwashes that are necessary to maintain operation of the filtration process. Jensen's Module No. 1 washwater (WW) lift pumps were installed with the original plant construction and have been in service for 54 years. Inspection and testing has revealed significant corrosion in the pumps' housings, and diminished pump output. The pumps have reached the end of their useful life and should be rehabilitated. This project will rehabilitate or replace the Module No. 1 vertical turbine washwater lift pumps, modify the piping for the Module No. 1 service water and washwater lift pumps, replace the single-speed open motors with closed motors with VFDs or soft start function, and other appurtenances to reliably operate the service water and washwater systems.

### **Jensen Modules 2 and 3 Basin Solids Removal System Rehabilitation**

This project will rehabilitate Modules Nos. 2 and 3 traveling bridges and sedimentation basins at the Jensen plant to enhance solids removal efficiency. Planned work includes replacing the existing traveling bridge end-truck structure, drive system, rails, and racks; replacing suction pumps and flexible hoses; retrofitting the suction piping; replacing sludge line piping, rehabilitating/replacing launder gates and launders; upgrading the bridge control system and power supply; replacing the existing basin inlet gate actuators; recoating bridge trusses; replacing basin guardrails; and installing improvements to prevent bird nesting within the basin.

### **Jensen Ozone HVAC System Upgrade**

The current California Fire Code (CFC) requires the ozone generation building to be mechanically ventilated with no less than six air changes per hour (ACH). Additionally, it is the industry standard to provide 12 ACH during emergency operations. The HVAC system serving the ozone generation building consists of one air handling unit and six exhaust fans with a total airflow capacity that can provide 9.5 ACH. However, the existing HVAC system's regular operation is based on one air handling unit and three roof-mounted exhaust fans. The remaining three fans are off. This arrangement provides only 5 ACH, below the 6 ACH required by the current CFC. This project will rehabilitate the HVAC system serving the ozone generation building at the Jensen plant to ensure compliance with the current California Fire Code and meet industry standard for emergency operations.

### **Jensen Ozone PSU and Critical Component Upgrade**

Ozone is used as the primary disinfectant at Metropolitan's water treatment plants. At the Jensen plant, the critical systems associated with ozone generation have deteriorated or have become obsolete after 17 years of operation and need to be upgraded. This project will upgrade the units that provide power to the Jensen plant's ozone generators and will replace outdated components of other critical systems associated with the plant's ozone generation, which have reached the end of their service life, and are no longer supported by the original equipment manufacturer. The systems to be upgraded include the following areas: (1) power supply unit (PSU); (2) nitrogen supply system; (3) ozone destruct units; (4) dissolved ozone; (5) cooling water loop; (6) ozone generator dielectrics; (7) liquid oxygen vaporizers; and (8) other components of the ozone system. This project also will make modifications to re-purpose one existing PSU chiller as a backup HVAC chiller.

### **Jensen Ozone System Rehabilitation**

The ozone generation system at the Jensen plant has been operational since 2005 to serve as the primary disinfectant, aiming to minimize the production of disinfection by-products (DBP). Several crucial components of the ozone generation system are nearing or have surpassed the end of their useful life. This project will upgrade critical components of the ozone system at the Jensen plant to address aging infrastructure and control system improvements.

### **Jensen Raw Water Emergency Bypass**

The Jensen plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Jensen plant.

### **Jensen Reservoir Bypass Gate Refurbishment**

The Jensen plant's existing reservoir bypass gates were installed in 1972 and allow the reservoirs to be isolated in case of water quality issues. The bypass gates are corroded and are currently inoperable because portions of the bronze bearings are degraded and missing. This project will enhance infrastructure safety, security, and resiliency, and will improve the reliability of water deliveries by replacing the reservoir bypass gates.

### **Jensen San Fernando Road Entrance Pavement Rehabilitation**

The existing pavement from the Jensen San Fernando entrance to bridge crossing Bull Creek has not been replaced in over 50 years and has become worn over time. Large parts of the pavements have deteriorated into potholes and ruts that can damage cars and trucks. Temporary pothole repairs have become a quarterly maintenance activity that is not sustainable due to the temporary nature of the repairs. This entrance is critical for truck deliveries and the inability for chemical trucks to use this road could impact chemical deliveries. This project will remove and replace approximately 30,000 square feet of deteriorating asphalt pavement at the Jensen plant's San Fernando Road entrance. Following installation of new asphalt, entrance road will be restriped, and new rubberized speed bumpers placed along newly paved area.

### **Jensen Seepage Water Collection Improvements and Beneficial Reuse**

There are currently two ways to dispose of seepage water at the Jensen plant: (1) discharge to the sewer system or (2) beneficial reuse through irrigation. The current plant-wide irrigation system is not tied into the seepage water system; only a minor portion of the irrigation system is tied in. The irrigation system is undersized for the amount of seepage water being used, creating the potential for environmental restrictions. Using the seepage water for the plant-wide irrigation system will increase the amount of seepage water that can be beneficially reused and provide a sustainable way to irrigate the landscape at Jensen. This project will install facilities needed to support the beneficial reuse of seepage water at the Jensen plant.

### **Jensen Site Security Upgrade**

The outdated Jensen plant's security system needs an upgrade to minimize risk of an intrusion. The existing camera system is undersized and aged. Planned upgrade includes installation of additional card readers and motion-activated lights in sensitive areas; replacement of existing aging security cameras with high resolution cameras; addition of new cameras, motion detection devices, and public announcement speakers to monitor the perimeter of the plant and deter intruders; replacement of security signage to meet current code; security upgrades of first floor windows; addition of horizontal structural support to strengthen the existing gates; and addition of new defensive barrier plants and trees to screen the west side of the Jensen plant.

### **Jensen Solids Mechanical Dewatering Facility**

Efficient recovery of water from residual solids is critical for the operation and efficiency of the Jensen plant, the current system consisting of solids thickeners on the Jensen site, and solids lagoons located at the adjacent Los Angeles Department of Water and Power (LADWP) site.

The solids thickeners play a key role in the recovery of water from the residual solids. During thickener operation, operators rotate valves daily to divert flow of residual solids to different thickeners. These valves leak and are difficult to access. This project will reconfigure Solids Pump Station No. 2 to allow better access to the valves; and upgrade the solids splitter vault to facilitate remote operation.

Metropolitan has an ongoing lagoon use agreement with LADWP, which allows for Metropolitan's use of four of the lagoons located at the Los Angeles Aqueduct Filtration Plant (LAAFP) to process solids generated and conveyed from the Jensen plant. Under this agreement, two of the lagoons can be used until October 1, 2062, and the other two until October 1, 2022. To reliably support the Jensen plant operation and provide operational flexibility during unfavorable source-water quality or higher water demand, it was recently determined that construction of two new lagoons to replace the two existing lagoons that must be returned to LADWP is not sufficient. This project will design and construct a new mechanical solids handling facility at the Jensen plant instead of constructing two new lagoons to replace the ones that must be returned to LADWP. This new mechanical facility will be sized to handle all of Jensen plant's solids handling needs when treating as much as 500 mgd.

### **Jensen Washwater Reclamation Plant Flocculator Rehabilitation**

The Jensen plant's washwater reclamation plant 2 (WWRP-2) was constructed during the plant expansion in 1995. WWRP-2 is the only reclamation plant currently operational at Jensen, and its two treatment trains (Sides 3 and 4) must be reliable at all times to support Jensen plant's capacity of 500 mgd. Rehabilitation work for the flocculator basins on Side 4 was completed in 2017. This project will provide similar rehabilitation of flocculator basins on Side 3 to maintain its reliability. The work will include replacing bearings and stuffing boxes, replacing wood components of the flocculator paddles and baffle walls, and rehabilitating other appurtenances to maintain the reliability of the plant at all times.

### **San Fernando Road Rail Crossing Rehabilitation**

The Jensen plant receives water treatment chemical supply by rail. Metropolitan's chlorine vendor is transitioning to heavier chemical railcars which require heavier gauge rails to meet Federal Railroad Administration regulations for hazardous chemical transportation requirements. This project will rehabilitate the deteriorated railroad crossing at San Fernando Road, upgrade the strength of the rails and turnout, add concrete crossing panels to handle heavy truck traffic, replace damaged asphalt, and install crossing arms and signage.

## **Mills Project Group**

### **Eastern Region Security System Upgrade – Area 2**

This project will replace the existing security system with a new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at the Mills plant and Etiwanda HEP/PCS.

### **Mills Basin Solids Removal System Rehabilitation**

Currently, the Mills plant removes solids from each sedimentation basin using a bridge-mounted siphon system and discharges the solids to the retention basins. However, the flow cannot be adequately controlled. As a result, excessive amounts of water are often siphoned to the retention basins, causing increased solids drying time and reduced retention basin capacity. This project will upgrade the traveling bridges' solids removal equipment and controls to improve the solids removal process at the Mills plant's Modules Nos. 3 and 4. The new equipment and controls will allow the plant to optimize its solids removal process by simultaneously reducing the amount of water removed from the basin and reducing excessive solids build-up in the basins.

### **Mills Chemical Tank Farms Rehabilitation**

The Mills plant uses tanks to store the chemicals used during the treatment process. Losing a single tank would, at the minimum, reduce operational flexibility at a local level and put the plant at risk of violating water quality requirements. The Mills chemical tank farms were installed or rehabilitated between the 1970s and 1990s. Polymer and fiber reinforced plastic (FRP) tanks are past the end of their design life of 10 years. For steel tanks, the expected life can be several decades long, but once corrosion begins, it rapidly worsens when the metal is exposed. The Mills chemical storage tanks and associated equipment are nearing or have reached the end of life. This project will rehabilitate the chemical storage tanks, equipment, and support infrastructure located near the chemical tank farms at the Mills plant.

### **Mills Electrical Upgrades**

The electrical system at the Mills plant has deteriorated through long-term use, is difficult to maintain and repair, and needs improved backup capability. Failure of a single electrical device could impact the treatment process. This project upgrades the electrical system with dual-power feeds to key process equipment to comply with current codes and industry practice, improve plant reliability, and enhance worker safety. The electrical upgrades at the Mills plant will be completed in three stages. Stage 1 is complete and included replacement of obsolete circuit breakers, expansion of the electrical building for UPC-9, installation of new air conditioning system, installation of MCCs and distribution of power feed to chemical feeds systems, washwater return pumps, modules 3 and 4 filter surface wash pumps, and improvement of power reliability for key process equipment. Stage 2 upgrades is underway and will add a second incoming 12 kV service from Riverside Public Utilities and upgrade the plant's main switchgear and standby generator switchgear. Stage 3 upgrades will install climate control systems and doors at two electrical buildings, modify electrical manholes, replace digital metering modules for all motor control centers, and add fiber optic cabling.

### **Mills Enhanced Bromate Control Facilities**

The Mills plant is currently using a temporary system built for bromate reduction. This system has been running successfully and has proven the effective use of chloramines in bromate control and the reduced operational costs over a wider range of influent water quality conditions. This project will replace the temporary feed, metering, monitoring, and injection (chlorine and ammonia) system with a permanent system which will incorporate new doubled-walled piping, double-wall containment, new flow metering, new chlorinators, new analyzers, and new ammonia feed tank. The full implementation of this project will significantly reduce the current operational costs of bromate control as well as provide greater control of bromate formation over a wide range of influent water quality conditions. The project also includes replacement of two existing chlorinators with new units for lower chlorine dosage control flexibility.

### **Mills Filter Valve Rehabilitation**

The Mills plant Modules 3 & 4 were constructed in 1996 and are utilized in coagulation, flocculation, sedimentation, and filtration. During the filtration process, water settles through the filter media and is then collected in the combined filter effluent channel and conveyed to the finish water reservoirs. Modules 3 & 4 have 32 biologically active filters (16 each). The filters are designed for high filtration flow rates while reducing turbidity to ensure a high-quality filtrate. The treatment effluent must also meet water quality regulatory compliance. These filters and their associated equipment are over 26 years old. Due to age and usage, the filter, drain, and backwash valves have corroded, leading to unscheduled maintenance and failures. This project rehabilitates the filter valve systems in Modules 3 & 4, including filter, backwash, drain valves, actuators, and associated equipment.

### **Mills Fluorosilicic Acid Tank Replacement**

The Mills plant relies on two 6,250-gallon cross-linked high-density polyethylene (HDPE) tanks for the storage of fluorosilicic acid. These tanks have a recommended service life of 10 years and have been in service since 2007. Recent inspections have identified leakage at the bolted connections of both tanks. This project will replace the fluorosilicic acid storage tanks with capacity of 7,900-gallon and improved mechanical properties to provide an expected service life of 20 years. The project will also replace coating in the containment area as necessary.

### **Mills Operations Building Upgrade**

The Mills Plant Operations Building was constructed as a one-story building in 1976, and a two-story annex was added in 1992. The building houses equipment and storage rooms, a small control room, a laboratory facility, a dedicated treatment plant control center, and office and meeting spaces. Due to the age of the building, the current infrastructure is obsolete and does not meet today's security standards. The building does not have smoke detection and fire alarm monitoring, and there are also no fire sprinklers installed. The HVAC software, controllers, and mechanical equipment are also obsolete, lacking any controls, and have no way for staff to access the programming. This project will upgrade the Mills Operations Building, including replacement of plumbing fixtures, restoration of damaged areas, replacing the HVAC systems to meet Title 24 with temperature monitoring and control, and upgrading security features to meet Metropolitan standards and Department of Homeland Security recommendations.

### **Mills Ozone Critical Components Upgrade**

Metropolitan's five water treatment plants use ozone as the primary disinfectant to reduce the formation of disinfection by-products (DBP) for compliance with the U.S. Environmental Protection Agency's Disinfectant/DBP rule. The Mills plant was the first treatment plant to incorporate ozone into the water treatment process. The ozone generation system at the Mills plant has operated since 2003, and several critical components of the system have exceeded their service life and are no longer supported by the original equipment manufacturer. Continued deterioration of the ozone system could require the plant to switch to chlorine as the primary disinfectant, which would increase the regulated disinfection by-products, trihalomethanes, and halo acetic acid levels. This project will upgrade the critical components of the ozone generation system at the Mills plant.

### **Mills Pavement Refurbishment**

The asphalt pavement and concrete joint sealants at the Mills plant have deteriorated over time or have been damaged by heavy equipment during the construction of capital improvement projects. Severely cracked asphalt and potholes increase the maintenance costs to repair District vehicles and may damage other service vehicles. Asphalt pavement typically has a service life of approximately 20 years. The asphalt in most areas needing rehabilitation is over 30 years old and has reached the end of its expected life. This project will remove, haul away, replace, re-strip, and improve deteriorating pavement areas of the Mills plant.

### **Mills Perimeter Security and Erosion Control Improvements**

The Mills plant has approximately 14,500 linear feet of perimeter fencing that is primarily a chain link with a height of six to eight feet. The fencing and several of the entry gates are deteriorating and may be vulnerable to security breaches. In addition, stormwater runoff has eroded an area on the southern boundary of the plant. This project will replace 7,700 feet of the existing fence with security fencing along the plant's southern, northern and western boundaries, replace existing guard shack and motorized sliding gate at the Barton Street entrance with motorized double swing gate with associated controls, replace three existing secondary gates with taller security gates with security cameras, and install one security camera at each of the sliding gates. Grading and erosion control improvements, such as installation of v-ditches and flow re-direction, will also be performed to prevent sediment from leaving the site. All improvements will be consistent with Mills plant's architectural design guidelines, and with Metropolitan's approach to facility security.

### **Mills Raw Water Emergency Bypass**

The Mills plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Mills plant.

## Skinner Project Group

### **Eastern Region Security System Upgrade – Area 1**

This project will replace the existing security system with a new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at the Skinner plant.

### **Skinner 480V Circuit Breakers Rehabilitation**

The Skinner plant's 480 volt (V) breakers protect equipment and personnel by cutting power to an electrical circuit when the circuit is overloaded or fails. They are a critical component of the electrical power supply system. Electrical lines, which include 480V circuit breakers, supply power to the ozonation facilities, the sulfuric acid tank farm, washwater reclamation plants, and peroxide tank farm. The circuit breakers are reaching the end of their life, and some mechanisms within the breakers are failing. Failing breakers would disrupt water treatment related to those systems. This project will refurbish or replace all existing 480V Eaton Magnum breakers and other appurtenances to keep the Skinner plant reliable.

### **Skinner Chemical Flow Meter Replacement**

The chemical flow meters at the Skinner plant were installed in 2007 with a plant-wide chemical system upgrade and chlorine building construction. The manufacturer no longer supports these flow meters. As a result, replacement parts are no longer available, significantly affecting the staff's ability to maintain each flow meter. The Skinner plant's chemical flow meters operate in real-time and report current chemical flow and feed rates to the SCADA system. The operators use flow meter readings to adjust the chemical dosages. This project will procure and install replacements for all remaining obsolete chemical flow meters within the Skinner plant.

### **Skinner Chemical Tank Farm Rehabilitation**

The Skinner plant uses tanks to store the chemicals used during the treatment process. Losing a single tank would, at the minimum, reduce operational flexibility at a local level and put the plant at risk of violating water quality requirements. The Skinner chemical tank farms were installed or rehabilitated between the 1970s and 1990s. Polymer and fiber reinforced plastic (FRP) tanks are past the end of their design life of 10 years. For steel tanks, the expected life can be several decades long, but once corrosion begins, it rapidly worsens when the metal is exposed. The Skinner chemical storage tanks and associated equipment are nearing or have reached the end of life. This project will rehabilitate the chemical storage tanks, equipment, and support infrastructure located near the chemical tank farms at the Skinner plant.

### **Skinner Electrical Equipment Building No. 3 Roof Upgrade**

The Skinner Electrical Equipment Building No. 3 was constructed during the second plant expansion in 1983 and houses two critical unit power centers, which power the chlorine building and two chemical tank farms. The building has a screw type metal roof whose life span ranges from 40 to 70 years. Recent inspections of the roof have identified several water leaks through the ceiling. This project will replace the roof of the building with a reliably leak free roof to improve reliability of Skinner's continued operations.

### **Skinner Fire Protection System Expansion**

The installation of a new Battery Energy Storage System (BESS) at the Skinner plant requires improvements to the plant's fire protection system. This project constructs a new fire hydrant, water pipes, and other improvements to provide a permanent fire protection water source for the Skinner's solar facility and BESS to comply with the fire codes.



### **Skinner Fluorosilicic Acid Tank Replacement**

Fluorosilicic acid tanks will be removed and replaced with two 8,200-gallon above-ground (Fluoride) tanks at the Skinner Plant. New extrusion-molded linear HOPE tanks will be installed. To minimize changes in the tank farm, the new tanks will match the dimensions and capacity of the existing tanks. Scope will include modification to the tank farm to provide access during construction and associated piping work to connect the new storage tanks to the existing chemically compatible PVDF tank farm piping. The new tanks will be mounted on the existing tank pads.

### **Skinner Ozone Contactor Roof Elastomeric Coating**

Leakage through cracks in Skinner plant's ozone roof deck was found in 2010. Cracks in the concrete roof deck can allow rain and nuisance water to be drawn down into the contactors which then mixes with the freshly ozonated water, creating a potential cross-connection. The water and air penetrating through the existing concrete roof decks exposes the rebar and structural steel in the decks, creating the potential of eventual structural failure to the roof decks. In addition, to keep the constant vacuum in the contactors, the Ozone Destruct Units have to work excessively which consumes additional electricity and affects the Destruct Units reliability and long-term life span. This project will abrasive blast, apply primer, and coat 61,000 square-feet of the Ozone Contactor Building concrete roof deck with an elastomeric coating to reduce potential structural damage and operational impact.

### **Skinner Ozone Critical Components Upgrades**

Metropolitan's five water treatment plants use ozone as the primary disinfectant to reduce the formation of disinfection by-products (DBP) for compliance with the U.S. Environmental Protection Agency's Disinfectant/DBP rule. Several critical components of the ozone generation system at the Skinner plant have exceeded their service life and are no longer supported by the original equipment manufacturer. Continued deterioration of the ozone system could require the plant to switch to chlorine as the primary disinfectant, which would increase the regulated disinfection by-products known as trihalomethanes and haloacetic acids. As a result, this could lead to a violation of drinking water regulations and requirements. This project will rehabilitate and upgrade the critical components of the ozone generation system at Skinner plant.

### **Skinner Plant 1 - Concrete Joint Sealant Replacement**

Concrete joint sealant throughout Skinner Plant 1 is cracked, delaminating, degraded, or missing as it has exceeded its service life. The degradation has allowed vegetation growth and moisture, sediment, and other outside contaminants to enter into and penetrate the concrete joints. This project will remove severely degraded concrete joint sealant throughout Plant 1, prepare and primer the existing joints, and replace with new concrete joint sealant.

### **Skinner Plant 1 and Ozone Lab Turbidimeter Replacement**

Turbidity meters are required for water quality reporting. The current turbidimeters at Skinner Plant 1 and the ozone laboratory were installed in 2014. The original equipment manufacturer no longer supports the current turbidimeter model and the plant will no longer be able to maintain the existing turbidimeters when spare part supplies run out. Regulatory requirements do not allow turbidity meters to be out of service for 72 hours. Long lead times may mean a reduction in plant capacity if a turbidity meter fails. This project will replace all remaining obsolete turbidimeters and controllers within the Skinner plant.

### **Skinner Plant 1 Filter Rehabilitation**

Skinner Plant 1 consists of three treatment modules each featuring flocculation, sedimentation, and filtration unit processes. Plant 1 was constructed in 1977 and is rated to treat flows as high as 240 mgd. Several filter system components in Plant 1 have become obsolete or have deteriorated over time. Filters are a necessary part of the treatment process. Failure of systems at a single filter will reduce the treatment capacity at Plant 1. This project will rehabilitate and upgrade the structure, equipment, and systems inside and adjacent to Skinner Plant 1 Filters.

### **Skinner Potable Pumps VFD Rehabilitation**

The Skinner plant's variable frequency drive (VFD) potable pumps are essential to multiple plant systems, including service water for required and critical treatment chemical injections, water for safety showers and facilities such as bathrooms and kitchens plant-wide, and surface washwater, which is needed every time a filter is backwashed. The VFD pumps were installed in 2006 and some of their parts, such as the circuitry and the capacitors, are expected to last about 10 to 15 years. The existing VFD pumps are now obsolete, and parts will eventually become unavailable. Of primary concern is that the control platform is proprietary, and plant staff cannot modify, repair, or adjust it. This project replaces all obsolete VFD pumps at the Skinner Plant.

### **Skinner Raw Water Emergency Bypass**

The Skinner plant is located within proximity of a number of faults, which are capable of generating large earthquakes. In the event of a large earthquake that can cause extensive damages to the plant and disables the water treatment capability, the plant does not have an emergency raw water bypass to deliver raw water under a boil water order in such a need were to occur. This project will improve resiliency against severe earthquake and enhance operational flexibility by constructing a raw water emergency bypass for the Skinner plant.

### **Skinner Sodium Hypochlorite Tank Replacement**

The Skinner plant relies on two cross-linked high-density polyethylene (HDPE) tanks for the storage of sodium hypochlorite, which serves as initial backup disinfection to ozone treatment and ensures that primary disinfection requirements are continuously met during unexpected events such as power outages. The tanks are 10 feet in diameter and 12 feet tall, with a storage capacity of 6,250 gallons each. The tanks have been in service since 2007 and have exceeded their recommended service life of 15 years. Recent inspections discovered leakage from a propagating crack in one of the two tanks, which was repaired on a temporary basis. This project will replace the two existing sodium hypochlorite tanks with tanks of the same size.

### **Skinner Sulfuric Acid Transfer Line Rehabilitation**

The sulfuric acid transfer system at the Skinner plant is used to move chemical between tanks and is also used to homogenize the chemical within individual tanks. This critical water treatment system recently experienced a leak in a transfer pipeline. This project will replace degraded transfer and recirculation pipes with pipe made from more appropriate material, and includes adding pressure relief valves and alarms, and other appurtenant work to improve the safety and reliability of the sulfuric acid transfer system.

### **Skinner Washwater Reclamation Plant Rehabilitation**

The Washwater Reclamation Plant 2 (WWRP-2) processes wash water from the treatment modules at Skinner Plant. It reclaims water used in filter backwashes and sedimentation basin sludge processing during treatment. Solids settle out of the water, and the reclaimed water is returned to the inlet control structure at the ozone contactor building to be put through the treatment process. The WWRP-2 is the oldest working reclamation plant on site. Much of the equipment and infrastructure has deteriorated with time. The WWRP-2 was modified during the Skinner ORP project around 2011. The flocculators were redesigned, and solids pumps were replaced. The solids pumps are now obsolete. The other equipment was not rehabilitated then and is 30 years old. This project rehabilitates the WWRP-2 at the Skinner Plant, including replacement of return wash pumps and improvements on associated systems in the area.

### **Skinner WTP Service Building 1 Rehabilitation**

Service Building 1 Rehabilitation will replace the sanitation facilities and roofing system and improve the staff work/meeting/lunch areas of the building. The scope includes the following: replace the roofing system; replace/upgrade all MEP and HVAC systems (mechanical; electrical; plumbing, heating, and air conditioning) to current building codes; upgrade IT requirements; comply with ADA requirements; improve employees shared facilities and offices (bathroom, locker rooms, break rooms, meeting rooms, cubicles); and abate all hazardous materials. Option to replace the building will be considered during the early phases of this project.

## Weymouth Project Group

### **Water Quality Demonstration Plant Rehabilitation**

The Water Quality Demonstration Plant (WQDP), formerly known as the Oxidation Demonstration Plant was placed into service in 1992 to perform demonstration-scale testing of ozone processes in advance of ozone retrofits at Metropolitan's water treatment plants. Since testing to support the ozone implementation was completed, this facility has been used continuously to determine the feasibility and application of emerging water treatment processes. The facility will continue to provide Metropolitan with a critical applied research platform to conduct numerous water quality studies before implementing full-scale treatment plant retrofits. The 5.5 MGD plant provides a demonstration-scale test facility that is approximately a 1:100 scale version of Metropolitan's full-scale plants and is needed to ensure that Metropolitan continues to meet all current and future drinking water regulations. Following 30 years of continuous use, many equipment items at the testing facility have deteriorated and become less reliable. This project will remove obsolete equipment; install new ozone generators, a new liquid oxygen (LOX) storage tank, and associated equipment; install variable frequency drives (VFDs) for the backwash pumps; rehabilitate secondary containment system for all chemicals used at the plant; and upgrade other electrical, mechanical, and control systems to make the plant operation more efficient.

### **Western Region Security System Upgrade – Area 8**

This project will replace the existing security system with a new enhanced system and install other security related equipment in this region to enhance the theft and trespassing detection and deterrence, lower maintenance costs, and better leverage the available bandwidth and data storage capabilities to provide better video feeds and recordings at the Weymouth plant and La Verne Water Quality Laboratory Building.

### **Weymouth Aqua Ammonia and Caustic Tank Farm Upgrades**

The Aqua Ammonia and Caustic Tank Farm at Weymouth is located on the northwest side of the plant. This tank farm was completed in 1997 and houses three aqua ammonia tanks and four caustic soda tanks. Aqueous ammonia is injected into the Combined Filter Effluent channel after chlorine to form chloramines to disinfect the water. Metropolitan practices chloramination to meet federal and state water quality standards for the maximum contaminant level of the total trihalomethane. Caustic soda is also injected into the Combined Filter Effluent channel to aid in preventing corrosion problems in the distribution system and to adjust and stabilize the pH. A rapid seismic evaluation recently conducted by Metropolitan staff, revealed that the steel moment frames and braced frame connections, including their lateral bracings, will not withstand a major earthquake. Further detailed seismic evaluation will be conducted to develop upgrade options. This project will upgrade the Weymouth Aqua Ammonia and Caustic Tank farm to meet current seismic standards. This project will also include mechanical, instrumentation, and electrical upgrades at the tank farm.

### **Weymouth Asphalt Refurbishment**

Over the past 80 years, the paved roads around the Weymouth plant have begun to deteriorate due to aging and surface wear. The roads are used to perform routine operation and maintenance activities and have received heavy use during rehabilitation efforts by Metropolitan forces and construction contractors. The deteriorated pavement exhibits raveling caused by wear and tear under traffic loads, surface deterioration, and fatigue and edge cracking caused by saturated subgrades from poor drainage and standing water. This project will remove the existing deteriorated paving, perform grading, install surface concrete gutters to improve drainage and asphalt paving to provide all-weather paved surfaces, and new pavement markings for the Weymouth plant.

### **Weymouth Administration Building Upgrades**

The Weymouth Administration Building has been in service since 1941 and is an essential facility that supports treatment plant operations. The building is comprised of two separate reinforced concrete structures: a two-story structure of approximately 15,200 square feet that houses offices, support spaces, restrooms, a demonstration room, and a water quality laboratory; and an adjacent, four-story structure (typically referred to as the Control Building) of approximately 20,000 square feet that houses the plant control room, chemical piping systems, lockers, conference rooms, and an equipment storage area. The plant's outlet conduit passes underneath the building. This project will strengthen the two structures that comprise the Administration Building to increase their capability to withstand a major earthquake and retain its functionality as an essential facility. Seismic upgrades include addition of micro-piles to supplement existing caisson footings, reinforcement of the walls for the plant's filter outlet channel; filling of below-ground openings with structural concrete, and addition of new shear walls and drag beams. Electrical, mechanical, and plumbing components impacted by the upgrades will also be reconfigured and modernized. The plant's water quality sampling laboratory and office space will also be updated and optimized where required. This project will also upgrade the Weymouth plant's natural gas system, which serves all buildings throughout Metropolitan's La Verne site, and install a new fire protection system consistent with California Fire Code Standards.

### **Weymouth Basins 1 & 2 Rehabilitation**

Basins Nos. 1 & 2 were built in 1939 as part of the original Weymouth plant construction. Each basin has a treatment capacity of 57.5 million gallons per day. These basins were originally designed to treat Colorado River Water (CRW). With the addition of State Project Water (SPW), the plant periodically requires higher coagulant dosages than CRW. As a result, the basins operated at a higher solids loading rate than the rate for which the basins were originally designed. This situation has dramatically increased run time on the basins' circular sludge rakes, which remove sludge from the basins. As originally designed, the sludge rakes only operated 1 to 2 hours every 4-7 days. Under current conditions, the sludge rakes are operated 6 to 12 hours each day which results in more frequent maintenance. These basins also have had issues with low solids-settling rates within the basins and high particle loading to the filters, or short-circuiting. The project includes the rehabilitation of the flocculation basins, settling basins, sludge collection equipment, baffling, and edge weirs.

### **Weymouth Basins 5 - 8 and Inlet Channel Refurbishment**

The basin inlet channels deliver water to each of the Weymouth plant's eight flocculation/sedimentation basins. The inlet channel serving Basins Nos. 1-4 is a concrete box culvert constructed in 1940, while the inlet channel serving Basins Nos. 5-8 was constructed in 1962. A structural assessment of the basin inlet channels has found that they should be upgraded to reduce the risk of damage from a major seismic event. Inspections have also identified that wooden baffle walls have deteriorated after repeated wet and dry cycles and have shown a propensity to support algae and microbial growth.

For the inlet channel serving Basins Nos. 1-4, this project will strengthen the conduit and will reconfigure the channel to provide additional flexibility. For the Basins Nos. 5-8 refurbishment, the project includes refurbishing the steel guides; replacing the drive and paddle shaft assemblies; replacing the baffle boards, supports, and paddle wheel boards in the flocculation section. The project also includes filling the interior corners of each cell with sloping concrete fillets to direct residual solids into the path of the rotating scrapers; refurbishing the structural members of the catwalks; replacing the sedimentation basin sludge collector rakes, drives, and pumps; replacing launders, launder isolation gates, and drains; installing utilities, handrails, and other work necessary to complete the basin refurbishment. Replacement of inlet channel gates for Basins 1 through 8 and inlet channel seismic structural upgrades for Basins 5 through 8 are also part of this project.

### **Weymouth Chemical Tank Farm Rehabilitation**

The Weymouth plant's chemical tank farms house the chemicals, feed equipment, and analytical instruments necessary to treat water. The chemical storage tanks and associated equipment are nearing the end of service life. Most chemical tank farms rehabilitated between 2000 and 2010. Polymer and fiber reinforced plastic (FRP) tanks are past the end of the design life of 10 years. The expected life for steel tanks can be several decades long, but once corrosion begins, it rapidly worsens when the chemical and metal are exposed to air. Losing a single tank would, at the minimum, reduce operational flexibility at a local level and put the plant at risk of violating water quality requirements if anything happened to the remaining tanks or the delivery. This project will rehabilitate the chemical storage tanks, equipment, and support infrastructure located within the vicinity chemical tank farms at Weymouth Plant.

### **Weymouth Chlorine Delivery Railroad Tracks Replacement**

The Weymouth plant receives chlorine deliveries via rail cars. The railroad spur to the Weymouth plant was originally installed in the 1930s to transport material and equipment for the construction of the Weymouth plant. This project will replace the track dedicated to the Weymouth plant, improve traffic control and intersections as necessary, and install new rail car scales.

### **Weymouth Chlorine Maintenance Shop Expansion**

With the completion of the Weymouth Chlorine System Upgrades project, the amount of equipment to maintain has increased, resulting in insufficient space in the existing shop to perform necessary maintenance and accommodate storage of equipment and spare parts. Storage cabinets and electrical panels have been added where desks and workspaces were located. Also, due to the space limitations, spare equipment is currently stored in the two storage bays, which poses the potential of the equipment being compromised in the event of a leak. This project will expand the existing Chlorine Maintenance Shop, including a room addition to ensure adequate working space and storage exist to address these space, storage, and maintenance needs to reliably maintain the chlorine equipment for the expanded chlorine process.

### **Weymouth Dry Polymer System Upgrade**

Cationic polymers are used as a coagulant aid for the washwater reclamation plant, and nonionic polymers are needed to meet filter performance regulations when treating high State Project Water (SPW) blends. Depending on the quality of the source water, both dry polymers may need to be applied simultaneously. However, the current dry polymer system only has one mixing train available. Since these feed systems share a common polymer mixer, it is difficult to operate both systems at the same time. Additionally, the existing dry polymer mixer uses a type of batch mixer that can only make a single batch at a time and frequently clogs. The mixer is housed in a metal structure that does not meet current seismic codes although it was constructed to meet the codes at that the time of construction.

The project will construct a new dry polymer mixing facility to replace the existing facility. The scope of the project includes construction of a new building designed to meet current seismic standards, installation of a dry polymer mixing system to allow simultaneous mixing and feeding of cationic and nonionic polymers, independently; and construction of a covered containment area to house feed equipment and new polymer storage tanks.

### **Weymouth Filter Valve Replacement**

The original filter valves in Building No. 1 were installed in two stages in 1941 and 1949, and were replaced in the early 1970s with similar valves. These valves are not consistent with modern American Water Works Association (AWWA) standards. The filter valves in Building No. 2 were installed during the second plant expansion in 1962 and are similar in dimension to the valves in Building No. 1. The existing filter valve bodies exhibit corrosion, the rubber seats are worn, and many valves leak after 49 to 59 years of continuous operation. In addition, the frequency of repairs to the actuators is increasing, and spare parts are difficult to obtain. This project will replace all filter valves and actuators in both Filter Building Nos. 1 and 2 with Metropolitan furnished AWWA-standard valves and current industry-standard actuators. This project will also replace or refurbish appurtenant equipment which is ancillary to the reliable operation of the filter valves, such as flow meters, underdrain valves, electrical and control systems, pipes, and other equipment.

### **Weymouth Hazardous Waste Staging and Containment Facility**

The existing hazardous waste storage area requires a number of upgrades to enhance compliance with current codes and to provide enhanced safety measures, such as providing spill containment, eyewashes and safety shower, a canopy, leak detection, and sump. These utilities are all available at the existing sulfuric acid tank farm, which is no longer utilized. As the existing hazardous waste storage area does not provide containment to capture spills or leaks, there is potential for hazardous waste to run off to the storm drain system as well as exposure to plant personnel.

This project will relocate the existing Hazardous Waste Staging and Containment Facility to the existing sulfuric acid tank farm to account for deficiencies at the existing facility. The existing sulfuric acid tank farm, located approximately 100 feet from the existing hazardous waste area, is a 30-foot by 30-foot containment area with a roof, sump, SCADA controls, eyewash station, power, and potable water that can be cost effectively utilized to relocate the hazardous waste facility.

### **Weymouth Ozone Contactor Building Ozone Off-Gassing Improvements**

The Weymouth plant's ozone contactor building features four 10-chamber ozone contactors for ozone disinfection. Ozone gas is generated in the ozone generator building and routed to the main header on the roof of the ozone contactor building, which then splits into individual contactor headers. Ozone is fed into each chamber through a diffuser array at the bottom of the chambers within the contactor. This allows the ozone gas to spread throughout all the chambers in a pattern of fine bubbles for contact with raw water. The excess ozone not being used in the contactors is being released into the atmosphere through the effluent gates or vents on the roof of the contactor building. This results in ozone lingering on the roof deck and wafting over the side of the building, down to the ground level, and into the building gallery, which prevents plant staff from performing preventive and corrective maintenance on the roof or in the gallery, as it's unsafe for staff to be around high levels of ozone. This project will determine the location of ozone off-gassing and develop and implement solutions to reduce ozone off-gassing, including modifications to the Weymouth plant's ozone contactor building.

### **Weymouth Solids Handling Rehabilitation**

Residual solids generated during the water treatment process are sent to the gravity thickeners to separate water from the solids before being sent to belt presses in the solids handling facility for further dewatering. Dewatered solids are then pumped to elevated hoppers for storage prior to offsite disposal. Mechanical equipment at the solids handling facility has experienced frequent failures, and the facility itself requires full-time staffing to operate. Regular failures occur with the system's bridge breakers, which break apart dewatered solids so that they can be pumped to the hoppers. The facility also experiences frequent issues with the hoppers. After the belt presses dewater the solids, polymer solution is added to the discharge side of the cake pumps to facilitate pumping. This produces a cake-like material that often sticks to the hoppers' mechanical components and impedes opening and closing of the hopper gates. Rehabilitation of the solids handling facility is necessary to maintain its long-term function, reduce maintenance and operational labor costs, and reduce chemical costs.

This project will identify and implement the most feasible rehabilitation of the facility and to evaluate the capacity of the facility's decant lines. Options for rehabilitation include: (1) eliminating the existing cake pumps and installing a conveyor belt system to transfer the dewatered solids to the hopper system without the addition of liquid polymer; (2) transferring solids to a separate storage area where the solids are held prior to being hauled offsite. This project will also evaluate modifications within the building that would facilitate future equipment repairs and replacement; and (3) constructing sludge lagoons that would replace the belt press facility as the main solids handling facility to process residual solids.

### **Weymouth Solids Thickeners Upgrades**

The Weymouth plant solids thickeners receive residual solids from the water treatment plant collector system and the washwater reclamation plant (WWRP). There are two identical 58-foot diameter thickeners and two newer identical 60-foot diameter thickeners located at the north end of the plant. Each thickener comprises an inlet well, circular basin, sweep arms and drive motor, a sludge removal hopper, and supernatant weirs. Residual solids enter the thickeners in the inlet well, settles, and accumulates at the bottom of the basin. The thickened solids are then scraped into the sludge removal hopper and pumped into one of the three belt presses at the solids handling facility. A rapid seismic evaluation of the thickeners and thickened solids pump room was recently conducted by Metropolitan staff, confirmed that the supports of the scraper blades comply with the strength design. However, the perimeter wall does not meet the strength design criteria under the current standards and is inadequate in the flexure capacity. This project will upgrade the Weymouth thickeners to meet current seismic standards. This project will also include mechanical, instrumentation, electrical, and associated upgrades.

### **Weymouth Wheeler Gates Security Improvements**

Construction vehicles and chemical delivery trucks access the Weymouth plant through the Wheeler entrance gate. This project will provide safety and security improvements to the Weymouth plant's Wheeler gate, including construction of a new guard enclosure; improved lighting, security cameras, and communication features; crash-rated gates at vehicle and train entrances; perimeter wall and fencing along Wheeler Avenue; two traffic lanes at the entrance and exit; chemical delivery staging and containment area; and vehicle rejection turn-about outside the plant entrance gate.

## **Water Treatment - General Project Group**

### **CUF Dechlorination System Upgrade**

The chlorine unloading facility (CUF) is used to transfer liquid chlorine from rail cars to cargo trailers for delivery to Metropolitan facilities. The goal of this project is to enhance compliance with discharge regulations and allow the transfer of liquid chlorine from rail cars to cargo trailers to occur over a wide range of operating conditions. This project will evaluate available technologies; perform a pilot study, if needed, to determine the best technology; and will explore methods and technologies of neutralizing chlorine to improve chlorine transloading ability throughout the year. This project will upgrade the existing system that neutralizes chlorine at CUF.

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# SERVICE AREA ECONOMY

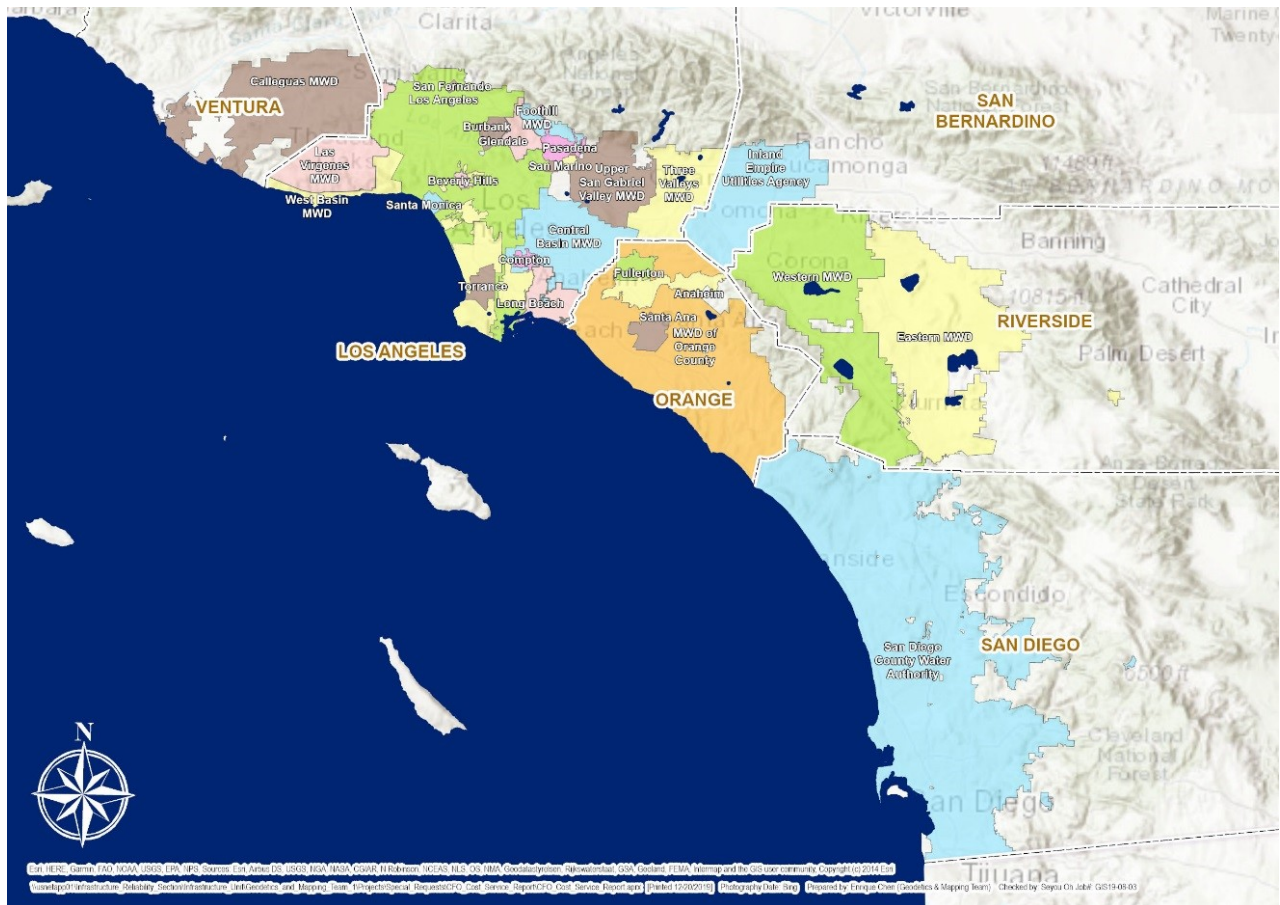
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## Metropolitan Service Area

Metropolitan's service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies. Metropolitan has historically provided between 40 and 60 percent of the water used annually within its service area.

### Service Area Map

The map below shows the area served by Metropolitan. It includes parts of six of the ten counties that comprise Southern California (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all of the area within each of the six counties.





## Selected Demographic and Economic Information for Metropolitan’s Service Area

The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California. Metropolitan estimates that approximately 18.6 million people lived in the service area in 2022, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG). Since 2020, the region has experienced a 1.1 percent loss in population due mostly to housing shortages and high cost of living throughout Southern California. Recent population projections were prepared by the Center for Continuing Study of the California Economy (CCSCE) in 2020, which were based on SCAG studies and used as the base data for the development of population for Metropolitan’ 2020 Integrated Water Resources Plan’s planning scenarios. CCSCE projected approximately 12 percent growth from 2019 (18.8 million) to 2035 (21.1 million). CCSCE’s projection is consistent with the Census Bureau’s national baseline projections, extrapolated for Metropolitan’s service area.

The economy of Metropolitan’s service area is exceptionally diverse. In 2022, the economy of the Six County Area was larger than all but thirteen nations of the world. The Six County Area economy ranked between South Korea (\$1.67 trillion) and Mexico (\$1.4 trillion), with an estimated gross domestic product (“GDP”) of \$1.57 trillion. The Six County Area’s gross domestic product in 2022 was larger than all U.S. states except California, Texas and New York.

Table 14. Ranking of Areas by Gross Domestic Product 2022

Country	Dollars (in Billions)
United States	\$25,440
China	17,963
Japan	4,256
Germany	4,082
California	3,642
India	3,417
United Kingdom	3,089
France	2,779
Texas	2,402
Russian Federation	2,240
Canada	2,161
Italy	2,050
New York	2,048
Brazil	1,920
<b>Six County Area</b>	<b>1,823</b>
Australia	1,693
South Korea	1,674
Mexico	1,466
Spain	1,418

Source: Countries - World Bank; U.S. - Bureau of Economic Analysis; California and Six County Area - U.S. Department of Commerce

## Summary of Recent Trends and Outlook for the Six County Area Economy

The national economy posted job growth through 2023 and continuing through February 2024. At the same time, consumer price increases slowed in 2023 while increasing a bit in the first two months of 2024 indicating that

inflation was still a concern. The national unemployment rate rose to 3.9% in February 2024 but has remained below 4% for 25 consecutive months.

The federal funds rate remained at the range of 5.25%-5.50% in the Federal Reserve Bank meeting in March 2024 unchanged since the July 2023 meeting. The Bank announced that future rate cuts would depend on continued declines in the inflation rate. The March 2024 UCLA Anderson School (“UCLA”) economic forecast has the federal funds rate falling toward the end of 2024 and averaging 4.4% in 2025 and 2026.

While the job and inflation data have been positive in recent months, national and world threats remain. Conflicts in Ukraine and Gaza continue and Congress has not reached a long-term decision on the budget or federal debt limit or border policies and funding of Ukraine and Israel.

Six County Area job growth slowed in 2023 largely as a result of the actors and writers strikes and declines in port activity in the middle of the year. Monthly job gains have returned since the low in July 2023. Modest gains are expected in 2024 and beyond as shown in the UCLA forecast. Six County Area unemployment rates increased in 2023 and are expected to increase again in 2024 before declining in 2025 and 2026 and then matching the national unemployment rate.

The UCLA economic forecast released on March 13, 2024 shows the State underperforming the nation in 2023 and 2024 and outperforming the nation in 2025 and 2026. The UCLA forecast no longer anticipates a recession during the forecast period. Job growth in California is forecast at 1.4% in 2024 compared to 1.5% for the nation but the State is forecast for much higher job growth compared to the nation in 2025 (1.7% vs 1.1%) and 2026 (1.2% vs 0.6%). UCLA forecasts continued growth in tech jobs and a rebound in port and Hollywood related jobs

The Six County Area has outpaced the nation in nonfarm wage and salary job growth since 2000. The Six County Area job growth outpaces the nation in periods of economic growth such as the 2015 through 2019 period and 2022. The Six County Area lags the nation in job growth during recession periods such as the 2007 through 2010 period and 2020. Recent growth forecasts through 2050 from the Southern California Association of Governments (“SCAG”) and the San Diego Association of Governments (“SANDAG”) have job growth in the Six County Area slightly outpacing the nation during this timeframe.

The Six County Area economy maintains several areas of long-term economic strength and competitive advantage. One area of strength is the connection to Pacific Rim trade and tourism. Though trade volumes fell in 2023, the causes of the decline have been resolved and trade volumes are growing again and have supported long-term job growth in warehousing, wholesale trade and trucking. The Los Angeles region accounted for a record \$24.1 billion in new venture capital (“VC”) funding in 2021 supporting a growing tech sector. VC funding declined temporarily in the nation and Six County Area in 2023. The VC funding and growth in the life sciences sector in San Diego County is expected to provide new jobs in professional and information services and manufacturing.

Tourism has benefited from the Six County Area’s Pacific Rim location and continuing expansion and renovation in the Area’s leading tourist sites. Air travel in 2023 and the first 2 months of 2024 in the Six County Area was growing but still below pre-pandemic highs. All of the major airports in the Six County Area have expanded capacity and airport access in anticipation of long-term growth. The elimination of restrictions on international travel and the opening to travel to and from China has started to boost international and total air travel.

Annual population growth slowed more to an average of 92,600 between 2010 and 2020 according to the revised California Department of Finance (“DOF”) estimates, and growth turned negative in 2021, 2022 and 2023 as birth and immigration levels fell, deaths increased from the COVID-19 pandemic, and out-migration increased. The Six County Area had 21.7 million residents in 2023, approximately 56% of the State’s population. Population growth is projected to resume with a return to higher immigration though the extent of growth will depend on success in increasing housing as described below.

In response to the rising home prices and shortage of new housing units, the State legislature has passed legislation and financial assistance to expand the housing supply statewide. In addition, the California

Department of Housing and Community Development gave SCAG and SANDAG goals to substantially increase annual housing construction. The amount of success in meeting these housing goals will affect the rate of future growth in the Six County Area and is one of the long-term risks for the Six County Area economy.

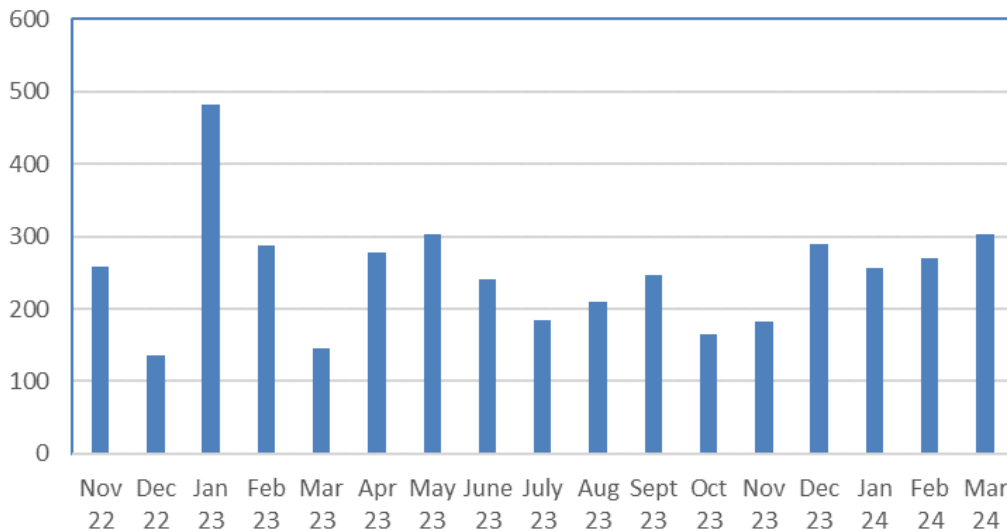
### The Pace of Economic Recovery through February 2024

#### The National Economy and Outlook

The national economy posted continued job growth and unemployment remained below 4% throughout 2023 and to March 2024. Real GDP increased by 2.5% in 2023 up from 1.9% in 2022. Inflation rates declined in both the Consumer Price Index (“CPI”) and the Personal Consumption Expenditure Price Index. The federal funds rate remained at the range of 5.25%-5.50% in the Federal Reserve Bank meeting in January 2024 unchanged since the July 2023 meeting. The Bank announced that future rate cuts would depend on continued declines in the inflation rate. The March 2024 UCLA forecast has the federal funds rate falling toward the end of 2024 and averaging 4.4% in 2025 and 2026.

The chart below shows steady monthly job growth throughout 2023 and continuing into 2024. The national unemployment rate was 3.8% in March 2024 and has remained below 4% for the past 25 months. While the job and inflation data have been positive in recent months, national and world threats remain. Conflicts in Ukraine and Gaza continue and Congress has not reached a long-term decision on the budget or federal debt limit or border policies and funding of Ukraine and Israel.

**U.S. Change in Non-farm Payroll Jobs**

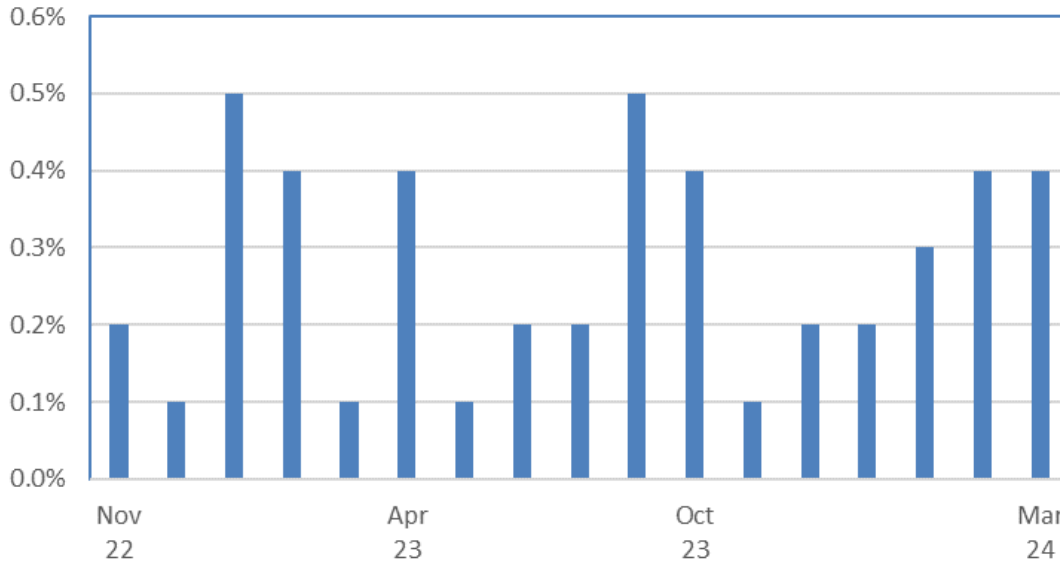


Source: U.S. Department of Labor, Bureau of Labor Statistics

Consumer price increases slowed during most of 2023 but increased in both January and February of 2024. The 12-month increase in the CPI was 3.52% in March 2024 and 3.8% in the CPI minus food and energy. Most of the increases came from housing and auto repair services. The real concern is that the recent data show that inflation pressures remain, especially in those service areas.

Producer price increases are near the Fed target of 2% annual increases. In March 2024, the Producer Price Index increased 2.1% year over year while the Index minus food energy and trade services increased by 2.8% year over year.

### U.S. Consumer Price Index Monthly Change



Source: U.S. Department of Labor, Bureau of Labor Statistics

The UCLA economic forecast released on March 13, 2024 shows the State underperforming the nation in 2023 and 2024 and outperforming the nation in 2025 and 2026. The UCLA forecast no longer anticipates a recession during the forecast period.

Job growth in California is forecast at 1.4% in 2024 compared to 1.5% for the nation but the State is forecast for much higher job growth compared to the nation in 2025 (1.7% vs 1.1%) and 2026 (1.2% vs 0.6%). UCLA forecasts continued growth in tech jobs and a rebound in port and Hollywood related jobs.

In both forecasts, the unemployment rate is higher in 2024 compared to 2023 and then declines in 2025. The California unemployment rate is forecast to be higher than the nation in 2024 and close to the national rate in 2025 and 2026.

Increases in the CPI are forecast to decline in 2024 for both the State and nation and to decline further in the State in 2025 and 2026.

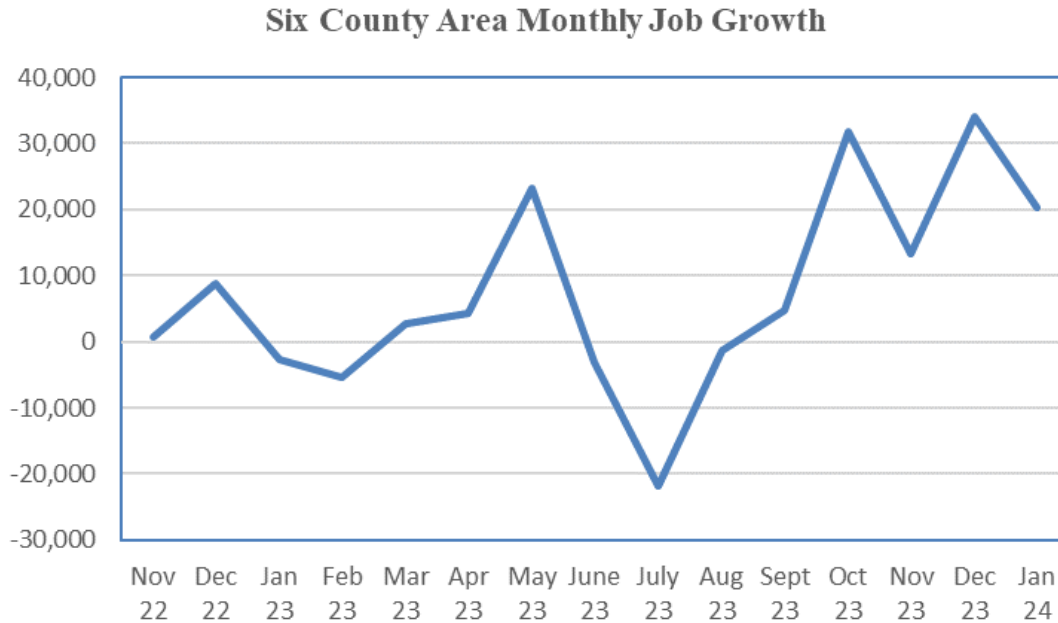
#### UCLA Economic Forecast, March 2024

	2023	2024	2025	2026
<b>Job Growth</b>				
California	2.1 %	1.4 %	1.7 %	1.2 %
U.S.	2.4 %	1.5 %	1.1 %	0.6 %
<b>Unemployment Rate</b>				
California	4.2 %	4.6 %	3.8 %	3.9 %
U.S.	3.6 %	4.0 %	3.9 %	3.8 %
<b>CPI</b>				
California	7.3 %	3.8 %	3.0 %	2.8 %
U.S.	4.0 %	2.6 %	2.7 %	2.6 %

Source: UCLA Anderson School

**Six County Area Recent Trends**

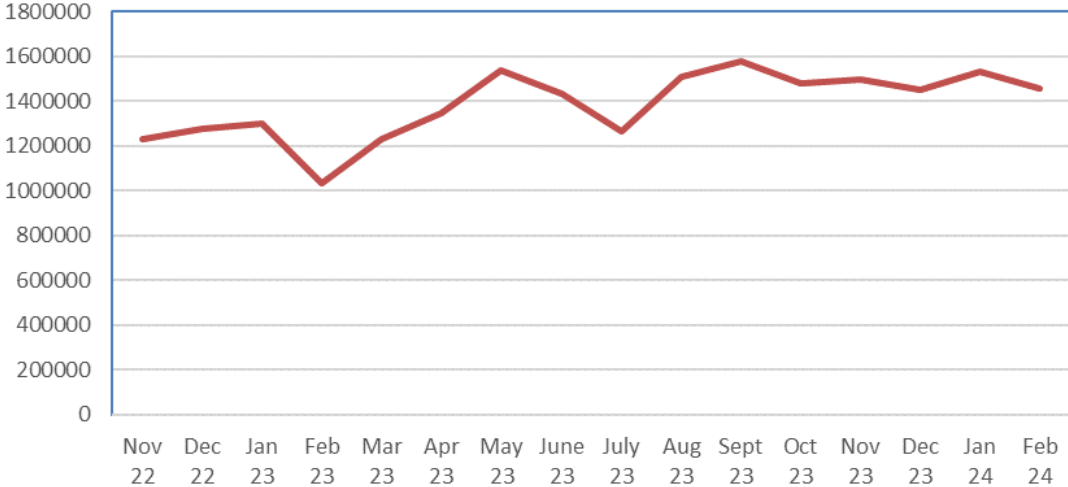
Six County Area job growth slowed in 2023 largely as a result of the actors and writers strikes and declines in port activity in the middle of the year. Monthly job gains have returned since the low in July 2023. Modest gains are expected in 2024 and beyond as shown in the UCLA forecast.



Source: U.S. Department of Labor and the California Employment Development Department (EDD)

Container volumes (measured in twenty-foot equivalent units (“TEUs”)) at the ports of Los Angeles and Long Beach (the “ports”) reached record levels in 2021. Long-term growth in the United States and in its trading partners can boost international trade levels of activity in the coming years as will new trade agreements. However, port activity declined in 2022 and into 2023 as a result of earlier long delays in unloading cargo and a resulting shift of some activity to Eastern ports, economic slowdown in China and concern over upcoming labor negotiations. There are no delays now in unloading cargo and China is growing again though the other concerns remain. Container volumes increased year over year in each of the six months ending in February 2024 though it remains below record levels.

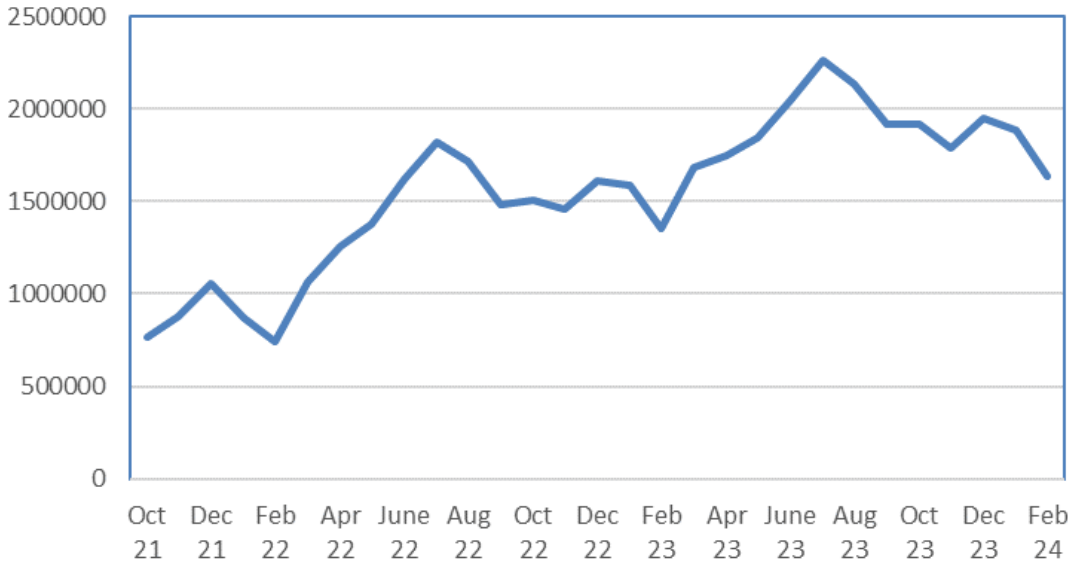
**Ports of LA and Long Beach TEU Volume**



Source: Ports of Los Angeles and Long Beach

Air travel at the major Six County Area airports increased year over year throughout 2023 and in February 2024 led by large increases in international travel at LAX though travel levels remain below 2019 peaks. Further increases are likely in the coming months as China has loosened air travel restrictions in and out of the country.

**LAX International Passengers**



Source: Los Angeles Airport

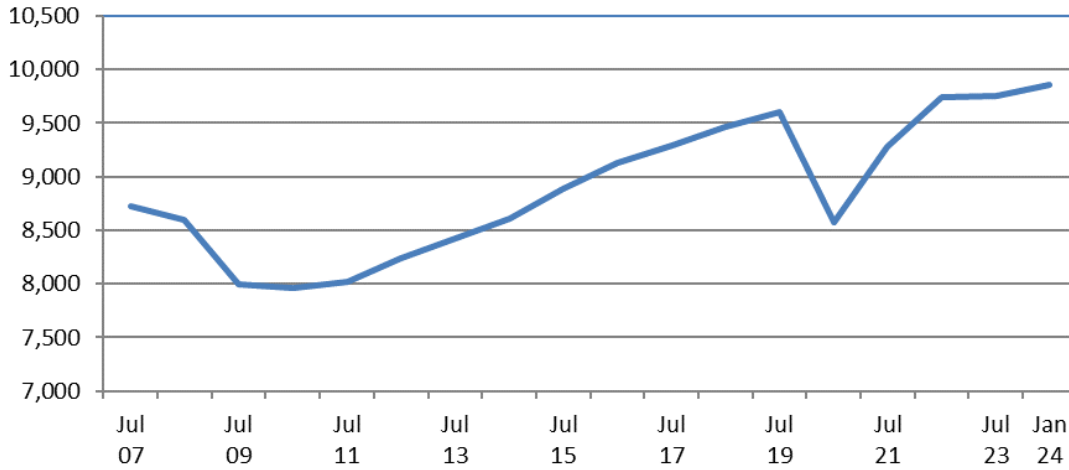
**The following pages describe historical economic trends in the Six County Area. As noted above, this section reflects data through the end of 2023, or an indicated earlier date when 2023 annual data is not available.**

**Six County Area Long-Term Trends Through 2023**

Long-term trends through 2023 are updated in this section when 2023 data is available. For two indicators— income and metro area GDP—2023 data is not available and the trend analysis ends in 2022.

The Six County Area moved from substantial job losses during the 2008-2009 recession to sustained job growth during the seven years from 2013 through 2019 (see the following figure). The Six County Area slightly outpaced the nation in nonfarm wage and salary job growth since the beginning of 2013. Job levels declined substantially after February 2020 but by January 2024, Six County Area job levels were above the pre-pandemic high.

**Six County Area Jobs (Thousands)**



Source: EDD; data are seasonally adjusted

Job growth for the entire Six County Area in 2023 was 69,600 jobs or a gain of 0.7% compared to a 0.9% increase in jobs for the State and 2.3% for the nation for the comparable period as job growth was restrained by the actors and writers strikes and mid-year declines in port activity.

**Employment Trends Through 2022 by Metro Area (Non-Farm Wage and Salary Jobs in Thousands)**

County	2007	2010	2019	2020	2022	2023
Los Angeles	4,255.3	3,926.6	4,562.6	4,168.1	4,533.0	454,350%
Orange	1,528.2	1,372.6	1,675.3	1,532.7	1,666.1	168,190%
Riverside-San Bernardino	1,289.8	1,150.9	1,552.7	1,495.8	1,659.8	167,980%
San Diego	1,322.3	1,240.5	1,503.1	1,385.8	1,531.2	155,210%
Ventura	298.9	276.1	312.1	290.3	311.6	31,400%
Total Six County Area	8,694.5	7,965.9	9,605.8	8,872.7	9,701.7	977,130%

Source: California Employment Development Department (EDD)

Unemployment rates in the Six County Area declined sharply between 2010 and 2019 (see the following table). In 2019, unemployment rates ranged from a low of 2.8% in Orange County to a high of 4.5% in Los Angeles County. Unemployment rates rose in 2023 throughout the Six County Area as a result of the slowing job growth explained above.

## Unemployment Rates by Metro Area

	2000	2006	2010	2019	2020	2022	2023
Los Angeles	5.4 %	4.8 %	12.6 %	4.5 %	12.3 %	5.0 %	5.0 %
Orange	3.5 %	3.4 %	10.0 %	2.8 %	8.9 %	3.2 %	3.6 %
Riverside-San Bernardino	5.0 %	4.9 %	14.0 %	4.0 %	9.9 %	4.1 %	4.7 %
San Diego	3.9 %	4.0 %	11.0 %	3.2 %	9.4 %	3.4 %	3.9 %
Ventura	4.5 %	4.3 %	11.1 %	3.6 %	8.7 %	3.7 %	4.3 %
United States	4.0 %	4.6 %	9.6 %	3.7 %	8.1 %	3.6 %	3.6 %
State of California	4.9 %	4.9 %	12.5 %	4.1 %	10.1 %	4.3 %	4.8 %

Source: U.S. Bureau of Labor Statistics and EDD

## Taxable Sales and Income

Taxable sales in the Six County Area have grown more slowly than personal income as a higher share of spending is on services and other non-taxable items. Taxable sales declined in 2020 as a result of the pandemic restrictions and rebounded sharply in 2021 and 2022 to record levels reflecting strong income growth from the federal pandemic support payments to residents in the Six County Area. Taxable sales fell slightly in 2023 based on the first three quarters data.

Taxable sales in the Six County Area grew by 29% between 2019 and 2023 outpacing the 17% increase in the CPI. Taxable sales also rose faster than inflation in all counties between 2000 and 2023 led by strong growth in Riverside and San Bernardino counties.

## Taxable Sales (Dollars in Billions)

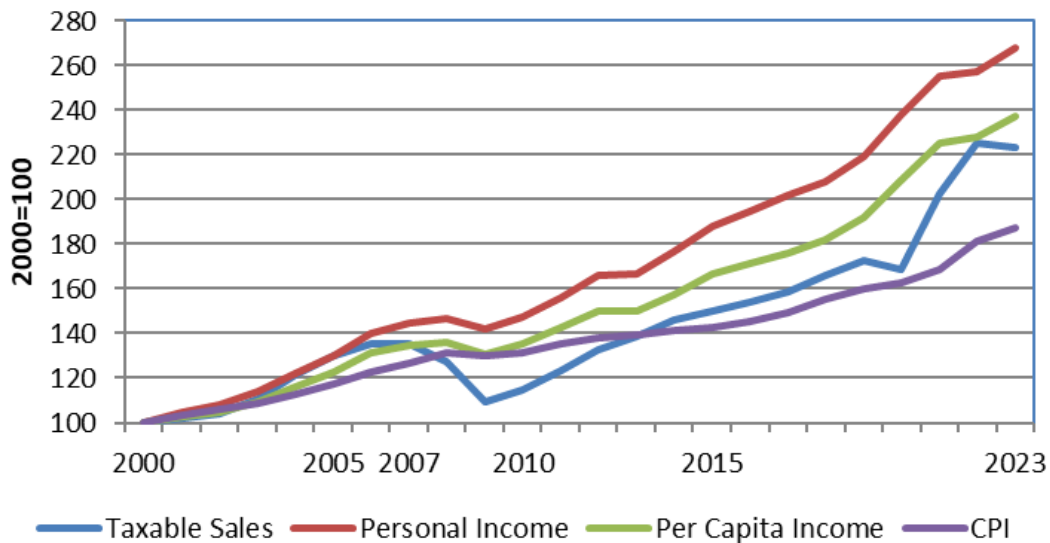
	2000	2010	2019	2021	2022	2023	% Change 2000 - 23	% Change 2019 - 23
Los Angeles County	\$106.7	\$116.9	\$172.3	\$192.5	\$213.7	\$210.1	97%	22%
Orange County	44.5	47.7	69.7	78.3	88.0	87.9	98%	26%
Riverside County	17.0	23.2	40.6	55.5	62.1	61.5	262%	51%
San Bernardino County	18.9	24.7	41.8	55.4	60.0	58.1	207%	39%
San Diego County	36.2	41.6	61.4	71.7	80.7	81.0	124%	32%
Ventura County	9.1	10.2	14.8	17.3	19.1	19.7	116%	33%
<b>Total Six County Area</b>	<b>\$232.4</b>	<b>\$264.3</b>	<b>\$400.6</b>	<b>\$470.7</b>	<b>\$523.6</b>	<b>\$518.3</b>	<b>123%</b>	<b>29%</b>
Los Angeles Area Consumer								
Price Index (1982-84=100.0)	171.6	225.9	274.1	289.2	310.8	322%	88%	17%

Source: Taxable Sales—California Department of Tax and Fee Administration, Consumer Price Index—U.S. Bureau of Labor Statistics. 2023 estimates based on 3 quarters of data.

The increase in per capita income between 2000 and 2023 far exceeded the increase in consumer prices. Taxable sales growth kept pace with total income growth through 2005, lagged far behind income for the period from 2000 through 2019 and surged to keep pace with personal income growth by 2022 before falling in 2023 and also exceeded the increase in consumer prices as shown in the following graph. The growth in income and taxable sales is expected to outpace the increase in consumer prices for most future years.



## Growth in Taxable Sales, Income and Consumer Prices in Six County Area



Sources: California Department of Fee and Tax Administration, U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics and CCSCE

### Construction Activity Through 2023

Residential building permit levels in the Six County Area declined sharply after 2004 falling from 108,322 to 17,932 units in 2009. Permit levels have rebounded in recent years, reaching 63,874 in 2022 before declining to 48,042 permits in 2023 as mortgage rates and construction costs both increased substantially reducing permit applications. Multi-family residential permits are the majority in Los Angeles, Orange, and San Diego counties, while most permits in Riverside and San Bernardino are for single-family homes. For the first time, data on permits for accessory dwelling units (ADUs) are available and show an additional 6,513 permits in 2023 in the Six County Area.

The California Department of Housing and Community Development has given all regions in California goals for housing that both plan for future population growth but also plan to reduce existing housing shortages. The Southern California and San Diego regional planning agencies (SCAG and SANDAG) have allocated these regional goals to local jurisdictions and developed strategies to meet these goals that imply much higher levels of residential construction than in recent years.

### Residential Building Permits

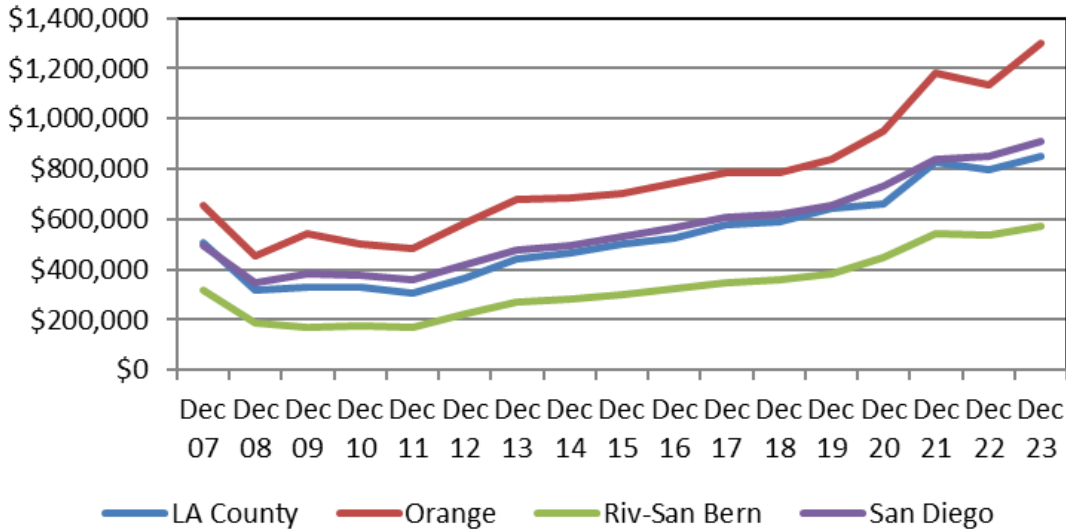
County	2004	2009	2019	2022	2023	2023 ADU
Los Angeles	26,395.0	5,653.0	21,622.0	27,213.0	9,236	2,733
Orange	9,322	2,200	10,294	6,334	10,315	1,017
Riverside	34,226	4,190	8,361	11,724	11,611	622
San Bernardino	18,470	2,495	5,980	6,552	4,762	570
San Diego	17,306	2,990	7,450	9,646	11,095	1,326
Ventura	2,603	404	1,428	2,405	1,023	245
<b>Total Six County Area</b>	<b>108,322</b>	<b>17,932</b>	<b>55,135</b>	<b>63,874</b>	<b>48,042</b>	<b>6,513</b>

Source: Construction Industry Research Board and California Homebuilding Foundation

### Housing Price and Affordability Trends in the Six County Area Economy

Housing prices surged to record highs in 2023 as a result of continuing demand and very low inventories of homes for sale by historic standards according to the California Association of Realtors (“CAR”), despite a sharp increase in mortgage rates as job and income growth continued. Median resale housing prices in the Six County Area markets have risen substantially in recent years, In the seven years ending December 2023 median resale prices rose 63% in Los Angeles County, 74% in Orange County, 77% in the Riverside-San Bernardino County area and 60% in San Diego County (see the figure below).

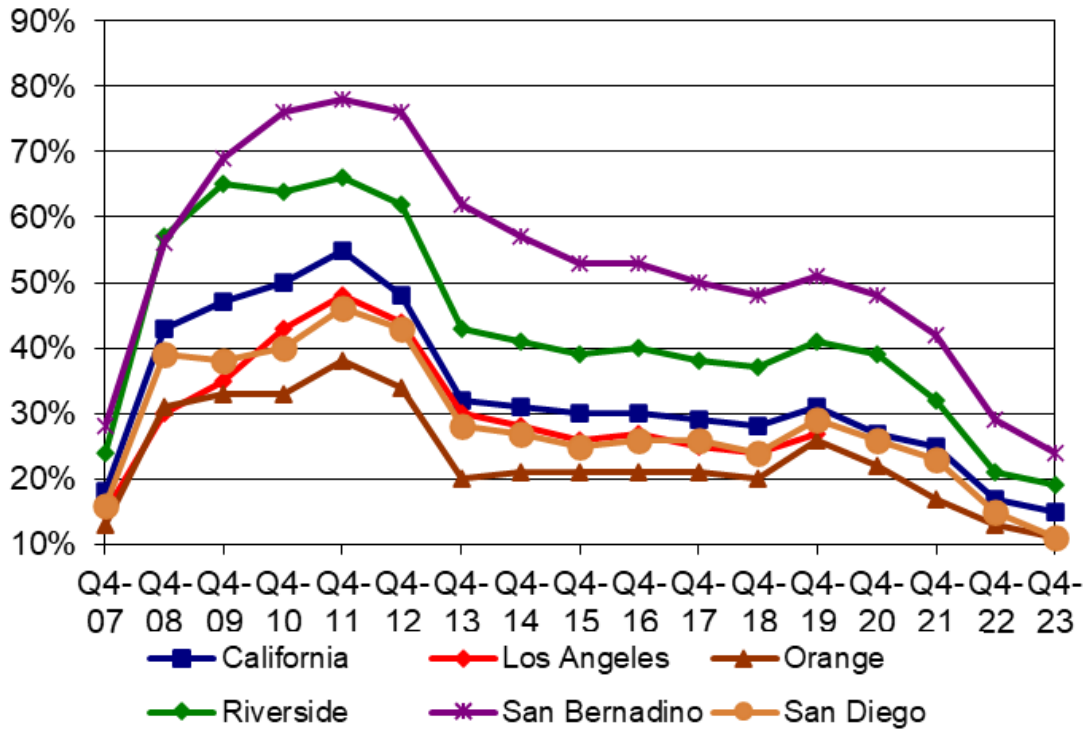
#### Median Resale Housing Prices



Source: California Association of Realtors

The rise in home prices has led to a decline in housing affordability for homebuyers throughout the Six County Area after 2013 as measured by CAR. Affordability declined in each year after 2019 as home prices rose and mortgage rates increased substantially. Affordability is at the lowest level since the record lows right before the foreclosure crisis in 2008.

## Home Buyer Affordability Index



Source: California Association of Realtors

### Nonresidential Construction Through 2023

Nonresidential construction permit levels reached a record \$15.6 billion in 2018, declined slightly in 2019, and then fell sharply after that as the COVID-19 pandemic, rising interest rates, reduced business travel and rising office vacancies reduced construction activity. The largest declines were in Los Angeles and Orange counties. Permit valuation rebounded in 2022 led by Los Angeles County and reached a Six County Area total of \$11.7 billion before falling sharply in 2023 to \$8.3 billion.

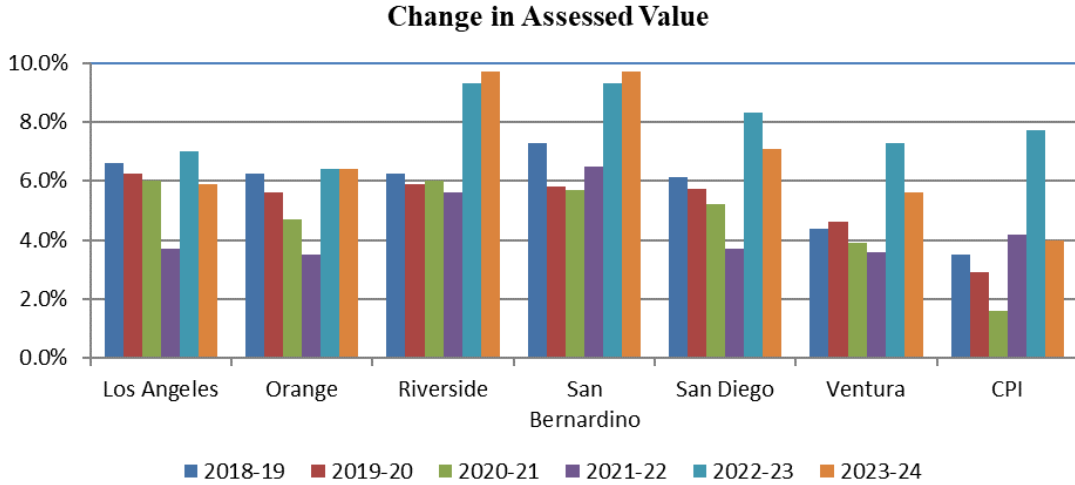
#### Total Nonresidential Construction Permit Valuation (Dollars in Billions)

County	2007	2009	2019	2020	2022	2023
Los Angeles	\$4.7	\$2.7	\$6.6	\$3.5	\$4.1	\$3.0
Orange	2.0	1.0	3.2	2.0	1.9	1.7
Riverside	1.5	0.4	1.3	1.2	1.7	1.3
San Bernardino	1.4	0.3	1.4	1.1	2.0	1.0
San Diego	1.4	0.6	2.4	2.0	1.8	1.2
Ventura	0.3	0.2	0.2	0.3	0.2	0.1
<b>Total Six County Area</b>	<b>\$11.3</b>	<b>\$5.1</b>	<b>\$15.1</b>	<b>\$10.1</b>	<b>\$11.7</b>	<b>\$8.3</b>

Source: Construction Industry Research Board and California Homebuilding Foundation

**Assessed Valuation**

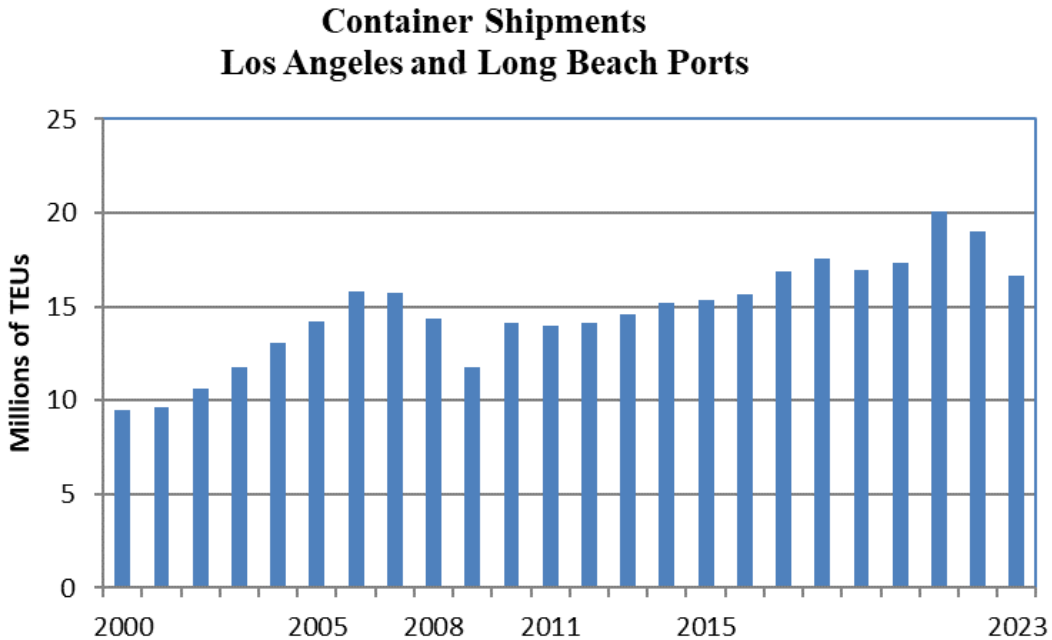
Assessed valuation in the Six County Area rebounded and outpaced inflation in 2023 after a long downturn during the last recession and a temporary downturn in 2021 and 2022 related to the COVID pandemic that was a source of fiscal pressure on local communities throughout the Six County Area. Assessed values increased in 2023-24 year with large gains ranging from 5.6% in Ventura County to 9.7% in Riverside and San Bernardino County compared to a 4.0% increase in the CPI (see the following figure).



Source: County Assessors' Offices and Bureau of Labor Statistics

**International Trade**

Container volumes reached record levels in 2021. Container volumes declined in 2022 and again in 2023 as imports from China fell sharply even though the port congestion issues were resolved. Some shippers shifted to other ports during the period of congestion and threats of port strikes and have not returned yet to Los Angeles and Long Beach ports.



Source: Ports of Los Angeles and Long Beach

Over the longer term, international trade has been a leading growth sector in the Six County Area. The Los Angeles and Long Beach ports historically have accounted for roughly half of the nation's imports from China. This growth supports jobs and economic activity in the transportation, wholesale trade and warehousing industries as the Six County Area is a gateway for U.S. trade with Pacific Rim countries. For example, in the Riverside-San Bernardino metro area, where many imports are stored and shipped from, warehousing jobs increased from 16,900 in 2007 to 133,100 in 2022, along with jobs added in trucking and wholesale trade. Between 2019 and 2022, all three sectors added 61,900 jobs.

Long-term growth in the United States and its trading partners can boost international trade levels of activity in the coming years as will new trade agreements. However, as discussed in the first section, port activity has declined in recent months as a result of earlier long delays in unloading cargo and a resulting shift of some activity to Eastern ports, economic slowdown in China and concern over the upcoming labor negotiations. There are no delays now in unloading cargo and the ports reached a new labor contract though the other concerns remain. On the other hand, strike threats at eastern ports and threats to middle east and Panama port travel could make Six County Area ports more attractive destinations.

Port traffic has risen year over year in each of the five months ending in January 2024.

### **Income, Wages and Poverty Rates**

Counties in the Six County Area have income and wage levels and poverty rates that range from below the national average to above the national average. Orange and Ventura counties have the highest household income levels within the Six County Area. Los Angeles, Orange, and San Diego counties have the highest wage levels, well above the national average. San Diego County income levels are also above the national average. Riverside and San Bernardino counties have per capita income and wage levels that are below the national average. Median household income in 2021 was above the national average in each of the counties in the Six County Area.

Per capita income and median household income measures are affected by demographic trends. Per capita income measures in the region are pushed downward by the above-average percent of children versus total population in the Six County Area population compared to the national average, while median household income measures are pushed upward by the above-average number of wage earners per household in the Six County Area. Income and wage trends in the Six County Area have been comparable to national trends since 2000. Poverty rates exceeded the national average in 2022 in Los Angeles and San Bernardino counties and were at or below the national average elsewhere in the Six County Area.

Per capita income is based on total personal income divided by population while median household income is based on money income, which is lower than total personal income. The table below shows median household income, per capita income, wage levels and poverty rates for each of the counties in the Six County Area, as well as for California and the United States, in 2022.

Income and wage levels improved in 2022 compared to 2021 throughout the Six County Area except for per capita income in Riverside and San Bernardino counties (see the following table). Per capita income grew slower than inflation throughout the Six County Area in 2022. Poverty rates were little changed between 2021 and 2022 in most Six County Area counties and these rates do not take into account the rapid rise in rents and home prices throughout the Six County Area.

## Income and Wages 2022

	<b>Per Capita Income</b>	<b>Median Household Income</b>	<b>Average Wage</b>	<b>Poverty Rate</b>
Los Angeles County	\$74,142	\$82,516	\$78,454	13.9 %
Orange County	83,553	106,209	76,341	9.9%
Riverside County	51,415	86,748	55,488	10.7%
San Bernardino County	49,270	79,091	57,432	13.4%
San Diego County	74,326	98,928	76,918	10.6%
Ventura County	76,375	102,569	66,063	9.4%
California	77,035	91,551	84,436	12.2%
United States	65,470	74,755	69,986	12.6%

Source: Per Capita Income - U.S. Department of Commerce; Median Household Income and Poverty Rate—U.S. Census Bureau (American Community Survey); Average Wage—U.S. Bureau of Labor Statistics

## Change in Income and Wages 2021 to 2022

	<b>Per Capita Income</b>	<b>Median Household Income</b>	<b>Average Wage</b>	<b>Poverty Rate</b>
Los Angeles County	1.0 %	6.5 %	1.4 %	(0.3%)
Orange County	2.4 %	5.6 %	1.5 %	0.0%
Riverside County	(0.1)%	9.8 %	3.2 %	(0.9%)
San Bernardino County	(0.6)%	5.7 %	3.4 %	0.2%
San Diego County	1.3 %	8.7 %	1.5 %	0.0%
Ventura County	2.5 %	6.3 %	0.9 %	0.6%
California	0.1 %	7.8 %	(1.5)%	(0.1%)
United States	1.6 %	7.2 %	3.5 %	1.0%

Source: Per Capita Income-U.S. Department of Commerce; Median Household Income and Poverty Rate-U.S. Census Bureau (American Community Survey); Average Wage-U.S. Bureau of Labor Statistics

## Population

Population growth in California and the Six County Area has been slowing since 2000 compared with previous decades. Population growth averaged 177,600 per year between 2000 and 2010 compared to 219,300 between 1990 and 2000.

Annual population growth slowed more to an average of 92,600 between 2010 and 2020 according to the revised DOF estimates, and growth turned negative in 2021, 2022 and 2023 as birth and immigration levels fell, deaths increased from the COVID-19 pandemic, and out-migration increased. The Six County Area had 21.7 million residents in 2023, approximately 56% of the State's population.

### Six County Area Population (in Thousands)

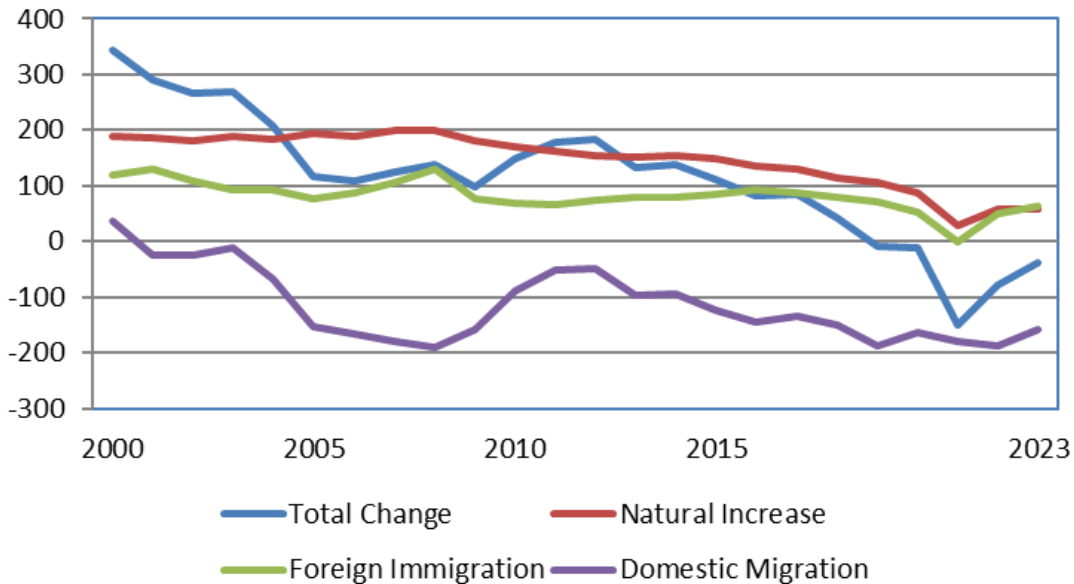
County	1990	2000	2010	2020	2022	2023
Los Angeles	8,860	9,544	9,846	10,015	9,841	9,826
Orange	2,412	2,854	3,017	3,189	3,154	3,142
Riverside	1,188	1,557	2,198	2,423	2,432	2,431
San Bernardino	1,432	1,719	2,045	2,185	2,179	2,171
San Diego	2,505	2,828	3,104	3,305	3,294	3,298
Ventura	669	757	825	844	830	826
<b>Total Six County Area</b>	<b>17,066</b>	<b>19,259</b>	<b>21,035</b>	<b>21,961</b>	<b>21,730</b>	<b>21,694</b>

Source: California Department of Finance as of July 1

Six County Area population growth is determined by three major components—natural increase, which is the number of births minus the number of deaths; net foreign immigration, which is the number of people moving to the region from abroad minus the number moving abroad; and net domestic migration, which is the number of people moving from other regions of the State and nation minus the number moving out to these areas. Natural increase was the largest component of population growth from 2010 through 2020 averaging near 137,300 per year. Declining birth rates in recent years and an increase in deaths due to COVID-19 reduced natural increase to just 27,000 in 2021 and 58,000 in 2022 and 2023.

Net foreign immigration averaged 75,700 per year from 2010 through 2020, while net domestic migration was negative from 2010 through 2020, averaging -116,00 per year. Foreign immigration was 0 in 2021 before rebounding to 63,600 in 2023 as COVID-19 and restrictive immigration policies restricted travel into the country. Net out-migration averaged 116,300 from 2010 through 2020 with higher levels in the past three years. Deaths are returning to pre-COVID-19 levels and foreign immigration is growing again while domestic migration trends will depend on housing affordability and job growth.

### Components of Change in Six County Area Population (Thousands)

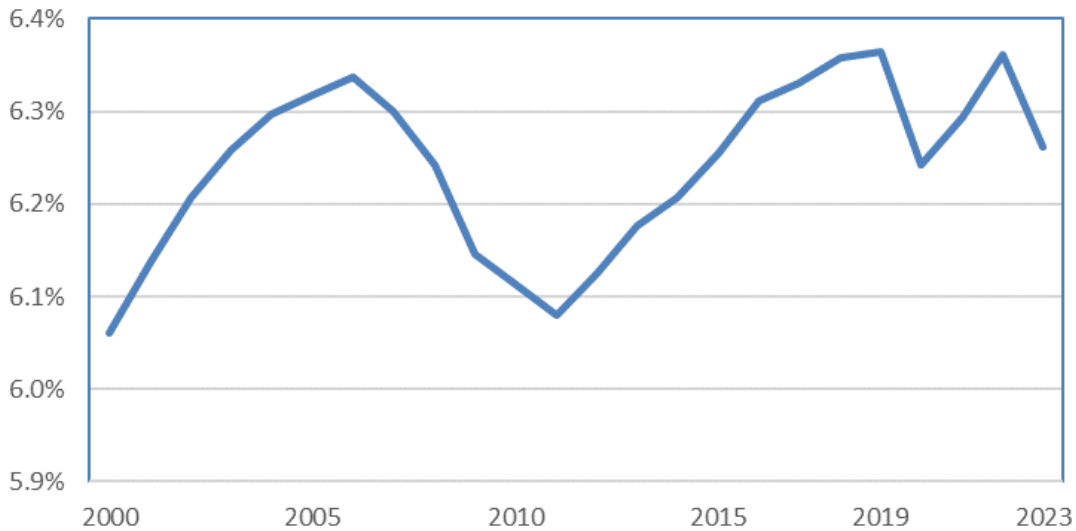


Source: California Department of Finance as of July 1

## Economic Structure of the Six County Area and Long-Term Prospects

The Six County Area has increased its share of national jobs since 2000. In 2022, the Six County Area accounted for nearly 6.4% of the nation’s non-farm wage and salary jobs, the highest share since 2000. The Six County Area economy usually outpaces the nation in growth periods and lags in recessions as in the periods after 2007 and 2020. The Six County Area share declined in 2023 as a result of the long actors and writers strikes and mid-year declines in port activity but should grow in the near term as California is forecast to out-pace the nation in the March 2024 UCLA economic forecast for 2024, 2025, and 2026 referenced earlier in this Appendix E. Recent SCAG and SANDAG growth forecasts to 2050 have job growth slightly outpacing the nation.

### Six County Area Share of U.S. Jobs



Sources: EDD, Bureau of Labor Statistics, U.S. Dept. Of Labor, CCSCE

In 2023, Education and Health Services was the largest major industry sector in the Six County Area measured by jobs, with nearly 1.8 million jobs or 18% of the Six County Area total (see table on the following page).

The next largest sectors in 2023 were Professional and Business Services and Government followed by Leisure and Hospitality, Retail Trade, and Manufacturing. Six County Area job levels in 2023 exceeded 2019 levels and were more than 1.7 million above 2000 levels despite large losses in Manufacturing, smaller declines in other sectors, and pandemic related job losses in 2020.

The largest gains between 2019 and 2023 were in Educational and Health Services and Transportation, Warehousing and Utilities and Professional and Business Services. Other sectors including Manufacturing, Wholesale and Retail Trade, Information and Financial Activities remained below 2019 job levels in 2023.

Long-term job growth is driven by the Six County Area’s economic base—those sectors that sell most of their goods and services in national and world markets outside of the Six County Area. Recent projections by CCSCE, SCAG and SANDAG report that the Six County Area will see job growth that slightly exceeds the national average during the next 10 to 30 years, led by gains in Professional and Business Services, Educational and Health Care, and sectors related to international trade and the tourism component of Leisure and Hospitality.



## Six County Area Employment by Major Sector (Jobs in Thousands)

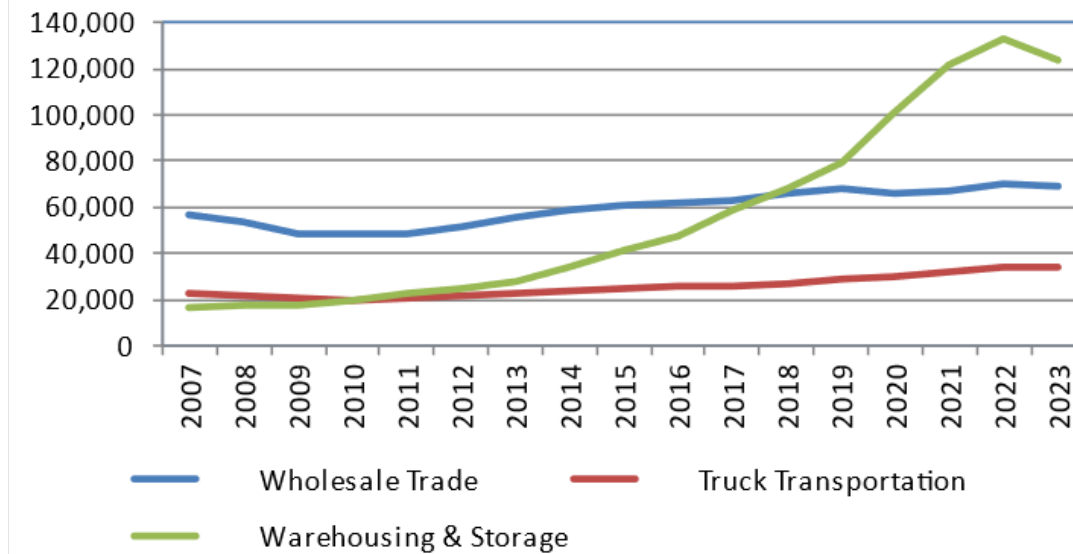
	2000	2007	2019	2022	2023	Change 2019 - 2023
Farm	67.7	63.8	56.1	54.6	53.1	(3.0)
Natural Resources and Mining	4.6	6.4	5.0	4.9	4.8	(0.2)
Construction	373.8	478.7	464.3	477.1	479.5	15.2
Manufacturing	1,113.6	888.4	744.9	721.3	716.5	(28.4)
Wholesale Trade	383.7	426.1	427.4	409.1	404.9	(22.5)
Retail Trade	835.7	949.8	928.8	908.1	911.4	(17.4)
Transp, Warehousing and Utilities	298.0	304.4	429.8	520.2	508.3	78.5
Information	345.0	292.4	284.4	298.3	254.5	(29.9)
Financial Activities	449.5	524.3	479.3	467.0	448.0	(31.3)
Professional and Business Services	1,182.7	1,289.4	1,432.3	1,499.1	1,458.4	26.1
Educational and Health Services	831.1	1,097.9	1,589.7	1,667.4	1,763.4	173.7
Leisure and Hospitality	741.0	895.0	1,191.1	1,141.5	1,190.1	(1.0)
Other Services	271.4	293.9	322.7	317.3	329.2	6.5
Government	1,171.1	1,245.8	1,306.3	1,270.9	1,302.8	(3.5)
<b>Total Wage and Salary Jobs</b>	<b>8,068.9</b>	<b>8,756.3</b>	<b>9,659.2</b>	<b>9,756.8</b>	<b>9,824.9</b>	<b>165.7</b>

Source: EDD

The Six County Area economy has an economic base that is diversified and well positioned to participate in U.S. and world economic growth over the next ten years. Job levels are expected to grow in the high wage and fast-growing professional, scientific, technical and information services sectors, which include architecture, design, computer, research and development, advertising, legal, accounting, and internet-related and management services. Other fast-growing sectors over the next ten years include entertainment and tourism industries and health care.

The expansion of foreign trade and the growth of distribution centers such as that of Amazon in the Inland Empire have contributed to a surge in logistics (wholesale trade, warehouse, and trucking) jobs in the Riverside-San Bernardino metro area (see the following figure). Between 2007 and 2022 these jobs increased by 140,700 or 147%, including a gain of 61,100 jobs between 2019 and 2022 led by a surge in warehousing jobs. Logistics jobs declined in 2023 as a result of decreased trade with China during the middle of the year.

## Logistics Jobs in the Riverside -San Bernardino Metro Area



Source: EDD

The diversity of the Six County Area economy has led to GDP growth that slightly trailed the national average in 2022. Six County Area GDP growth in current dollars in 2022 was 8.2% and real GDP growth was 1.8%, compared to 1.9% for the nation. In 2022, the Six County Area GDP was just over \$1.8 trillion. The 2021-22 growth rates reflected a rebound from the 2020 numbers affected by the pandemic.

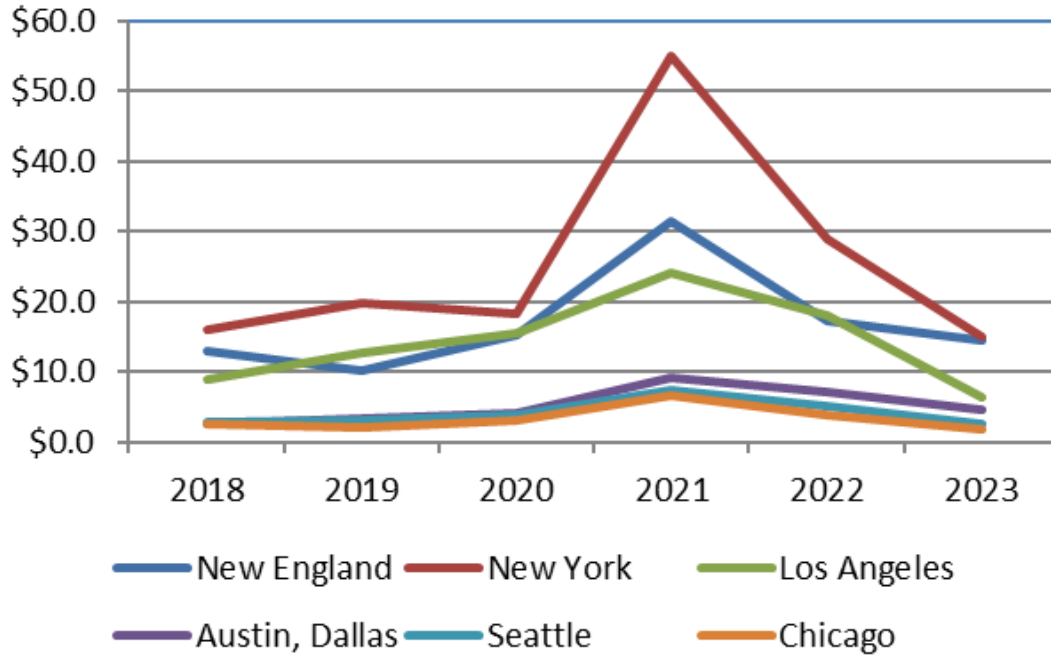
### Six County Area GDP (Billions of Current Dollars)

Metro Area					Percent Change	
	2019	2020	2021	2022	Current \$ 2021-22	Real \$ 2021-22
LA-Orange	1,064.2	1,035.1	1,136.1	1,227.5	8%	1.8%
Ventura	53.5	53.9	58.5	62.3	6.6%	(0.4%)
Riv.-San Bern.	193.8	196.5	218.4	237.9	8.9%	1.1%
San Diego	245.5	246.7	272.8	295.6	8.4%	2.9%
<b>Six County Area</b>	<b>1,557</b>	<b>1,532.3</b>	<b>1,685.8</b>	<b>1,823.4</b>	<b>8.2%</b>	<b>1.8%</b>
United States	21,521.4	21,323	23,594	25,744.1	9.1%	1.9%

Source: U.S. Department of Commerce; 2022 estimates are preliminary

The San Francisco Bay Area is by far the largest recipient of new VC funding in the United States with \$51.7 billion in 2023 funding, down from a record \$106.8 billion in 2021 funding. The Six County Area has been one of the top three VC markets behind the Bay Area for the past decade, outpacing the Chicago, Seattle, and Austin, Dallas regional markets in total funding as shown below. VC funding fell broadly in all areas shown in the following figure in 2023 with the Six County Area falling to \$6.4 billion down from a record high \$24.1 billion VC funding level in 2021.

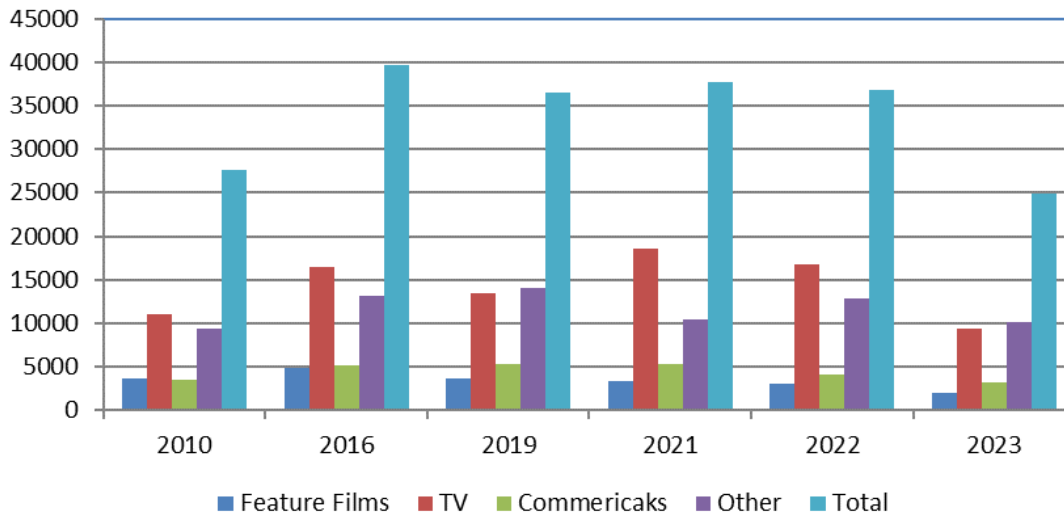
## Regional VC Funding (\$Billions)



Source: CB Insights

The motion picture and tourism sectors are two major components of the Six County Area economic base. Film LA reported that the number of filming shoot days in 2023 fell sharply as a result of the long film industry strikes that finally ended by year end. (see the following chart). However, the mix of production days changed over time with long-term losses in the production of major feature films (though levels have been relatively flat since 2010). TV and commercial shoot days have increased. In September 2014, California approved an increase in the State film tax credit to \$330 million per year from \$100 million starting in 2015. Production days set a recent record in 2016 of 39,627 production days and remained near that level until the strike in 2023.

## Filming Shoot Days in Los Angeles Area

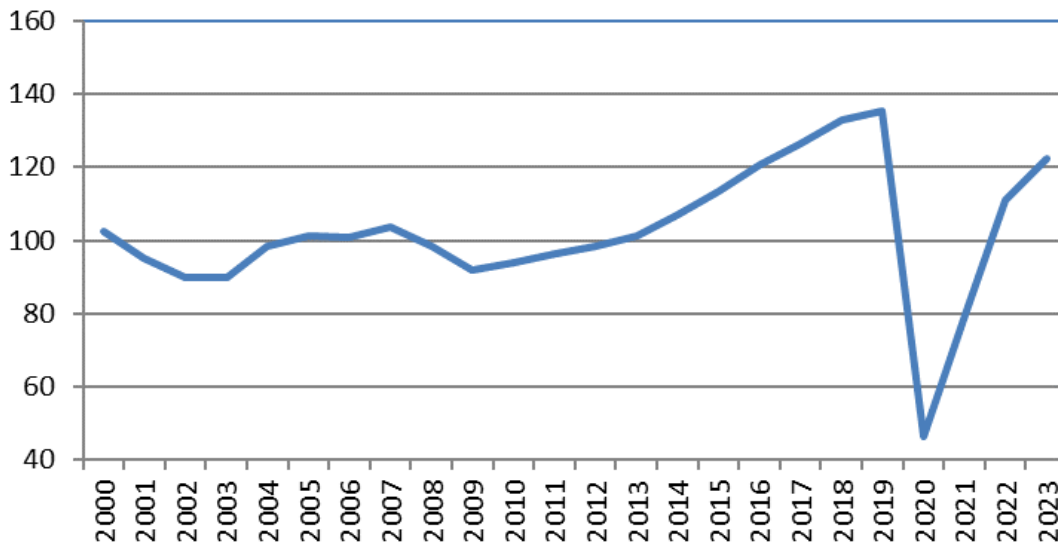


Source: Film LA

As of the end of 2019, California and the Six County Area were experiencing growth in both domestic and foreign visitors. Hotel rates and occupancy were increasing in the Six County Area and the same was true for employment in the hotel and amusement park sectors. In 2018, Los Angeles County set tourism records for the fourth year in a row for visitors, 50 million, up 3.1% over 2017, according to data from the Los Angeles Tourism and Convention Board. Foreign travel to the region in 2018 also surged with gains of 6.9% from China, 4.5% from Canada and 3.0% from the UK. In 2018, passenger travel at Los Angeles International Airport was up 3.5% to 87.5 million trips to set an all-time record. Air passenger travel at the major airports in the Six County Area reached record levels in 2019 up 2.0% over 2018 to 135.5 million trips led by gains at Burbank, Ontario, and San Diego airports (see the chart below).

The COVID-19 pandemic and travel restrictions resulted in a sharp decline in air travel in 2020 followed by some recovery in 2021 and additional gains in 2022 and 2023. The U.S. and other countries reduced travel restrictions in 2021 and 2022, and China recently reopened international travel. Air travel in increased by 10.2% compared to 2022 though it remains below pre-pandemic levels. Capacity expansions and programs to increase airport access and reduce ground congestion have been completed and are still ongoing, respectively, in the Six County Area.

### Passengers at Major Airports in the Six County Area



Source: Airport websites—Los Angeles International, Burbank, John Wayne, Ontario, and San Diego

The positives for long-term economic growth include the strength of the region as a center for knowledge-based and creative activities and international trade, tourism, and investment with the Pacific Rim. For example, the Six County Area does not have many automotive industry production jobs but nearly all large worldwide auto companies have a major design studio in the Six County Area.

#### Risks for the Long-Term Forecast

The long-term impact, if any, of the Russian invasion of Ukraine on the Six County Area economy cannot be known at this time. Both the short-term impact and any longer-term impacts will depend on the duration and magnitude of the war.

Housing and transportation challenges pose risks to the long-term economic competitiveness and quality of life in the Six County Area. Recent housing shortages have contributed to relatively large increases in home prices and rents. If more housing is not built, continuing increases in housing costs could affect the location decisions of firms and families.

The State Department of Housing and Community Development has recently released the Regional Housing Needs Assessment (RHNA) goals for SCAG and SANDAG. The total goal for the Six County Area for the period from 2021 to 2029 is 1.5 million units or nearly three times the recent annual permit levels. More than half of the units are for residents making less than 120% of the area median income. Roughly half of the units are to make up for current shortages and half for projected growth. SCAG and SANDAG have set housing goals for local jurisdictions and adopted policies in addition to the State policies to provide incentives for more housing to be proposed and approved.

In the past five years, the State legislature passed housing legislation to ease development restrictions and to set aside money for subsidized housing. In 2024, the State legislature will consider additional legislation that will make it easier to build housing at all income levels with special attention to housing barriers in jurisdictions that are not meeting the housing targets in their plans.

In addition, the Six County Area needs substantial transportation investment, of at least \$500 billion by 2040, to serve the growing number of residents and businesses. The two major planning agencies serving the Six County Area, SANDAG and SCAG, have plans to address these housing and transportation challenges. These plans require cooperation from local jurisdictions to locate housing and provide funding for both transportation and below-market housing projects. Additionally, these plans require state and local laws that reduce barriers to and costs of building housing and transportation improvements.

The Six County Area economy is connected to the national and world economies, especially the Pacific Rim, and is subject to fluctuations and changes in long-term demographic trends around the world and changes in national policies that affect the global economy.

Immigration has contributed, until recently, to population and economic growth in the Six County Area. Continuing low levels of immigration such as experienced in 2020 and 2021 would restrain growth in the nation and Six County Area, which historically has been the location for a relatively high share of national immigration. Recently, immigration levels have returned to higher levels as international travel is rebounding and the current administration is supporting higher levels of refugees and asylum seekers, though long-term immigration reform has still not passed.

The recent slowdown in port-related trade in the region poses a risk to long-term growth if not reversed, including recapture of port volume diverted to Eastern ports.

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# GLOSSARY OF TERMS

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**20 x 2020** — 2009 Water Conservation Act goal of twenty percent reduction in per capita regional water use by 2020.

**ACE** — Association of Confidential Employees; an employee bargaining unit at Metropolitan.

**Accrual** — An accounting method that records revenues when earned and expenses when incurred regardless of the timing of when the cash is actually paid or received.

**Acre-Foot** — A unit of measure equivalent to 325,851.4 gallons of water and weighs approximately 62.4 pounds, which meets the needs of two average families in and around the home for one year.

**ACWA** — Association of California Water Agencies.

**AFSCME** — American Federation of State, County, and Municipal Employees, Local 1902.

**Appropriation** — Money set aside for a specific purpose. The designation of the use to which a fund of money is to be applied.

**Bay Delta** — An environmentally sensitive area of the Sacramento/San Joaquin River Delta through and from which water flows to reach portions of California from the San Francisco Bay Area to San Diego. Moving water across the delta during the high-demand summer months is becoming more difficult as additional water is set aside to mitigate for environmental impacts.

**Budget** — A report of all anticipated expenditures and required reserves and the source of moneys to be used to meet such expenditures and provide such reserves.

**Budgeted Position** — A staff position approved by the Board of Directors for the fiscal year.

**Capital Investment Plan (CIP)** — Metropolitan's CIP is designed to refurbish existing facilities needed to ensure a reliable distribution system, expand treatment facilities to meet current and future water quality regulations, and expand storage and conveyance facilities to meet current and future storage requirements.

**Capital Project** — A project that results in a new asset (e.g., a facility, betterment, replacement, equipment, etc.) that has a total cost of at least \$50,000 and a useful life of at least five years. Computer software can be capitalized if it costs \$250,000 or more and has a useful life of at least three years.

**The California Environmental Quality Act (CEQA)** — A statute that requires state and local agencies to identify the significant environmental impacts of their actions, and to avoid or mitigate those impacts, if feasible.

**Climate Adaptation Master Plan for Water (CAMP4W)** — This comprehensive effort will provide the roadmap that will guide our future capital investments and business model as we confront our new climate reality in the years and decades ahead. This program requires coordination among Metropolitan's Board, member agencies, partner organizations, internal Metropolitan Groups, community based-organizations, trade organizations, and legislative partners. Current efforts are focused on coordinating the development of 1) Climate Decision-Making Framework 2) Financial Plan 3) Business Model 4) Internal and External Policy Recommendations.

**Colorado River Aqueduct (CRA)** — The 242-mile-long water conveyance system built by Metropolitan to carry water from the Colorado River to its Southern California service area.

**Conservation Program** — A program where Metropolitan provides financial assistance for the development of conservation programs at the local level (e.g. energy efficient washing machines, low flush toilets, etc.).

**CUWCC** — California Urban Water Conservation Council, a non-profit 501c3 formed as a partnership of water suppliers, environmental groups, and others interested in conserving California's greatest natural resource, water.

**Debt Service** — The annual cost of repaying outstanding debt.

**Delta Conveyance Project** — The Department of Water Resources (DWR) is pursuing a new environmental review and planning process for a single tunnel project to modernize the State Water Project's Bay-Delta conveyance. On December 21, 2023, DWR certified the Final EIR and adopted the Delta Conveyance Project. The Delta Conveyance Project proposes to modernize the SWP's water infrastructure in the Sacramento-San Joaquin Delta to increase the state's water supply reliability. The project features a large tunnel that would bypass the Delta's imperiled environment by carrying water below the Delta from the north to delivery infrastructure in the south. The approved project, identified in the Final EIR as the Bethany Reservoir Alternative, would feature two intakes with a total diversion capacity of 6,000 cubic feet-per-second. Information regarding the Delta conveyance project is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/delta-conveyance/>

**Department of Water Resources (DWR)** — A department within the California Resources Agency which is responsible for the state's management and regulation of water usage.

**Distribution System** — Refers to the network of pipelines and canals used for the conveyance of water from Metropolitan's terminal reservoirs to member agency service connections.

**DVL** — Diamond Valley Lake. A reservoir built by Metropolitan with a capacity of 800,000 AF.

**EIR** — Environmental Impact Report.

**EMS** — Energy Management System.

**Endangered Species Act (ESA)** — An act of the federal government enacted in 1973 that provides for the conservation of species that are endangered or threatened and the conservation of the ecosystems on which they depend. A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future.

**Enterprise Fund** — To account for operations that are financed and operated where the intent is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

**Ethics Program** — State law (SB 60) mandates that Metropolitan maintain a program to address and seek to avoid potential ethical abuses relating to business relationships, solicitation and/or receipt of campaign contributions, and public notice and approval procedures for contracts of \$50K or more. This program includes on-going training for board members and employees regarding ethics in the workplace.

**FERC** — Federal Energy Regulatory Commission.

**Fund** — A self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein, which are segregated for the purpose of carrying on specific activities or attaining certain objective in accordance with special regulations, restrictions, or limitations.

**Fund Balance** — Created from excess revenues over expenditures. This can be a combination of collections/revenues being higher than budget and actual expenditures being lower than budget.

**IID/Metropolitan Conservation Agreement** — Water conservation agreement with the Imperial Irrigation District (IID) that allows for the development of certain water conservation capital structures by Metropolitan in the Imperial Valley. Metropolitan, in turn, gets the quantity of water conserved during the term of this agreement, four years during construction, and 35 years after completion. It encompasses both the operating and maintenance, in direct, and capital cost of developing and implementing the program. This agreement is renewable.

**IRWMP** — Integrated Regional Water Management Plan.

**Integrated Resources Plan (IRP)** — An open and participatory planning process that takes a broad view of all water resource options available to the region and searches for the right combination of investments to achieve water supply objectives in a cost-conscious and environmentally responsible manner.

**KPIs** — Key Performance Indicators

**Local Resources Program (LRP)** — A program in which Metropolitan provides financial assistance to its member agencies for the development of local groundwater recycling and groundwater recovery projects.

**MAPA** — Management and Professional Employees Association, Local 1001.

**Member Agency** — Refers to any of the 26 cities or public water agencies that comprise the Metropolitan Water District and whose representatives constitute the Board of Directors of Metropolitan.

**MAF (million acre-feet)** — A unit measure of water.

**Minute 319** — Agreement that amends the 1944 Treaty between Mexico and the United States by establishing new rules in sharing Colorado River water and provides immediate plans to address current challenges. Parties to the agreement include Metropolitan Water District of Southern California, Southern Nevada Water Authority, Central Arizona Water Conservation District. Minute 319 allows Mexico to store water in Lake Mead as Intentionally Created Mexican Apportionment for future delivery and environmental flows. Stored water will be exchanged among the parties to the agreement.

**MOU (Memorandum of Understanding)** — Legal agreements entered into between Metropolitan and any of the four employee bargaining units that dictate terms and conditions of employment.

**Operating Equipment** — Any portable equipment costing \$5,000 or more and having a useful life of five years or more.

**Operations Maintenance Power & Recovery (OMP&R)** — A component of the State Water Contract that is billed to the contracting agencies to maintain the system.

**OPEB** — Other Post Employment Benefits.

**ORP** — Oxidation Retrofit Program.

**Ozone** — It is an unstable form of oxygen composed of three-atom molecules that break down readily to normal oxygen and nascent oxygen. The latter is a powerful oxidizing agent and has germicidal action. Ozone is usually produced with on-site generators by passing high-voltage electricity through dry atmospheric air or pure oxygen between stationary electrodes. This process converts a small percentage of the oxygen in the air into ozone. It is usually injected into the water to be treated in a highly baffled mixing chamber.

**PAYGO** — The practice of funding construction expenditures from current operating revenues in lieu of using debt proceeds.

**PVID** — Palo Verde Irrigation District.



**Palo Verde Land Management and Water Supply Program** — Calls for the development of a flexible water supply of between 25,000 and 111,000 acre–feet per year for 35 years through a land management and crop rotation program to be implemented by participating farmers in the Palo Verde Valley. The maximum water supply that could be developed would be about 3.63 million acre–feet during the 35–year term while the minimum water supply required to be developed would be 1.76 million acre–feet.

**Performance Measure** — An indicator of progress toward completing an initiative, achieving a goal, or implementing a strategy. Performance measures are quantifiable and tracked over time. Measures can indicate problem areas that need attention or be a guide for continual performance improvement through specific initiatives and actions.

**PCCP** — Pre-stressed Concrete Cylinder Pipe.

**Power Recovery** — Energy generated from the operation of sixteen Metropolitan-owned hydroelectric generating facilities. The term "recovery" derives from the capture of potentially wasted electrical energy from Metropolitan's water distribution system.

**Pure Water Southern California (PWSC)** — The initial construction of an advanced water treatment demonstration facility that takes treated wastewater and purifies it through various advanced treatment technologies to produce a safe, high-quality water source. The project is a partnership between Metropolitan and the Sanitation Districts of Los Angeles County and was completed in August 2019. The demonstration plant, now called the Grace F. Napolitano Pure Water Innovation Center is also being used for -Direct Potable Reuse ("DPR") testing for raw water augmentation at the two Metropolitan treatment plants in the future. The State Water Resources Control Board Division of Drinking Water approved new DPR regulations for California in January 2024. Information regarding the PWSC is located on Metropolitan's website at <https://www.mwdh2o.com/planning-for-tomorrow/building-local-supplies/regional-recycled-water-program/>

**Quagga Mussel** — A destructive non-native species of mussel from the Ukraine region that could clog pipes and water line.

**Quantification Settlement Agreement (QSA)** - The Quantification Settlement Agreement (QSA) and related agreements, executed by Coachella Valley Water District (CVWD), Imperial Irrigation District (IID), Metropolitan, and other parties in October 2003, establishes Colorado River water use limits for IID and CVWD, and provides for specific acquisitions of conserved water and water supply and delivery arrangements for up to 110 years. The QSA and related agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs and set aside several disputes among California's Colorado River water agencies.

**Replacement and Refurbishment (R&R)** — Capital projects that invest in Metropolitan's aging infrastructure by restoring them to optimal operating status.

**Reserves** — Funds set aside to comply with bond covenants, working capital policy, or other board policies as part of a prudent financial strategy.

**Revenue Remainder Fund** — See Financial Policies for description.

**SCADA** — Supervisory Control and Data Acquisition; automated systems that are used to monitor, operate, and control Metropolitan's water conveyance, treatment, and distribution systems.

**Senate Bill 60 (SB 60)** — This bill requires Metropolitan to place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures and, commencing February 1, 2001, to prepare and submit to the Legislature a prescribed annual report relating to water conservation.

**State Water Contract (SWC)** — State Water Contracts are the basis for all SWP construction and ongoing operations, as well as the basis for the contractors' participation in the SWP. As the largest of the now 29 contractors, Metropolitan is entitled to slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract.

**State Water Project (SWP)** — The SWP is the largest state-built, user-financed water supply and transportation project in the country. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement costs of the SWP.

**System Overview Study** — An analysis of Metropolitan's current delivery and treatment capacities versus projected needs during the planning horizon. The System Overview Study, coupled with the Integrated Area Study, analyzes various portfolios of projects that could be used to meet future demand and then develops a potential CIP. Finally, the System Overview Study analyzes the potential impact to rates from the proposed facilities.

**TAF (thousand acre-feet)** — A unit of measure of water.

**Total Dissolved Solids (TDS)** — Refers to the total organic carbon concentration in water. Measurement of TDS removal is used as a surrogate for disinfection by-product precursor removal.

**Treatment Plants** — Facilities used by Metropolitan for the treatment of water to remove contaminants or total dissolved solids thus ensuring that such water is potable before it is distributed to member agencies.

**U.S. Department of the Interior, Bureau of Reclamation (USBR)** — Largest wholesaler of water and second largest supplier of hydroelectric power in the American West. Promotes water conservation, recycling, and reuse.

**Vacancy Factor** — A calculated reduction to the O&M labor budget that attempts to account for vacancies that occur within organizations throughout the year. Budgeted labor dollars assume that budgeted positions will be filled for the entire fiscal year (2,080 hours). However, positions routinely become vacant throughout Metropolitan for part of the year as staff transfer to other positions or leave employment in the company and time elapses during the recruitment period to refill the vacated positions.

**WRSF** — Water Rate Stabilization Fund. See Financial Policies for description.

**WRM** — Water Resource Management (group); an organization within Metropolitan that focuses on water resource planning and management, including conservation.

**WSF** — Water Stewardship Fund. See Financial Policies for description.

**Water Supply Allocation Plan (WSAP)** — This plan is intended to be implemented during periods of regional water shortages to promote conservation of scarce water supplies. The WSAP was created to approach limiting supplies in a manner that is regionally fair and minimizes impacts by establishing accurate and fair baselines for each of Metropolitan's 26 member agencies.

**Water Supply Programs** — Water transfer and storage programs that supplement Colorado River and State Water Project supplies.

**Water Surplus Drought Management Plan (WSDM Plan)** — This plan directs Metropolitan's resource operations to help attain the region's reliability goal. The WSDM Plan recognizes the interdependence of surplus and shortage actions and is a coordinated plan that utilizes all available resources to maximize supply reliability. The overall objective is to ensure that shortage allocation of Metropolitan's imported water supplies is minimized.

**Working Capital** — A measure of both a company's efficiency and its short-term financial health. The working capital ratio is calculated as:  $\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$ .

**WSO** — Water System Operations (group); an organization within Metropolitan responsible for operating and maintaining Metropolitan's water conveyance, treatment, and distribution system and its appurtenant systems.

**THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA**

**RESOLUTION 9301**

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**RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
FINDING THAT FOR FISCAL YEARS 2022/23 THROUGH 2025/26, THE AD VALOREM  
PROPERTY TAX RATE LIMITATION IN SECTION 124.5 OF THE METROPOLITAN  
WATER DISTRICT ACT IS NOT APPLICABLE BECAUSE IT IS ESSENTIAL TO  
METROPOLITAN'S FISCAL INTEGRITY TO COLLECT AD VALOREM PROPERTY  
TAXES IN EXCESS OF THAT LIMITATION**

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The Board of Directors of The Metropolitan Water District of Southern California (the "Board") hereby finds that:

1. The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Section 124 of the Metropolitan Water District Act (the "Act"), is authorized to levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district; and
2. Pursuant to Section 307 of the Act, the Board of Directors ("Board") determines the amount of money necessary to be raised by taxation for district purposes each fiscal year and fixes rates of taxation upon the assessed valuation of property taxable by the district to be levied accordingly; and
3. Since its inception Metropolitan has levied and collected property taxes; and
4. The Board, pursuant to sections 133 and 134 of the Act, is authorized to fix the rate or rates at which water shall be sold. Such rates, so far as practicable, shall result in revenue which, together with revenue from fixed charges or assessments, will pay Metropolitan's operating expenses, capital costs, debt service and other expenses and obligations; and
5. Before 1942, all revenues to pay for operations, construction of the Colorado River Aqueduct, other facilities, and other Metropolitan obligations came from ad valorem property taxes. After deliveries of Metropolitan water began in fiscal year 1941/42, water sales were an additional source of revenues, but not until 1974 did revenues from water sales equal revenues from ad valorem taxes; and
6. On November 4, 1960, Metropolitan entered into its contract with the California Department of Water Resources (the "State Water Contract") for water service from the State

Water Project. Metropolitan's was the first contract executed and the prototype for the 28 state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159; and

7. Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction and replacement of the State Water Project system, as well as ongoing operating and maintenance costs, regardless of quantities of water delivered to Metropolitan and regardless of the amounts of water Metropolitan delivers to its member agencies. Approximately 70 percent of Metropolitan's State Water Contract obligations are fixed, or unrelated to the quantity of water delivered; and

8. Metropolitan's authority to levy a tax or assessment to satisfy State Water Contract obligations was a condition to entering into the State Water Contract, and the California Department of Water Resources only executed state water contracts with agencies that have taxing power; and

9. The State Water Contract expressly provides that, if other available funds are not sufficient, Metropolitan must levy a tax or assessment to satisfy its State Water Contract obligations; and

10. Metropolitan's outstanding general obligation bonds and State Water Contract obligations are indebtedness approved by the California voters before Article XIII A of the California Constitution (Proposition 13) was adopted; and

11. Metropolitan's revenues from water transactions and deliveries vary with the quantity of water delivered and water deliveries fluctuate significantly with drought, weather conditions, availability of local supplies, economic conditions and other factors affecting regional demands. During the period from fiscal year 2011/12 through fiscal year 2020/21, Metropolitan's annual Member Agency water transactions ranged from 1.37 million acre-feet to 2.06 million acre-feet; and

12. When fixing taxes and setting rates, the Board and Metropolitan's member agencies evaluate the appropriate mix of property taxes and water rates and charges to promote Metropolitan's fiscal stability and ensure its ability to satisfy the region's long-term water supply needs while reasonably and fairly allocating the cost of providing service to its member agencies and complying with legal requirements; and

13. On May 8, 1984, the Board approved recommendations to amend the Act, set forth in Board Letter 6-2 dated April 30, 1984; and

14. Such amendments were incorporated into Assembly Bill 1445, which was approved by the Legislature and filed with the California Secretary of State on July 3, 1984, and added to the Act as Section 124.5; and

15. Section 124.5 provides that Metropolitan must limit the ad valorem property tax to collect no more than the amount required to pay for a fraction of voter-approved debt, specifically, the composite amount required to pay (1) the principal and interest on general obligation bonded indebtedness of the district and (2) that portion of the district's payment obligation under a water service contract with the state which is reasonably allocable, as determined by Metropolitan, to the payment by the state of principal and interest on bonds issued pursuant to the California Water Resources Development Bond Act as of the effective date of Section 124.5 and used to finance construction of facilities for the benefit of the district; and

16. Section 124.5 further provides that its restrictions do not apply "if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to that date of the hearing;" and

17. Section 124.5's rate restriction became effective in fiscal year 1990/91; and

18. In fiscal years 1990/91 through 1999/2000, the Board maintained Metropolitan's tax levy rate at .0089 percent, a rate that was below the rate then permitted under the restriction clause of Section 124.5; and

19. Metropolitan's tax levy rate has declined from .0089 percent in fiscal year 1999/2000 to .0035 percent in fiscal year 2012/13, and the Board has made the necessary finding since fiscal year 2013/14 that it is essential to fiscal integrity to collect property taxes in excess of the limits set forth in Section 124.5; and

20. On February 8, 2022, the General Manager presented to the Board a proposed biennial budget for fiscal years 2022/23 and 2023/24, proposed rates for calendar years 2023 and 2024, proposed charges for 2023, and the Ten-Year Financial Forecast that were based on the proposal that Metropolitan maintain its current ad valorem property tax rate of 0.0035 to maintain fiscal integrity; and

21. On March 7, 2022, the General Manager provided an information letter to the Board reviewing the applicability of Section 124.5 for fiscal years 2022/23 through 2025/26; and

22. On March 8, 2020, the Board held a public hearing with advance notice as required by Section 124.5, to consider the recommendation to suspend the tax restriction clause of Section 124.5 for to give interested parties the opportunity to present their views regarding the recommendation that it is essential to fiscal integrity to collect property taxes in fiscal years 2022/23 through 2025/26 in excess of the limits of Section 124.5; and

23. Metropolitan currently utilizes tax revenues solely to pay debt service on its general obligation bonds, approved by the voters in 1966 and presently outstanding in the amount of \$26,830,000 as of December 31, 2021, and a portion of its State Water Contract obligations capital costs; and

24. Metropolitan provides, sells and delivers a reliable water supply at wholesale to its member agencies throughout a broad service area, and its integrated water system is able to deliver water throughout its service area; and

25. Metropolitan's participation in the State Water Project under the State Water Contract is fundamental to Metropolitan's ability to consistently provide a reliable water supply and delivery at wholesale to its service area and, thus, satisfaction of its State Water Contract obligations is essential to Metropolitan's mission; and

26. The State Water Project facilities are over 50 years old and Metropolitan's State Water Contract obligations include increasing costs for repair and replacement of existing facilities that are needed to both maintain the storage and conveyance capacity of the State Water Project facilities and assure continued availability and delivery of supplies from the State Water Project and other sources. These costs and obligations were not foreseen by the Legislature when, in 1984, it established the Section 124.5 tax rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

27. Metropolitan's State Water Contract obligations also include substantial construction, replacement, operation, and maintenance costs for endangered species protection and conservation measures, consistent with state and federal mandates. These obligations must be undertaken to ensure the reliability of the State Water Project, to address ecosystem needs, and to secure long-term operating permits consistent with the federal and state endangered species acts. These costs and obligations were not foreseen or considered by the Legislature when, in 1984, it established the Section 124.5 rate restriction and nothing

suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether collecting more than the limitation in that Section is essential to Metropolitan's fiscal integrity; and

28. Consideration of, and providing for, current and anticipated State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

29. Availability of diverse financial resources to satisfy Metropolitan's State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

30. An appropriate balance of fixed costs and fixed revenue is essential to Metropolitan's long-term fiscal health; and

31. The ad valorem tax is essential to the appropriate balance of fixed costs and fixed revenue under current circumstances; and

32. Continuing an ad valorem property tax rate in excess of the limit of Section 124.5 will allow the Board flexibility to fund Metropolitan's State Water Contract obligations fully and fairly in fiscal year 2022/23 through 2025/26 and for the foreseeable future; and

33. When it enacted Section 124.5, the Legislature recognized the importance of robust fixed revenue sources. At the same time that it established the rate restriction and safety valve to make the restriction inapplicable, it authorized alternative fixed revenue sources in the form of benefit assessments and standby charges. To the extent such assessments or charges would be new assessments or charges, they would likely be governed by additional requirements not in place or contemplated when the Legislature enacted Section 124.5. In the Board's judgment, adoption of such new or additional assessments or charges is not practical and they are not practical fixed revenue sources at this time, especially because those assessments and charges would be collected from property owners already paying the ad valorem property taxes; and

34. In FY 2021/22, approximately 90 percent of Metropolitan's estimated costs are fixed, while approximately 18 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges; in FY 2022/23, approximately 80 percent of Metropolitan's estimated costs are fixed, while approximately 18 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges. Collecting an amount in excess of the Section 124.5 rate limitation will allow Metropolitan to sustain ad valorem property tax revenues at 8 percent of overall revenues in fiscal year 2022/23 and fiscal year 2023/24. If Section 124.5 limitations were applied, it is anticipated that, in fiscal years 2022/23 through 2025/26, and thereafter, ad valorem property tax revenue would drop to less than 0.1 percent overall revenue; and

35. If the Section 124.5 limit is applicable, fiscal years 2022/23 through 2025/26 fixed revenues as a percentage of total revenues will decline approximately from 18 percent in fiscal year 2021/22 to an average of 10 percent for fiscal years 2022/23 through 2025/26; and

36. Considering Metropolitan's significant fixed costs and fluctuating volumetric revenues, robust and diverse fixed revenues are essential to Metropolitan's fiscal well-being for the additional reason that they help Metropolitan maintain its creditworthiness. Positive credit ratings are central to fiscal integrity because they reduce the cost of borrowing and provide flexibility by increasing access to credit markets. Access to credit markets is especially important whenever Metropolitan faces supply or demand uncertainties. As set forth above, collecting more tax revenue in excess of the Section 124.5 limit will allow Metropolitan to retain important fixed revenues; and

37. Ad valorem taxes are an important component of Metropolitan’s fiscal integrity because they help ensure that those for whom costs are incurred help pay those costs. As a wholesale water agency, Metropolitan’s customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water transactions with Metropolitan; whereas ad valorem taxes are levied directly on residents and businesses that are property owners within Metropolitan’s service area. All property owners within Metropolitan’s service area benefit from the water system that allows water to be delivered in Southern California. Ad valorem taxes ensure that residences and businesses pay a share of costs of the system; and

38. Maintaining the existing ad valorem tax rate advances fiscal integrity because it takes pressure off Metropolitan’s volumetric water rates and readiness-to-serve and capacity charges and assist the Board, in its discretion, in maintaining a fair and appropriate balance between fixed costs and fixed revenues and help ensure that all who benefit from Metropolitan’s service pay a fair share of the cost of that service; and

39. Continuing an ad valorem property tax rate in excess of the limits of Section 124.5 and preventing the decline in fixed revenues will create a more stable water revenue structure that can better deal with fluctuations in water transactions and support drought response measures; and

40. Metropolitan’s reliance on property taxes is significantly lower than most other agencies that entered into state water contracts. Other state water contractors rely on property taxes to cover up to 100 percent of their state water contract obligations. Even if all of Metropolitan’s property tax revenue were fully allocated to State Water Contract obligations— and it is not, as a portion covers Metropolitan’s general obligation debt service—Metropolitan would cover only an average of 24 percent for fiscal years 2022/23 through 2025/26 of its State Water Contract obligations. This percentage is significantly lower than other state water contractors; and

41. An analysis of fiscal health and stability must consider long-term circumstances, and the full spectrum of facts and circumstances, including the appropriate mix of property taxes and water rates and charges that will best allow Metropolitan to satisfy the region’s long-term water supply needs; and

42. Notices of a public hearing were filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate on February 24, 2022; and

43. The Board conducted a public hearing at its regular meeting on March 8, 2022, at which interested parties were given the opportunity to present their views regarding the recommendation that it is essential to Metropolitan’s fiscal integrity to collect taxes in excess of the Section 124.5 limitation for fiscal years 2022/23 through 2025/26; and

44. The Board has carefully considered the comments and evidence and all material factors relevant to the finding, and all such materials were made available at <https://www.mwdh2o.com/who-we-are/budget-finance/property-tax-rate-for-fy-202021/> ; and

45. The meeting of the Board was conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which a quorum was present and acting throughout; and

46. A four-year determination of the applicability of Section 124.5 is appropriate given (1) the flexibility required to manage Metropolitan’s finances during current drought conditions, (2) the time required to complete ongoing financial and strategic planning efforts, (3) inherent volatility found in



Metropolitan’s financial profile, and (4) the scope of financial planning timeframes used in the financial sector for various projections and analysis;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating public comments and evidence and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 9-2 and presented on March 8, 2022, and in recognition of the facts and considerations set forth in this Resolution, hereby:

1. Finds and determines that it is essential to Metropolitan’s fiscal integrity to collect ad valorem property taxes in excess of the Section 124.5 limitation on ad valorem property taxes in fiscal years 2022/23 through 2025/26; and
2. Resolves and determines that pursuant to its finding, the tax rate restriction in Section 124.5 of the Act is inapplicable when setting the ad valorem property tax rate for fiscal years 2022/23 through 2025/26; and
3. Waives compliance with Section 4301(b) of Metropolitan’s Administrative Code for any tax levy that utilizes this finding regarding Section 124.5 of the Act.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution of the Board of Directors of The Metropolitan Water District of Southern California, adopted at its meeting held April 12, 2022.



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Secretary of the Board of Directors  
of The Metropolitan Water District  
of Southern California

**THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA**

**RESOLUTION 9353**

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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
FIXING AND ADOPTING WATER RATES  
TO BE EFFECTIVE JANUARY 1, 2025 AND 2026**

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The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The Board of Directors (“Board”) of The Metropolitan Water District of Southern California (“Metropolitan”), pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), is authorized to fix such rate or rates for water that, so far as practicable, will result in revenue which, together with revenue from any water standby or availability service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

2. On March 12, 2002, the Board adopted Resolution 8805, “Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California Fixing And Adopting Rates And Charges For Fiscal Year 2002/03 And To Direct Further Actions In Connection Therewith”, adopting a new structure for Metropolitan’s water rates and charges in order to enhance Metropolitan’s fiscal stability and ability to ensure the region’s long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies; and

3. The rate structure adopted by Resolution 8805 was the product of a three-year process that included a strategic planning process commenced by the Board in July 1998, discussions with member agencies, retail agencies and other stakeholders and numerous meetings of Metropolitan’s Board, Audit, Budget and Finance Committee, Budget, Finance and Investment Committee and Subcommittee on Rate Structure Implementation; and

4. Development of the rate structure adopted by Resolution 8805 included Strategic Plan Policy Principles adopted by the Board on December 14, 1999 to provide a framework for the development of a revised rate structure; a Composite Rate Structure Framework adopted by the Board on April 11, 2000 (the “Rate Structure Framework”); a Rate Structure Action Plan adopted by the Board on December 12, 2000; and study of (i) a detailed rate design proposal presented in December 2000 (the “December 2000 Proposal”) developed from the Rate Structure Framework and (ii) an alternative rate structure proposal presented in September 2001 (the “Proposal”) that addressed concerns which were raised about the December 2000 Proposal; and

5. By Resolution 8774, “Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California To Approve Rate Structure Proposal And To Direct Further Actions In Connection Therewith,” adopted October 16, 2001, the Board approved the Proposal, which unbundled water rates and charges to reflect the different functions undertaken by Metropolitan to provide its services, and determined that the Proposal (i) was consistent with the Board’s Strategic Plan Policy Principles, (ii) addressed issues raised during the consideration of the December 2000 Proposal, (iii) furthered Metropolitan’s strategic objectives of ensuring the region’s long term water supply reliability through encouragement of sound and efficient water resources management, water conservation, and accommodating a water transfer market, and (iv) enhanced the fiscal stability of Metropolitan; and

6. By Resolution 8774, the Board directed the General Manager to (i) prepare a report on the Proposal describing each of the rates and charges and the cost of service process used to develop the rates and charges and (ii) utilize the Proposal as the basis for determining Metropolitan’s revenue requirements and recommending rates to become effective January 1, 2003, in accordance with Metropolitan’s annual rate-setting procedure under the Administrative Code; and

7. On January 7, 2002, the General Manager presented to the Budget, Finance and Investment Committee (formerly the Audit, Budget and Finance Committee and today, the Finance and Asset Management Committee) a detailed report describing each of the rates and charges and the supporting cost of service process, dated December 2001 (the “2001 Cost of Service Report”), that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major functions that Metropolitan undertakes to provide its services to its member agencies, (iv) classified these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

8. By Resolution 8805 the Board found and determined that the cost of service process reasonably and fairly: (i) identified revenue requirements; (ii) allocated costs to the functions that Metropolitan undertakes to provide its services to its member agencies; (iii) classified service function costs based upon use of and benefit from Metropolitan’s system, and (iv) allocated costs to rates and charges based upon customary water industry standards; and

9. By Resolution 8805 the Board found and determined that the water rates and charges were supported by the cost of service process and that such rates and charges reasonably and fairly allocated the costs of providing service of Metropolitan’s water system to its member agencies and third-party transporters of water, if any; and

10. The Board received the Final Report on Rates and Charges, dated June 28, 2002, that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan undertakes, (iv) classified these service function costs based on the use of and benefit of the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

11. Metropolitan’s water rates approved by the Board thereafter have utilized the unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805; and

12. The cost of service process supporting Metropolitan’s water rates approved by the Board on March 11, 2003 and in following years is consistent with the cost of service process described in the 2001

Cost of Service Report. Raftelis Financial Consultants, Inc. (“RFC”), the firm engaged in 1998 to perform a comprehensive cost of service study and assist in the development of the rate structure, confirmed to the Board in a report dated April 6, 2010, that the fiscal year 2010/11 cost of service report presented to the Board in January 2010 was accurate and consistent with the 2001 Cost of Service Report and that the fiscal year 2010/11 cost of service report and rate methodology was consistent with water industry best practices and complies with cost of service and rate guidelines in the American Water Works Association’s Manual M-1, *Principles of Water Rates, Fees and Charges*; and

13. In *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case Nos. CPF-10-510830 and CPF-12-512466 (the “2010 and 2012 Cases,” collectively), the San Diego County Water Authority challenged Metropolitan’s water rates adopted on April 13, 2010 and April 10, 2012; and

14. On June 21, 2017, the Court of Appeal entered a decision in the 2010 and 2012 Cases in *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, 12 Cal.App.5th 1124, holding that Metropolitan may recover its State Water Project transportation costs through its transportation rates and that based on the administrative record before it the rates in CYs 2011 through 2014 did not support Metropolitan’s Water Stewardship Rate allocation to its transportation rates, and on September 27, 2017, the California Supreme Court denied SDCWA’s Petition for Review, making the decision final; and

15. On September 21, 2021, the Court of Appeal issued a new appellate decision in which it interpreted its 2017 appellate decision. The Court of Appeal clarified that its 2017 decision regarding the Water Stewardship Rate was not limited to 2011-2014, and that it prohibits the inclusion of the Water Stewardship Rate in transportation rates charged under Metropolitan’s wheeling rate and in the price term of the SDCWA-MWD Exchange Agreement from 2015 forward. On November 23, 2021, Metropolitan’s Board approved an action directing staff to recover 100 percent of demand management costs from Metropolitan’s supply rate elements in the future rate and charge proposals.

16. San Diego County Water Authority filed lawsuits also challenging Metropolitan’s water rates adopted on April 8, 2014, April 12, 2016, and April 10, 2018, each also titled *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, pending in the San Francisco Superior Court under Case Nos. CPF-14-514004, CPF-16-515282, and CPF-18-516389. Following a consolidated trial in 2022. The court ruled, among other things, that Metropolitan does not have a duty to include a reasonable credit for any offsetting benefits pursuant to Water Code section 1811(c) when setting its rates; and

17. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the rates and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds, subordinate revenue bonds, short-term certificates and to the payment of revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and

18. On February 12, 2024, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the proposed biennial budget for fiscal years 2024/25 and 2025/26, identifying key assumptions, addressing key circumstances such as low projected water transactions, and increased cost pressures, incorporating a ten-year financial forecast; determining anticipated total revenues and revenues anticipated to be derived from water transactions and firm revenue sources required during fiscal years 2024/25 and 2025/26, identifying revenue requirements for that period and recommending rates and charges consistent with cost of service principles to be effective January 1, 2025

and January 1, 2026, and explaining that costs and revenues may be at variance with forecasts and variations will be addressed, for example by contributions to, or withdrawals from, financial reserves maintained for this purpose; and

19. The recommended rates were developed using the same unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805, as detailed in the FYs 2024/25 and 2025/26 Cost of Service Report for Proposed Water Rates and Charges (the “2024 Cost of Service Report”) provided to the Board and the public on February 12, 2024; and

20. The detailed proposed departmental and non-departmental biennial budget for fiscal years 2024/25 and 2025/26 (the “Proposed Biennial Budget”) was distributed to the Board and the public on February 12, 2024; and

21. On February 12, 2022, the capital investment plan (CIP) appendix to the detailed Proposed Biennial Budget for fiscal years 2024/25 and 2025/26 was also provided to the Board and the public, providing detailed information on proposed capital projects and capital improvement costs; and

22. Board workshops and discussions regarding the Proposed Biennial Budget and future water rates and charges were held on February 12, 2024, March 12, 2024, and April 9, 2024 at the regularly scheduled Finance and Asset Management Committee meetings, and on February 27, 2024 and March 26, 2024 at a special meetings of the Finance and Asset Management Committee; and

23. The Board conducted a public hearing at its regular meeting on March 12, 2024, at which interested parties were given the opportunity to present their views regarding the proposed water rates and charges; and

24. Notice of the public hearing was published prior to the hearing in various newspapers of general circulation within Metropolitan’s service area; and

25. Metropolitan received written comments regarding the proposed water rates and charges, which, together with Metropolitan’s responses, have been provided to the Board and the public; and

26. Before the April 9, 2024 Board meeting, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing modifications to the Proposed Biennial Budget for fiscal years 2024/25 and 2025/26 with additional alternatives to the budget recommendations made in February 2024 pursuant to Board and public feedback; alternatives to the determination of total revenues and of revenues to be derived from water transactions and firm revenue sources required during fiscal years 2024/25 and 2025/26, and alternatives to the proposed rates to be effective January 1, 2025 and January 1, 2026, and charges to be effective January 1, 2025; and

27. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

28. All board letters, reports, presentations and other documents referred to in this Resolution may be viewed by Board members and the public on Metropolitan’s web page at the Budget & Finance page of Metropolitan’s website, <http://www.mwdh2o.com>, or in the office of the Board Executive Secretary;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

**Section 1.** That the Board of Directors of The Metropolitan Water District of Southern California hereby fixes and adopts the following water rates, to be effective on January 1, 2025 and January 1, 2026 as shown in the table below, in order to enhance Metropolitan’s fiscal stability and ability to ensure the region’s long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies and other potential users of Metropolitan’s system:

<b>Table 1. Water Rates</b>		
<b>Water Rates Effective January 1st</b>	<b>2025</b>	<b>2026</b>
Supply Rate (\$/AF)	\$290	\$313
System Access Rate (\$/AF)	\$463	\$492
System Power Rate (\$/AF)	\$159	\$179
Treatment Surcharge (\$/AF)	\$483	\$544
<b>Full Service Untreated Volumetric Rate (\$/AF)</b>	<b>\$912</b>	<b>\$984</b>
<b>Full Service Treated Volumetric Rate (\$/AF)</b>	<b>\$1,395</b>	<b>\$1,528</b>

**Section 2.** The Board finds and determines that the rates specified in Section 1 utilize the unbundled water rate and charge elements of the rate structure approved by Resolution 8774 and implemented by Resolution 8805, with the exception of the removal of the Water Stewardship Rate element and recovery of demand management costs from the supply rate elements, and that the cost of service process supporting the rates and charges specified in Section 1 is the cost of service process described in the 2024 Cost of Service report and in the revised report provided to the Board prior to the April 9, 2024 meeting. The adopted rates and charges and final cost of service reports will be on file at the Budget & Finance page of [www.mwdh2o.com](http://www.mwdh2o.com) and available for review by interested parties at Metropolitan’s headquarters.

**Section 3.** The Board finds and determines that the cost of service process reasonably, fairly and proportionately: (i) identifies revenue requirements; (ii) shows the costs of major service functions that Metropolitan undertakes, (iii) assigns costs to the service functions; (iv) allocates service function costs based upon use of and benefit from Metropolitan’s system, and (v) distributes costs to rates and charges based upon customary water industry standards. Accordingly, the Board finds that the cost of service process supports the rates and charges by creating a logical nexus between the costs and the revenues required and the rates and charges necessary to defray Metropolitan’s costs of providing its services and for use of its water system.

**Section 4.** The Board finds and determines that the rates specified in Section 1 are fixed by the Board pursuant to Sections 133 and 134 of the Act, and, so far as practicable, will result in revenue which, together with revenue from water standby or availability service charges or assessments, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt. Actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and Administrative Code Section 5202(e) contemplates variation in actuals to budget and provides policy guidance to the Board, and the Board finds and determines that Metropolitan’s financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e).

**Section 5.** The Board finds and determines that the rates specified in Section 1, together with other revenues from Metropolitan’s charges, ad valorem property taxes, and other miscellaneous revenue, do not exceed the reasonable and necessary cost of providing Metropolitan’s water services for which the rates and charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

**Section 6.** The Board finds and determines that the respective per-acre-foot rates and charges specified in Section 1 are paid for the corresponding products or services and use of Metropolitan’s water system, that Metropolitan provides such products or services directly to the member agencies or other users of Metropolitan’s system that pay such rates and charges, and that such products or services are not provided to those not charged.

**Section 7.** The Board finds and determines that each of the rates specified in Section 1 are set for Metropolitan’s services and are not levied for separate general revenue purposes.

**Section 8.** The General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

**Section 9.** If any provision of this Resolution is held invalid, that invalidity shall not affect other provisions of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

**Section 10.** That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 9, 2024.



Secretary of the Board of Directors  
of The Metropolitan Water District  
of Southern California

**THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA**

**RESOLUTION 9354**

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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
FIXING AND ADOPTING  
A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2025**

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The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. Pursuant to Resolution 8774, the Board of The Metropolitan Water District of Southern California (“Metropolitan”) approved a rate structure proposal at its meeting on October 16, 2001, described in Board Letter 9-6, including a Readiness-To-Serve (“RTS”) Charge; and
2. Providing firm revenue sources is a goal of such rate structure; and
3. The amount of revenue to be raised by the RTS Charge shall be as determined by the Board and allocation of the RTS Charge among member public agencies (“member agencies”) shall be in accordance with the method established by the Board; and
4. The RTS Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
5. Metropolitan has legal authority to fix and adopt such RTS Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), and to fix it as an availability of service charge pursuant to Section 134.5 of the Act; and
6. Under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan’s operating expenditures and provide for payment of other costs, including payment of the interest and principal of Metropolitan’s non-tax funded bonded debt; and
7. The RTS Charge recovers the capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability; and
8. Pursuant to Resolution 8322, adopted by the Board on May 14, 1991, Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the RTS Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s revenue bonds, subordinate revenue bonds, short-term certificates and commercial paper; and



9. Under authority of Section 134.5 of the Act, an RTS Charge levied as an availability of service charge may be collected from the member agencies within Metropolitan, or may continue to be collected as a standby charge against individual parcels within Metropolitan's service area; and

10. Certain member agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their RTS Charge obligation through a Metropolitan water standby charge ("Standby Charge") levied on parcels within those member agencies; and

11. Under authority of Section 134.5 of the Act, the Standby Charge may continue to be levied on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and

12. Metropolitan is willing to comply with the requests of member agencies opting to have Metropolitan continue to levy the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein; and

13. On April 9, 2024, the Board considered the rates and charges presented by the General Manager, approved the biennial budget for fiscal years 2024/25 and 2025/26, adopted recommended water rates for calendar years 2025 and 2026 and charges for calendar year 2025, and received information and documents that have been made available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

14. In approving the Proposed Biennial Budget and adopting the rates and charges on April 9, 2024, the Board determined the amount of revenue to be raised by the RTS Charge in calendar year 2025 to be \$181,000,000, based on information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

15. Written notice of intention of Metropolitan's Board to consider and take action at its regular meeting of April 9, 2024, to adopt Metropolitan's RTS Charge for calendar year 2025 was given to each of Metropolitan's member agencies; and

16. The RTS Charge for calendar year 2025 applicable to each member agency is reflected in the Engineer's Report dated April 2024 and its method of its calculation and the specific data used in its determination are as specified in the cost of service report; and

17. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board does hereby resolve, determine and order as follows:

**Section 1.** That the Board hereby fixes and adopts an RTS Charge for the period from January 1, 2025 through December 31, 2025.

**Section 2.** That said RTS Charge shall be in an amount sufficient to provide for payment of debt service not paid from ad valorem property taxes, and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability.

**Section 3.** That such RTS Charge for January 1, 2025 through and including December 31, 2025 shall be in the amounts specified in Section 4, which shall be determined on a historic basis for each acre-foot of water, included in Metropolitan’s average water deliveries to its member agencies for the applicable ten-year period identified in Section 4. The aggregate RTS Charge for the period from January 1, 2025 through and including December 31, 2025 shall also be as specified in Section 4.

**Section 4.** That the RTS Charge for January 1, 2025 through and including December 31, 2025 shall be allocated among the member agencies in proportion to the average of applicable deliveries (including exchanges and transfers) through Metropolitan’s system (in acre-feet) to each member agency during the ten-year period ending June 30, 2023, unless otherwise agreed and approved by Metropolitan’s Board. The allocation of the RTS Charge among member agencies is based on deliveries data recorded by Metropolitan and shall be conclusive in the absence of manifest error but may be corrected by Metropolitan to reflect any errors discovered by Metropolitan.

The amount of the RTS Charge to be charged to each member agency effective January 1, 2025, is as set forth in Schedule 1, which is based on deliveries data prepared by Metropolitan and may be corrected as agreed to by the impacted member agencies:

**Schedule 1**

<b>Calendar Year 2025 RTS Charge</b>			
	<b>Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2013/14 - FY2022/23</b>	<b>RTS Share</b>	<b>12 months @ \$181 million per year (1/25-12/25)</b>
Anaheim	23,001.9	1.69%	\$ 3,053,652
Beverly Hills	9,858.1	0.72%	1,308,727
Burbank	11,540.0	0.85%	1,532,010
Calleguas MWD	90,313.9	6.62%	11,989,760
Central Basin MWD	31,768.2	2.33%	4,217,436
Compton	12.0	0.00%	1,593
Eastern MWD	96,726.8	7.09%	12,841,114
Foothill MWD	8,399.5	0.62%	1,115,088
Fullerton	6,528.4	0.48%	866,688
Glendale	15,436.0	1.13%	2,049,230
Inland Empire Utilities Agency	57,672.1	4.23%	7,656,348
Las Virgenes MWD	19,302.4	1.42%	2,562,520
Long Beach	27,777.5	2.04%	3,687,644
Los Angeles	272,316.9	19.97%	36,151,847
Municipal Water District of Orange County	187,038.3	13.72%	24,830,556
Pasadena	19,104.9	1.40%	2,536,300
San Diego County Water Authority	175,570.9	12.88%	23,308,183
San Fernando	312.4	0.02%	41,473
San Marino	1,035.1	0.08%	137,416
Santa Ana	8,648.2	0.63%	1,148,105
Santa Monica	4,783.2	0.35%	635,001
Three Valleys MWD	62,674.4	4.60%	8,320,436
Torrance	15,088.8	1.11%	2,003,137
Upper San Gabriel Valley MWD	38,526.1	2.83%	5,114,591
West Basin MWD	111,549.0	8.18%	14,808,858
Western MWD	68,413.1	5.02%	9,082,286
<b>MWD Total</b>	<b>1,363,398.1</b>	<b>100.00 %</b>	<b>\$ 181,000,000</b>

Totals may not foot due to rounding

The General Manager shall establish and make available to member public agencies procedures for administration of the RTS Charge, including filing and consideration of applications for reconsideration of their respective RTS Charge. The General Manager shall review any applications for reconsideration submitted in a timely manner. The General Manager shall also establish reasonable procedures for the filing of appeals from his determination.

**Section 5.** That the RTS Charge specified in Schedule 1, together with other revenues from Metropolitan's water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan's water services for which the rates and charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

**Section 6.** That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the RTS Charge.

**Section 7.** That the RTS Charge and the amount applicable to each member agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted rates and charges to be effective January 1, 2025, which forms the basis of the RTS Charge, and the corresponding 2024 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

**Section 8.** That except as provided in Section 10 below with respect to any RTS Charge collected by means of the Standby Charge, the RTS Charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.

**Section 9.** That such RTS Charge may, at the request of any member agency which elected to utilize the Standby Charge as a mechanism for collecting the RTS Charge obligation in fiscal year 1993/94, be collected by continuing the Standby Charge at rates not to exceed rates levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.

**Section 10.** That the Standby Charge shall be collected on the tax rolls, together with the ad valorem property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan that funds the capital costs or maintenance and operation expenses for Metropolitan's water system, or future RTS Charge obligations of such agency. Notwithstanding the provisions of Sections 8 and 9 above, any member agency requesting to have all or a portion of its RTS Charge obligation collected through Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan, as provided in Administrative Code Section 4507.

**Section 11.** That notice is hereby given to the public and to each member agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 14, 2024 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue the Standby Charge for fiscal year 2024/25 under authority of Section 134.5 of the Act on land within Metropolitan at rates not to exceed rates, per acre of land, or per parcel of land less than an acre, levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area. Such Standby Charge will be continued as a means of collecting the RTS Charge.

**Section 12.** That no failure to collect, and no delay in collecting, any Standby Charge shall excuse or delay payment of any portion of the RTS Charge when due.

**Section 13.** That the RTS Charge is fixed and adopted by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for payment of the RTS Charge. In the event that the Standby Charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested continuation of the Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if continuation of such Standby Charge had never been sought.

**Section 14.** That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

**Section 15.** That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

**Section 16.** That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by mailing or by publication.

**Section 17.** That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 9, 2024.



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Secretary of the Board of Directors  
of The Metropolitan Water District  
of Southern California

**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
ENGINEER'S REPORT**

**PROGRAM TO SET A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2025,  
INCLUDING LOCAL OPTION TO CONTINUE COLLECTING A STANDBY CHARGE,  
DURING FISCAL YEAR 2024/25**

**April 2024**

**BACKGROUND**

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide wholesale water service for domestic and municipal uses to its 26 member public agencies. Approximately 19 million people reside within Metropolitan's service area, which covers approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan historically provided between 40 and 60 percent of the water used within its service area. To supply Southern California with reliable and safe water, Metropolitan imports water from the Colorado River and Northern California to supplement its member agencies' local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other local resource programs.

**REPORT PURPOSES**

As part of its role as a regional imported water supplier, Metropolitan builds, maintains, and operates capital facilities and implements water management programs that ensure the delivery of reliable high-quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's Readiness-to-Serve (RTS) Charge, and (2) describe the method and basis for levying Metropolitan's Standby Charge for those agencies electing to continue to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2024/25. **Because the Standby Charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS Charge is levied on a calendar year basis.** The RTS Charge for calendar year 2024 was adopted by Metropolitan's Board on April 11, 2023 and the RTS Charge for 2025 will be considered by the Board on April 9, 2024. The Board will consider the continuation of the Standby Charge for fiscal year 2024/25 on May 14, 2024.

Metropolitan collects the RTS Charge from its member agencies to recover a portion of the capital costs including debt service on bonds issued to finance capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge is collected from parcels of land within Metropolitan's member agencies that have elected to collect all or a portion of their RTS obligation through the Standby Charge, as a method of recovering the costs of special benefits conferred on parcels within their service area. The RTS Charge will partially pay for the facilities and programs described in this report, namely, the amount attributable to the portions providing emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge, when collected, will be utilized solely for capital payments and debt service on the capital facilities funded by the RTS Charge, as identified in this report.

The budgeted total RTS revenue for fiscal year 2024/25 is \$174.0 million, of which \$44.0 million is estimated to be collected via the Standby Charge based on fiscal year 2023/24 collections of the Charge as set forth in Table 5. The Standby Charge is collected on property tax bill.

## **METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS AND AVAILABILITY OF WATER SOURCES**

Metropolitan's member agencies have widely differing imported water supply needs and the availability of imported water supply from various sources also varies widely. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods and/or based on a variety of other factors, these agencies rely on Metropolitan to make up any shortfalls in local water supplies. Similar coordination challenges arise in managing water available from Metropolitan's various water supply sources.

To respond to fluctuating demands for water, Metropolitan and its member agencies collectively examined the available local and imported resource options in order to develop a cost-effective plan that meets the reliability and quality needs of the region. The product of this intensive effort was an Integrated Resources Plan (IRP) for achieving a reliable and affordable water supply for Southern California. The major objective of the IRP was to develop a comprehensive water resources plan that ensures (1) reliability, (2) affordability, (3) water quality, (4) diversity of supply, and (5) adaptability for the region, while recognizing the environmental, institutional, and political constraints to resource development. As these constraints change over time, the IRP is periodically revisited and updated by Metropolitan and the member agencies to reflect current conditions. The most recent update was adopted in 2016. In 2022, Metropolitan's Board adopted the 2020 IRP Regional Needs Assessment that incorporated scenario planning to address wide-ranging uncertainties rather than focusing on a single set of assumptions as in the past. To meet the water supply needs of the region, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system to its member agencies.

### **CAPITAL FACILITIES - CONVEYANCE AND DISTRIBUTION**

Metropolitan's water system has been built over time to meet the widely differing needs of its member agencies and the various sources of water available to Metropolitan. To meet those needs, Metropolitan's water delivery system is comprised of three basic conveyance and delivery components that form one integrated water system:

- State Water Project (SWP);
- Colorado River Aqueduct (CRA); and
- Distribution System

The system draws on diverse supply sources, transports water across a large part of the State and distributes water in six counties, where member agencies or their retail sub-agencies serve an estimated 19 million people. The CRA and the California Aqueduct of the SWP convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System. The system is an interconnected regional conveyance and distribution system with the ability to deliver supplies from each of the SWP, the CRA, and its storage portfolio to most areas of its vast and diverse service area to almost every member agency. This flexibility derives from the capital facilities and provides local and system-wide benefits to all member agencies, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area. The 2020 IRP Needs Assessment, however, identified reliability risks faced by member agencies that depend predominantly on SWP supplies served by Metropolitan.

As the 2007 Integrated Area Study (IAS) emphasized, regional system flexibility is a key component of overall reliability.<sup>1</sup> Today, system flexibility continues to be essential to the availability of Metropolitan’s services.<sup>2</sup> Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. Metropolitan must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to serve as large an area as is determined to be reasonable and practical with SWP water; and where a blend of water sources is served, to have the objective to the extent determined to be reasonable and practical. (MWD Act, Sec. 136.)

Metropolitan’s intent in the 2007 Integrated Area Study was to provide equitable reliability across its service area through a balanced combination of infrastructure, storage, demand management, and water supply programs. In the context of climate change, historical hydrology proved an inadequate guide to supplies available from the State Water Project and the Colorado River. From 2020 through 2022, imported supply losses outstripped the ability of Metropolitan’s portfolio to compensate. Further, Metropolitan could not provide equitable service to all member agencies. As such, Metropolitan’s board in August 2022 adopted a resolution that committed to three new policy statements:

1. All member agencies must receive equivalent water supply reliability through an interconnected and robust system of supplies, storage, and programs.
2. Metropolitan will reconfigure and expand its existing portfolio and infrastructure to provide sufficient access to the integrated system of water sources, conveyance and distribution, storage, and programs to achieve equivalent levels of reliability to all member agencies.
3. Metropolitan will eliminate disparate water supply reliability through a One Water integrated planning and implementation approach to manage finite water resources for long-term resilience and reliability, meeting both community and ecosystem needs

In 2023, a series of winter storms brought much needed precipitation in both the northern Sierra and the Upper Colorado River Basins, improving available supplies for Metropolitan. Water supply conditions greatly improved, but also presented challenges to store and distribute all available supplies. Operational flexibility is being increased by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network will fully allow Metropolitan to incorporate supply from the SWP and the CRA with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the Desert Water Agency/Coachella Valley Water District Advanced Delivery account, in-basin surface storage in Diamond Valley Lake and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network also allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs.

Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability, with a structural limitation that became starkly evident in the 2020-2022 drought. It is fair and reasonable for member agencies and all property owners within the service area to share the cost of developing and maintaining these assets and newly identified system flexibility projects because they all benefit from regional system flexibility and reliability.

<sup>1</sup> 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

<sup>2</sup> 2023 Annual Operating Plan, pg. 5-15

### State Water Project Description and Benefits

One of Metropolitan's two major sources of water is the SWP.<sup>3</sup> The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. See Figure 1. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area.



**Figure 1. Facilities of the State Water Project**



3 For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-19 dated December 2022 and titled "Management of the California State Water Project. Appendices to the Bulletin are also updated separately. Both are available at: <https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132>.

The SWP is managed and operated by the Department of Water Resources (DWR). All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by 29 agencies and districts, known collectively as the State Water Contractors (Contractors). The Contractors are participants in the SWP through long-term contracts for the delivery of SWP water and use of the SWP transportation facilities.

In 1960, Metropolitan signed the first water supply contract (as amended, the State Water Contract) with DWR. The original term of the water supply contract was 75 years. In 2022, a contract extension was authorized which extended the original term by another 50 years to 2085. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct.

Since 1960, the SWP system has been extended, improved, and refurbished. All such costs are payable by the Contractors. California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. On October 10, 2017, Metropolitan's Board voted to support financing for the California WaterFix project. However, the state terminated the project in April 2019. Consistent with the Governor's Executive Order N-10-19, the state then announced a new single tunnel Delta conveyance project, which was notably included as part of the Governor's 2020 Water Resilience Portfolio. In 2019, DWR initiated planning and environmental review for a single tunnel Delta Conveyance Project (DCP) to protect the future reliability of access to SWP supplies. In December 2020, the Metropolitan Board authorized the General Manager to execute agreements for (a) funding a share of up to 60.2 percent for planning and preconstruction costs for the DCP, and (b) an amendment to the Joint Powers Agreement for the Delta Conveyance Design and Construction Joint Powers Authority. A Delta conveyance project will contribute to the improvement of capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. Metropolitan's biennial budget for fiscal years 2024/25 and 2025/26 includes Metropolitan's planned contribution of \$11.6 million for DWR's planning costs of a new Delta conveyance project.

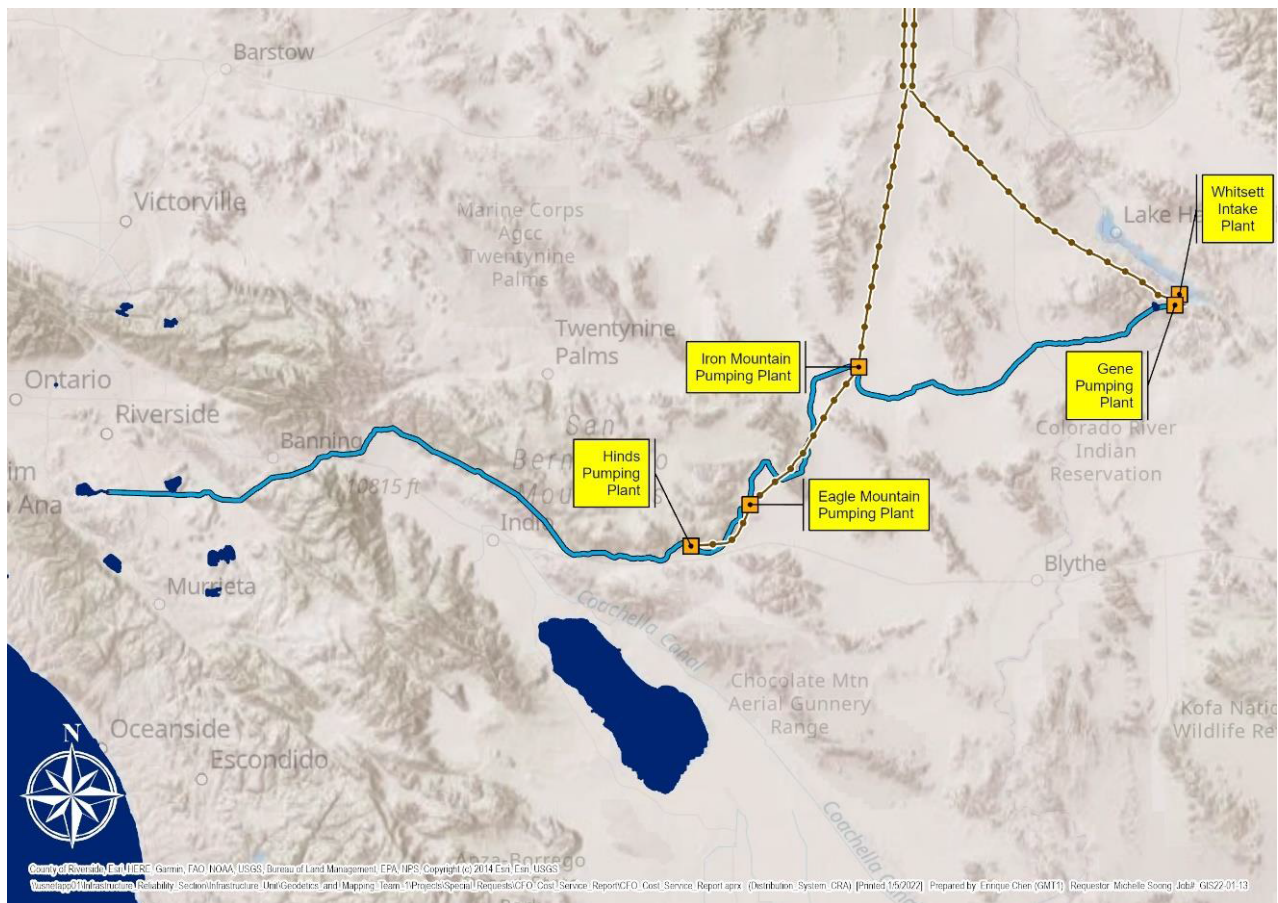
All Metropolitan member agencies benefit from the SWP system and its supplies, which—when available—can be distributed to all member agencies. As described above, the 2020-2022 drought led Metropolitan's board to recommit itself to equitable water supply reliability and to direct staff to identify and pursue solutions to prevent a reoccurrence. Metropolitan's member agencies distribute that water to parcels as retail water providers or as wholesale water providers to retail agencies. In this way, the SWP water that Metropolitan delivers to its member agencies contributes to water available to existing and future end users throughout Metropolitan's service area. The cost of the net capital payments for the SWP less the portion covered by property taxes in fiscal year 2024/25 is \$0 million, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the SWP facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$309.8 million system costs, representing 14% of the total system costs.

#### Colorado River Aqueduct Description and Benefits

Metropolitan's other major source of water is the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of five pumping plants, 450 miles of high voltage power lines, one electric substation, four regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. See Figure 2. Metropolitan owns, operates, and manages the Colorado River Aqueduct. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The direct costs of the CRA activities include labor, materials and supplies, as well as outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan’s capital financing activities are apportioned to cost functions, such as the CRA Conveyance and Aqueduct function. The capital cost of the Colorado River Aqueduct and Inland Feeder in fiscal year 2024/25 is \$90.5 million, and is included in the Non-SWP Conveyance System line item in Table 1. Real property throughout Metropolitan’s service area benefits from the availability of the CRA facilities and its integration into Metropolitan’s system and therefore all such costs may be attributed to such parcels. However, Metropolitan’s Standby Charge collects only \$44.0 million of the total \$309.8 million system costs, representing 14% of the total system costs.

**Figure 2. Colorado River Aqueduct**



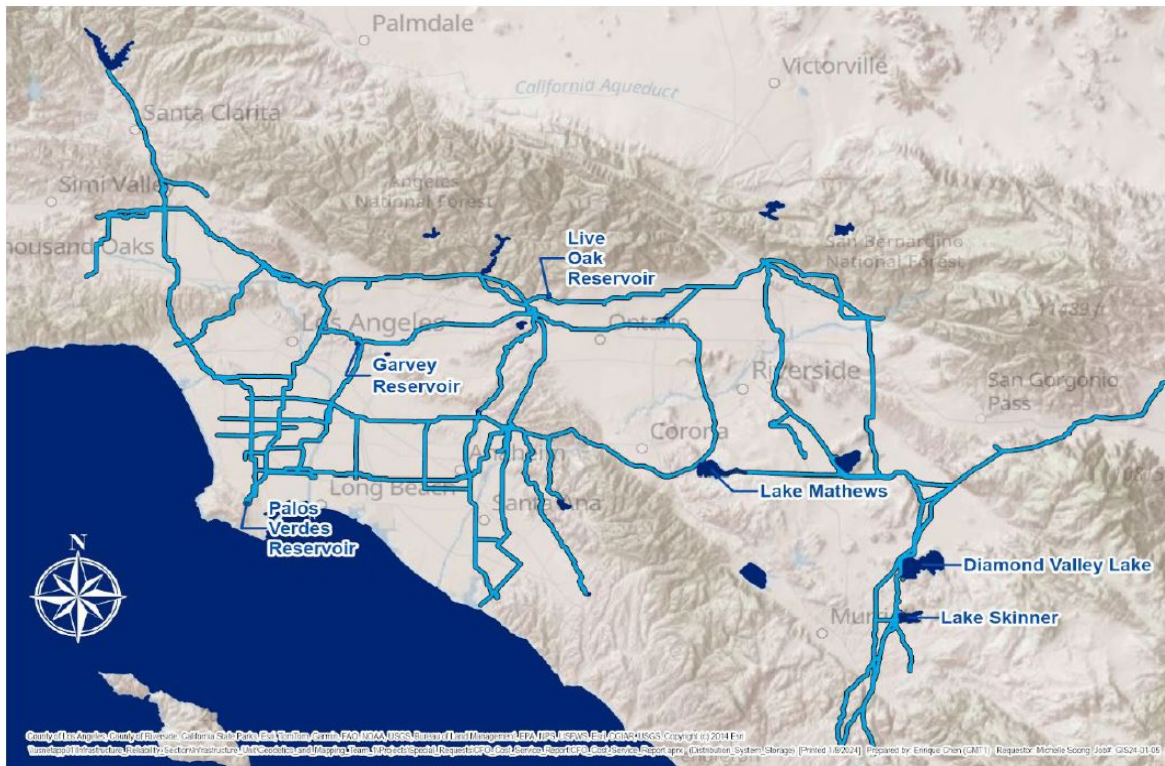
Metropolitan’s Conveyance and Distribution System Benefits

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. See Figure 3. For a list of Metropolitan’s conveyance facilities within its service area, see Table 3. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts, are considered to be distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency’s local distribution system. For a list of Metropolitan’s distribution facilities, see Table 3.



All water transport facilities not specifically identified as part of the regional conveyance system are considered to be distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and generally do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the CRA and SWP to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

**Figure 3. Metropolitan's Distribution and Storage Facilities**



Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System flexibility improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2024/25 estimated conveyance and distribution system benefits. The capital cost of the Distribution System in fiscal year 2024/25 is \$97.2 million, and is included in the Distribution System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the Distribution System and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$309.8 million system costs, representing 14% of the total system costs..

## CAPITAL FACILITIES - WATER STORAGE

### System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and ensuring system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. Diamond Valley Lake provides 810,000 acre-feet of that storage capacity, effectively doubling Southern California's previous surface water storage capacity. Other existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage.

Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. Water storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area. The capital costs of water storage in fiscal year 2024/25 is \$122.1 million and, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the storage capacity throughout the service area and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$44.0 million of the total \$309.8 million system costs, representing 14% of the total system costs.

## METROPOLITAN'S REVENUE

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales to its member agencies, which is currently Metropolitan's largest source of revenue. In addition, ad valorem property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness. However, the use of water rates as a primary source of revenue has placed an increasing burden on member agencies and their ratepayers, which would more equitably continue to be paid in part by assessments on land that in part derives its value from the availability of water through an integrated and reliable water system.

### **Readiness-To-Serve**

In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS Charge, which in 1995 certain member agencies opted to pay in part pursuant to the collection of a standby charge. In October 2001, the Board adopted the current unbundled rate structure, and maintained the RTS Charge.

As noted above, Metropolitan levies the RTS Charge on its member agencies to recover capital costs, including a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system for emergency storage and available capacity.

The estimated fiscal year 2024/25 RTS Charge for each member agency is shown in Table 4.

## **Standby Charge Option**

Metropolitan's Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it, which excludes lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water and lands that the General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the Standby Charge will be applied. Utilization of the Standby Charge transfers some of the burden of maintaining Metropolitan's capital infrastructure from water rates and ad valorem taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the levying of a standby charge. The projects to be supported in part by the Standby Charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users.

Although a standby charge could have been set to recover all Conveyance, Distribution, and Storage costs as detailed in Table 1, Metropolitan's continued Standby Charge only collects about 14% of those costs. For fiscal year 2024/25, the amount to be recovered by the RTS Charge is estimated to be \$174.0 million and of that only \$44.0 million is estimated to be recovered by the Standby Charge.

The Standby Charge for each acre or parcel of less than an acre varies from member agency to member agency, as permitted under the legislation establishing Metropolitan's Standby Charge. The water Standby Charge for each member agency is continued at amounts not to exceed the rates in place since fiscal year 1996/97 and is shown in Table 5, which consists of composite rates by member agencies, not to exceed \$15.00. The composite rates consisted in part of a uniform component of \$5 applicable throughout Metropolitan, and in part of a variable component, not exceeding \$10 in any member public agency, reflecting the allocation of historical water deliveries by the member agencies as of fiscal year 1993/94 when the composite rates were initially established. Metropolitan will continue Standby Charges only within the service areas of the member agencies that have requested that the Standby Charge be utilized for purposes of meeting their outstanding RTS obligation. Although rates may not exceed the amounts in place in fiscal year 1996/97, some rates may be lower.

The Standby Charge is proposed to be collected from: (1) parcels on which water standby charges have been levied in fiscal year 1993/94 and annually thereafter and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during fiscal year 2023/24, such parcels being subject to the Standby Charge upon annexation, which is used to estimate the Standby Charge collections for the following fiscal year. Fiscal Year 2024/25 Table 6 also shows parcels known by Metropolitan as annexed, or to be annexed, by the time collections are made for fiscal year 2024/25.

The estimated costs of Metropolitan's wholesale water system, which could be paid by a Standby Charge, are approximately \$309.8 million for fiscal year 2024/25, as shown in Table 1. An average total Standby Charge of about \$71.27 per acre of land or per parcel of land less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan's service area, as Metropolitan delivers water to member agencies that contributes to water available to these properties, via that member agency or a retail sub-agency. Because Metropolitan's water deliveries to member agencies contributes to water available only to properties located within Metropolitan's service area boundaries (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the area is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agency service areas would provide net revenue flow of approximately \$44.0 million for fiscal year 2024/25. Metropolitan will use other revenue sources, such as water sales revenues, RTS Charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program costs. Additionally, the actual Standby Charge proposed to be continued ranges from \$1.65 to \$15 per acre of land or per parcel of land less than one acre. Thus, the benefits of Metropolitan's investments in water conveyance, storage, and distribution far exceed the recommended Standby Charge.

## **Equity**

The RTS Charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay an equitable share of the costs to provide that reliability. Within member agencies that elect to pay the RTS Charge through Metropolitan's standby charges, the Standby Charge results in a lower RTS Charge than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water system. With the Standby Charge, these properties are now contributing a more appropriate share of the cost of importing water to Southern California.

Metropolitan's water system increases the availability and reliable delivery of water throughout Metropolitan's service area. A reliable system benefits existing end users and land uses through retail water service provided by Metropolitan member agencies or by water retailers that purchase water from a Metropolitan member agency, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water resources from the SWP, CRA, Storage, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

A major advantage of a firm revenue source, such as an RTS charge, is that it contributes to revenue stability during times of drought or low water sales. It affords Metropolitan additional security, when borrowing funds, that a portion of the revenue stream will be unaffected by drought or by rainfall. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lower overall cost to its member agencies.

## SUMMARY

The foregoing and the attached tables describe the current costs of Metropolitan's system and benefits provided by the projects listed as mainstays to the water system for Metropolitan's service area. Benefits are provided to member agencies, their retail sub-agencies, water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for calendar year 2025, that the Metropolitan Board of Directors adopt the RTS Charge as set forth in Table 4 with an option for local agencies to request that a Standby Charge be collected for fiscal year 2024/25 from lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge amounts collected by Metropolitan within the applicable member agency for fiscal year 1996/97. The maximum Standby Charge would not exceed \$15 per acre of land or per parcel of less than one acre. The costs of the system described in this Engineer's Report exceeds the recommended Standby Charge by at least \$266 million. A preliminary listing of all parcels subject to the proposed 2024/25 Standby Charge and the amounts proposed to be continued for each is available in the office of the Chief Financial Officer. A final listing is available upon receipt of final information from each county.

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**TABLE 1**

**ESTIMATED COSTS OF  
WATER SYSTEM INFRASTRUCTURE  
BENEFITING REAL PROPERTY WITHIN METROPOLITAN'S SERVICE AREA**

	<b>Estimated Program Costs for FY2024/25</b>	<b>Dollars Per Parcel of 1 Acre or Less</b>
<b>Capital Payments for Water System Infrastructure</b>		
Net Capital Payments to State Water Project (SWP) (less portion paid by property taxes)	\$ —	\$0.00
Non Tax Supported Capital Costs for Non-SWP Conveyance System <sup>1</sup>	\$ 90,512,590	\$20.82
Non Tax Supported Capital Costs for Distribution System <sup>2</sup>	\$ 97,186,802	\$22.36
Non Tax Supported Capital Costs for Water Storage <sup>3</sup>	\$ 122,086,749	\$28.09
<b>Total Capital Payments</b>	<b>\$ 309,786,140</b>	<b>\$71.27</b>
<b>Estimated Standby Charge Revenues</b>	<b>\$ 44,048,322</b>	<b>\$10.13</b>
Percent Collected by Standby Charge	14%	
<b>Total Remaining Costs Not Paid by Standby Charge</b>	<b>\$ 265,737,818</b>	<b>\$61.14</b>

**Notes:**

[1] Non-SWP Conveyance include the Colorado River Aqueduct and Inland Feeder.

[2] Distribution facilities include the pipelines, laterals, feeders and canals that distribute water throughout the service area.

[3] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes.

Totals may not foot due to rounding

**TABLE 2**

**WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS**

<b>Project Name</b>	<b>FISCAL YEAR 2024/25 Payment</b>
<b>Water Recycling Projects</b>	<b>\$14,381,254</b>
Alamitos Barrier Reclaimed Water Project	
Anaheim Water Recycling Demonstration Project	
Burbank Recycled Water System Expansion Phase II Project	
Capistrano Valley Non Domestic Water System Expansion	
CBMWD Recycled Water System Expansion Phase I	
Development of Non-Domestic Water System in Ladera Ranch and Talega Valley	
Direct Reuse Project Phase IIA	
Dry Weather Runoff Reclamation Facility	
Eastern Recycled Water Pipeline Reach 16 Project	
El Toro Phase II Recycled Water Distribution System Expansion Project	
El Toro Recycled Water System Expansion	
Elsinore Valley Recycled Water Program	
Escondido Membrane Filtration Reverse Osmosis Facility	
Escondido Regional Reclaimed Water Project	
French Valley Recycled Water Distribution Project	
Groundwater Reliability Improvement Program Recycled Water Project	
Hansen Area Water Recycling Phase I Project	
Hansen Dam Golf Course Water Recycling Project	
Harbor Water Recycling Project	
Jurupa Community Services District Regional Recycled Water Project	
La Puente Recycled Water Project	
Lake Mission Viejo Advanced Purification WTF	
Las Flores Recycled Water System Expansion Project	
Leo J. Vander Lans Water Treatment Facility Expansion Project	
Los Angeles Taylor Yard Park Water Recycling Project	
Michelson/Los Alisos Water Reclamation Plant Upgrades and Distribution System Expansion Project	
North Atwater Area Water Recycling Project	
North Hollywood Area Water Recycling Project	
Oceanside Pure Water and Recycled Water Phase I Project	
Oxnard Advanced Water Purification Facility Project	
Rowland Water District Portion of the City of Industry Regional Recycled Water Project	
Oxnard Advanced Water Purification Facility Project	
San Clemente Recycled Water System Expansion Project	
San Diego Pure Water North City Project Phase I	
San Elijo Water Reclamation System	
Santa Maria Water Reclamation Project	
Sepulveda Basin Sports Complex Water Recycling Project	
Sepulveda Basin Water Recycling Project - Phase 4	
Terminal Island Recycled Water Expansion Project	
USGVMWD Portion of the City of Industry Regional Recycled Water Project	
Van Nuys Area Water Recycling Project	

**TABLE 2 (Continued)**

**WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS**

<b>Project Name</b>	<b>FISCAL YEAR 2024/25 Payment</b>
<b>Water Recycling Projects (continued)</b> Walnut Valley Water District Portion of the City of Industry Regional Recycled Water Project West Basin Water Recycling Program Phase V Project Westside Area Water Recycling Project	

**TABLE 2 (Continued)**

**WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS**

<b>Project Name</b>	<b>FISCAL YEAR 2024/25 Payment</b>
<b>Groundwater Recovery Projects</b>	<b>\$10,325,100</b>
Beverly Hills Desalter Project	
Cal Poly Pomona Water Treatment Plant	
Chino Basin Desalination Program / IEUA	
Chino Basin Desalination Program / Western	
Colored Water Treatment Facility Project	
Fallbrook Groundwater Desalter Project	
Irvine Desalter Project	
IRWD Wells 21 & 22 Desalter Project	
North Pleasant Valley Regional Desalter	
Perris II Brackish Groundwater Desalter	
Pomona Well #37-Harrison Well Groundwater Treatment Project	
Round Mountain Water Treatment Plant	
San Juan Basin Desalter Project	
Santa Monica Sustainable Water Supply Project	
Temescal Basin Desalting Facility Project	
<b>On-site Retrofit Program</b>	<b>\$3,000,000</b>
<b>Future Supply Actions</b>	<b>\$5,892,000</b>
<b>Conservation Projects</b>	<b>\$54,050,000</b>
Regionwide Residential	
Regionwide Commercial	
Member Agency Administered/MWD Funded	
Water Savings Incentive Program	
Landscape Training Classes	
Landscape Irrigation Surveys	
Innovative Conservation Program/Pilot Programs/Studies	
Inspections	
Turf Replacement Program	
Disadvantaged Communities Program	
Conservation Advertising	
Municipal Leak Detection and Repair	
Multifamily Toilet Replacement Program	
<b>Total Demand Management Programs</b>	<b>\$87,648,354</b>

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION  
 CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-LIVE OAK  
 CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-MORRIS DAM  
 CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T  
 CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY (50/50)  
 CLEARING OF LAKE MATHEWS RESERVOIR AREA  
 CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN  
 COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50)  
 COPPER BASIN RESERVOIR SUPERVISORY CONTROL  
 COPPER BASIN SEWER SYSTEM  
 CORONA DEL MAR RESERVOIR- REPLENISHMENT  
 CORONA DEL MAR RESERVOIR- CHLORINATION STATION  
 CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST)  
 DAM MONITORING SYSTEM UPGRADES - Lake Mathews  
 DAM MONITORING SYSTEM UPGRADES - LAKE SKINNER  
 DAM SEISMIC ASSESSMENT - PHASE 3  
 DAM SEISMIC UPGRADES - PHASE 3  
 DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADE  
 DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGE 3  
 DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGES 1 & 2  
 DIAMOND VALLEY LAKE INLET/OUTLET TOWER FISH SCREEN REPLACEMENT - CONSTRUCTION  
 DIAMOND VALLEY LAKE MONITORYING SYSTEM UPGRADES  
 DIAMOND VALLEY LAKE, CAL PLAZA CHARGES  
 DIAMOND VALLEY LAKE, CONSULTANT COSTS  
 DIAMOND VALLEY LAKE, DAM DEFORMATION MONITORING  
 DIAMOND VALLEY LAKE, EAST DAM SUMP PUMP ELECTRICAL STUDY  
 DIAMOND VALLEY LAKE, GENERAL CONSTRUCTION MGMT, 2000-2001  
 DIAMOND VALLEY LAKE, INUNDATION MAPS  
 DIAMOND VALLEY LAKE, UNDERGROUND TANK CLOSURE  
 DIAMOND VALLEY RECREATION, EAST MARINA  
 DIAMOND VALLEY RECREATION, FISHERY  
 DIAMOND VALLEY RECREATION, MUSEUM FOUNDATION REHABILITATION  
 DIAMOND VALLEY RECREATION, SEARL PARKWAY IMPROVEMENTS, PHASE I  
 DIAMOND VALLEY TRAILS PROGRAM, TRAILS  
 DISTRICT DESIGN AND INSPECTION - MORRIS DAM  
 DISTRICT RESERV. AQUEOUS AMMONIA FEED SYSTEM  
 DISTRICT RESERVOIR - LONGTERM CHEMICAL FAC CONTAINMENT  
 DOMESTIC WATER SUPPLY - LAKE MATHEWS (ORG CONST)  
 DOMESTIC WATER SYSTEM-PALOS VERDES RESERVOIR (INTERIM CONST)  
 DVL - SEARL PARKWAY EXTENSION - PHASE 2  
 DVL - SEARL PARKWAY LANDSCAPING  
 DVL EAST DAM ELECTRICAL UPGRADES  
 DVL EAST DAM POWER LINE REALIGNMENT  
 DVL INLET/OUTLET FISH SCREEN REHABILITATION  
 DVL RECREATION - ALTERNATE ACCESS ROAD  
 DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY  
 DVL SECURITY ENHANCEMENT  
 DVL, CONSTRUCTION  
 DVL, CONSTRUCTION CLAIMS SUPPORT  
 DVL, CONSTRUCTION MANAGEMENT SERVICE  
 DVL, CONSTRUCTION SUPERVISION  
 DVL, CONSTRUCTION, WEST DAM FOUNDATION  
 DVL, DEDICATION CEREMONY  
 DVL, DISTURBED  
 DVL, DOMENIGONI PARK  
 DVL, EAST DAM  
 DVL, EAST DAM EMBANKMENT  
 DVL, EAST DAM FENCING  
 DVL, EAST DAM INLET OUTLET TOWER CONSTRUCTION  
 DVL, EAST DAM LANDSCAPE SCREENING  
 DVL, EAST DAM NORTH RIM REMEDIATION  
 DVL, EAST DAM P-1 FACILITIES  
 DVL, EAST DAM SITE COMPLETION  
 DVL, EAST DAM STATE STREET IMPROVEMENTS  
 DVL, EAST DAM VERTICAL SLEEVE VALVE  
 DVL, EAST MARINA, PHASE 2  
 DVL, EXCAVATION  
 DVL, FIXED CONE, SPHERE  
 DVL, GENERAL  
 DVL, GRADING OF CONT  
 DVL, INSTALL NEW WATERLINE  
 DVL, MISC SMALL CONS  
 DVL, NORTH HIGH WATER ROAD  
 DVL, P-1 PUMPING FACILITY  
 DVL, PROCUREMENT

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

DVL, SCOTT ROAD EXTENSION  
DVL, SOUTH HIGH WATER ROAD & QUARRY  
DVL, SPILLWAY  
DVL, START UP  
DVL, VALLEY-WIDE SITE ROUGH GRADING  
DVL, WORK PACKAGE  
DVL, WORK PACKAGE 1  
DVL, WORK PACKAGE 10, INLET OUTLET WORK  
DVL, WORK PACKAGE 11, FOREBAY  
DVL, WORK PACKAGE 12, TUNNEL  
DVL, WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY  
DVL, WORK PACKAGE 14, PC-1  
DVL, WORK PACKAGE 15, SITE CLEARING  
DVL, WORK PACKAGE 16, GROUNDWATER MONITORING  
DVL, WORK PACKAGE 17, FIELD OFFICE  
DVL, WORK PACKAGE 18, TEMPORARY VISITOR CENTER  
DVL, WORK PACKAGE 19, PERMANENT VISITOR CENTER  
DVL, WORK PACKAGE 2, EASTSIDE PIPELINE  
DVL, WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION  
DVL, WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION  
DVL, WORK PACKAGE 23, WEST RECREATION AREA  
DVL, WORK PACKAGE 24, EAST RECREATION AREA  
DVL, WORK PACKAGE 25, EXCAVATION  
DVL, WORK PACKAGE 26, ELECTRICAL TRANSMISSION LINES  
DVL, WORK PACKAGE 27, MAJOR EQUIPMENT P-1  
DVL, WORK PACKAGE 28, MAJOR EQUIPMENT, GATES  
DVL, WORK PACKAGE 29, MAJOR EQUIPMENT, PC-1  
DVL, WORK PACKAGE 30, INSTRUMENTATION AND CONTROL SYSTEMS  
DVL, WORK PACKAGE 31, GEOGRAPHICAL INFO  
DVL, WORK PACKAGE 32, PERMIT  
DVL, WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES  
DVL, WORK PACKAGE 34, EMERGENCY RELEASE  
DVL, WORK PACKAGE 35  
DVL, WORK PACKAGE 36, TRANSMISSION LINE TO PC-1  
DVL, WORK PACKAGE 38, RUNOFF EROSION  
DVL, WORK PACKAGE 39, SADDLE DAM FOUNDATION  
DVL, WORK PACKAGE 4, NEWPORT ROAD RELOCATION  
DVL, WORK PACKAGE 40  
DVL, WORK PACKAGE 42, GEOTECHNICAL  
DVL, WORK PACKAGE 43, MOBILIZATION  
DVL, WORK PACKAGE 44, SITE DEVELOPMENT  
DVL, WORK PACKAGE 47, HAZARDOUS MATERIAL  
DVL, WORK PACKAGE 48, GENERAL ADMIN  
DVL, WORK PACKAGE 49  
DVL, WORK PACKAGE 5, SALT CREEK FLOOD CONTROL  
DVL, WORK PACKAGE 52, HISTORY ARCHEOLOGY INVENTORY  
DVL, WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY  
DVL, WORK PACKAGE 54, PLANTS, WILDLIFE  
DVL, WORK PACKAGE 55, AIR QUALITY, NOISE  
DVL, WORK PACKAGE 6, SURFACE WATER MITIGATION  
DVL, WORK PACKAGE 7, DESIGN WEST DAM ACCESS  
DVL, WORK PACKAGE 8, DESIGN EAST DAM ACCESS  
DVL, WORK PACKAGE 9, SADDLE DAM  
DVL, WORKING INVENTORY, 80,000 ACRE FEET (10% OF CAPACITY)  
EAST DAM TUNNELS  
EAST MARINA BOAT RAMP EXTENSION  
ELECTRICAL SERVICE - LAKE MATHEWS (ORG CONST)  
ELECTRICAL SYSTEM - LAKE MATHEWS (ORG CONST)  
FIRST SAN DIEGO AQUEDUCT - REPLACE PIPELINE SECTION BOTH BARRELS  
FLOATING BOAT HOUSE - LAKE MATHEW  
FLOOD RELEASE VALVE, MORRIS DAM & WATER SUPPLY SYSTEM,PV RESER.  
FOOTBRIDGE - LAKE MATHEWS (ORG CONST)  
FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS  
FOOTHILL FEEDER- LIVE OAK RESERVOIR- RESIDENCE  
GARVEY RESERVOIR OPERATION & MAINTENANCE CENTER  
GARVEY RESERVOIR OPERATION & MAINTENANCE CENTER (RETIREMENT)  
GARVEY RESERVOIR - JUNCTION STRUCTURE, REPLACE VALVE # 1  
GARVEY RESERVOIR COVER AND LINER REPLACEMENT  
GARVEY RESERVOIR COVER AND LINER REPLACEMENT PROJECT  
GARVEY RESERVOIR DRAINAGE & EROSION CONTROL IMPROVEMENTS  
GARVEY RESERVOIR DRAINAGE & EROSION IMPROVEMENTS - AREAS 6, 7, 8, 10 & 11 CONSTRUCTION  
GARVEY RESERVOIR DRAINAGE & EROSION IMPROVEMENTS - AREAS 6-10 & 11 CONSTRUCTION  
GARVEY RESERVOIR DRAINAGE AND EROSION IMPROVEMENTS  
GARVEY RESERVOIR- EMERGENCY GENERATOR  
GARVEY RESERVOIR- FLOATING COVER

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM  
 GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1  
 GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST  
 GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5  
 GARVEY RESERVOIR- MODIFY DESILTING BASINS  
 GARVEY RESERVOIR REPAIR  
 GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS  
 GARVEY RESERVOIR, REPLACE VALVE # 4 & 5  
 GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE  
 GARVEY RESERVOIR: CONT. 565, SPEC.412  
 GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES  
 GARVEY RESERVOIR-HYPOCHLORINATION  
 GARVEY RESERVOIR-HYPOCHLORINE STATION  
 GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION  
 GARVEY RESEVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES  
 GARVEY RSVR REPLACE VENTURI THROAT SECTION  
 HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS  
 HEADWORKS: ADDITIONAL VALVES  
 HEADWORKS: MOTOR OPERATED SLIDE GATES  
 HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR  
 HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR  
 HOUSE AT PALOS VERDES RESERVOIR  
 HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939  
 HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955  
 IRVINE REGULATING STRUCTURE SUMP DRAIN LINE  
 JENSEN FINISHED WATER RESERVOIR NO. 1 COVER REHABILITATION  
 JENSEN FINISHED WATER RESERVOIR NO. 2 FLOATING COVER IMPROVEMENT  
 JENSEN FINISHED WATER RESERVOIRS REHABILITATION AND MIXING IMPROVEMENTS  
 JENSEN FLUORIDE TANK REPLACEMENT  
 JENSEN FWR # 2 FLOATING COVER REPLACEMENT  
 JENSEN FWR NO. 2 FLOATING COVER REPLACEMENT  
 JENSEN RESERVOIR 1 AND 2 MIXING IMPROVEMENTS  
 JENSEN RESERVOIR BYPASS GATE REFURBISHMENT  
 JENSEN, REPAIR COVER OVER RESERVOIR 1  
 LAKE MATHEWS - REPLACE STANDBY GENERATOR  
 LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT  
 LAKE MATHEWS ABOVEGROUND STORAGE TANK REPLACEMENT  
 LAKE MATHEWS AREA PAVING  
 LAKE MATHEWS BUILDING  
 LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.  
 LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING  
 LAKE MATHEWS- CHLORINATION FACILITIES  
 LAKE MATHEWS CHLORINATION FACILITY- REPLACE CHLORINATION EQPMT.  
 LAKE MATHEWS CNTRL TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES  
 LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE  
 LAKE MATHEWS DAM SAFETY INSTRUMENTATION UPGRADES  
 LAKE MATHEWS DAM SPILLWAY ASSESSMENT  
 LAKE MATHEWS DIKE  
 LAKE MATHEWS DISASTER RECOVERY FACILITY UPGRADE  
 LAKE MATHEWS DISCHARGE FACILITY UPGRADES  
 LAKE MATHEWS DIVERSION TUNNEL  
 LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR  
 LAKE MATHEWS- DOCK AND BOAT SHELTER  
 LAKE MATHEWS DOMESTIC FACILITIES  
 LAKE MATHEWS- DOMESTIC WATER SYSTEM  
 LAKE MATHEWS ELECTRICAL RELIABILITY  
 LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT  
 LAKE MATHEWS ELECTRICAL UPGRADES  
 LAKE MATHEWS- EMERGENCY GENERATOR  
 LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)  
 LAKE MATHEWS FOREBAY - DISCHARGE FACILITY UPGRADES  
 LAKE MATHEWS FOREBAY LINING AND TOWER REPAIRS  
 LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL CONCRETE BLOCK BLDG  
 LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG  
 LAKE MATHEWS FOREBAY PRESSURE CONTROL STRUCTURE AND BYPASS  
 LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE  
 LAKE MATHEWS FOREBAY WALKWAY REPAIRS  
 LAKE MATHEWS FOREBAY, HEADWORK FACILITY AND EQUIPMENT UPGRADE  
 LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.  
 LAKE MATHEWS- HOUSE AND GARAGE  
 LAKE MATHEWS HYDRAULIC POWER UNIT REHABILITATION  
 LAKE MATHEWS I/O TOWER EMERGENCY GENERATOR  
 LAKE MATHEWS- IMPROVE MAIN SUBSTATION  
 LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

LAKE MATHEWS -LUMBER STORAGE BUILDING  
 LAKE MATHEWS -LUMBER STORAGE BUILDING - INTEREST  
 LAKE MATHEWS LUMBER STORAGE ROOF COVER  
 LAKE MATHEWS MAIN DAM AND SPILLWAY  
 LAKE MATHEWS MAIN DAM SUB DRAIN SYSTEM  
 LAKE MATHEWS MAINTENANCE BUILDING  
 LAKE MATHEWS MAINTN.FACILITIES-REPLACE 75 KVA TRANSFORMER.SERV.  
 LAKE MATHEWS- MODIFY CHLORINATION  
 LAKE MATHEWS- MODIFY CHLORINE STORAGE TANK FOUNDATIONS  
 LAKE MATHEWS- MODIFY ELECTRICAL SERVICE  
 LAKE MATHEWS MULTIPLE SPECIES RESERVE, MANAGER'S OFFICE AND RESIDENCE  
 LAKE MATHEWS OFFICE BLDG MODIFICATIONS-AMERICANS W/ DISABILITY  
 LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABILITY  
 LAKE MATHEWS -OPERATOR RESIDENCE  
 LAKE MATHEWS OULET TOWER  
 LAKE MATHEWS OUTLET FACILITIES  
 LAKE MATHEWS OUTLET TOWER NO. 2 VALVE REHABILITATION  
 LAKE MATHEWS OUTLET TOWER- REPLACE CRANES  
 LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES  
 LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES (RETIREMENT)  
 LAKE MATHEWS OUTLET TUNNEL  
 LAKE MATHEWS PERIMETER FENCING UPGRADE - NEW  
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER  
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST  
 LAKE MATHEWS- PROPANE STORAGE TANK  
 LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST  
 LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS  
 LAKE MATHEWS- REPLACE VALVES  
 LAKE MATHEWS RESERVOIR DREDGING AND EMERGENCY DEWATERING FACILITIES  
 LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE  
 LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST  
 LAKE MATHEWS- SEEPAGE ALARMS  
 LAKE MATHEWS- SEEPAGE ALARMS - INTEREST  
 LAKE MATHEWS SODIUM HYPOCHLORITE TANK REPLACEMENT  
 LAKE MATHEWS SODIUM HYPOCHLORITE INJECTION SYSTEM  
 LAKE MATHEWS- SPRAY PAINT BOOTH  
 LAKE MATHEWS WASTEWATER SYSTEM REPLACEMENT  
 LAKE MATHEWS WATERSHED, DRAINAGE  
 LAKE MATHEWS WATERSHED, DRAINAGE WATER QUALITY MGMT PLAN (CAJALCO CREEK DAM)  
 LAKE MATHEWS, HAZEL ROAD  
 LAKE MATHEWS, REPLACE CHLORINATION EQUIPMENT  
 LAKE MATHEWS,DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50  
 LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS  
 LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.  
 LAKE MATTHEWS FIRE WATER LINE  
 LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)  
 LAKE SKINNER - AERATION SYSTEM  
 LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN  
 LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN - INTEREST  
 LAKE SKINNER - INSTALL OUTLET CONDUIT FLOWMETER  
 LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS  
 LAKE SKINNER AERATOR AIR COMPRESSORS REPLACEMENT  
 LAKE SKINNER- EQUIPMENT YARD SECURITY  
 LAKE SKINNER- EQUIPMENT YARD SECURITY - INTEREST  
 LAKE SKINNER FACILITIES  
 LAKE SKINNER FACILITIES - EMPLOYEE HOUSING  
 LAKE SKINNER FACILITIES - FENCING  
 LAKE SKINNER FACILITIES - LANDSCAPING  
 LAKE SKINNER FACILITIES - RELOCATE BENTON ROAD  
 LAKE SKINNER OUTLET CONDUIT REPAIR  
 LAKE SKINNER OUTLET TOWER SEISMIC ASSESSMENT  
 LAKE SKINNER- PROPANE STORAGE TANK  
 LAKE SKINNER- PROPANE STORAGE TANK - INTEREST  
 LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A  
 LIVE OAK RESERVOIR ASPHALT PAVEMENT REHABILITATION  
 LIVE OAK RESERVOIR EMERGENCY DEWATERING IMPROVEMENTS  
 LIVE OAK RESERVOIR PAVEMENT REHABILITATION  
 LIVE OAK RESERVOIR REHABILITATION  
 LIVE OAK RESERVOIR SURFACE REPAIR  
 MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)  
 MILLS FINISHED WATER RESERVOIR REHABILITATION  
 MILLS FINISHED WATER RESERVOIRS REHABILITATION AND MIXING IMPROVEMENTS  
 MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS  
 MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR  
 MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER



**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS  
 MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM  
 MORRIS DAM COTTAGE  
 MORRIS DAM- ENLARGMT. OF SPILLWAY FACLT.& UPPER FDR.VALVE MODF  
 MORRIS DAM ROAD IMPROVEMENT  
 MORRIS DAM, SEISMIC STABILITY REANALYSIS  
 MORRIS DAM-REPLACE EMERGENCY POWER SYSTEM  
 MORRIS RESERVOIR- CAPITAL OBLIGATION PAID  
 MORRIS RESERVOIR- INTEREST OBLIGATION PAID  
 O.C.RESERVOIR - IMPROVE DOMESTIC SYSTEM  
 ORANGE COUNTY RESERVOIR -- JUNCTION STRUCTURE,REPLACE VALVE # 1  
 ORANGE COUNTY RESERVOIR (SPEC NO. 341)  
 ORANGE COUNTY RESERVOIR CHLORINATION STATION  
 ORANGE COUNTY RESERVOIR- EMBANKMENT AND SPILLWAY  
 ORANGE COUNTY RESERVOIR- EMERGENCY GENERATOR  
 ORANGE COUNTY RESERVOIR- FLOATING COVER  
 ORANGE COUNTY RESERVOIR- HOUSE  
 ORANGE COUNTY RESERVOIR- MODIFY DOMESTIC WATER SYSTEM  
 ORANGE COUNTY RESERVOIR- REPLACE RESIDENCE NO. 95D  
 ORANGE COUNTY RESERVOIR-MODIFY ELEC. CONTROL CENTER  
 ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION EQUIPMENT  
 ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION SYSTEM  
 P V RESERVOIR-REPLACE CHLORINATION SYSTEM  
 P105080 IRVINE REGULATING STRUCTURE SUMP DRAIN LINE  
 P105176 LIVE OAK RESERVOIR ASPHALT PAVEMENT REHABILITATION  
 P105202 GARVEY RESERVOIR DRAINAGE & EROSION IMPROVEMENTS - AREAS 6-10, 11 CONSTR  
 PALOS VERDES CHLORINATION STATION AND COTTAGE  
 PALOS VERDES RESERVOIR  
 PALOS VERDES RESERVOIR - INLET/OUTLET TOWER  
 PALOS VERDES RESERVOIR- BY PASS PIPELINES  
 PALOS VERDES RESERVOIR COVER AND LINER REPLACEMENT  
 PALOS VERDES RESERVOIR COVER REPLACEMENT  
 PALOS VERDES RESERVOIR- FENCING AROUND  
 PALOS VERDES RESERVOIR GROUNDWATER MANAGEMENT  
 PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING  
 PALOS VERDES RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM UPGRADE  
 PALOS VERDES RESERVOIR,BYPASS PIPELINE RELIEF STRUCTURE MODIFN.  
 PALOS VERDES RESERVOIR,COVERING  
 PALOS VERDES RESERVOIR,REPLACE ACCESS AND PERIMETER ROADS  
 PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST  
 PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE,INL.TWR  
 PALOS VERDES RESERVOIR-REPLACE CHLORINATION SYSTEM  
 PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY  
 PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY- INTEREST  
 PV RESERVOIR GROUNDWATER MANAGEMENT  
 PVR FACILITY SEWER CONNECTION  
 RECORD DRAWING RESTORATION PROGRAM, CRA  
 REPAIRS TO AZUSA CONDUIT  
 REPLACEMENT OF A 30 INCH GATE VALVE P.V.R.  
 RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR  
 RESIDENCE 45-D - CORONA DEL MAR RESERVOIR  
 RESIDENCE 80-D - ORANGE COUNTY RESERVOIR  
 RESIDENCE 90-D - LAKE MATHEW  
 RESIDENCE 91-D - SAN JACINTO RESERVOIR  
 RESIDENCE 93-D - SAN JACINTO RESERVOIR  
 ROADS AT LAKE MATHEWS ABOVE FLOODLINE  
 SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR  
 SAN JACINTO RESERVOIR - SAN DIEGO ACQUEDUCT  
 SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597)  
 SEEPAGE CONTROL AT LAKE MATHEWS  
 SKINNER DAM SAFETY INSTRUMENTATION UPGRADES  
 SKINNER DAM SPILLWAY ASSESSMENT  
 SKINNER FINISHED WATER RESERVOIR SLIDE GATE REHABILITATION  
 SKINNER FINISHED WATER RESERVOIR SLIDE GATES REHABILITATION  
 SPILLWAY UPGRADES LAKE MATHEWS  
 SPILLWAY UPGRADES LAKE SKINNER  
 TEMPORARY EMPLOYEE LABOR SETTLEMENT  
 VALVE - GENE RESERVOIR (REPLACED 201)  
 VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)  
 WADSWORTH PUMP PLANT CONDUIT PROTECTION  
 WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION  
 WADSWORTH PUMPING PLANT FIRE PROTECTION SYSTEM UPGRADE - NEW  
 WADSWORTH PUMPING PLANT FIRE PROTECTION SYSTEM UPGRADES  
 WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - CONSTRUCTION & STARTUP  
 WATER QUALITY PROJECT UPSTREAM

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS  
 WEYMOUTH FINISHED WATER RESERVOIR GATE REPLACEMENT  
 WEYMOUTH FINISHED WATER RESERVOIR GATE REHABILITATION

**Sub-total Storage facilities costs**

**122,086,749**

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - GENE  
 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - INTAKE  
 2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - IRON  
 ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT  
 ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT  
 ALL PUMPING PLANTS - BRIDGE CRANES  
 ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE  
 ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION  
 ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY  
 ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS  
 AMP VALVE & SERVICE CONNECTION VAULT REPAIR  
 AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY  
 AQUEDUCT & PUMPING PLANT ISOLATION GATES  
 ARROWHEAD EAST TUNNEL CONSTRUCTION  
 ARROWHEAD TDS REDUCTION  
 ARROWHEAD TUNNELS CLAIMS COST  
 ARROWHEAD TUNNELS CONNECTOR ROAD  
 ARROWHEAD TUNNELS CONSTRUCTION  
 ARROWHEAD TUNNELS ENGINEERING  
 ARROWHEAD TUNNELS RE-DESIGN  
 ARROWHEAD WEST TUNNEL CONSTRUCTION  
 AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY  
 AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY  
 AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES  
 BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION  
 BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS  
 BANK TRANSFORMERS REPLACEMENT STUDY  
 BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE  
 BLACK METAL MOUNTAIN 2.4KV ELECTRICAL POWER UPGRADE  
 BOX SPRINGS FEEDER REHAB PHASE III  
 BUDGET ADJUSTMENT  
 CABAZON RADIAL GATE FACILITIES IMPROVEMENT  
 CABAZON RADIAL GATE FACILITY IMPROVEMENTS  
 CAJALCO CREEK MITIGATION FLOWS  
 CAST-IRON BLOW OFF REPLACEMENT - PHASE 4  
 CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION  
 CCRP - BLOW-OFF VALVES PHASE 4 PROJECT  
 CCRP - CONTINGENCY  
 CCRP - EMERGENCY REPAIR  
 CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.  
 CCRP - PART 1 & 2  
 CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY  
 CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN  
 CCRP - TUNNELS STUDY  
 CEPSRP - 230 KV SYSTEM SYNCHRONIZERS  
 CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS  
 CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS  
 CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV , 69 KV & 6.9 KV LIGHTENING ARRESTERS  
 CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION  
 CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION  
 CEPSRP- ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST.  
 COLORADO RIVER AQUEDUCT - PUMPING  
 COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT  
 COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION  
 CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY  
 COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN)  
 COPPER BASIN AND GENE WASH RESERVOIRS DISCHARGE STRUCTURE REHABILITATION - STAGE 2  
 COPPER BASIN AND GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION  
 COPPER BASIN INTERIM CHLORINATION SYSTEM  
 COPPER BASIN OUTLET GATES RELIABILITY  
 COPPER BASIN OUTLET REHABILITATION  
 COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICWAYS REHABILITATION  
 COPPER BASIN POWER & PHONE LINES REPLACEMENT  
 COPPER BASIN RESERVOIR OUTLET STRUCTURE REHABILITATION PROJECT  
 COPPER BASIN RESERVOIRS DISCHARGE VALVE REHABILITATION & METER REPLACEMENT  
 COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS  
 CORROSION CONTROL OZONE MATERIAL TEST FACILITY  
 COST OF LAND AND RIGHT OF WAY  
 CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT  
 CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES  
 CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES  
 CRA - AUXILIARY POWER SYSTEM REHAB  
 CRA - BANK TRANSFORMERS REPLACEMENT STUDY  
 CRA - BLOW-OFF VALVES PHASE 4  
 CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

CRA - BLOW-OFF VALVES PHASE 4  
 CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT  
 CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT  
 CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2  
 CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICeways REHABILITATION  
 CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT  
 CRA - CUT & COVER FOR NAT WASH EXPOSURE STUDY  
 CRA - DANBY TOWER FOOTER REPLACEMENT  
 CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS  
 CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE  
 CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS  
 CRA - DESERT PUMP PLANT OIL CONTAINMENT  
 CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT  
 CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS  
 CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION  
 CRA - DISCHARGE LINE ISOLATION GATES  
 CRA - DWCV-4 VALVE REPLACEMENT  
 CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY  
 CRA - ELECTRICAL/ POWER SYST REL. PROG. - IRON MTN - 230KV BREAKER SWITC. INST.  
 CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA  
 CRA - HINDS PUMP UNIT NO. 8 REFURBISHMENT  
 CRA - INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU  
 CRA - INTAKE PUMPING PLANT AUTOMATION PROGRAMMING  
 CRA - INVESTIGATION OF SIPHONS AND RESERVOIR OUTLETS  
 CRA - IRON MOUNTAIN RESERVOIR AND CANAL LINER REPAIRS  
 CRA - IRON MTN. TUNNEL REHABILITATION  
 CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS  
 CRA - MAIN PUMP MOTOR EXCITERS  
 CRA - MAIN PUMP STUDY  
 CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY  
 CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY  
 CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT  
 CRA - PUMPING WELL CONVERSION  
 CRA - QUAGGA MUSSEL BARRIERS  
 CRA - REAL PROPERTY - BOUNDARY SURVEYS  
 CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY ( 5 PLANTS)  
 CRA - RELIABILITY PROGRAM INVESTIGATION  
 CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568  
 CRA - RELIABILITY PHASE II CONTINGENCY  
 CRA - SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE  
 CRA - SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION  
 CRA - SERVICE CONNECTION DWCV-4 A, B, C, & D PLUG VALVES REPLACEMENT  
 CRA - SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS  
 CRA - SUCTION & DISCHARGE LINES EXPANSION JOINT REHAB  
 CRA - SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM  
 CRA - SWITCHYARDS AND HEAD GATES REHAB  
 CRA - SWITCHYARDS AND HEAD GATES REHABILITATION  
 CRA - TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT  
 CRA - TUNNELS VULNERABILITY STUDY - REPAIRS TO TUNNELS  
 CRA - WEST PORTAL UPGRADE - REHAB OF STILLING WELL, SLIDE GATE OPERATORS AND RADIAL GATES  
 CRA WHITEWATER TUNNEL NO 2 SEISMIC UPGRADE  
 CRA 2.4 KV STANDBY DIESEL ENGINE GENERATORS REPLACEMENT  
 CRA 230 KV & 69 KV DISCONNECTS SWITCH REPLACEMENT  
 CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADES  
 CRA 230 KV TRANSMISSION LINE - INFRASTRUCTURE RELIABILITY IMPROVEMENTS (REF: PENDING NEW PN104717)  
 CRA 230 KV TRANSMISSION SYSTEM REGULATORY AND OPERATIONAL FLEXIBILITY UPGRADES  
 CRA 230 KV TRANSMISSION SYSTEM REGULATORY COMPLIANCE AND OPERATIONAL FLEXIBILITY UPGRADES - STUDY  
 CRA 230KV & 69KV PROTECTION PANEL UPGRADE  
 CRA 230KV TRANSMISSION SYSTEM REGULATORY COMPLIANCE AND OPERATIONAL FLEXIBILITY UPGRADES  
 CRA 2400 V VILLAGE ELECTRICAL POWER DISTRIBUTION UPGRADES  
 CRA 6.9 KV LEAD JACKETED CABLES  
 CRA 6.9 KV POWER CABLES REPLACEMENT  
 CRA 6.9 KV POWER CABLES REPLACEMENT UNITS 6 TO 9  
 CRA 69KV AND 240 KV TRANSFORMERS REPLACEMENT  
 CRA 69KV PANEL UPGRADE  
 CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT  
 CRA ALL PUMPING PLANTS - FLOW METER UPGRADES  
 CRA ALL PUMPING PLANTS, FLOW METER REPLACEMENT  
 CRA ANCILLARY EROSION AND DRAINAGE CONTROL  
 CRA AND IRON MOUNTAIN RESERVOIR PANEL REPAIRS  
 CRA AND IRON MOUNTAIN RESERVOIR PANEL REPLACEMENT  
 CRA AQUEDUCT BLOCKER GATE REPLACEMENT  
 CRA AQUEDUCT ISOLATION GATES REPLACEMENT  
 CRA ASPHALT REPLACEMENT  
 CRA AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES FOR FOUR PUMPING PLANTS  
 CRA AUXILIARY POWER SYSTEMS

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

CRA BLACK METAL COMMUNICATION SITE II UPGRADE  
 CRA CANAL CRACK REHAB AND EVALUATION  
 CRA CANAL CRACK REHABILITATION  
 CRA CANAL IMPROVEMENTS  
 CRA CHLORINE INJECTION IMPROVEMENTS  
 CRA CHOLLA WASH CONDUIT RELINING  
 CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT  
 CRA CONDUIT EROSION CONTROL IMPROVEMENTS  
 CRA CONDUIT FORMAT WASH EROSION REPAIRS  
 CRA CONDUIT STRUCTURAL PROTECTION  
 CRA CONDUIT STRUCTURAL PROTECTION  
 CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR  
 CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2  
 CRA CONVEYANCE SYSTEM HIGH FLOW RELIABILITY UPGRADES  
 CRA COPPER BASIN AND GENE WASH DAM SLUICeways  
 CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY  
 CRA DELIVERY LINE REHABILITATION  
 CRA DESERT AIRFIELDS IMPROVEMENT  
 CRA DESERT REGION SECURITY IMPROVEMENTS  
 CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY  
 CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS  
 CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION  
 CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT  
 CRA DOMESTIC WATER TREATMENT SYSTEM REPLACEMENT  
 CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP)  
 CRA ENERGY EFFICIENCY IMPROVEMENTS  
 CRA FREDA SIPHON BARREL NUMBER 1  
 CRA FREDA SIPHON BARREL NUMBER 1 INTERNAL SEAL INSTALLATION  
 CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT  
 CRA GENE STORAGE WAREHOUSE REPLACEMENT  
 CRA HINDS PUMPING PLANT - WASH AREA UPGRADE  
 CRA INTAKE AND GENE OVER-CURRENT RELAY REPLACEMENT  
 CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT  
 CRA INTAKE PUMP PLANT SHORE PROTECTION  
 CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT  
 CRA IRON HOUSING REPLACEMENT  
 CRA IRON MOUNTAIN PUMP PLANT 2400 V SWITCH RACK REHABILITATION  
 CRA IRON MOUNTAIN PUMP PLANT AND EAGLE MOUNTAIN PUMP PLANT RESERVOIR BOTTOM RELINING  
 CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT  
 CRA LAKEVIEW SIPHON  
 CRA MAIN PUMP & MOTOR REFURISHMENT  
 CRA MAIN PUMP AND MOTOR REFURISHMENT  
 CRA MAIN PUMP CONTROLS & INSTRUMENTATION  
 CRA MAIN PUMP CONTROLS AND INSTRUMENTATION  
 CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT  
 CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT  
 CRA MAIN PUMP MOTOR EXCITERS REHABILITATION  
 CRA MAIN PUMP MOTOR REHABILITATION (INCLUDES UPCOMING CIP - CRA MAIN PUMP REHABILITATION)  
 CRA MAIN PUMP REHABILITATION  
 CRA MAIN PUMP REHABILITATION (STAGE 1) - DESIGN PHASE FOR DEMONSTRATION PROJECT  
 CRA MAIN PUMP REHABILITATION (STAGE 1) - PRELIMINARY INVESTIGATIONS  
 CRA MAIN PUMP STUDY  
 CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS  
 CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION  
 CRA MAIN PUMPING PLANT UNIT COOLERS & HEAT EXCHANGERS  
 CRA MAIN PUMPING PLANT UNIT COOLERS AND HEAT EXCHANGERS  
 CRA MAIN PUMPING PLANTS DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS  
 CRA MAIN PUMPING PLANTS DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS  
 CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM  
 CRA MAIN PUMPING PLANTS SAND REMOVAL SYSTEM  
 CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM  
 CRA MAIN TRANSFORMER REFURBISHMENT  
 CRA MAIN TRANSFORMER REPLACEMENT /REHABILITATION  
 CRA MAIN TRANSFORMER REPLACEMENT/REHAB.  
 CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY  
 CRA MM 33 CANAL SIDEWALL IMPROVEMENTS  
 CRA OVER-CURRENT RELAY REPLACEMENT  
 CRA PROTECTIVE SLABS  
 CRA PUMP PLANT FLOW METER REPLACEMENT  
 CRA PUMP PLANT FLOW METER UPGRADE  
 CRA PUMP PLANT LOWER GUIDE ACCESS IMPROVEMENTS  
 CRA PUMP PLANT ROLLUP DOOR AND WINDOW REPLACEMENTS  
 CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY  
 CRA PUMP PLANT SUMP SYSTEM REHABILITATION

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE  
 CRA PUMP PLANTS 2.3KV & 480V SWITCHRACKS REHAB  
 CRA PUMP PLANTS 2.3KV AND 480V SWITCH RACK REHABILITATION  
 CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB  
 CRA PUMP PLANTS CIRCULATION WATER SYSTEMS  
 CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR  
 CRA PUMPING PLANT DELIVERY LINE REHABILITATION  
 CRA PUMPING PLANT REHABILITATION STUDY  
 CRA PUMPING PLANT REHABILITATION STUDY AND INVESTIGATION  
 CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT  
 CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY  
 CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION AND DISCHARGE LINES-EXPANSION JOINT REPAIRS  
 CRA PUMPING PLANT STATION BATTERY REPLACEMENT  
 CRA PUMPING PLANT STORAGE BUILDINGS  
 CRA PUMPING PLANT STORAGE BUILDINGS AT HINDS, EAGLE MOUNTAIN AND IRON MOUNTAIN  
 CRA PUMPING PLANT SUMP SYSTEM REHABILITATION  
 CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN.  
 CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE  
 CRA PUMPING PLANT WASTEWATER SYSTEM REHABILITATION - ALL FIVE PUMPING PLANT PRELIMINARY DESIGN  
 CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT  
 CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - GENE/IRON MTN FINAL DESIGN  
 CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN.  
 CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/UPGRADES  
 CRA PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT  
 CRA PUMPING PLANTS ASPHALT REPLACEMENT  
 CRA PUMPING PLANTS CRANE IMPROVEMENTS  
 CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION  
 CRA PUMPING PLANTS VULNERABILITY ASSESSMENT  
 CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT  
 CRA PUMPING PLT RELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION  
 CRA PUMPING WELL CONVERSION  
 CRA QUAGGA MUSSEL BARRIERS  
 CRA RADIAL GATES AND SLIDE GATE REHABILITATION  
 CRA RADIAL GATES REPLACEMENT  
 CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT  
 CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS  
 CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS)  
 CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568  
 CRA RELIABILITY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION  
 CRA SAND TRAP EQUIPMENT UPGRADES  
 CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE  
 CRA SEISMIC RETROFIT OF 6.9KV SWITCH HOUSES  
 CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES  
 CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION  
 CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT  
 CRA SIPHON REHAB  
 CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS  
 CRA SUPPORT FACILITIES SEISMIC EVALUATIONS  
 CRA SURGE CHAMBER DISCHARGE LINE BY-PASS COVERS  
 CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL  
 CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT  
 CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT  
 CRA TUNNELS - SEISMIC RESILIENCE UPGRADES  
 CRA UPS REPLACEMENT  
 CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY  
 CRA WATER DISTRIBUTION SYSTEM & VILLAGE ASPHALT REPLACEMENT - GENE & IRON MOUNTAIN  
 CRA WATER DISTRIBUTION SYSTEM & WASTEWATER SYSTEM REPLACEMENT - GENE & IRON MTN CONSTRUCTION  
 CRA WATER DISTRIBUTION SYSTEM REPLACEMENT AND CRA ROADWAY ASPHALT REPLACEMENT - ALL PP  
 CRA WHIPPLE MOUNTAIN TUNNEL FLOW METERING EQUIPMENT UPGRADES  
 CUF DECHLORINATION SYSTEM  
 DAM SLUICeways AND OUTLETS REHABILITATION  
 DANBY TOWER FOOTER REPLACEMENT  
 DANBY TOWERS FOUNDATION REHABILITATION  
 DESERT FACILITIES FIRE PROTECTION SYSTEMS UPGRADE  
 DESERT LAND ACQUISITIONS  
 DESERT PUMP PLANT OIL CONTAINMENT  
 DESERT ROADWAY IMPROVEMENT  
 DESERT SEPTIC SYSTEM  
 DESERT SEWER SYSTEM REHABILITATION  
 DESERT WATER TANK ACCESS - FIRE WATER, CIRCULATING WATER, DOMESTIC WATER- STUDY  
 DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS  
 DISTRIBUTION SYSTEM FACILITIES - REHABILITATION PROGRAM  
 DISTRIBUTION SYSTEM FACILITIES REHABILITATION PROGRAM - MAINTENANCE & STORAGE SHOP (PC-1)  
 DISTRIBUTION SYSTEM RELIABILITY PROGRAM - PHASE 2  
 DVL INLET / OUTLET TOWER FISH SCREENS REPLACEMENT

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

DVL TO SKINNER TRANSMISSION LINE STUDY  
 E. THORNTON IBBETSON GUEST QUARTERS  
 EAGLE AND HINDS EQUIPMENT WASH AREA UPGRADE  
 EAGLE KITCHEN UPGRADE  
 EAGLE LIFT & EAGLE WEST SIPHONS SEISMIC IMPROVEMENTS  
 EAGLE MOUNTAIN 230 KV LOCAL BREAKER FAILURE BACKUP  
 EAGLE MOUNTAIN 230 KV PHYSICAL AND CYBER SECURITY UPGRADES  
 EAGLE MOUNTAIN 230KV LOCAL BREAKER FAILURE BACKUP  
 EAGLE MOUNTAIN 230KV PHYSICAL AND CYBER SECURITY UPGRADE  
 EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM  
 EAGLE MOUNTAIN SAND TRAPS STUDY  
 EAGLE MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY  
 EAGLE MTN SAND TRAPS STUDY  
 EAGLE PP UTILITIES AND PAVING  
 EAGLE ROCK ASPHALT REPAIR PROJECT  
 EAGLE ROCK MAIN ROOF REPLACEMENT  
 ENHANCED VAPOR RECOVERY UPGRADES FOR GASOLINE DISPENSERS  
 ENVIRONMENTAL MITIGATION  
 ETIWANDA PIPELINE LINER REPAIR  
 ETIWANDA RESERVOIR LINER REPAIR  
 FUTURE SYSTEM RELIABILITY PROJECTS  
 GARVEY RESERVOIR - AUTOMATED DATA ACQUISITION SYSTEM  
 GARVEY RESEVOIR AUTOMATED DATA ACQUISITON SYSTEM REPLACEMENT  
 GENE & INTAKE P.P. - FREQUENCY PROTECTION RELAY REPLACEMENT  
 GENE & INTAKE PUMPING PLANT OUTLET STRUCTURE GATE RE-COATING (10003)  
 GENE & INTAKE PUMPING PLANT SURGE CHAMBER OUTLET GATES RE-COATING  
 GENE & INTAKE PUMPING PLANTS - REPLACE UNDER FREQUENCY PROTECTION RELAY  
 GENE & IRON UTILITIES AND PAVING  
 GENE AIR CONDITION  
 GENE CAMP STATION SERVICE TRANSFORMER REPLACEMENT  
 GENE COMMUNICATION SYSTEM UPGRADE  
 GENE PUMPING PLANT - AIR STRIP EXTENSION PROJECT  
 GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT  
 GENE PUMPING PLANT - PEDDLER SUBSTATION REPLACEMENT  
 GENE PUMPING PLANT - SCADA SYSTEM  
 GENE PUMPING PLANT EXPANSION JOINT REHABILITATION  
 GENE PUMPING PLANT MAIN TRANSFORMER AREA  
 GENE PUMPING PLANT STANDBY GENERATOR REPLACEMENT  
 GENE STORAGE BUILDING REPLACEMENT  
 GENE STORAGE WAREHOUSE REPLACEMENT  
 GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION  
 HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.  
 HIGHLAND PIPELINE CONSTRUCTION  
 HINDS EAGLE & IRON MOUNTAINS STORAGE BUILDINGS  
 HINDS PP UTILITIES AND PAVING  
 HINDS PUMPING PLANT DISCHARGE VALVE PIT PLATFORM REPLACEMENT  
 HINDS PUMPING PLANT DISCHARGE VALVE PLATFORM REPLACEMENT  
 HINDS PUMPING PLANT EQUIPMENT WASH AREA UPGRADES  
 HINDS PUMPING PLANT SCADA SYSTEM  
 HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT  
 HINDS TRANSFORMER POWER CABLE REPLACEMENT  
 INLAND FDR, ARROWHEAD TUNNELS REDESIGN  
 INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION  
 INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH  
 INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM  
 INLAND FDR, REACH 4, RUSD PPLN  
 INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD  
 INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA  
 INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD  
 INLAND FDR-ENVIRON. MITIG.  
 INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT  
 INLAND FEEDER CONTINGENCY  
 INLAND FEEDER COST OF LAND AND RIGHT OF WAY  
 INLAND FEEDER ENVIRONMENTAL MITIGATION  
 INLAND FEEDER GROUNDWATER MONITORING  
 INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST  
 INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION  
 INLAND FEEDER HIGHLAND PIPELINE DESIGN  
 INLAND FEEDER MENTONE PIPELINE CONSTRUCTION  
 INLAND FEEDER MENTONE PIPELINE DESIGN  
 INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION  
 INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY  
 INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD.  
 INLAND FEEDER REVERSE OSMOSIS PLANT  
 INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN  
 INLAND FEEDER RUSD CLAIMS DEFENSE  
 INLAND FEEDER STUDIES  
 INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION  
 INLAND FEEDER, ARROWHEAD EAST TUNNEL  
 INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION  
 INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL  
 INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION  
 INLAND FEEDER, PROGRAM MANAGEMENT  
 INLAND FEEDER/SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB  
 INSULATION JOINT TEST STATIONS  
 INTAKE AND GENE PUMPING PLANTS 480 V AND 2400 V STANDBY DIESEL ENGINE GENERATOR REPLACEMENT  
 INTAKE POWER AND COMMUNICATION LINE RELOCATION  
 INTAKE POWER AND COMMUNICATIONS LINE RELOCATION  
 INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT  
 INTAKE PUMP PLANT ROAD IMPROVEMENTS  
 INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU  
 INTAKE PUMPING PLANT 2.4KV PWER LINE RELOCATION  
 INTAKE PUMPING PLANT AUTOMATION PROGRAMMING  
 INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT  
 INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION  
 INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION (4 PLANTS)  
 INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACEMENT  
 INTAKE PUMPING PLANT SCADA SYSTEM  
 INTAKE PUMPING PLANT STANDBY GENERATOR REPLACEMENT  
 INTAKE UTILITIES AND PAVING  
 IRON AND EAGLE PUMP PLANT RESERVOIR SPILLWAY AUTO REJECTION  
 IRON MOUNTAIN & EAGLE MOUNTAIN 230KV TRANSMISSION LINE PILOT RELAY  
 IRON MOUNTAIN 2400 V STANDBY DIESEL ENGINE GENERATOR REPLACEMENT  
 IRON MOUNTAIN AUXILIARY POWER SYSTEM REHABILITATION  
 IRON MOUNTAIN GENERATOR REPLACEMENT  
 IRON MOUNTAIN HAZARDOUS WASTE CONTAINMENT  
 IRON MOUNTAIN PUMPING PLANT  
 IRON MOUNTAIN PUMPING PLANT DELIVERY LINE NO. 1 RELINING  
 IRON MOUNTAIN PUMPING PLANT HOUSING REPLACEMENT  
 IRON MOUNTAIN PUMPING PLANT SCADA SYSTEM  
 IRON MOUNTAIN SERVICE PIT REHABILITATION  
 IRON MOUNTAIN & EAGLE MOUNTAIN 230KV TRANSMISSION LINE PILOT RELAY  
 IRON MT. AUXILIARY POWER SYSTEM REHABILITATION AND UPGRADE  
 IRON-EAGLE MTN. 230 KV TRANSMISSION LINE PILOT RELAY  
 JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 2 REPAIRS  
 JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 1 REPAIR  
 LAKE MATHEWS FOREBAY & HEADWORK FACILITY & EQUIPMENT  
 LAKE MATHEWS FOREBAY WALKWAY REPAIRS  
 LAKE MATHEWS ICS  
 LAKE MATHEWS INTERIM CHLORINATION SYSTEM  
 LAKE SKINNER - OUTLET CONDUIT FLOWMETER INSTALLATION  
 LAKE SKINNER BYPASS PIPELINE NO. 2 CATHODIC PROTECTION  
 LAKE SKINNER OUTLET CONDUIT  
 LAKEVIEW PIPELINE LEAK REPAIR AT STA. 2510+49  
 LAVERNE FACILITIES - EMERGENCY GENERATOR  
 LAVERNE FACILITIES - MATERIAL TESTING  
 LOWER FEEDER EROSION PROTECTION  
 MAGAZINE CANYON - VALVE REPLACEMENT FOR SAN FERNADO TUNNEL (STATION 778+80)  
 MAGAZINE CANYON OIL & WATER SEPARATOR  
 MAGAZINE CANYON OIL/WATER SEPARATOR  
 MAPES LAND ACQUISITION  
 MENTONE PPLN, RUSD, DEFENSE OF CLAIM  
 MILE 12 FLOW AND CHLORINE MONITORING STATION UPGRADES  
 MILE 12 POWER LINE & FLOW MONITORING EQUIPMENT STUDY  
 MILLS PLANT SUPPLY PUMP STATION STUDY  
 MINOR CAP FY 2011/12  
 MOTOR BREAKER FAULTY (5 PPLANTS)  
 NEWHALL TUNNEL - REPAIR STEEL LINER  
 NEWHALL TUNNEL - UPGRADE LINER SYSTEM  
 NITROGEN STORAGE STUDY AT DVL, INLAND FEEDER PC-1, AND LAKE MATHEWS  
 OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR  
 OC 88 PUMP PLANT FIRE PROTECTION STUDY  
 OC-71 SERVICE CONNECTION REPAIRS  
 OLINDA PCS FACILITY REHABILITATION AND UPGRADE  
 OLINDA PRESSURE CONTROL STRUCTURE FACILITY REHABILITATION AND UPGRADE  
 ORANGE COUNTY 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR  
 ORANGE COUNTY 88 PUMP PLANT FIRE PROTECTION STUDY  
 OVERALL ASSESSMENT OF DELIVERY LINES  
 OWNER CONTROLLED INSURANCE PROGRAM



**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

P105082 IRON-EAGLE MTN. 230 KV TRANSMISSION LINE PILOT RELAY  
P105159 EAGLE MOUNTAIN 230KV LOCAL BREAKER FAILURE BACKUP  
P105209 CRA PUMPING PLANT STATION BATTERY REPLACEMENT  
PALO VERDE VALLEY LAND PURCHASE - 16,000 ACRES  
PALOS VERDES FEEDER REHABILITATION OF DOMINGUEZ CHANNEL  
PALOS VERDES RESERVOIR SPILLWAY MODIFICATION  
PROJECT MANAGEMENT SUPPORT  
PUDDINGSTONE RADIAL GATE REHABILITATION  
PURCHASE OF LAND AND RIGHT OF WAY  
QUAGGA MUSSEL STUDY  
R&R FOR CRA  
REPAIR UPPER FEEDER LEAKING EXPANSION JOINT  
REPAIRS TO TUNNELS  
RIALTO FEEDER REPAIR @ STA. 3662+23  
RIALTO FEEDER REPAIR OF ANOMALOUS PIPE SECTION  
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - COLORADO RIVER AQUEDUCT  
RIVERSIDE BADLANDS TUNNEL CONSTRUCTION  
RIVERSIDE BRANCH - ALESSANDRO BLVD. LEFT LAND TURN LANE  
RIVERSIDE BRANCH - CONSTRUCTION OF CONTROL PANEL DISPLAY WALL  
RIVERSIDE NORTH PIPELINE DESIGN & CONSTRUCTION  
RIVERSIDE SOUTH PIPELINE CONSTRUCTION  
SAN DIEGO PIPELINE REPAIR AT STATION 1268+57  
SAN FERNANDO TUNNEL STATION 778+80 VALVE REPLACEMENT  
SAN GABRIEL TOWER SEISMIC ASSESSMENT  
SAN GABRIEL TOWER SLIDE GATE REHABILITATION  
SAN JACINTO TUNNEL EAST ADIT REHABILITATION  
SAN JACINTO TUNNEL, WEST PORTAL  
SAN JOAQUIN RESERVOIR - NEW DESIGN  
SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER  
SAN JOAQUIN RESERVOIR IMPROVEMENTS  
SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY  
SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY  
SANTA ANA RIVER BRIGDE SEISMIC RETROFIT  
SANTIAGO TOWER ACCESS ROAD UPGRADE  
SANTIAGO TOWER PATROL ROAD REPAIR  
SD5 REPAIR  
SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT  
SECURITY FENCING AT OC-88 PUMPING PLANT  
SEISMIC EVALUATION OF CRA STRUCTURES  
SEISMIC PROGRAM  
SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM  
SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION  
SEPULVEDA FEEDER REPAIR AT STATION 1099  
SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT  
SERVICE CONNECTION & EOCF #2 METER ACCESS ROAD UPGRADE & BETTERMENT  
SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STUCTURE CONSTRUCTION  
SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY  
SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY  
SWITCHYARDS AND HEAD GATES REHAB  
TEMESCAL HYDRO-ELECTRIC PLANT ACCESS ROAD UPGRADE  
TEMESCAL POWER PLANT ACCESS ROAD PAVING  
TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT  
TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT  
U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION  
UPPER FEEDER CATHODIC PROTECTION SYSTEM  
UPPER FEEDER GATES REHABILITATION PROJECTS  
UPPER FEEDER LEAKING EXPANSION JOINT REPAIR  
VALLEY BRANCH - PIPELINE CORROSION TEST STATION  
WASTEWATER SYSTEM REHABILITATION  
WASTEWATER SYSTEM REHABILITATION - GENE/IRON MTN  
WASTEWATER SYSTEM REHABILITATION - HINDS/EAGLE MTN  
WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION  
WHITE WATER SIPHON PROTECTION  
WHITEWATER EROSION PROTECTION STRUCTURE REHABILITATION  
WHITEWATER SIPHON EROSION PROTECTION  
WHITEWATER SIPHON PROTECTION STRUCTURE

**Sub-total Conveyance and Aqueduct facilities costs**

**\$90,512,590**

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

108TH STREET PRESSURE CONTROL STRUCTURE REHABILITATION  
 108TH STREET PRESSURE CONTROL STRUCTURE VALVE REPLACEMENT  
 42" CONICAL PLUG VALVE REPLACEMENT  
 ACCUSONIC FLOW METER UPGRADE  
 ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES  
 ALAMEDA CORRIDOR PIPELINE  
 ALL FACILITIES - WATER DISCHARGE ELIMINATION  
 ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES  
 ALL FEEDERS - MANHOLE LOCKING DEVICE RETROFIT  
 ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS  
 ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT  
 ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION  
 ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS  
 ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS  
 ALLEN MCCOLLOCH PIPELINE REPAIR  
 ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR  
 ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES  
 ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63  
 ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A  
 ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS  
 ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION  
 ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS  
 ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS  
 ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02  
 ALLEN-MCCOLLOCH PIPELINE  
 ALLEN-MCCOLLOCH PIPELINE OC-76 TURNOUT RELOCATION  
 ALLEN-MCCOLLOCH PIPELINE PCCP REHAB. - PRELIMINARY DESIGN  
 ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION  
 ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2  
 ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS  
 AMP -SERVICE CONNECTIONS UPGRADES  
 AMP -VALVE ACTUATOR REPLACEMENTS  
 AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES  
 AMR - RTU UPGRADE - PHASE 2  
 ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS  
 APPIAN WAY VALVE REPLACEMENT  
 ARROW HIGHWAY PROPERTY DEVELOPMENT  
 ASPHALT REHABILITATION AT WEYMOUTH FINISHED WATER RESERVOIR  
 ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS  
 ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE  
 ASSESS THE CONDITIONS OF MET'S  
 ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3  
 AULD VALLEY CONTROL STRUCTURE AREA FACILITIES  
 AUTOMATED RESERVOIR WATER QUALITY MONITORING  
 AUTOMATIC METER READING SYSTEM - RTU UPGRADE PHASE 2  
 AUTOMATIC METER READING SYSTEM UPGRADE  
 AUTOMATION COMMUNICATION UPGRADE  
 AUTOMATION DOCUMENTATION SURVEY F/A  
 BAR 97- ENHANCED AREA VEHICLE TESTING  
 BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM  
 BIXBY VALVE REPLACEMENT  
 BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER  
 BOX SPRINGS FEEDER BROKEN BACK REPAIR  
 BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I  
 BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING  
 BOX SPRINGS FEEDER REPAIR - PHASE II  
 BOX SPRINGS FEEDER REPAIRS PHASE 3 AND PHASE 4  
 C&D CRANE INSTALLATION AT OC-88 PUMPING PLANT  
 CAJALCO CREEK DAM MANHOLE COVER RETROFIT  
 CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD  
 CALABASAS FEEDER CARBON FIBER /BROKEN BACK REPAIR  
 CALABASAS FEEDER INTERFERENCE MITIGATION  
 CALABASAS FEEDER PCCP REHABILITATION - PRELIMINARY DESIGN  
 CALABASAS FEEDER PCCP REHABILITATION  
 CALABASAS FEEDER REPAIR, STUDY  
 CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000 FOR FY 2010/11  
 CAPITAL PROJECTS COSTING LESS THAN \$250,000 FOR FY2008-09  
 CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC ASSESSMENT  
 CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC RETROFIT  
 CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2  
 CASA LOMA SIPHON #1 & SAN JANCINTO PIPELINE PROTECTION  
 CASA LOMA SIPHON BARREL 1 & 2 DVL AND SD CANAL FLOW METER REPLACEMENT  
 CASA LOMA SIPHON BARREL NO. 1 - PERMANENT REPAIRS  
 CASA LOMA SIPHON BARREL NO. 1 JOINT REPAIR  
 CASA LOMA SIPHON NO 1, CASA LOMA CANAL & SAN DIEGO CANAL FLOW METER REPLACEMENT

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

<b>Description</b>
<b>Distribution Facilities</b>
CATHODIC PROTECTION FOR THE FOOTHILL FEEDER
CATHODIC PROTECTION SYSTEM UPGRADES
CCP-PHASE 2 CONSTRUCTION
CDSRP - DISCHARGE ELIMINATION
CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY
CDSRP - SEPULVEDA FEEDER REPAIRS
CDSRP - SEPULVEDA TANKS RECOATING
CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE & RIGHT-OF-WAY ACQUISITION
CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT
CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP)
CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL. SYSTEM LOG
CHEMICAL UNLOADING FACILITY RETROFIT
CHEVALIER FALCON MILLING MACHINE
COASTAL JUNCTION REVERSE FLOW BYPASS
COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
COLLIS AVENUE VALVE REPLACEMENT
COLLIS VALVE REPLACEMENT
COLORADO RIVER AQUEDUCT CASA LOMA SIPHON BARREL NO. 1 PROJECT NO. 2 - PERMANENT REPAIRS
COLORADO RIVER AQUEDUCT CASA LOMA SIPHON BARREL NO. 1 REPLACEMENT
COMMUNICATIONS STRUCTURE ALARM MONITORING
COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III
CONE CAMP INTERTIE BYPASS PIPELINE REPAIR
CONSTRUCTION PHASE 2
CONTRACT & LITIGATION TASKS -CONTRACT # 1396
CONTROL SYSTEM DATA STORAGE AND REPORTING
CONTROL SYSTEM DRAWING & DOCUMENTATION UPDATE
CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION
CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE
CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED
CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8
CONVEYANCE AND DISTRIBUTION SYSTEM ELECTRICAL STRUCTURES REHABILITATION
CONVEYANCE AND DISTRIBUTION SYSTEM HYDAULIC PILOT VALVE STANDARIZATION
CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS
COPPER BASIN ICS
COPPER BASIN SEWER SYSTEM
CORONA POWER PLANT REPLACE EMERGENCY GENERATOR
CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE
COVINA PCS UPGRADES
COVINA PRESSURECONTROL FACILITY
COYOTE CREEK HEP/PCS EMERGENCY STANDBY GENERATOR
COYOTE CREEK NORTHERN PERIMETER LANDSCAPING
COYOTE PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
CPA PIPELINE & TUNNEL ALIGNMENT
CPA PIPELINE & TUNNEL ALIGNMENT - NON FUNDED PORTION
CPA PIPELINE & TUNNEL ALIGNMENT - STUDY
CPA WATER TREATMENT PLANT - NON FUNDED PORTION
CPA WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2
CPAWQP - PHASE 2
CPAWQP - STUDY AND LAND ACQUISITION - CONTINGENCY
CPAWQP - STUDY AND LAND ACQUISITION - PIPELINE & TUNNEL ALIGNMENT - STUDY
CPAWQP - STUDY AND LAND ACQUISITION - RIGHT-OF-WAY-ACQUISITION
CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2
CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - STUDY
CRA - PC-1 EFFLUENT OPEN CHANNEL TRASH RACK
CRA CABAZON & POTRERO SHAFT COVERS
CRA CONTROL INTEGRATION
CRA PROTECTIVE SLAB AT STATION 9704+77
CROSS CONNECTION PREVENTION PROGRAM - PHASE II CONSTRUCTION
CROSS CONNECTION PREVENTION PROJECT, COMPLETE PRELIMINARY DESIGN AND CEQA DOCUMENTATION
CRW FOR REPLENISHMENT AT USG3
CSEP - ELECTRONIC SYSTEM LOG (ESL)
CSEP - ENERGY MANAGEMENT SYSTEM PHASE II
CSEP - ENHANCED DISTRIBUTION SYSTEM CONTROL PROJECT
CSEP - IMPLEMENTATION
CSEP - OPERATIONS & BUSINESS DATA INTEGRATION PILOT
CSEP - PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING
CSEP - PLC PHASE 2 - LIFE-CYCLE REPLACEMENT
CSEP - PLC STANDARDIZATION
CSEP - PLC STANDARDIZATION PHASE II
CSEP - POWER MANAGEMENT SYSTEM
CSEP - WATER PLANNING APPLICATION
CSEP IMPLEMENTATION
CSEP- SMART OPS (FORMERLY REAL TIME OPERATIONS SIMULATION)
CURRENT DRAIN STATIONS
DAM REHABILITATION & SAFETY IMPROVEMENTS ST. JOHN'S CANYON CHANNEL EROSION MITIGATION

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

DANBY TOWER FOUNDATION INVESTIGATION AND SHORT TERM MITIGATION  
 DEODERA PCS PAVEMENT UPGRADE & BETTERMENT  
 DESERT BRANCH - REPLACE STOLEN COPPER GROUND WIRE FOOTINGS/GROUNDING, AND COPPER PIPING  
 DESERT BRANCH PUMP PLANT AUXILIARY (STATION SERVICE)  
 DESERT BRANCH, PURCHASE & INSTALL 5 PORT VIDEO CONFERENCING  
 DESERT FACILITIES DOMESTIC WATER GAC SYSTEM INSTALLATION  
 DESERT HIGH VOLTAGE TRANSMISSION TOWERS - REPLACE COPPER GROUND WIRES ON  
 DETAIL SEISMIC EVALUATION OF WATER STORAGE TANK  
 DETAILED RELIABILITY IMPROVEMENTS OF THE LOS ANGELES COUNTY OPERATING REGION  
 DETAILED RELIABILITY IMPROVEMENTS OF THE ORANGE COUNTY OPERATING REGION - STAGE 1  
 DFP - ELIMINATE BACKUP GENERATOR TIE-BUS & INSTALL MANUAL TRANSFER SWITCH FOR CHLORINE SCRUBBER  
 DIEMER FILTRATION PLANT - SLOPE REPAIR  
 DIEMER OZONE COOLING WATER ALTERNATIVE SOURCE  
 DIRECTIONAL SIGNS FOR DIAMOND VALLEY LAKE FACILITY  
 DISCHARGE ELIMINATION  
 DIST SYS-AIR RELEASE & VAC VALVE MODS  
 DISTRIBUTION SYSTEM - CAPP CONSTRUCTION PACKAGES 9,11,12  
 DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM  
 DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE  
 DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN & CONSTRUCTION  
 DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY  
 DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY  
 DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY  
 DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I  
 DISTRIBUTION SYSTEM EQUIPMENT & INSTRUMENTATION UPGRADES  
 DISTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY  
 DISTRIBUTION SYSTEM ONLINE ANALYZERS REPLACEMENT  
 DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM  
 DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION  
 DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS)  
 DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING  
 DOMINGUEZ CHANNEL PRESSURE RELIEF STRUCTURE IMPROVEMENTS  
 DROUGHT RESPONSE WESTSIDE PUMP STATION  
 DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396  
 DSRACS - SKINNER AREA  
 DSRACS - SOFTWARE DEVELOPMENT COST  
 DSRACS - WEYMOUTH  
 DVL & CONTROL SYSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN  
 DVL VIEWPOINT ROAD SECURITY UPGRADES  
 EAGLE EQUIPMENT WASH AREA UPGRADE  
 EAGLE ROCK - ASPHALT REHABILITATION  
 EAGLE ROCK - FIRE PROTECTION AT THE WESTERN AREA OF THE EAGLE ROCK CONTROL CENTER PERIMETER GROUNDS  
 EAGLE ROCK CONTROL CENTER FIREHYDRANT  
 EAGLE ROCK LATERAL INTERCONNECTION REPAIR  
 EAGLE ROCK MAIN BUILDING ROOF REPLACEMENT - STUDY  
 EAGLE ROCK OCC - REHAB CONTROL ROOM  
 EAGLE ROCK OPERATIONS CONTROL CENTER  
 EAGLE ROCK RESIDENCE CONVERSION  
 EAGLE ROCK TOWER AND PUDDINGSTONE SPILLWAY GATES REHABILITATION  
 EAGLE ROCK TOWER DISTRIBUTION SYSTEM UPGRADES  
 EAGLE ROCK TOWER SLIDEGATE REHABILITATION  
 EAST INFLUENT CHANNEL REPAIR PROJECT  
 EAST LAKE SKINNER BYPASS AND BYPASS NO.2 SCREENING STRUCTURE UPGRADE (SUSPENSE)  
 EAST ORANGE COUNTY FEEDER #2 REPAIR  
 EAST ORANGE COUNTY FEEDER #2 SEISMIC RETROFIT  
 EAST ORANGE COUNTY FEEDER NO. 2 SERVICE CONNECTION A-6 REHABILITATION  
 EAST VALLEY FEEDER VALVE STRUCTURE ELECTRICAL UPGRADE  
 EASTERN AND DESERT REGIONS PLUMBING RETROFIT  
 EASTERN REGION PCCP JOINT MODIFICATION 2012  
 E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE  
 ELECTRIC CURRENT DRAIN STATION INSTALLATIONS  
 ELECTRICAL UPGRADES AT 15 STRUCTURES IN THE ORANGE COUNTY REGION (STAGE 1)  
 ELECTRICAL UPGRADES AT 15 STRUCTURES, OC REGION  
 ELECTROMAGNETIC INSPECTION OF PCCP LINES  
 ELECTROMAGNETIC INSPECTIONS OF PCCP LINES  
 ELECTRONIC SYSTEM LOG (ESL)  
 ENERGY MANAGEMENT SYSTEM - PHASE 2  
 ENHANCED DISTRIBUTION SYSTEM AUTOMATIC FLOW TRANSFERS SOFTWARE REDEVELOPMENT  
 ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE I  
 ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE II  
 ENVIRONMENTAL REGULATORY AGREEMENTS AND OTHER REGULATORY AGENCY  
 EOFC2 OC-44B VALVE REPLACEMENT STA. 1239+29  
 EQUIPMENT UPGRADE AT THE NORTH PORTAL OF THE HOLLYWOOD TUNNEL  
 ETIWANDA / RIALTO PIPELINE INTER-TIE CATHODIC PROTECTION  
 ETIWANDA CAVITATION FACILITY INFRASTRUCTURE REHABILITATION

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

ETIWANDA CAVITATION TEST FACILITY COMMUNICATION AND CONTROL SYSTEM REPLACEMENT  
 ETIWANDA HEP NEEDLE VALVE OPERATORS  
 ETIWANDA PIPELINE - LINING REPLACEMENT  
 ETIWANDA PIPELINE AND CONTROL FACILITY - RIGHT OF WAY  
 ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS  
 ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION  
 ETIWANDA PIPELINE AND CONTROL FACILITY - EMERGENCY DISCHARGE CONDUITS  
 ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION  
 ETIWANDA PIPELINE AND CONTROL FACILITY - RESIDENCES  
 ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE  
 ETIWANDA PIPELINE LINING REPAIRS  
 ETIWANDA PIPELINE LINING REPLACEMENT  
 ETIWANDA PIPELINE RELINING - PHASE 3  
 ETIWANDA PIPELINE SOUTH - STA. 332+00 TO 349+00 & UPPER FEEDER - STA. 1078+00 TO 1083+00 PROTECTION  
 ETIWANDA PUMP STATION  
 ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE  
 ETIWANDA TEST FACILITY  
 FACILITY AND PROCESS RELIABILITY ASSESSMENT  
 FAIRPLEX AND WALNUT PCS VALVES REPLACEMENT  
 FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6  
 FLOW METER REPLACEMENT  
 FLOW METER REPLACEMENT PROJECT  
 FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL  
 Foothill & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS  
 FOOTHILL FEEDER - CASTAIC VALLEY BLOW-OFF VALVES REPLACEMENT  
 FOOTHILL FEEDER ACOUSTIC FIBER OPTIC PCCP MONITORING SYSTEM  
 FOOTHILL FEEDER ADEN AVE. REHABILITATION  
 FOOTHILL FEEDER CARBON FIBER REPAIR  
 FOOTHILL FEEDER CATHODIC PROTECTION  
 FOOTHILL FEEDER PCS VALVE REPLACEMENT  
 FOOTHILL FEEDER PIPELINE REPLACEMENT PROJECT  
 FOOTHILL FEEDER POWER PLANT EXPANSION  
 FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER  
 FOOTHILL FEEDER, CARBON FIBER REPAIRS  
 FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT  
 FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION  
 FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION  
 FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE  
 FUTURE SYSTEM RELIABILITY PROGRAM  
 GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM  
 GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS  
 GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS  
 GARVEY RESERVOIR CONTROL VALVES REPLACEMENT  
 GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM  
 GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS  
 GARVEY RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM REHABILITATION  
 GENE & IRON POOLS  
 GENE AIR CONDITIONING SYSTEM REPLACEMENT  
 GENE MESS HALL AIR CONDITIONING UNIT  
 GENE SPARE PARTS WAREHOUSE IMPROVEMENTS  
 GLENDALE 01 SERVICE CONNECTION REHAB  
 GLENDALE-01 SERVICE CONNECION REHABILITATION AND UPGRADE  
 GLENDALE-01 SERVICE CONNECTION REHABILITATION  
 GREG AVE PCS FACILITY REHABILITATION  
 GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT  
 GREG AVENUE PCS - PUMP MODIFICATIONS AND NEW CONTROL BUILDING  
 GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION  
 HINDS GARAGE ASBESTOS SHEETING REPLACEMENT  
 HOLLYWOOD TUNNEL NORTH PORTAL EQUIPMENT UPGRADES  
 HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY  
 HYDRAULIC MODELING PROJECT  
 HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS  
 HYDROELECTRIC POWER PLANT (HEP) DISCHARGE ELIMINATION  
 IAS PROJECTS - CPA  
 IAS PROJECTS - DVL-SKINNER  
 IAS PROJECTS - MILLS SUPPLY RELIABILITY  
 INLAND FEEDER AND LAKEVIEW PIPELINE INTERTIE  
 INLAND FEEDER RIALTO FEEDER INTERTIE  
 INLAND FEEDER TO CITRUS RESERVOIR AND PUMP STATION INTERCONNECTIONS  
 INLAND PCSUST REMOVAL & AST INSTALLATION  
 INSTALL MOTION SENSORS IN NEW EXPANSION  
 INSTALL TEST LEADS AT FOUR LOCATIONS  
 INSULATION JOINT TEST STATIONS  
 INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE  
 IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396  
 JENSEN EGEN UST UPGRADE - LINE LEAK DETECTOR INSTALLATION  
 JENSEN FILTER EFFLUENT TURBIDIMETER RELIABILITY  
 JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING  
 JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION  
 JENSEN FLUORIDE TANK REPLACEMENT  
 LA VERNE FACILITIES - BRIDGEPORT E-2-PATH  
 LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10  
 LA VERNE FACILITIES - EXPANSION OF THE SANITARY SEWER  
 LA VERNE FACILITIES - HAZARDOUS WASTE STORAGE  
 LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT  
 LA VERNE FACILITIES - MATERIALS TESTING LABORATORY  
 LA VERNE FACILITIES - REPLACEMENT OF FLOCCULATOR STUB SHAFT - BASINS 1 & 2  
 LA VERNE MACHINE SHOP - AIR CONDITIONING UNIT REPLACEMENT  
 LA VERNE MACHINE SHOP - REPAIR HORIZONTAL BORING MILL  
 LA-35 DISCHARGE STRUCTURE REPAIRS  
 LADWP CONNECTION IN MAGAZINE CANYON  
 LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES  
 LAKE MATHEWS - DIVERSION TUNNEL WALKWAY REPAIR  
 LAKE MATHEWS - FACILITY WIDE EMERGENCY WARNING AND PAGING SYSTEM  
 LAKE MATHEWS - FOREBAY MCC ROOF IMPROVEMENT  
 LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION  
 LAKE MATHEWS - MULTIPLE SPECIES MANAGER'S OFFICE & RESIDENCE  
 LAKE MATHEWS - RENOVATION OF BLDGS. 8 & 15, GENERAL ASSEMBLY & ADMIN. BLDG. OFFICE AREAS  
 LAKE MATHEWS - RETROFIT LOWER ENTRANCE GATE SWING ARM  
 LAKE MATHEWS FENCING SECURITY UPGRADE  
 LAKE MATHEWS FOREBAY MCC ROOF IMPROVEMENT  
 LAKE MATHEWS MAIN DAM TOE SEEPAGE COLLECTION  
 LAKE MATHEWS RETROFIT LOWER ENTRANCE GATE SWING ARM  
 LAKE PERRIS BYPASS PIPELINE EXPLORATION  
 LAKE PERRIS BYPASS PIPELINE RELINING  
 LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT  
 LAKE PERRIS PIPELINE RELINING  
 LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT  
 LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION  
 LAKE SKINNER - REPLACEMENT AERATOR RING  
 LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT  
 LAKE SKINNER AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT  
 LAKE SKINNER CATHODIC PROTECTION  
 LAKE SKINNER DAM ROAD REHAB  
 LAKE SKINNER EAST BYPASS SCREENING STRUCTURES  
 LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION  
 LAKE SKINNER WEST BYPASS SCREENING STRUCTURE  
 LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION  
 LAKE VIEW PIPE LINE REPAIRS  
 LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE  
 LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM  
 LAKEVIEW PIPELINE IMPROVEMENTS  
 LAKEVIEW PIPELINE RELINING  
 LAKEVIEW PIPELINE RELINING - STAGE 2  
 LAKEVIEW PIPELINE RELINING - STAGE 3  
 LAKEVIEW PIPELINE REPAIR  
 LAKEVIEW PIPELINE UPGRADE  
 LIVE OAK RESERVOIR BYPASS PIPELINE CATHODIC PROTECTION  
 LIVE OAK RESERVOIR PIPELINES CATHODIC PROTECTION  
 LOS ANGELES COUNTY NORTH C AND D REGION ELECTRICAL STRUCTURES REHAB  
 LOS ANGELES COUNTY SOUTH C AND D REGION ELECTRICAL STRUCTURES REHAB  
 LOWER FEEDER - CATHODIC PROTECTION  
 LOWER FEEDER CATHODIC PROTECTION SYSTEM REHABILITATION  
 LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION  
 MAGAZINE CANYON CANOPY  
 MAGAZINE CANYON-ISOLATION GATE JACKING FRAME  
 MAPES LAND ACQUISITION  
 MICROWAVE COMMUNICATION SITES BUILDING UPGRADE  
 MIDDLE CROSS FEEDER CATHODIC PROTECTION  
 MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS  
 MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM  
 MIDDLE FEEDER BLOW-OFF VALVE REPLACEMENT AT STA 782+53.16  
 MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM  
 MIDDLE FEEDER NORTH DRAINAGE AND PROTECTION RESTORATION  
 MIDDLE FEEDER RELOCATION FOR SCE MESA SUBSTATION  
 MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD  
 MINOR CAP 08/09 PLACEHOLDER  
 MINOR CAP FY 2009/10  
 MINOR CAP FY 2012/13

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

MINOR CAP FY 2014/16  
 MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS  
 MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)  
 MWD ROAD GUARDRAIL  
 NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS  
 NITROGEN STORAGE STUDY  
 NON PCCP LINES CONDITION INSPECTION AND ASSESSMENT  
 NORTH PORTAL OF HOLLYWOOD TUNNEL  
 NORTH REACH CONSTRUCTION / INSPECTION / CM  
 NORTH REACH CONSTRUCTION/ASBUILT  
 NORTH REACH ENVIRONMENTAL - CONSTRUCTION  
 NORTH REACH FINAL DESIGN & ADV/NTP  
 NORTH REACH POST DESIGN / ASBUILT  
 NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION  
 NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN  
 NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN  
 OAK ST PCS REHABILITATION  
 OAK ST. PCS ROOF REPLACEMENT  
 OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION  
 OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB  
 OC 88 FIRE SYSTEM PROTECTION UPGRADES  
 OC 88 PUMPING PLANT REHABILITATION  
 OC CATHODIC PROTECTION STA 1467+15 TO STA 2053+97  
 OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS  
 OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT  
 OC-71 FLOW CONTROL FACILITY  
 OC-88 - SECURITY FENCING AT PUMP PLANT  
 OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY  
 OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE  
 OC-88 PUMP STATION CHILLERS REPLACEMENT  
 OC-88 PUMP STATION FLOW METER UPGRADE  
 OC-88 PUMP STATION PLC UPGRADE  
 OC-88 PUMP STATION UPGRADES  
 OC-88 PUMPING PLANT SURGE TANK UPGRADES  
 OC-88 PUMPING PLANT SURGE TANKS UPGRADES  
 OC-88 PUMPING PLANT UPGRADES  
 OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS  
 OLINDA PCS VALVE REPLACEMENT  
 OLINDA PRESSURE CONTROL STRUCTURE  
 OLINDA PRESSURE CONTROL STRUCTURE AND SANTIAGO TOWER EMERGENCY GENERATORS  
 ON-CALL RESOURCES MANAGEMENT APPLICATION  
 OPERATIONS CONTROL CENTER AT EAGLE ROCK  
 OPERATIONS CONTROL CENTER UPS REPLACEMENT  
 OPERATIONS SCOPING STUDY  
 ORANGE CO FDR, BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR  
 ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE  
 ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT  
 ORANGE COUNTY AND RIVERSIDE/SAN DIEGO COUNTY OPERATING REGIONS VALVE REPLACEMENT  
 ORANGE COUNTY AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT  
 ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY  
 ORANGE COUNTY C&D ELECT STRUCT REHAB - STAGE 2  
 ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS  
 ORANGE COUNTY C&D TEAM SUPPORT FACILITY  
 ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER  
 ORANGE COUNTY FEEDER CATHODIC PROTECTION  
 ORANGE COUNTY FEEDER CATHODIC PROTECTION SYSTEM REHABILITATION  
 ORANGE COUNTY FEEDER DEWATERING IMPROVEMENTS  
 ORANGE COUNTY FEEDER EXTENSION LINING REPAIR  
 ORANGE COUNTY FEEDER INSPECTION  
 ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY  
 ORANGE COUNTY FEEDER LINING REPAIRS  
 ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES  
 ORANGE COUNTY FEEDER RELINING  
 ORANGE COUNTY FEEDER RELINING - REACH 3  
 ORANGE COUNTY FEEDER RELINING - REACHES 1 & 2  
 ORANGE COUNTY FEEDER RELOCATION IN FULLERTON  
 ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION  
 ORANGE COUNTY FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS  
 ORANGE COUNTY REGION C AND D ELECTRICAL STRUCTURES REHABILITATION  
 ORANGE COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING  
 ORANGE COUNTY RELIABILITY IMPROVEMENTS  
 ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS  
 ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION  
 OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT  
 P104881 SECOND LOWER FEEDER PCCP REHABILITATION

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

P105039 FOOTHILL FEEDER - CASTAIC VALLEY BLOW-OFF VALVES REPLACEMENT  
P105062 SAN DIEGO PIPELINE NO. 2 ACCESS ROAD RELOCATION  
P105064 OC 88 FIRE SYSTEM PROTECTION UPGRADES  
P105118 PERRIS BYPASS PIPELINE SUMP PUMP REPLACEMENT  
P105124 LAKE PERRIS PIPELINE RELINING  
P105127 OC-88 PUMP STATION PLC UPGRADE  
P105137 RIALTO FEEDER STA 3820+00 MANHOLE REPLACEMENT  
P105139 WCF/PVF INTERCONNECTION VALVE AUTOMATION  
P105167 SAN GABRIEL PCS ELECTRICAL REPLACEMENTS  
P105235 SEPULVEDA HEP TAILRACE COATINGS  
P105240 WEST VALLEY FEEDER NO. 1 STRUCTURES - PIPING IMPROVEMENTS  
PALOS ALTOS FEEDER - 108TH ST.  
PALOS VERDES FEEDER - LONG BEACH LATERAL TURNOUT STRUCTURES STA. 1442+15 VALVE REPLACEMENT (NEED UD)  
PALOS VERDES FEEDER - LONG BEACH LATERAL TURNOUT STRUCTURES STA. 1442+15 VALVE REPLACEMENTS  
PALOS VERDES FEEDER PCS - VALVE REPLACEMENT  
PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS  
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK  
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PROJECT  
PCCP HYDRAULIC ANALYSES  
PCCP REHABILITATION - PROGRAM MANAGEMENT  
PCCP RELIABILITY PROGRAM PIPELINE PROCUREMENT  
PERIMETER FENCING AT PLACERITA CREEK  
PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM  
PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION  
PERRIS BYPASS PIPELINE SUMP PUMP REPLACEMENT  
PERRIS CONTROL FACILITY BYPASS & PCS UPGRADE  
PERRIS CONTROL FACILITY PUMPBACK UPGRADES  
PERRIS PCS ROOF REHAB  
PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT  
PERRIS PUMPBACK COVER  
PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD)  
PERRIS VALLEY PIPELINE - GENERAL  
PERRIS VALLEY PIPELINE - NORTH REACH  
PERRIS VALLEY PIPELINE - RESERVED FOR STAGE II DESIGN / BUILD  
PERRIS VALLEY PIPELINE - SOUTH REACH  
PERRIS VALLEY PIPELINE - STUDY  
PERRIS VALLEY PIPELINE - TIE-IN (WMWD)  
PERRIS VALLEY PIPELINE - TUNNELS  
PERRIS VALLEY PIPELINE - VALVES  
PERRIS VALLEY PIPELINE DESIGN-BUILD (EMWD)  
PERRIS VALLEY PIPELINE NORTH REACH  
PERRIS VALLEY PIPELINE SOUTH REACH  
PERRIS VALLEY PIPELINE TIE-IN (WMWD)  
PERRIS VALLEY PIPELINE VALVES  
PLACENTIA RAILROAD LOWERING PROJECT  
PLACERITA CREEK PERIMETER FENCING  
PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING  
PLATFORM REPLACEMENT AT VARIOUS C&D WRU STRUCTURES  
PLC REPLACEMENT PHASE II  
PM-26A NEW SERVICE CONNECTION, BIG DALTON CANYON  
POWER PLANT DISCHARGE ELIMINATION  
PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2  
PRESTRESSED CONCRETE CYLINDER PIPE (PCCP) STRUCTURAL PERFORMANCE RISK ANALYSIS  
PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3  
PREVENTION OF CRA WATER MIGRATION TO SPW AT WEYMOUTH JUNCTION STRUCTURE  
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY  
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY  
PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION  
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE LOS ANGELES CO. OPERATING REGION  
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE ORANGE COUNTY OPERATING REGION  
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE RIVERSIDE/SAN DIEGO CO. OPERATING REGION  
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE WESTERN SAN BERNARDINO COUNTY OPERATING REGION  
PUDDINGSTONE SPILLWAY CROSS CONNECTION  
PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT  
R&R FOR DISTRIBUTION  
REAL PROPERTY ACQUISITION  
REAL PROPERTY ACQUISITION FOR ALL 4 REGIONS  
RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271)  
RED MOUNTAIN HEP FLOOD DAMAGE  
RED MTN COMM. TOWER & METER STRUCTURE  
REHABILITATION OF METALLIC AND CONCRETE PIPELINES PHASE 1 - SELECT HIGH PRIORITY FEEDERS  
REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR  
RELOCATION OF ORANGE COUNTY FEEDER  
RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE)  
REMAINING PORTIONS



**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

REPAIRS TO THE LA-35 DISCHARGE STRUCTURE  
 REPLACE 2 FIRE & DOMESTIC WATER SYSTEM  
 REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER  
 REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS  
 REPLACE VALVE POSITION INDICATORS  
 REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER  
 REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1  
 RIALTO FEEDER AND MILLS PLANT PUMP STATION  
 RIALTO FEEDER BROKEN BACK REPAIR  
 RIALTO FEEDER PCCP REHABILITATION - REACH 1  
 RIALTO FEEDER PCCP REHABILITATION - REACHES 2-3  
 RIALTO FEEDER REHABILITATION  
 RIALTO FEEDER STA 3820+00 MANHOLE REPLACEMENT  
 RIALTO FEEDER VALVE STRUCTURE  
 RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY  
 RIALTO PIPELINE - CONSTRUCTION PHASE 1  
 RIALTO PIPELINE - CONSTRUCTION PHASE 2  
 RIALTO PIPELINE CATHODIC PROTECTION SYSTEM REHABILITATION  
 RIALTO PIPELINE IMPROVEMENTS  
 RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION  
 RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III  
 RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2  
 RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3  
 RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN  
 RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT  
 RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN  
 RIALTO PIPELINE PCCP REHABILITATION  
 RIALTO PIPELINE REPAIR @ STA 3196+44  
 RIALTO PIPELINE REPAIR AT THOMPSON CREEK  
 RIALTO PIPELINE REPAIRS AT STATION 3198+44  
 RIALTO PIPELINE VALVE PROCUREMENT  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - LOS ANGELES COUNTY REGION  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - O. C. REGION  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - RIVERSIDE AND SAN DIEGO COUNTY REGION  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - WESTERN SAN BERNARDINO COUNTY REGION  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM RIVERSIDE SAN DIEGO  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM RIVERSIDE SAN DIEGO COUNTY REGION - STAGE 1  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM WESTERN SAN BERNARDINO COUNTY REGION - STAGE 1  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM WESTERN SAN BERNARDINO REGION - STAGE 2  
 RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM WESTERN SAN BERNARDINO REGION - STAGE 3  
 RIGHT OF WAY SURVEY AND MAPPING  
 RIGHT-OF-WAY INFRASTRUCTURE PROTECTION PROGRAM WESTERN SAN BERNARDINO STAGE 1  
 RIO HONDO PRESSURE CONTROL STRUCTURE VALVE REPLACEMENTS  
 RIVERSIDE SAN BERNARDINO AND SAN DIEGO REGIONS C AND D ELECTRICAL STRUCTURES REHAB  
 ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION  
 ROOF REPLACEMENT AT SOTO ST. FACILITY  
 ROWIPP PROGRAMMATIC ENVIRONMENTAL DOCUMENT  
 ROWIPP PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR LOS ANGELES CO.  
 ROWIPP PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE ORANGE CO. OPERATING REGION  
 ROWIPP PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE RIVERSIDE/SAN DIEGO CO. OPERATING REGION  
 SAN DIEGO #3 BLOWOFF TO PUMPWELL CONVERSION  
 SAN DIEGO AND AULD VALLEY CANALS CONCRETE LINER REPAIR  
 SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY  
 SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT  
 SAN DIEGO CANAL - FENCING  
 SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER  
 SAN DIEGO CANAL - PIEZOMETER  
 SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK  
 SAN DIEGO CANAL - SEEPAGE STUDY  
 SAN DIEGO CANAL BISULFITE TANK REPLACEMENT  
 SAN DIEGO CANAL DEWATERING SUMP  
 SAN DIEGO CANAL LINER REPAIR  
 SAN DIEGO CANAL RADIAL GATE (V0-6) REHABILITATION  
 SAN DIEGO CANAL RADIAL GATE (V0-8) REHABILITATION  
 SAN DIEGO CANAL RADIAL GATE (V0-8) REHABILITATION..  
 SAN DIEGO CANAL RADIAL GATE REHAB  
 SAN DIEGO CANAL SEEPAGE STUDY  
 SAN DIEGO CANAL WEST BYPASS TRASH RACK  
 SAN DIEGO PIPELINE #4 VALVE REPLACEMENT  
 SAN DIEGO PIPELINE 1 & 2 REHABILITATION  
 SAN DIEGO PIPELINE 1 AND 2 STATION 1214 EXPOSURE REPAIR  
 SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT  
 SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS  
 SAN DIEGO PIPELINE 4 AND AULD VALLEY PIPELINE CARBON FIBER REPAIRS  
 SAN DIEGO PIPELINE 5 & LAKE SKINNER OUTLET REPAIR

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

SAN DIEGO PIPELINE 6 - PRESSURE CONTROL STRUCTURE/HYDROELECTRIC PLANT - FEASIBILITY STUDY  
 SAN DIEGO PIPELINE 6 NORTH REACH, ENVIRONMENTAL MONITORING DURING CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 1 JOINT REPAIR  
 SAN DIEGO PIPELINE NO. 2 ACCESS ROAD RELOCATION  
 SAN DIEGO PIPELINE NO. 3 BYPASS  
 SAN DIEGO PIPELINE NO. 3 PIPING MODIFICATIONS  
 SAN DIEGO PIPELINE NO. 3 CONTROL STRUCTURE AND PRESSURE CONTROL STRUCTURE CONSTRUCTION COSTS  
 APPURTENANCES  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - ETIWANDA FACILITY/DROP INLET STRUCTURE  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILT  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.1 SAN DIEGO CANAL TO MOUNT OLYMPUS  
 SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.2 MOUNT OLYMPUS TUNNEL & PORTALS  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADV/NTP  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH CONSTRUCTION / AS BUILT  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS  
 SAN DIEGO PIPELINE NO. 6 AREA STUDY  
 SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION  
 SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY  
 SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT  
 SAN DIEGO PIPELINES 3 & 5 VACUUM VALVE REPLACEMENT PROJECT  
 SAN DIMAS AND RED MOUNTAIN POWER PLANTS STANDBY DIESEL ENGINE GENERATOR REPLACEMENTS  
 SAN DIMAS AND RED MOUNTAIN POWER PLANTS STANDBY DIESEL ENGINE GENERATOR REPLACEMENTS  
 SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT  
 SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER  
 SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION  
 SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION  
 SAN GABRIEL PCS ELECTRICAL REPLACEMENTS  
 SAN GABRIEL TOWER AND SPILLWAY IMPROVEMENTS  
 SAN GABRIEL TOWER SEISMIC UPGRADE  
 SAN GABRIEL TOWER SLIDE GATE REHABILITATION  
 SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE  
 SAN JACINTO DIVERSION STRUCTURE SLIDE GATE (V-03) REPAIRS  
 SAN JACINTO DIVERSION STRUCTURE SLIDE GATE V-03 REPLACEMENT  
 SAN JACINTO DIVERSION STRUCTURE SLIDE GATES V-01 V-02 REPAIR  
 SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2  
 SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2  
 SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD  
 SANTA ANA RIVER BRIDGE EXPANSION JOINT REPLACEMENT  
 SANTA ANA RIVER BRIDGE SEISMIC RETROFIT  
 SANTA ANA RIVER BRIDGE SEISMIC UPGRADE  
 SANTA ANA RIVER DISCHARGE PAD - UPPER FEEDER

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

SANTA MONICA AND CALABASAS FEEDER BYPASS FOR SECTIONALIZING VALVES  
 SANTA MONICA FEEDER CAST IRON PIPE REHABILITATION  
**SANTA MONICA FEEDER CATHODIC PROTECTION.**  
 SANTA MONICA FEEDER RELOCATION  
 SANTA MONICA FEEDER STATION 495+10 REHABILITATION  
 SANTIAGO CONTROL TOWER CATHODIC PROTECTION  
 SANTIAGO CONTROL TOWER SEISMIC IMPROVEMENTS  
 SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE  
 SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT  
 SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT  
 SANTIAGO PRESSURE CONTROL STRUCTURE  
 SANTIAGO TOWER ACCESS ROAD IMPROVEMENT  
 SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)  
 SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)  
 SCADA SYSTEM HARDWARE UPGRADE  
 SCADA SYSTEM NT SOFTWARE UPGRADE  
 SCADA SYSTEM SUPPORT PROGRAMS  
 SD AND CASA LOMA CANALS LINING  
 SD CANAL EAST & WEST BYPASS SCREENING STRUCTURES STUDY  
 SD CANAL REPLACE SODIUM BISULFITE TANK  
 SD PIPELINE 3 CULVERT ROAD REHAB  
 SD PIPELINE 3,4, AND 5 PROTECTIVE COVER  
 SD PIPELINE 4 EXPLORATORY EXCAVATION  
 SD PIPELINE 5 EXPLORATORY EXCAVATION  
 SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES  
 SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS  
 SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT  
 SECOND LOWER CROSS FEEDER CONSTRUCTION  
 SECOND LOWER CROSS FEEDER FINAL DESIGN  
 SECOND LOWER FEEDER - INSTALL LINER  
 SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM  
 SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT  
 SECOND LOWER FEEDER PCCP - REACHES 7, AND 10  
 SECOND LOWER FEEDER PCCP REHAB, R/W ACQUISITION  
 SECOND LOWER FEEDER PCCP REHAB. - REACH 9  
 SECOND LOWER FEEDER PCCP REHABILITATION  
 SECOND LOWER FEEDER PCCP REHABILITATION - PRELIMINARY DESIGN  
 SECOND LOWER FEEDER PCCP REHABILITATION - PIPE PROCUREMENT DOCUMENTS  
 SECOND LOWER FEEDER PCCP REHABILITATION - REACH 1  
 SECOND LOWER FEEDER PCCP REHABILITATION - REACH 11  
 SECOND LOWER FEEDER PCCP REHABILITATION - REACH 2  
 SECOND LOWER FEEDER PCCP REHABILITATION - REACH 3  
 SECOND LOWER FEEDER PCCP REHABILITATION - REACH 5  
 SECOND LOWER FEEDER PCCP REHABILITATION - REACH 6  
 SECOND LOWER FEEDER PCCP REHABILITATION - VALVE PROCUREMENT  
 SECOND LOWER FEEDER PCCP REPAIRS  
 SECOND LOWER FEEDER REHABILITATION REACH 3 ACOUSTIC FIBER OPTIC PCCP MONITORING SYSTEM  
 SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY  
 SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE  
 SEISMIC UPGRADES AT 10 SERVICE CONNECTION STRUCTURES ALONG AMP  
 SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS  
 SEPULVEDA CANYON CONTROL FACILITY BYPASS PROJECT  
 SEPULVEDA CANYON CONTROL FACILITY RELIABILITY IMPROVEMENTS  
 SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE  
 SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS  
 SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING  
 SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS  
 SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM  
 SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00  
 SEPULVEDA FEEDER HEP AUTO PILOT  
 SEPULVEDA FEEDER PCCP DEL AMO BLVD URGENT RELINING  
 SEPULVEDA FEEDER PCCP REHABILITATION - REACH 1  
 SEPULVEDA FEEDER PCCP REHABILITATION - REACH 2  
 SEPULVEDA FEEDER PCCP REHABILITATION - REACH 3  
 SEPULVEDA FEEDER PCCP REHABILITATION - REACH 4  
 SEPULVEDA FEEDER PCCP REHABILITATION - REACH 5  
 SEPULVEDA FEEDER PCCP REHABILITATION - SOUTH REACH PDR AND NORTH REACH PDR THROUGH CONSTRUCTION  
 SEPULVEDA FEEDER REPAIRS AT 3 SITES  
 SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM  
 SEPULVEDA FEEDER STATION 2002+02 TO 2273+28 STRAY CURRENT INTERFERENCE MITIGATION  
 SEPULVEDA FEEDER STRAY CURRENT MITIGATION REFURBISHMENT  
 SEPULVEDA FEEDER/EAST VALLEY FEEDER INTERCONNECTION ELECTRICAL UPGRADES  
 SEPULVEDA HEP TAILRACE COATINGS  
 SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS  
 SEPULVEDA PIPELINE PCCP REHABILITATION

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

SEPULVEDAFEEDER/EASTVALLEYFEEDERINTERCONNECTIONELECTRICALUPGRADES  
 SEPULVEDA-WEST BASIN INTERCONNECTION VALVE REPLACEMENT  
 SEPULVEDA-WEST BASIN INTERCONNECTION VALVE REPLACEMENTS  
 SERVICE AREA INTERCONNECTION ENHANCEMENT PROGRAM  
 SERVICE CONNECTION A-02 REHABILITATION  
 SERVICE CONNECTION LA-17 FLOWMETER REPLACEMENTS  
 SERVICE CONNECTION LA-17 REHABILITATION  
 SERVICE CONNECTION LV-01 UPGRADES  
 SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK  
 SERVICE CONNECTION WB13 - WEST BASIN FEEDER  
 SERVICE CONNECTIONS CB-12 & CB-16 TURNOUT VALVE REPLACEMENT & ELECTRICAL UPGRADE  
 SERVICE CONNECTIONS WB-2A AND WB-2B EQUIPMENT RELOCATION  
 SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS  
 SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN  
 SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION  
 SKINNER ACCUSONIC FLOWMETER REPLACEMENT  
 SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT  
 SKINNER BRANCH - CASA LOMA CANAL  
 SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE  
 SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR  
 SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS  
 SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES  
 SKINNER DAM REMEDIATION  
 SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396  
 SKINNER ELECTRICAL BUILDING HVAC UPGRADE  
 SKINNER FACILITY AREA PAVING  
 SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1  
 SKINNER HELIPAD REHAB  
 SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER  
 SKINNER SCADA SERVERS RELOCATION  
 SMART-OPS (FORMERLY RTOS)  
 SOTO ST. FACILITY - SECURITY & HVAC REPLACEMENT  
 SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE  
 SOTO STREET FACILITY - REPLACE HEATING  
 SOTO STREET FACILITY - ROOF REPLACEMENT  
 SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING  
 SOUTH REACH / TUNNEL STUDY  
 SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED  
 SOUTH REACH DESIGN - FUTURE/UNAPPROPRIATED  
 SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED  
 SOUTH REACH FEASIBILITY STUDY  
 SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED  
 SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED  
 SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING  
 ST. JOHN'S CANYON CHANNEL EROSION MITIGATION  
 SYSTEM RELIABILITY PROGRAM  
 SYSTEM-WIDE ASPHALT REPLACEMENT  
 TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR  
 TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION  
 TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK  
 TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.  
 TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE  
 UF RAW VACUUM VALVES AND BLOWOFF IMPROVEMENTS  
 UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION  
 UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE  
 UPGRADE CATHODIC PROTECTION RECTIFIERS  
 UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT  
 UPGRADE SUNSET GARAGE  
 UPPER FEEDER - SANTA ANA RIVER BRIDGE LINING REPAIRS  
 UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS  
 UPPER FEEDER - STRUCTURAL PROTECTION  
 UPPER FEEDER AIR ENTRAINMENT  
 UPPER FEEDER BLOW OFF STRUCTURE REPLACEMENT  
 UPPER FEEDER CATHODIC PROTECTION SYSTEM  
 UPPER FEEDER EMERGENCY EXPANSION JOINT REPLACEMENT  
 UPPER FEEDER GATE REHABILITATION  
 UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE  
 UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD  
 UPPER FEEDER SERVICE CONNECTIONS UPGRADES  
 UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION  
 UPS SYSTEMS INSTALLATION AT FOOTHILL PCS  
 UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE  
 UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)  
 VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM  
 VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

VALVE PROCUREMENT  
 VENICE PCS VALVE REFURBISHMENT  
 VIDEO CONFERENCE SYSTEM UPGRADE  
 VIDEOCONFERENCING UPGRADE  
 WADSWORTH PUMP DISCHARGE TO EASTSIDE PIPELINE INTERCONNECTION  
 WADSWORTH PUMP PLANT STOP LOGS  
 WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS  
 WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION  
 WADSWORTH PUMPING PLANT CONTROL & PROTECTION UPGRADE  
 WADSWORTH PUMPING PLANT CONTROL & PROTECTION UPGRADES  
 WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE  
 WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING  
 WADSWORTH PUMPING PLANT SLEEVE VALVE REFURBISHMENT  
 WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY  
 WADSWORTH PUMPING PLANT YARD PIPING LINING REPLACEMENT  
 WADSWORTH YARD PIPING LINING REPAIRS  
 WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - UPS REPLACEMENT  
 WASHINGTON STREET PRESSURE CONTROL STRUCTURE VALVE REPLACEMENT  
 WATER DELIVERY SYSTEM AUTOMATION  
 WATER PLANNING APPLICATION  
 WATER QUALITY - REMOTE MONITORING  
 WATER QUALITY LABORATORY BUILDING EXPANSION  
 WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM  
 WCF/PVF INTERCONNECTION VALVE AUTOMATION  
 WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS  
 WEST OC FEEDER VALVE REPLACEMENT  
 WEST ORANGE COUNTY FEEDER (WOCF) VALVE REPLACEMENT  
 WEST ORANGE COUNTY FEEDER OC-09 REHABILITATION  
 WEST ORANGE COUNTY FEEDER SERVICE CONNECTION OC-09 REHABILITATION  
 WEST ORANGE COUNTY FEEDER VALVE REPLACEMENT  
 WEST ORANGE COUNTY FEEDERCATHODIC PROTECTION  
 WEST VALLEY AREA STUDY  
 WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION  
 WEST VALLEY FEEDER NO. 1 - DE SOTO VALVE STRUCTURE IMPROVEMENTS  
 WEST VALLEY FEEDER NO. 1 - DE SOTO VALVE STRUCTURES IMPROVEMENT  
 WEST VALLEY FEEDER NO. 1 - STAGE 3 IMPROVEMENTS  
 WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 2)  
 WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 3)  
 WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS  
 WEST VALLEY FEEDER NO. 1 STRUCTURES - PIPING IMPROVEMENTS  
 WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS  
 WESTERN REGION PLUMBING RETROFIT  
 WESTERN SAN BERNARDINO COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING  
 WEYM. PLT/LA VERNE FAC-BACKFLO PREV ASSY  
 WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION  
 WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE  
 WEYMOUTH ASPHALT REHABILITATION  
 WEYMOUTH COMPRESSED AIR SYSTEM  
 WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396  
 WEYMOUTH FLOCCULATOR REHABILITATION  
 WEYMOUTH WATER TREATMENT PLANT DOMESTIC AND FIRE WATER SYSTEM IMPROVEMENT  
 WFP - ASPHALT REHABILITATION  
 WFP - COMPRESSED AIR SYSTEM IMPROVEMENT  
 WFP - PURCHASE OF REAL PROPERTY  
 WFP - REPAIR TO BLDG # 1  
 WILLITS STREET PRESSURE CONTROL STRUCTURE REHABILITATION  
 YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS  
 YORBA LINDA FEEDER BYPASS  
 YORBA LINDA PCS REHABILITATION  
 YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE

***Sub-total Distribution facilities costs***

***\$97,186,802***

TABLE 4

FISCAL YEAR 2024/25  
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE

Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2012/13 - FY2021/22	RTS Share	6 months @ \$167 million per year (7/24-12/24)	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2013/14 - FY2022/23	RTS Share	6 months @ \$181 million per year (1/25-6/25)	Total RTS Charge FY 2024/25
Anaheim	21,455.1	1.51 %	\$1,285,154	23,001.9	1.69 %	\$ 1,526,826	\$ 2,784,980
Beverly Hills	10,205.1	0.72 %	598,440	9,858.1	0.72 %	654,364	1,252,804
Burbank	12,718.9	0.89 %	745,852	11,540.0	0.85 %	766,005	1,511,858
Calleguas MWD	95,178.2	6.68 %	5,581,370	90,313.9	6.62 %	5,994,880	11,576,250
Central Basin MWD	33,127.5	2.33 %	1,942,638	31,768.2	2.33 %	2,108,718	4,051,356
Compton	179.0	0.01 %	10,497	12.0	— %	797	11,293
Eastern MWD	98,347.5	6.91 %	5,767,222	96,726.8	7.09 %	6,420,557	12,187,779
Foothill MWD	8,584.8	0.60 %	503,424	8,399.5	0.62 %	557,544	1,060,968
Fullerton	6,943.1	0.49 %	407,152	6,528.4	0.48 %	433,344	840,496
Glendale	16,034.1	1.13 %	940,260	15,436.0	1.13 %	1,024,615	1,964,875
Inland Empire Utilities Agency	59,972.9	4.21 %	3,516,887	57,672.1	4.23 %	3,828,174	7,345,061
Las Virgenes MWD	20,371.3	1.43 %	1,194,599	19,302.4	1.42 %	1,281,260	2,475,859
Long Beach	29,143.9	2.05 %	1,709,035	27,777.5	2.04 %	1,843,822	3,552,857
Los Angeles	289,217.7	20.31 %	16,960,092	272,316.9	19.97 %	18,075,923	35,036,015
Municipal Water District of Orange County	194,843.4	13.68 %	11,425,863	187,038.3	13.72 %	12,415,278	23,841,141
Pasadena	19,240.7	1.35 %	1,128,299	19,104.9	1.40 %	1,268,150	2,396,449
San Diego County Water Authority	195,939.0	13.76 %	11,490,111	175,570.9	12.88 %	11,654,092	23,144,202
San Fernando	85.4	0.01 %	5,008	312.4	0.02 %	20,737	25,745
San Marino	—	0.07 %	59,838	1,035.1	0.08 %	68,708	128,546
Santa Ana	9,104.1	0.64 %	533,876	8,648.2	0.63 %	574,053	1,107,928
Santa Monica	4,511.6	0.32 %	264,566	4,783.2	0.35 %	317,501	582,066
Three Valleys MWD	64,396.5	4.52 %	3,776,292	62,674.4	4.60 %	4,160,218	7,936,510
Torrance	15,339.7	1.08 %	899,539	15,088.8	1.11 %	1,001,568	1,901,108
Upper San Gabriel Valley MWD	34,238.2	2.40 %	2,007,771	38,526.1	2.83 %	2,557,296	4,565,067
West Basin MWD	114,036.4	8.01 %	6,687,239	111,549.0	8.18 %	7,404,429	14,091,668
Western MWD	69,677.5	4.89 %	4,085,977	68,413.1	5.02 %	4,541,143	8,627,120
<b>MWD Total</b>	<b>1,423,912.0</b>	<b>100.00 %</b>	<b>\$83,500,000</b>	<b>1,363,398.1</b>	<b>100.00 %</b>	<b>\$90,500,000</b>	<b>\$174,000,000</b>
Totals may not foot due to rounding							

**TABLE 5**  
**FISCAL YEAR 2024/25**  
**ESTIMATED STANDBY CHARGE REVENUE**

<b>Member Agencies</b>	<b>Total Parcel Charge</b>	<b>Number of Parcels or Acres</b>	<b>Gross Revenues (Dollars)<sup>1</sup></b>
Anaheim	\$8.55	69,677	\$595,741
Beverly Hills	—	—	—
Burbank	14.20	29,041	412,380
Calleguas MWD	9.58	260,565	2,496,211
Central Basin MWD	10.44	341,251	3,562,663
Compton	1.65	18,035	29,758
Eastern MWD	6.94	433,996	3,011,935
Foothill MWD	10.28	30,307	311,555
Fullerton	10.71	35,327	378,352
Glendale	12.23	44,942	5,499,645
Inland Empire Utilities Agency	7.59	265,041	2,011,661
Las Virgenes MWD	8.03	53,121	426,564
Long Beach	12.16	92,465	1,124,369
Los Angeles	—	—	—
Municipal Water District of Orange County <sup>2</sup>	10.09	666,450	7,577,622
Pasadena	11.73	39,656	465,169
San Diego CWA	11.51	1,096,250	12,617,839
San Fernando	—	5,102	—
San Marino	8.24	4,971	40,963
Santa Ana	7.88	65,231	514,017
Santa Monica	—	—	—
Three Valleys MWD	12.21	151,427	1,848,927
Torrance	12.23	40,605	496,602
Upper San Gabriel Valley MWD	9.27	215,019	1,993,223
West Basin MWD	—	—	—
Western MWD of Riverside Co.	9.23	388,204	3,583,126
<b>MWD Total</b>		<b>4,346,685</b>	<b>\$44,048,322</b>

(1) Estimates per FY 2023/24 applied amounts and Adjusted due to reorganization of Fallbrook Public Utility District parcels out from San Diego County Water Authority to Eastern MWD.

(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.

TABLE 6 PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES AS OF JULY 1, 2023				
Annexation	Parcel Number	Acres		Proposed Standby Charge (FY 2024/25)
<b>Calleguas MWD</b>				
<b>Annexation No.104</b>	145-0-232-01	9.90		\$94.84
<b>Annexation No. 106</b>				
	223-0-041-02	3.88		\$37.17
	223-0-090-01		No tax area	
	222-0-180-05	0.26		\$9.58
	223-0-090-08		No tax area	
	223-0-090-09		No tax area	
	223-0-090-015		No tax area	
<b>Western MWD</b>				
<b>Murrieta Payment Area</b>	906-212-001	2.34		21.60
	906-221-001	2.14		19.75
	906-221-002	0.48		9.23
<b>REORGANIZATIONS BETWEEN MEMBER AGENCIES</b>				
Annexation	Parcel Number	Acres	Original Standby Charge	Proposed Standby Charge (FY 2024/25)
<b>None</b>	No APN Presented			
<b>PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES ANTICIPATED AS OF JULY 1, 2024</b>				
Annexation	Parcel Number	Acres	Original Standby Charge	Proposed Standby Charge (FY 2024/25)
<b>None</b>	No APN Presented			
<b>REORGANIZATIONS BETWEEN MEMBER AGENCIES</b>				
Annexation	Parcel Number	Acres	Original Standby Charge	Proposed Standby Charge (FY 2024/25)
Reorg Fallbrook Public Utility District from San Diego County Water Authority to Eastern Municipal Water District			\$11.51	\$6.94



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**RESOLUTION 9355**

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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
FIXING AND ADOPTING  
A CAPACITY CHARGE  
EFFECTIVE JANUARY 1, 2025**

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The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The Board of The Metropolitan Water District of Southern California (“Metropolitan”), pursuant to Sections 133, 134 and 134.5 of the Metropolitan Water District Act (the “Act”), is authorized to fix such rate or rates for water as will result in revenue which, together with revenue from any water standby or availability of service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

2. The amount of revenue to be raised by the Capacity Charge shall be as determined by the Board and allocation of such charges among member agencies shall be in accordance with the method established by the Board; and

3. The Capacity Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and

4. The Capacity Charge is intended to recover the debt service and other appropriately allocated costs to construct, operate and maintain projects needed to meet peak demands on Metropolitan’s distribution system, as shown in the FYs 2024/25 and 2025/26 Cost of Service Report for Proposed Water Rates and Charges (the “2024 Cost of Service Report”), as introduced in February 4, 2024, modified to meet alternative rates and charges options proposed to the Board, and finalized following the Board’s approval of the budget, rates, and charges on April 9, 2024; and

5. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991, Resolution 9199, adopted by the Board on March 8, 2016, and Resolution 9201, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the Capacity Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds, subordinate revenue bonds and short-term certificates, and to revenue bonds, subordinate revenue bonds and short-term certificates to be issued pursuant to Resolution 8329, Resolution 9199, and Resolution 9201; and

6. The Capacity Charge is charged (on a dollar per cubic-foot-per-second basis) to member public agencies (“member agencies”), based upon the amount of capacity used by such member agency that is designed to recover the cost of providing peaking capacity within the distribution system; and

7. On April 9, 2024, the Board considered the options for rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2024/25 and 2025/26 and adopted water rates for calendar years 2025 and 2026 and charges for calendar year 2025, and received information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

8. In approving the biennial budget and adopting the rates and charges on April 9, 2024, the Board determined the amount of revenue to be raised by the Capacity Charge in calendar year 2025 to be based on a Capacity Charge in such year of \$13,000 per cubic-foot-per-second, based on information and documents available at <https://www.mwdh2o.com/who-we-are/budget-finance/>; and

9. Each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board does hereby resolve, determine and order as follows:

**Section 1.** That the Board hereby fixes and adopts a Capacity Charge, as described below, to be effective January 1, 2025.

**Section 2.** That said Capacity Charge shall be in an amount sufficient to provide for payment of the capital financing costs not paid from appropriate ad valorem property taxes, as well as other appropriately allocated costs, incurred to provide peaking capacity within Metropolitan’s distribution system.

**Section 3.** That such Capacity Charge effective January 1, 2025 shall be a charge as specified in Section 5 (set in dollars per cubic-foot-per-second of the peak day capacity) for capacity provided to a member agency, based on the maximum summer day demand placed on the system between May 1 and September 30 for the three-calendar year period ending December 31, 2023.

**Section 4.** The allocation of the Capacity Charge among member agencies is based on data recorded by Metropolitan and shall be conclusive in the absence of manifest error. Corrections may be made by staff for any incorrect recording or calculation, upon verification by the member agency, in accordance with the Administrative Code.

**Section 5.** That the Capacity Charge shall be a fixed charge as shown in the following table and collected from each member agency monthly, quarterly or semiannually as agreed to by Metropolitan and the member agency.

**Table 1. Calendar Year 2025 Capacity Charge**

<b>Calendar Year 2025 Capacity Charge</b>					
	Peak Day Demand (cfs) (May 1 through September 30)				Rate (\$/cfs): \$13,000
	Calendar Year				
Member Agency	2021	2022	2023	3-Year Peak	Calendar Year 2025 Capacity Charge
Anaheim	77.2	74.5	64.0	77.2	\$1,003,600
Beverly Hills	24.8	23.7	20.6	24.8	\$322,400
Burbank	15.5	8.4	16.3	16.3	\$211,900
Calleguas	189.6	138.8	159.6	189.6	\$2,464,800
Central Basin	54.1	47.1	53.7	54.1	\$703,300
Compton	0.0	0.0	3.2	3.2	\$41,600
Eastern	179.6	187.3	200.8	200.8	\$2,610,400
Foothill	22.8	16.1	14.9	22.8	\$296,400
Fullerton	20.0	15.1	13.8	20.0	\$260,000
Glendale	32.5	31.8	29.0	32.5	\$422,500
Inland Empire	101.4	95.2	99.5	101.4	\$1,318,200
Las Virgenes	42.9	34.8	37.9	42.9	\$557,700
Long Beach	45.7	44.1	41.4	45.7	\$594,100
Los Angeles	579.4	633.1	452.2	633.1	\$8,230,300
MWDOC	336.3	282.0	233.6	336.3	\$4,371,900
Pasadena	48.2	38.3	33.0	48.2	\$626,600
San Diego CWA	672.5	841.9	543.9	841.9	\$10,944,700
San Fernando	0.0	5.3	5.0	5.3	\$68,900
San Marino	5.4	4.9	4.3	5.4	\$70,200
Santa Ana	18.3	18.0	6.2	18.3	\$237,900
Santa Monica	15.1	18.0	21.0	21.0	\$273,000
Three Valleys	138.3	86.6	110.4	138.3	\$1,797,900
Torrance	27.2	29.0	27.1	29.0	\$377,000
Upper San Gabriel	32.4	25.3	11.5	32.4	\$421,200
West Basin	218.2	173.7	171.7	218.2	\$2,836,600
Western MWD	179.8	177.4	180.6	180.6	\$2,347,800
<b>Total</b>	<b>3,077.2</b>	<b>3,050.4</b>	<b>2,555.2</b>	<b>3,339.3</b>	<b>\$43,410,900</b>

Totals may not foot due to rounding

**Section 6.** That the Capacity Charge for each member agency, the method of its calculation, cost allocations and other data used in its determination are as specified in the adopted rates and charges to be effective January 1, 2025, which forms the basis of the Capacity Charge, and the corresponding 2024 Cost of Service Report, and the updated reports presented to the Board in April 9, 2024. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan’s headquarters.

**Section 7.** That the Capacity Charge specified in Section 5, together with other revenues from Metropolitan’s water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan’s water service for which the rates and charges are made, or conferring the benefit provided, and is fairly apportioned to each member agency in proportion to the peak day capacity utilized by each member agency.

**Section 8.** That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

**Section 9.** That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation and taking all necessary action to satisfy relevant statutes requiring notice by publication.

**Section 10.** That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 9, 2024.



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Secretary of the Board of Directors  
of The Metropolitan Water District  
of Southern California

# METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

