Report

Engineering Services Group

Capital Investment Plan Quarterly Report for Period Ending June 30th, 2023

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during the fourth quarter of fiscal year 2022/23. It also provides updates on the status of capital projects and capital expenditures to date, and information regarding service connections and relocations authorized by the General Manager during the reporting period of April to June 2023, the fourth quarter of fiscal year 2022/23, and the fourth quarter of the fiscal years 2022/23 and 2023/24 biennium.

Purpose

Administrative Code Requirement Section 2720(a)(1): General Manager's Quarterly Reports

Section 2720 of Metropolitan's Administrative Code requires the General Manager to report quarterly to the Engineering and Operations Committee on the Capital Investment Plan.

Sections 4700-4708 of Metropolitan's Administrative Code requires the General Manager to report on service connections approved by the General Manager with the estimated cost and approximate location of each.

Section 8122(c) of Metropolitan's Administrative Code requires the General Manager to report on the execution of any relocation agreement under the General Manager's authority involving an amount in excess of \$100,000.

Highlights of progress and major milestones on selected projects are presented in the attached report grouped by CIP program.

Attachments

Capital Investment Plan quarterly report for period ending June 2023

Date of Report: 9/12/2023



The Metropolitan Water District of Southern California

Capital Investment Plan Quarterly Report

April - June 2023



Table of Contents

Capital Investment Plan for Fiscal Years 2022/23 & 2023/24 2	CEQA Determinations	42
Executive Summary	Construction and Procurement Contracts	43
Board Action Summary 3	Project Labor Agreement	53
Planned Expenditure and Budget 6	Performance Metrics	55
Grant Funding of Capital Projects	Service Connections and Relocations	57
Major Capital Programs Overview9	Projects Expensed to Overhead	57
Major Capital Project Programs - Highlights 11	Program/Appropriation Status	58
Minor Capital Projects Program35	List of Tables	64
Project Actions	List of Figures	64

Capital Investment Plan for Fiscal Years 2022/23 & 2023/24

Metropolitan's total planned capital expenditures for Fiscal Years (FYs) 2022/23 and 2023/24 are \$600 million. Figure 1 below shows the planned expenditures by program. In April 2022, the Board appropriated \$600 million and delegated authority to the General Manager, subject to both CEQA requirements and the General Manager's authority as addressed in Metropolitan's Administrative Code, to initiate or proceed with work on all planned capital projects identified in the Capital Investment Plan (CIP) for FYs 2022/23 and 2023/24.

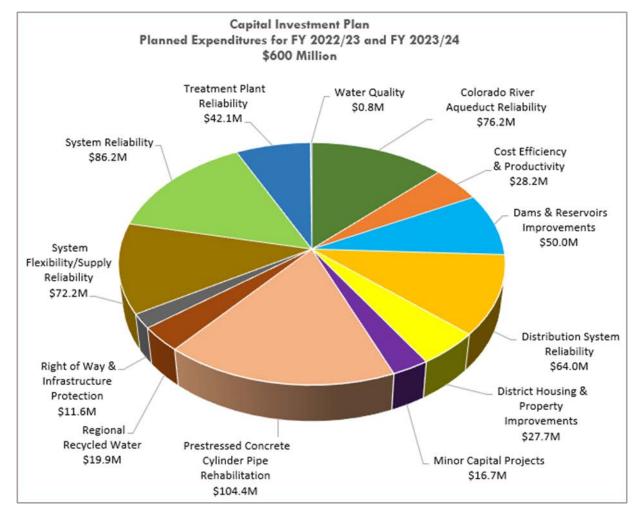


Figure 1: CIP for FY 2022/23 and FY 2023/24 by Program

[Cover photos: (left to right; top to bottom): Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation — reinforcing steel embeds are epoxied into place; Wadsworth, Inland Feeder, and Badlands Interconnections Butterfly Valve Procurement — inspection of 84-inch diameter butterfly valve body performed at Ebara Corporation fabrication shop in Tokyo, Japan; La Verne Shops Buildings Completion—Stage 5 — duct bank for new electrical unit substation is prepared for concrete pour]

Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 4th Quarter of Fiscal Year (FY) 2022/23, which ended in June 2023. CIP expenditures through the 4th Quarter totaled \$247.7 million and the expenditures are projected to stay near but under the planned expenditures through the end of the biennium. The CIP funds allocated through the reporting quarter totaled \$568.9 million, leaving approximately \$31.1 million available to be allocated during the remainder of the current biennium.

During the quarter, thirteen project-specific board actions were heard in open sessions. Five construction contracts and three procurement contracts were awarded by the Board during the reporting period with a total contract amount of approximately \$26.3 million. During the same time, two construction and one procurement contracts were completed with a total of approximately \$46.6 million in contract payments authorized, reflecting construction progress on projects such as Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement, Colorado River Aqueduct Pumping Plants – Sump Rehabilitation, Etiwanda Pipeline North Relining – Stage 3, La Verne Shops Building Completion – Stage 5, MWD HQ Building Fire Alarm & Smoke Control Improvements, Orange County Feeder Relining – Reach 3, Perris Valley Pipeline Interstate 215 Tunnel Crossing, Second Lower Feeder PCCP Rehabilitation – Reaches 3A and 3B, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

Board Action Summary

During the 4th Quarter, board actions heard in open session included thirteen project-specific actions summarized in Table 1 below. These actions awarded eight contracts totaling approximately \$26.3 million, authorized one new procurement & installation agreement in an amount not-to-exceed approximately \$2.0 million, authorized three new professional/technical services agreements for a total amount not-to-exceed approximately \$2.7 million, authorized an increase to two professional/technical services agreements for a total amount not-to-exceed approximately \$6.9 million, authorized an agreement in an amount not-to-exceed approximately \$0.3 million for environmental mitigation credits, and authorized an amendment to an existing lagoon use agreement. Information on the awarded contracts can be found in Table 10 of this report. The table below excludes information on board items heard in closed session.

Table 1: 4th Quarter Board Actions

Month	Board Letter Item No.	Project	Action taken
April	7-1	CRA Conduit Structural Protection	Awarded \$8,656,568 construction contract, authorized an agreement not-to-exceed \$1,200,000 for biological survey and environmental monitoring, and authorized an agreement not-to-exceed \$325,000 for environmental mitigation credits
April	7-2	Foothill Hydroelectric Plant and Control Building Seismic Upgrade	Awarded \$6,174,000 construction contract
April	7-3	Lake Skinner Outlet Tower Seismic Upgrade	Awarded \$1,174,475 procurement contract and authorized an agreement not-to-exceed \$900,000
April	7-5	Garvey Reservoir Rehabilitation	Authorized an increase of \$5,400,000 to an existing agreement

Month	Board Letter Item No.	Project	Action taken
April	7-6	Diamond Valley Lake Dam Monitoring System Upgrades - Stages 3 & Garvey Reservoir Dam Monitoring System Upgrades	Authorized a procurement and installation agreement not-to-exceed \$1,950,000
May	7-1	Headquarters Video Room Upgrades	Awarded a \$637,520 construction contract
May	7-2	CIP Budgeting System Improvements	Authorized an agreement not-to-exceed \$550,000
May	7-3	Jensen Solids Mechanical Dewatering Facility	Authorized an increase of \$1,500,000 to an existing agreement and authorized an amendment to an existing lagoon use agreement
May	7-4	Diemer Helicopter Hydrant Facility	Authorized an unplanned project
May	7-5	San Diego Pipeline Nos. 3 and 5 Air Release/Vacuum Valve Replacement	Awarded \$1,466,665 procurement contract
May	8-1	Inland Feeder/Foothill Pump Station Intertie	Awarded \$2,601,437 procurement contract
May	8-2	CRA Conveyance System Flow Monitoring Stations	Awarded \$5,266,000 construction contract
June	7-2	Jensen Administration Building Column Panel Replacement, Skinner Chemical Storage Tank Replacement, and Auld Valley and Red Mountain Control Structures Upgrades	Awarded \$281,900 construction contract and authorized three unplanned projects

The previously referenced April 2022 board action appropriated \$600 million to perform work on planned CIP projects through the current biennium. To be considered a planned project, the project must be identified and described in the Capital Investment Plan Appendix for the two-year budget cycle. Consistent with this action, all requests to allocate funds and proceed with planned CIP projects are reviewed and approved by the Chief Engineer acting under the General Manager's authority. Unplanned projects, those which are not already identified in the CIP Appendix, require a separate board authorization. During the 4th Quarter, the Board amended the CIP to include four new CIP projects. These projects were Auld Valley and Red Mountain Control Structures Upgrades, Diemer Helicopter Hydrant Facility, Jensen Administration Building Column Panel Replacement, and Skinner Chemical Storage Tank Replacement.

Figure 2 shows the allocation of the funds from Appropriation No. 15525 for this quarter and total for the current biennium through the quarter, which is approximately \$568.9 million, leaving approximately \$31.1 million available to be allocated during the remainder of the current biennium. This amount includes allocation of \$10 million to the Minor Capital Projects Program, approximately \$38.4 million for work authorized during the 4th Quarter, and approximately \$43.6 million reallocated back to the CIP Appropriation 15525. Details of the allocations for work authorized during the reporting quarter and from the prior biennium can be found in the **Project Actions** section.

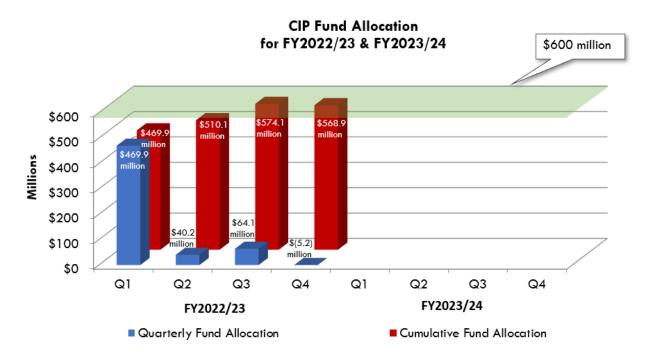


Figure 2: CIP Fund Allocation from Appropriation No. 15525 - FY 2022/23 and FY 2023/24

Information on construction and procurement contracts activities for the 4th Quarter of FY 2022/23 is presented in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 4th Quarter totaled approximately \$46.6 million and primarily reflect construction progress on Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement, Colorado River Aqueduct Pumping Plants – Sump Rehabilitation, Etiwanda Pipeline North Relining – Stage 3, La Verne Shops Building completion – Stage 5, MWD HQ Building Fire Alarm & Smoke Control Improvements, Orange County Feeder Relining – Reach 3, Perris Valley Pipeline Interstate 215 Tunnel Crossing, Second Lower Feeder PCCP Rehabilitation – Reaches 3A and 3B, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

^{*}Numbers may not sum due to rounding

\$247.7

Planned Expenditure and Budget

Table 2 and Figure 3 below show planned and actual expenditures for the biennium through the end of the 4th Quarter of FY 2022/23, and the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 4th Quarter of FY 2022/23 were approximately 83% of planned expenditures.

Quarter	Planned Expenditures (millions)	Actual Expenditures (millions)
FY 2022/23, Q1	\$85.3	\$30.4
FY 2022/23, Q2	\$82.8	\$63.4
FY 2022/23, Q3	\$64.9	\$70.2
FY 2022/23, Q4	\$67.0	\$83.7

Table 2: Planned & Actual Expenditures for FYs 2022/23 & 2023/24

Totals

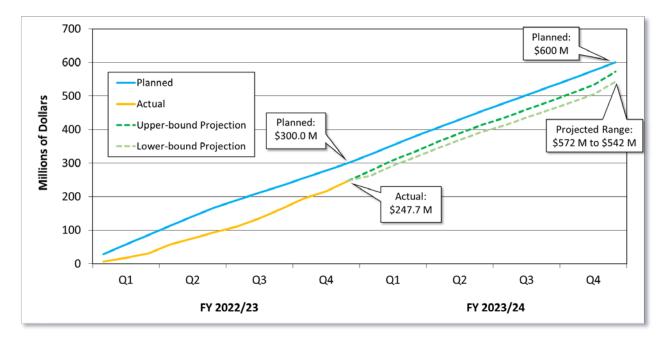


Figure 3: Current Biennium - Planned, Actual & Forecasted Expenditures

\$300.0

^{*} Numbers may not sum due to rounding.

As shown in Figure 3, the total planned expenditures in the current biennium are \$600 million. The projected expenditures for the biennium are currently projected to be between \$542 million and \$572 million with the actual expenditures 25% higher than the planned expenditures during the 4th Quarter of FY 2022/23. This negative variance below the planned expenditures for the first fiscal year is mainly due to a concerted effort during the last quarter of the last fiscal year to accelerate the work that was planned for the 1st Quarter of FY 2022/23, including the O&M work on the drought projects; staff redeployment to work on non-CIP projects such as Pure Water Southern California; and shift in the timing of the contract awards and delays in completing some construction and procurement contracts due to difficulties in obtaining permits within the planned timeline, equipment/materials delivery delays due to manufacturing and supply chain issues, and other factors that add time to awarding and completing contracts.

Some of the key projects that significantly contribute to the less than planned expenditures for the current biennium are (1) desert housing improvements, which have not yet transitioned from the planning to design phase as staff are investigating additional options with desert staff; (2) Lakeview Pipeline Relining – Stage 2, which was delayed to keep the pipeline in operation so that water deliveries to the Mills plant from DVL could continue during the recent drought; (3) CRA Transformer Replacement, which has been delayed after discovering that manufacturing and delivery of the large transformers will take longer than planned due to the global market conditions for this type of equipment and limited manufacturing capacities, (5) Second Lower Feeder PCCP Rehabilitation – Reach 3B, which the contract award was delayed due to longer than planned coordination and permitting with local entities; and (6) right-of-way and infrastructure protection, cathodic protection, and other R&R projects that were delayed due to staff redeployment to work on Pure Water Southern California and drought mitigation projects.

Funding of Capital Projects with Outside Sources

This section provides information on select grants and other outside sources of funds that Metropolitan receives to support capital projects. The expenditures related to these outside funding sources will be reported in subsequent quarters as the funds are received and expenditures are recorded.

Pure Water Southern California

In December 2022, Metropolitan's Board authorized the General Manager to use \$80 million in project funding from the State Water Resources Control Board (SWRCB) to commence activities related to the initiation of the Pure Water Southern California program. Metropolitan has received the \$80 million funding in one lump sum payment on May 24, 2023, to support the design activities for the program. Funds are available for expenditure until June 30, 2026. The use of these funds is not considered as part of Metropolitan's CIP expenditures. Staff anticipates that the State funds will be used to support the environmental planning and implementation phases of the program.

Drought Mitigation Projects

In December 2022, Metropolitan's Board adopted a resolution to accept \$50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects. The Board also designated the Group Manager of Engineering Services to be the signatory to execute actions related to the funds. The California Department of Water Resources (DWR) will administer the funds and release the reimbursement after Metropolitan invoices expenses. Per AB 211, the \$50 million fund will be available for encumbrance or expenditure until June 30, 2024, and five percent of this amount may be used for administrative costs by DWR. From the state-allocated amount, it allocated to Metropolitan \$47.5 million to improve and expand its infrastructure to make its entire jurisdiction resilient to fluctuating water supplies from each of its imported water sources and to allow conveyance of water throughout all its jurisdiction. Unlike the funds received for Pure Water discussed above, under this grant, staff will be required to submit invoices to DWR to receive reimbursement of expenditures that comply with the grant requirements. The use of these funds is considered as part of Metropolitan's overall CIP expenditures. Funding agreement with DWR was executed on June 15, 2023. The first quarterly progress report and cost reimbursement documents for the work performed through June 2023 will be submitted to DWR at the end of August 2023.

Major Capital Programs Overview

Metropolitan's CIP is structured into three levels. In descending order, they are:

- Program
- Project Group/Appropriation
- Project

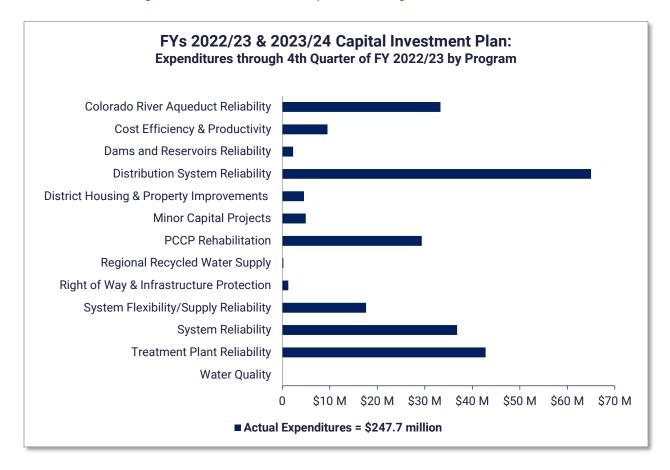
Metropolitan's CIP is comprised of 13 programs, which capture all projects within the CIP. The 13 capital programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status of each of the programs is provided later in this section of the report.

- Colorado River Aqueduct (CRA) Reliability
- Cost Efficiency & Productivity
- Dams & Reservoirs Improvements
- · Distribution System Reliability
- District Housing & Property Improvements
- Minor Capital Projects
- Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation
- Regional Recycled Water Supply
- Right-of-Way and Infrastructure Protection
- System Flexibility/Supply Reliability
- System Reliability
- Treatment Plant Reliability
- Water Quality

For the current biennium, the CIP includes over 37 project groups, 60 planned appropriations, and 447 planned projects (excluding Minor Capital Projects). The list of appropriations that make up each of the programs, along with planned expenditures and actual costs to date for those appropriations, are provided in Table 17 at the end of this report.

Figure 4 below shows actual expenditures for the 13 capital programs for 4th Quarter of FY 2022/23.

Figure 4: Biennium-to-date Actual Expenditures through 4th Quarter FY 2022/23



Major Capital Project Programs - Highlights

This section provides 4th Quarter highlights for the 12 Major Capital Projects Programs; the Minor Capital Projects Program is highlighted in its own section of this report. Status is provided for selected projects within each Major Capital Projects Program. The selected projects typically achieved major milestones during the 4th Quarter of FY 2022/23 or are scheduled to achieve major milestones in the next quarter.

Table 3: Major Capital Projects Programs

Program	Project
Colorado River Aqueduct (CRA) Reliability	CRA Pumping Plants Crane Improvements
Cost Efficiency & Productivity	Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2
Dams and Reservoirs Improvements	Program highlights only
Distribution System Reliability	Orange County Feeder Relining – Stage 3
District Housing & Property Improvements	Program highlights only
Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation	Second Lower Feeder PCCP Rehabilitation - Reach 3B
Regional Recycled Water Supply	Program highlights only
Right-of-Way & Infrastructure Protection	Program highlights only
System Flexibility/Supply Reliability	Inland Feeder/Rialto Pipeline Intertie
System Reliability	Lake Mathews Facility Wastewater System Replacement
Treatment Plant Reliability	Mills Electrical Upgrades – Stage 2
Water Quality	Program highlights only

Colorado River Aqueduct (CRA) Reliability Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$33.31 million

Program Information: The CRA Reliability Program is composed of projects to replace or refurbish facilities and components of the CRA system to reliably convey water to Southern California.

Program Highlights (4th Quarter)

Accomplishments

- Awarded Construction Contracts for the following projects:
 - CRA Conduit Structural Protection
 - CRA Conveyance System Flow Level Sensor Installation
 - o Hinds Pumping Plant Village Paving Replacement
- Continued construction activities for the following contracts:
 - CRA 6.9 kV Power Cable Replacement
 - CRA Domestic Water Treatment System Upgrades at all five pumping plants
 - CRA Mile 12 Flow Meter Upgrades
 - o CRA Pumping Plants Overhead Cranes Replacement
- Completed material procurement for the following project:
 - o CRA Pumping Plant Sump System Rehabilitation
- Continued final design of the following projects:
 - o Copper Basin Reservoir Discharge Valve Structure Rehabilitation
 - CRA Pumping Plant Sump System Rehabilitation
 - CRA Pumping Plant Village Utility Replacement
 - Gene Communication Reliability Upgrades
- Completed final design of the following projects:
 - CRA Freda Siphon Barrel No. 1 Internal Seal Installation
 - o CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
 - Eagle Mountain Pumping Plant Village Paving Replacement
- Continued preliminary design of the following projects:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - o CRA Desert Region Security Improvements Stage 2
 - CRA Main Transformer Replacement
 - o Hinds Pumping Plant Discharge Valve Platform Replacement
 - o CRA Erosion Control Protection
 - CRA Pumping Plants 2.3 kV Switchrack Rehabilitation Iron Mountain Pumping Plant
- Completed preliminary design of the following projects:
 - CRA Desert Region Security Improvements Stage 1
 - o CRA Main Pump Motor Rehabilitation
- Advertised procurement package for the following projects:
 - o CRA Main Transformer Replacement
- CRA Main Pump Motor Rehabilitation:
 - o Continued preparation of procurement package for pilot exciter system for Gene Pumping Plant
 - Continued study to install variable frequency drive pumps at Gene and Intake Pumping Plants

Upcoming Activities

- Award the following construction contracts:
 - o CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
 - o Eagle Mountain Pumping Plant Village Paving Replacement
 - Freda Siphon Barrel No. 1 Seal Installation
- Continue construction activities planned for the following contracts:
 - o CRA Conduits Structural Protection
 - o CRA Conveyance System Flow Level Sensor Installation
 - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
 - o CRA Pumping Plants Overhead Cranes Replacement
 - Hinds Pumping Plant Village Paving Replacement
- Complete construction of the CRA Mile 12 Flow Meter Upgrades
- Continue final design of the following projects:
 - o Copper Basin Reservoir Discharge Valve Structure Rehabilitation
 - o CRA Pumping Plant Sump System Rehabilitation
 - o CRA Pumping Plant Village Utility Replacement
- Initiate final design of the following projects:
 - CRA Desert Region Security Improvements Stage 1
- Complete final design of Gene Communication Reliability Upgrades
- Continue preliminary design of following projects:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - CRA Desert Region Security Improvements Stage 2
 - o Hinds Pumping Plant Discharge Valve Platform Replacement
- Complete preliminary design for the following projects:
 - o CRA Main Transformer Replacement
 - o CRA Pumping Plants 2.3 kV Switchrack Rehabilitation Iron Mtn. Pumping Plant
- CRA Main Pump Motor Rehabilitation:
 - Advertise procurement package
 - Complete study to install variable frequency drive pumps at Gene and Intake Pumping Plants

CRA Pumping Plants Crane Improvements

Total Project Estimate: \$19.7 million

Total Project Cost to Date: \$10.0 million

This project replaces the overhead bridge crane at all five pumping plants. It also makes improvements to the electrical system, abates hazardous materials, and performs seismic retrofit of the below-grade pump bays.

Phase	Construction
% Complete for Construction	30%
Construction Contract Award Date	September 2020
Estimated Construction Completion Date	September 2023
Contract Number	1946

Completed fabrication of the Iron Mountain overhead crane and continued design of the modifications to the Eagle Mountain crane girders. In the upcoming quarter, fabrication of the Intake crane will continue, modifications of the Eagle Mountain crane will continue, and the Iron Mountain crane replacement will be completed.



Newly fabricated overhead crane for Iron Mountain Pumping Plant

Cost Efficiency and Productivity Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$9.51 million

Program Information: The Cost Efficiency and Productivity Program is composed of projects to upgrade, replace, or provide new facilities, software applications, or technology, which will provide economic savings that outweigh project costs through enhanced business and operating processes.

Program Highlights (4th Quarter)

Accomplishments

- CIP Budget System Improvements
 - o Authorized agreement with consultant for design, development, and deployment
- DVL to Lake Skinner Trail
 - Completed 95% design
- Enterprise Content Management Phase II
 - Selected vendor and prepared for board authorization of agreement with consultant
- Oracle Database Upgrade
 - Continue execution of the migration plan
- · Payroll-Timekeeping Reimplementation
 - o Initiated design
- WIFI Implementation project
 - Authorized agreements for design, development, and deployment of the Los Angeles Basin and Riverside regional sites

Upcoming Activities

- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
 - o Continue construction
- CIP Budget System Improvements
 - o Initiate design
- DVL to Lake Skinner Trail
 - Complete final design and prepare to advertise a construction bid package
- Enterprise Content Management Phase II
 - Authorize agreement with consultant for design, development, and deployment
- Oracle Database Upgrade
 - o Continue database migration
- · Payroll-Timekeeping Reimplementation
 - o Continue design
- Real Property Group Business System Replacement
 - Continue system replacement
- WINS Water Billing System Upgrade
 - o Continue system upgrade

Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2

Total Project Estimate: \$10.5 million

Total Project Cost to Date: \$0.6 million

This project will improve the wave attenuator system at Diamond Valley Lake by moving the existing wave attenuator to a new location where the existing attenuator is better suited and add a new 1,100 foot long wave attenuator in its place to improve the protection of the marina from wind generated waves.

Phase	Final Design
% Complete for Current Phase	95%
Current Phase Authorized	March 2021
Estimated Construction Contract Award Date	November 2023

Completed final design of construction bid package. In the upcoming quarter, the bid package will be advertised.



Existing floating wave attenuator at Diamond Valley Lake: Looking from West to East

Dams and Reservoirs Improvements Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$2.29 million

Program Information: The Dams and Reservoirs Improvements Program is composed of projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities to reliably meet water storage needs and regulatory compliance.

Program Highlights (4th Quarter)

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Authorized a professional services agreement for design, procurement, and installation of the dam monitoring system
- Garvey Reservoir Dam Monitoring System Upgrades
 - Authorized a professional services agreement for design, procurement, and installation of the dam monitoring system
- Garvey Reservoir Rehabilitation
 - o Authorized a professional services agreement for final design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Authorized a professional services agreement to perform the detailed structural analysis of the outlet tower
 - Awarded a procurement contract for two replacement valves

Upcoming Activities

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Initiate final design
- Garvey Reservoir Dam Monitoring System Upgrades
 - Initiate final design
- Garvey Reservoir Rehabilitation
 - Initiate final design
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - o Initiate preliminary design
- Lake Skinner Outlet Tower Seismic Upgrade
 - o Initiate the detailed structural analysis of the outlet tower
 - o Continue valve procurement

Distribution System Reliability Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$65.00 million

Program Information: The Distribution System Reliability Program is comprised of projects to replace or refurbish existing facilities within Metropolitan's distribution system, including reservoirs, pressure control structures, hydroelectric power plants, and pipelines, to reliably meet water demands.

Program Highlights (4th Quarter)

Accomplishments

- Foothill Hydroelectric Power Plant Seismic Upgrade
 - Awarded a construction contract
- San Diego Pipeline Nos. 3 & 5 Air Release & Vacuum Valve Replacement
 - o Awarded a procurement contract for replacement air release and vacuum valves

Upcoming Activities

- Complete construction for the following projects:
 - Casa Loma Siphon Barrel No. 1 Seismic Upgrade
 - Etiwanda Pipeline North Relining Stage 3
- Continue construction activities planned for the following projects:
 - o Foothill Hydroelectric Power Plant Seismic Upgrade
 - Orange County Feeder Relining Stage 3
 - OC-88 Pump Station Chiller Replacement
 - o Sepulveda, West Valley, and East Valley Feeders Interconnection Electrical Upgrades
- Continue design for following projects:
 - o Auld Valley and Red Mountain Pressure Control Structures Upgrades
 - Hollywood Tunnel North Portal
- Continue valve and slide gate procurement for following projects:
 - Rialto Pipeline Rehabilitation at STA 2986+30
 - o San Diego Pipeline Nos. 3 & 5 Air Release & Vacuum Valve Replacement
 - o San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation

Orange County Feeder Relining - Stage 3

Total Project Estimate: \$23.8 million

Total Project Cost to Date: \$16.1 million

This project will replace approximately 4 miles of deteriorated internal coal-tar enamel liner with cement mortar lining, weld all joints, and construct new accessways on the Orange County Feeder Extension within the cities of Costa Mesa and Newport Beach.

Phase	Construction
% Complete for Construction	76%
Construction Contract Award Date	April 2022
Estimated Construction Completion Date	September 2023
Contract Number	1961

Removal of the existing coal tar, welding of the joints, and application of new mortar lining have been completed. In the upcoming quarter, the pipeline will be returned to service after the completion of construction, which will include building of an access structure and restoration of the access sites to the original condition.



Welding closure pipe piece at one of the Orange County Feeder Relining sites

District Housing & Property Improvements Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$4.57 million

Program Information: The District Housing & Property Improvements Program is composed of projects to refurbish or upgrade workforce housing at Metropolitan to enhance living conditions to attract and retain skilled employees.

Program Highlights (4th Quarter)

Accomplishments

 Completed selection of a consultant to provide community planning services for the village enhancements at four CRA pumping plants (Hinds, Eagle Mountain, Iron Mountain, and Gene)

Upcoming Activities

- Continue supplementary housing alternative analysis by holding site meetings with the community planner and Metropolitan Desert staff
- Initiate an alternative analysis report to provide multiple options with the most optimal recommendation for the housing, recreational amenities and the lodges and kitchens with associated costs at four pumping plants (Hinds, Eagle Mountain, Iron Mountain and Gene)

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$29.37 million

Program Information: The PCCP Rehabilitation Program is composed of projects to refurbish or upgrade Metropolitan's PCCP feeders to maintain water deliveries without unplanned shutdowns.

Program Highlights (4th Quarter)

Accomplishments

- Allen-McColloch Pipeline
 - o Continued evaluating a member agency cost-sharing proposal that may facilitate rehabilitation work
- Calabasas Feeder
 - Continued validating assumptions on pipeline hydraulic capacity necessary to reline the entire approximately nine-mile-long Calabasas Feeder PCCP pipeline
- PCCP Rehabilitation Valve and Equipment Storage Building
 - Continued construction of the pre-engineered metal building
- Second Lower Feeder
 - Reach 3A Completed relining and rehabilitation of approximately 1.2 miles of Second Lower Feeder PCCP pipeline from Oak Street Pressure Control Structure south through City of Rolling Hills Estates to the Palos Verdes Reservoir
 - Reach 3B Completed delivery of HDPE pipe, which will be used for the Palos Verdes Reservoir temporary bypass line, and continued reviewing contractor submittals. This project will reline approximately 3.6 miles of Second Lower Feeder PCCP pipeline from the intertie with Sepulveda Feeder south to Oak Street PCS, through the cities of Torrance, Los Angeles, and Lomita, and replace three 48-inch diameter sectionalizing valves at the intertie with Sepulveda Feeder.
 - Isolation Valve Procurement Continued fabrication and inspection of the remaining six 54-inch valves. To date, Metropolitan has received seven of thirteen large-diameter conical plug valves and actuators, including three 48-inch and the four 54-inch valves.
- Sepulveda Feeder
 - Reach 1 Continued final design to rehabilitate approximately three miles of Sepulveda Feeder PCCP pipeline, from just north of the Inglewood Lateral south to the West Coast Feeder, through the cities of Inglewood and Hawthorne, and unincorporated Los Angeles County
 - Reach 2 Continued final design to rehabilitate approximately 3.8 miles of Sepulveda Feeder PCCP pipeline, from the Dominguez Gap Channel south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles
 - North Reach Continued preliminary design of the northern 20-mile portion of the Sepulveda Feeder, including both steel and PCCP portions of the pipeline and appurtenances
 - Urgent Carbon Fiber Lining –Completed final design for urgent relining at three locations, prequalified carbon fiber lining contractors, and advertised construction bid package

Upcoming Activities

- Allen-McColloch Pipeline
 - o Continue evaluating member agency's cost-sharing proposal
- Calabasas Feeder
 - o Meet with affected member agency to discuss pipeline hydraulic capacity assumptions
- PCCP Rehabilitation Valve and Equipment Storage Building
 - o Complete construction of the pre-engineered metal building at the Lake Mathews site
- Second Lower Feeder
 - Reach 3B Continue reviewing contractor submittals and initiate procurement and fabrication of materials
 - Isolation Valve Procurement Continue fabrication of remaining valves
- Sepulveda Feeder
 - Reach 1 Continue final design and permitting process for long-lead permits from Caltrans, City of Los Angeles, and City of Torrance
 - o Reach 2 Continue final design and permitting process
 - North Reach Continue preliminary design
 - o Urgent Carbon Fiber Lining Award a construction contract

Second Lower Feeder PCCP Rehabilitation - Reach 3B

Total Project Estimate: \$105.6 million

Total Project Cost to Date: \$16.4 million

This project will rehabilitate approximately 3.6 miles of PCCP segments of the Second Lower Feeder with steel liner and replace three existing large diameter sectionalizing valves within the cities of Lomita, Los Angeles, and Torrance.

Phase	Construction
% Complete for Construction	4%
Construction Contract Award Date	January 2023
Estimated Construction Completion Date	September 2025
Contract Number	2026

The contractor completed delivery of high density polyethylene (HDPE) pipe and continued preparation of submittals for review. In the upcoming quarter, the contractor will complete the construction of Palos Verdes Reservoir Bypass Line; complete potholing activities in the cities of Lomita, Los Angeles, and Torrance; and continue coordination of submittals.



Third-party inspector and Metropolitan construction inspector performing inspection of 54-inch diameter valve

Regional Recycled Water Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$0.21 million

Program Information: The Regional Recycled Water Program includes the design and construction of the Advanced Water Treatment (AWT) Demonstration Plant, which represents the initial step in development of a potential regional recycled water system for recharge of groundwater basins within Southern California.

Program Highlights (4th Quarter)

Accomplishments

- Advanced Water Treatment Demonstration Facility
 - Continued baseline testing and monitoring of the secondary membrane bioreactor (MBR)
 - Continued with site and equipment improvements to support the secondary MBR testing
 - Received comments from independent scientific advisory panel on the Phase 1 draft tertiary MBR testing report
 - Received final grant reimbursement from the State Water Resource Control Board for the project construction
- Direct Potable Reuse (DPR) Demonstration Facility
 - o Completed draft technical memorandum for desktop modeling and bench test plan

Upcoming Activities

- Advanced Water Treatment Demonstration Facility
 - o Complete baseline testing and monitoring of the secondary MBR system
 - o Finalize and submit the tertiary MBR testing report to Division of Drinking Water for review
 - Initiate site and system improvements for tertiary MBR optimization to facilitate planning and design of the full-scale advanced purification facility
 - Update record drawings to incorporate recent site improvements
- Direct Potable Reuse Demonstration Facility
 - o Finalize technical memorandum for desktop modeling and bench test plan
 - Finalize the DPR bench testing plan and initiate bench scale testing
 - Review draft DPR regulation for pilot testing and full-scale implementation

Right-Of-Way and Infrastructure Protection Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$1.28 million

Program Information: The Right of Way Infrastructure Protection Program (RWIPP) is comprised of projects to refurbish or upgrade above-ground facilities and right-of-way along Metropolitan's pipelines to address access limitations, erosion-related issues, and security needs.

Program Highlights (4th Quarter)

Accomplishments

- Western San Bernardino County Region Stage 2
 - o Completed final design

Upcoming Activities

- Los Angeles County Region
 - o Continue preliminary design
- Riverside and San Diego County Region Stage 1
 - o Continue final design for urgent rehabilitation of one site along San Diego Pipeline No. 4
- Western San Bernardino County Region Stage 2
 - Advertise a construction bid package

System Flexibility/Supply Reliability Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$17.62 million

Program Information: The System Flexibility / Supply Reliability Program is comprised of projects to increase the capacity and flexibility of Metropolitan's water supply and delivery infrastructure to meet service demands. Projects under this program address climate change affecting water supply, regional drought, and alternative water sources for areas dependent on State Project Water.

Program Highlights (4th Quarter)

Accomplishments

- Inland Feeder/Rialto Pipeline Intertie
 - o Completed final design and advertised for bids
- Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie
 - o Awarded a valve procurement contract
 - Continued final design and right-of-way acquisition
- Perris Valley Pipeline I-215 Tunnel Crossing
 - o Continued reviewing contractor submittals
 - Continued permitting and installation of temporary groundwater conveyance pipelines and a treatment facility
- Sepulveda Feeder Pump Stations
 - Received Statements of Qualifications (SOQ) in response to RFQ No. 1340 for Stage 1 progressive design-build services
 - Evaluated SOQs and held interviews with respondents
- Wadsworth Pumping Plant Bypass Pipeline
 - o Completed mobilization and started construction
- West Area Supply and Delivery Alternatives
 - Continued a series of workshops with member agencies to further develop and evaluate alternatives for a potential east-west conveyance

Upcoming Activities

- Continue progress on four individual projects to allow the delivery of water from Diamond Valley Lake to the Rialto Pipeline
 - o Badlands Tunnel Surge Tank Facility: Complete final design and advertise for bid
 - o Inland Feeder/Rialto Pipeline Intertie: Award a construction contract
 - o Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie: Continue final design and right-of-way acquisition.
 - Wadsworth Pumping Plant Bypass Pipeline: Continue construction
- Perris Valley Pipeline I-215 Tunnel Crossing
 - o Continue construction
- Sepulveda Feeder Pump Stations
 - Select a design-build entity and complete negotiations for Stage 1 progressive design-build services

Inland Feeder/Rialto Pipeline Intertie

Total Project Estimate: \$17.9 million

Total Project Cost to Date: \$2.5 million

This project will construct a 250-foot-long pipe to connect the Inland Feeder to the Rialto Pipeline, including an 84-inch butterfly valve housed within a partially buried structure for isolation, allowing water to be pumped from Diamond Valley Lake (DVL) into the Rialto Pipeline.

Phase	Final Design
% Complete for Current Phase	95%
Current Phase Authorized	March 2022
Estimated construction contract award date	September 2023

The final design was completed, and the project was advertised for bids. Procurement of an 84-inch diameter butterfly valve is ongoing, and the delivery of the valve is scheduled for installation by the construction contractor. In the upcoming quarter, the construction contract will be awarded.



Inland Feeder/Rialto Pipeline Intertie project site looking in the northwesterly direction towards DWR's Devil Canyon Afterbay No. 2 Embankment

System Reliability Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$36.78 million

Program Information: The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan's service area to utilize new processes and/or technologies and improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.

Program Highlights (4th Quarter)

Accomplishments

- Control System Upgrade Phase 3
 - o Continued receiving submittals for the pilot project at Mills Water Treatment Plant
- Datacenter Backup Infrastructure Upgrade
 - o Completed vendor selection and prepared a board letter for authorization of consulting agreement
- Enterprise Data Analytics
 - Published request for proposals (RFP)
- Headquarters Fire Alarm & Smoke Control Upgrades
 - Continued construction of the smoke control portion of the project
- Headquarters Network Switch Replacement
 - o Completed vendor selection
- Headquarters Security Upgrade Stage 3
 - Continued construction began bollard installation around Headquarters Building
- Headquarters Video Room Upgrades
 - Awarded construction contract

Upcoming Activities

- AMR System RTU and Radio Modem Upgrade
 - o Continue receiving radio modem equipment
- Applications-Servers Upgrade
 - Continue to migrate and upgrade applications in batches
- Datacenter Backup Infrastructure Upgrade
 - o Authorize an agreement with consultant for design, development, and deployment
- Desert Microwave Site Tower Upgrades
 - Continue customer witnessed testing
- Enterprise Data Analytics
 - Complete vendor selection
- Headquarters Fire Alarm & Smoke Control Upgrades
 - Continue construction and obtain fire department sign-off of new fire alarm and smoke control system
- Headquarters Fire Sprinkler Level P1 Replacement
 - Complete final design and award construction contract

- Headquarters Network Switch Replacement
 - o Authorize consulting agreement
- Headquarters Security Upgrade Stage 3
 - Continue construction including completing bollard installation and beginning courtyard fencing installation
- Headquarters Video Room Upgrades
 - o Begin construction
- Maximo Mobile Upgrade
 - o Continue deployment of devices to field staff
- Security Operations Center MWD Cyber Security Upgrade Stage 1
 - o Complete Security Operations Center cyber security upgrades

Lake Mathews Facility Wastewater System Replacement

Total Project Estimate: \$5.9 million

Total Project Cost to Date: \$5.4 million

This project will replace the on-site wastewater septic system that serves the maintenance buildings, administrative offices, and repair shops at the Lake Mathews facility with a permanent sewer system that connects to the Western Municipal Water District's sewer system. The septic tanks and leach field of the wastewater system have been in operation for 80 years and are no longer reliable.

Phase	Construction
% Complete for Construction	92%
Construction Contract Award Date	October 2021
Estimated Construction Completion Date	October 2023
Contract Number	1944

The contractor installed the new sewer line and continued pipe testing and site restoration. In the upcoming quarter, the contractor will remove septic tanks, coat the accessway covers, and begin construction of the sewer laterals to the building connections.



Preparing subgrade for paving over the newly installed sewer line near Lake Mathews Building 6

Treatment Plant Reliability Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$42.79 million

Program Information: The Treatment Plant Reliability Program is comprised of projects to replace or refurbish facilities and components of Metropolitan's five water treatment plants to continue to reliably meet treated water demands.

Program Highlights (4th Quarter)

Accomplishments

- Awarded construction contracts for the following projects:
 - Jensen Administration Building Column Panel Replacement
 - o Skinner Chemical Storage Tank Replacement
- Continued construction for the following projects:
 - Jensen Ozone PSU Replacement Stage 1
 - Mills Electrical Upgrades Stage 2
 - Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades
 - Skinner Ozone Contractor Structure Rehabilitation
 - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Continued equipment procurement for the following project:
 - Diemer Power and Distribution Panel Upgrade
- Continued testing and startup for the following project:
 - Mills Ozone PLC Control and Communication Equipment Upgrade
- Continued final design for the following project:
 - o Weymouth Administration Building Upgrades
- Continued preliminary design of the following projects:
 - o Diemer Filter Rehabilitation
 - Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
 - Jensen Finished Water Reservoir Rehabilitation
 - Jensen Reservoir Bypass Gate Replacement
 - La Verne Water Quality Laboratory Building Upgrades
 - Mills Finished Water Reservoir Rehabilitation
 - Mills Perimeter Security & Erosion Control Improvements
- Completed study report for the following project:
 - Jensen Solids Mechanical Dewatering Facility

Upcoming Activities

- Complete construction for the following projects:
 - Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades
 - o Mills Ozone PLC Control and Communication Equipment Upgrade
- Began construction for the following projects:
 - Jensen Administration Building Column Panel Replacement
 - Skinner Chemical Storage Tank Replacement

- Continue construction of the following projects:
 - Jensen Ozone PSU Replacement Stage 1
 - Mills Electrical Upgrades Stage 2
 - o Skinner Ozone Contactor Structure Rehabilitation
 - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Continued equipment procurement for the following project:
 - Diemer Power and Distribution Panel Upgrade
- Continued final design for the following project:
 - Weymouth Administration Building Upgrades
- Continue preliminary design of the following projects:
 - Diemer Filter Rehabilitation
 - o Diemer Washwater Reclamation Plant Improvements & Slope Stabilization
 - o Jensen Finished Water Reservoir Rehabilitation
 - o Jensen Reservoir Bypass Gate Replacement
 - o La Verne Water Quality Laboratory Building Upgrades
 - o Mills Finished Water Reservoir Rehabilitation
 - Mills Perimeter Security & Erosion Control Improvements
- Begin preliminary design of the following project:
 - o Jensen Solids Mechanical Dewatering Facility

Mills Electrical Upgrades - Stage 2

Total Project Estimate: \$18.5 million

Total Project Cost to Date: \$6 million

This project will add a second incoming 12kV service from the Riverside Public Utilities, upgrade the plant's main medium voltage switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller.

Phase	Construction
% Complete for Construction	28%
Construction Contract Award Date	November 2021
Estimated Construction Completion Date	February 2025
Contract Number	1990

The contractor completed installation of electrical accessway structures, demolition of the existing storm drain, and demolition of a portion of the ozone switchgear building so that the building may be expanded. In the upcoming quarter, the contractor will begin forming the Riverside Public Utility switchyard concrete equipment pads and backfill the excavation by the ozone switchgear building.



Installation of foam bond breakers for the existing electrical duct bank and reinforcing steel for the new Mills ozone switchgear building

Water Quality Program

Actual Biennium Expenditures (Jul. 2022 through Jun. 2023) \$0.00 million

Program Information: The Water Quality Program is comprised of projects to add new facilities to ensure compliance with water quality regulations for treated water, located at Metropolitan's treatment plants and throughout the distribution system.

Program Highlights (4th Quarter)

Accomplishments

- Mills Enhanced Bromate Control Facilities
 - o Continued final design

Upcoming Activities

- Mills Enhanced Bromate Control Facilities
 - o Continue final design

Minor Capital Projects Program

The Minor Capital Projects (Minor Cap) Program is authorized biennially to enable staff to expedite small capital projects. At the commencement of each biennium, the Board had appropriated the entire two-year budget for the program. For the current and the last bienniums, the minor cap budget was included in the CIP appropriation. To be considered for inclusion in the Minor Cap Program, a project must have a planned budget of less than \$400,000. The \$400,000 project budget cap was first established by the June 2018 board action Item 8-3 and the same cap is applied for the new minor caps that are approved for the current biennium. Prior to that action, the budget cap for minor cap projects was \$250,000.

The duration of minor capital projects typically ranges from a few months to three years. Since many of these projects 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.

For the past three bienniums, the two-year budgets for the Minor Cap Program have been \$10 million, \$15.5 million, and \$20 million respectively. In April 2022, the Board appropriated funds for the projects identified in the CIP appendix for the current biennium, FYs 2022/23–2023/24, including the Minor Cap Program. \$10 million has been allocated for the current biennium to date.

Minor Cap Program Historical Summary

The following table provides the overall status of the Minor Cap appropriations for the fiscal years 2016/17–2017/18 through fiscal years 2022/23–2023/24.

	Fiscal Year				
	2016/17- 2017/18	2018/19- 2019/20	2020/21- 2021/22	2022/23- 2023/24	Totals*
Amount Appropriated	\$10M	\$15.5M	\$20M	\$10M	\$55.5M
Expenditures (through June 2023)	\$7.2M	\$12.4M	\$8.3M	\$2.4M	\$30.2M
Number of Projects Approved	41	48	53	32	174
Number of Projects Completed (through June 2023)	40	40	7	0	87
Number of Projects with Durations of Over 3 Years	1	7	0	0	8

Table 4: Minor Capital Projects Program

^{*} Numbers may not sum due to rounding.

Through June 2023, 87 of the 174 projects have been completed, and eight active projects have exceeded three years in duration, as described below.

- Central Basin CNB-48 Service Connection Access Improvement was impacted by ongoing supply chain delays. Procurement of the valves is underway. The project is scheduled to be completed by September 2023.
- East Valley Feeder Vaults Upgrades has been experiencing delays due to additional time required to acquire permits from an external agency. The project is scheduled to be completed by March 2024.
- Garvey Reservoir Sodium Hypochlorite Tank Replacement experienced delays due to the Texas deep freeze
 event of 2021, which caused power and resin supply chain disruptions, and delivery of the new tank was
 delayed. The tank has been installed and is now in service. Metropolitan force construction is currently
 fabricating brackets for the installation of the tank canopy roof. The project is scheduled to be completed
 by September 2023.
- Gene Inlet Surge Chamber Access Improvement has experienced delays due to re-scheduling of the
 installation of a recently fabricated hatch cover, which can only occur when Gene Wash Reservoir water level
 is lowered. Metropolitan force construction plans to complete the project by September 2023.
- Gene Pool Refurbishment has experienced delays due to a shortage of local contractors for this type of work due to increased construction activity in the region. Metropolitan force construction will complete the work and the project is scheduled to be completed by September 2023.
- Lower Feeder Blow-Off Drain Line Replacement experienced delays in obtaining a Caltrans permit for Highway 90. Construction is underway and the project is scheduled to be completed by September 2023.
- Rialto Feeder STA 3820+00 Manhole Replacement has completed construction. Additional time is required
 to complete record drawings and project closure documents. The project is scheduled to be completed by
 August 2023.
- Sepulveda Feeder Stray Current Drain Station Installation & Rehabilitation has experienced delays due to longer than anticipated time for review/approval of permit applications by the City of Los Angeles and Los Angeles Department of Transportation. The project is scheduled to be completed by March 2024.

Actual biennium expenditures to date (July 2022 through June 2023) for the Minor Capital Projects Program were \$4.94 million.

Minor Cap Projects, 4th Quarter

Authorized Projects

Three projects were authorized under the Minor Cap Program during the 4th Quarter of fiscal year 2022/23 (April through June 2023). The total amount authorized for these projects was \$880,000.

- Skinner Plant Flow Meter Upgrade This project will replace three obsolete flow meters, which exceeded
 their service life. Two of the three flow meters are located in the Lake Skinner Bypass Vault Nos. 2 and 3,
 which will be relocated from underground vaults to aboveground for safety and ease of maintenance. The
 third meter is one of the three influent flow meters for the Skinner plant's finished water reservoir influent
 flow meters. The project budget is \$300,000
- Skinner Plant Infrared Window Installation This project will install infrared windows on equipment housing
 high-voltage circuits at the Skinner plant to allow specialized infrared cameras to scan high-voltage
 equipment for inspection during maintenance without opening the equipment housing while electrically
 charged. These windows will improve safety and increase productivity of the staff maintaining the highvoltage electrical equipment. The project budget is \$330,000.

 WB-06 Flow Meter Structure Drainage Improvements – This project will install an underground infiltration basin next to WB-06 Flow Meter Structure, which houses chlorine analyzers, to capture chlorine analyzer effluent discharge water from the structure to allow water to percolate into the ground and prevent water from discharging onto the street. The structure is located in the City of Rolling Hills Estates. The project budget is \$250,000.

Completed Projects

Five projects were completed under the Minor Cap Program during the 4th Quarter of fiscal year 2022/23 (April through June 2023):

- CRA Canal Sidewall Replacement at Mile Marker 33
- Diamond Valley Lake Marina Boat Launch Docks Refurbishment
- OC-88 Fire Protection System Upgrades
- Orange County Region RTU Air Conditioning Unit Replacement
- Sunset Garage Security Upgrades

Cancelled Projects

One project was cancelled under the Minor Cap Program during the 4th Quarter of fiscal year 2022/23 (April through June 2023)

 La Verne Fabrication Shop Arc Quencher Installation was originally initiated in FYs 2020/21 and 2021/22 minor cap appropriation. The project was canceled to be addressed by the La Verne Shops Stage 5 Building Completion project.

Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 4th Quarter of FY 2022/23, through the authority delegated by the Board in April 2022. The total funding amount authorized during the 4th Quarter is \$38,395,185 through thirty-eight management actions. In some case listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session and minor cap authorizations. Minor cap authorizations can be found in the Minor Capital Projects Program section of this report.

Table 5: Capital Projects Funded in 4th Quarter

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized	
CIP Budgeting System Improvements	Design, Development, & Deployment	\$721,000	\$865,000	
CRA Pumping Plants 6.9 kV Power Cable Replacement ¹	Additional Legal Services	\$800,000	\$800,000	
CRA Conduit Structural Protection	Construction	\$9,500,000	\$13,300,000	
CRA Conveyance System Level Sensor Installation ²	Met Force Construction and Additional Final Design	\$640,000	\$640,000	
Delta Properties Infrastructure Improvements - Phase 5	Final Design	\$75,000	\$75,000	
Diamond Valley Lake Dam Monitoring System Upgrades - Stage 3	Design, Procurement, and Installation	\$2,458,000	\$2,650,000	
Eagle Rock Security Upgrade - Stage 1	Preliminary Design and Final Design	\$358,000	\$422,000	
Eastern Region Security Camera System Upgrade - Area 1	Preliminary Design	\$350,000	\$400,000	
Eastern Region Security Camera System Upgrade - Area 2	Preliminary Design	\$585,000	\$630,000	
Eastern Region Security Camera System Upgrade - Area 3	Preliminary Design	\$256,000	\$300,000	

¹ Additional funds were required for legal services authorized per February 2023 Boar letter Item 7-4 heard in closed session.

² Additional funds were required for final design to add a new flow monitoring facility and installation of eight of the twelve transducers and associated improvements by Metropolitan forces. This was to take advantage of the 2023 CRA shutdown and prior to the contractor's mobilization to ensure timely completion for the next 8-pump flow demand.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Eastern Region Security Camera System Upgrade - Area 4	Preliminary Design	\$226,000	\$250,000
Eastern Region Security Camera System Upgrade – IT Infrastructure Upgrades	Preliminary Design	\$135,000	\$140,000
Foothill Hydroelectric Plant and Control Building Seismic Upgrade	Construction	\$6,365,000	\$8,650,000
Garvey Reservoir Dam Monitoring System Upgrades	Design, Procurement, and Installation	\$766,000	\$830,000
Garvey Reservoir Rehabilitation	Final Design	\$7,200,000	\$8,900,000
Headquarters Video Room Upgrades	Study, Design, and Construction	\$1,330,520	\$1,450,0000
Jensen Control Room Wildfire Smoke Mitigation	Final Design	\$266,800	\$307,000
Lake Mathews Dam Erosion Control ³	Additional Preliminary Design	\$170,000	\$170,000
Rialto Feeder Rehabilitation at STA 2986+30	Procurement of 20- inch Ball Valve	\$534,200	\$558,000
San Diego and Auld Valley Canals Concrete Liner Replacement	Final Design	\$440,000	\$460,000
San Diego Pipelines 3 and 5 Air Release/Vacuum Valve Replacement ⁴	Procurement	\$1,614,665	\$1,700,000
Service Connection EM-14 Flowmeter Replacement	Procurement \$90,000		\$90,000
Service Connection EM-21 Flowmeter Replacement	Procurement	\$90,000	\$90,000
Services Procurement Implementation	Preliminary Design	\$300,000	\$300,000
Upper Feeder Expansion Joint Upgrade	Study	\$40,000	\$40,000
Western Region Security Camera System Upgrade - Area 1	Preliminary Design	\$226,000	\$250,000

 $^{^3}$ Additional preliminary design funds were required to complete the preliminary design, as the scope of the work changed due to differing site conditions.

⁴ Additional funds were required due to the increased price for procurement of 72 valves.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Western Region Security Camera System Upgrade - Area 2	Preliminary Design	\$416,000	\$445,000
Western Region Security Camera System Upgrade - Area 3	Preliminary Design	\$256,000	\$300,000
Western Region Security Camera System Upgrade - Area 4	Preliminary Design	\$420,000	\$450,000
Western Region Security Camera System Upgrade - Area 5	Preliminary Design	\$226,000	\$250,000
Western Region Security Camera System Upgrade - Area 6	Preliminary Design	\$310,000	\$350,000
Western Region Security Camera System Upgrade - Area 7	Preliminary Design	\$226,000	\$250,000
Western Region Security Camera System Upgrade Area 8	Preliminary Design	\$310,000	\$360,000
Western Region Security Camera System Upgrade - Area 9	Preliminary Design	\$146,000	\$175,000
Western Region Security Camera System Upgrade - Area 10	Preliminary Design	\$118,000	\$150,000
Western Region Security Camera Upgrade - IT Infrastructure Upgrades	Preliminary Design	\$200,000	\$205,000
Weymouth Hazardous Waste Staging and Containment ⁵	Additional Preliminary and Final Design	\$230,000	\$230,000
	Total	\$38,395,185	\$47,432,000

⁵ Additional preliminary and final design funds were required to address changes that impact the project design and incorporate updated safety standards for hazardous waste management.

Due to changes to the project implementation schedules or completion of projects under budget, \$43,605,000 was reallocated back to the CIP Appropriation (Appropriation No. 15525) from the previously authorized projects listed in Table 6 below. The reallocated funds were used to fund the projects listed in Table 5 and will be used to support the upcoming projects in the current biennium.

Table 6: General Manager Actions to Reallocate Capital Project Funds

Project Authorized (Title)	Amount Authorized for Reallocation to CIP Appropriation
Applications-Servers Upgrade from Old Windows Operating Systems	(\$3,000,000)
CRA - Reliability for FY2012/13 through FY 2017/18 Remaining Budget	(\$1,000,000)
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12 Remaining Budget	(\$500,000)
Iron Mountain and Gene Pumping Plant Utility Replacement	(\$900,000)
Payroll and Timekeeping System Upgrade	(\$1,200,000)
Perris Valley Pipeline Interstate 215 Tunnel Crossing	(\$10,000,000)
Second Lower Feeder PCCP Rehabilitation - Reach 3B	(\$10,000,000)
Water Information System	(\$1,175,000)
Water Operations Control Remaining Budget	(\$1,083,000)
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12 Remaining Budget	(\$4,747,000)
Weymouth Treatment Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	(\$10,000,000)
Total:	(\$43,605,000)

CEQA Determinations

Table 7 lists CEQA exemption determinations made by the General Manager during the 4th Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2022. Adoption of Negative Declarations and Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan's Board. This table excludes information on board items.

Table 7: CEQA Exemption Determinations

Projects
Freda Siphon Barrel No. 1 Repairs
Inland Feeder/Rialto Pipeline Intertie
Lake Mathews Administration and Warehouse Building Roof Replacement
Sepulveda Feeder Urgent Relining at Stations 569+40, 760+33, and 921+69

Construction and Procurement Contracts

The table below summarizes the status of all construction and procurement contracts that were awarded by the Board and active during the reporting quarter. These contracts are listed in Table 9, Table 11, and Table 12. Total contract earnings for the 4th Quarter were approximately \$46.63 million.

Table 8: 4th Quarter Contract Action

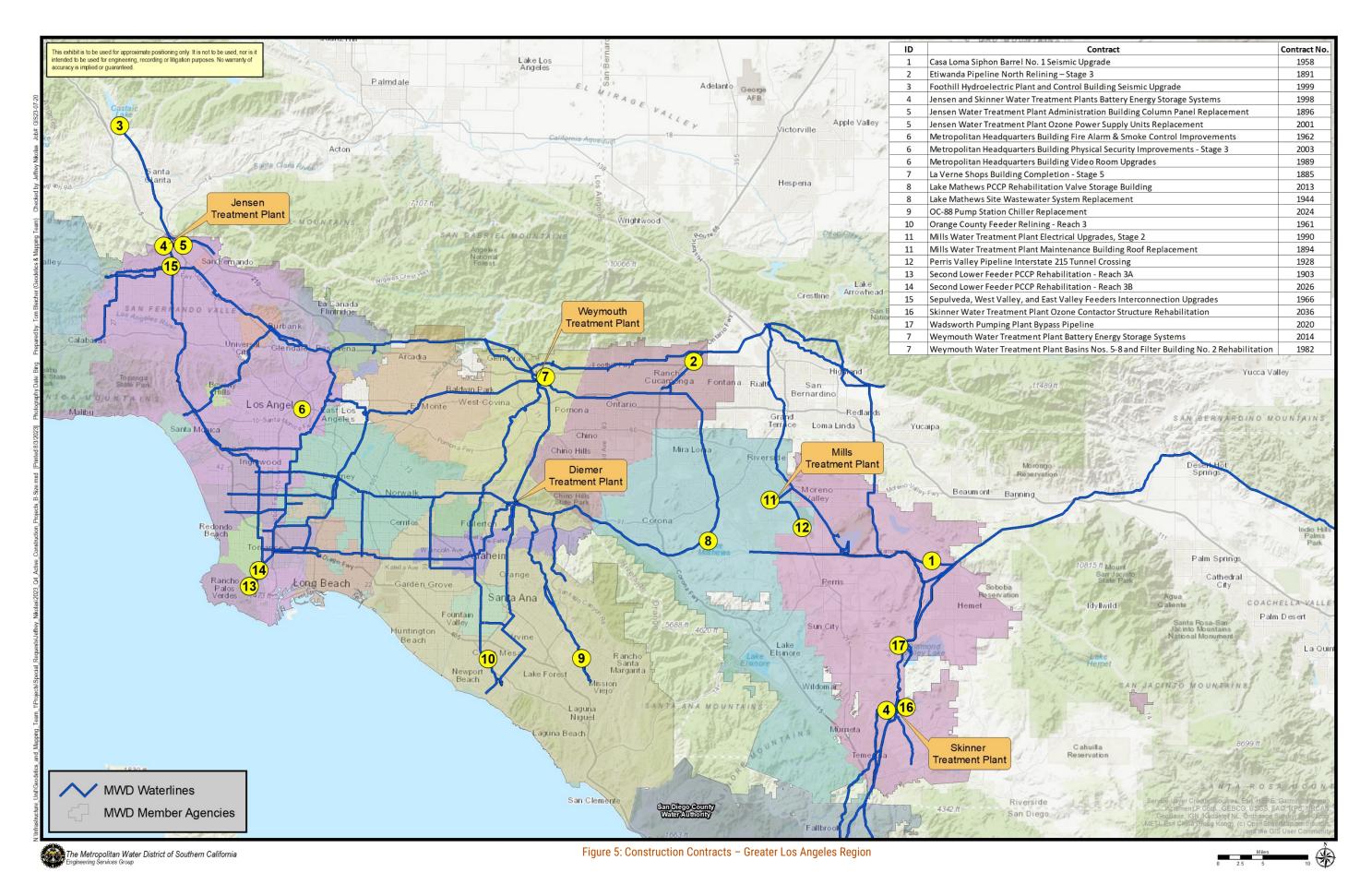
Contract Actions during Q4 for FY 2022/2023, April 2023 through June 2023					
Contracts Awarded by Board	5 construction contracts totaling \$21.01 million (Table 10) 3 procurement contracts totaling \$5.24 million (Table 10)				
Total Payments Authorized	\$46.63 million				
Construction Contracts Completed	Notice of Completion was filed for 2 construction contracts (Table 9)				
Procurement Contracts Completed	One procurement contract was completed				
Active Contracts at end of Q4 ⁶	29 construction contracts, totaling \$453.21million (Table 11) 17 procurement contracts, totaling \$55.66 million (Table 12) \$508.88 million total value*				

^{*}Numbers may not sum due to rounding.

The figures on the next two pages show the locations of the twenty-nine construction contracts that were active through the end of the 4^{th} Quarter.

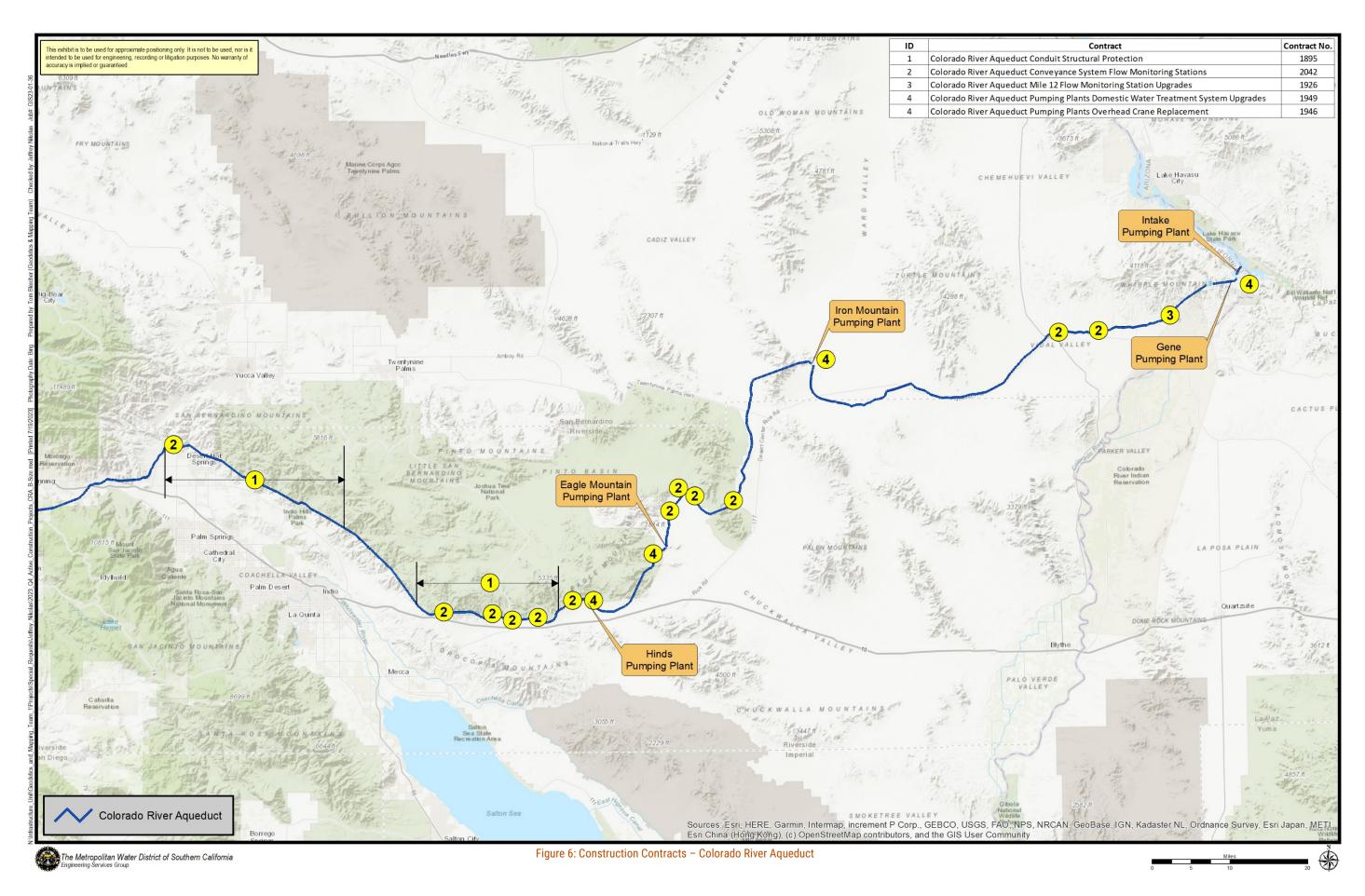
⁶ Active contracts at the end of the 4th Quarter are those that are ongoing at the end of June 2023 and have not filed Notice of Completion with the county where the work was performed.

April - June 2023 Capital Investment Plan Quarterly Report



Capital Investment Plan Quarterly Report

April - June 2023



Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the original amount of the contract or \$250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from the Board is required. In addition, the General Manager is authorized to execute change orders on procurement contracts in an amount not to exceed \$250,000. In the 4th Quarter, the Board did not authorize any increases to the General Manager's change order authority.

Notices of Completion during 4th Quarter:

The following table shows the two Board awarded construction contracts for which Metropolitan accepted the contract as completed during the 4th Quarter of FY 2022/23 and filed a Notice of Completion (NOC) with the county where the work was performed. In accordance with Section 9204 of the Civil Code of the State of California, an NOC is filed within 15 days of acceptance by Metropolitan of completion of construction by the contractor.

Contract No.	Construction Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1908	CRA Pumping Plants - Sump Rehabilitation	May 2023	\$26,900,000	\$16,690,970	-\$13,209,030	-49.1%
1964	Live Oak Reservoir 1964 Pipelines April 2023 \$182,8 Cathodic Protection		\$182,800	\$182,800	\$0	0%
	Totals:		\$27,082,800			

Table 9: Notices of Completion Filed This Quarter

For the 4th Quarter, the total bid amount of the completed construction contracts was approximately \$27 million.

The final contract costs can differ from the original bid amount due to change orders and actual costs incurred on unit price or other various bid items. The rolling average of change orders on completed construction contracts during the preceding 12-month period (July 2022 through June 2023) is 4.18 percent⁷.

Note that this rolling average of change orders excludes Contract 1905–Metropolitan Headquarters Building Improvements and Contract 1908-CRA Pumping Plants – Sump Rehabilitation since each contract had significant owner-directed additive and deductive change orders (+16% and -49%, respectively) that would skew the 12-month rolling average.

⁷ Original amount of construction contracts completed (Jul. 2022 through Jun. 2023) = \$ 14,940,178 Change orders for completed construction contracts (Jul. 2022 through Jun. 2023) = \$ 625,202 Change order percentage (Jul. 2022 through Jun. 2023) = 4.18%

Contracts Awarded by the Board during 4th Quarter:

During the period of April through June 2023, five construction contracts totaling \$21,015,998 and three procurement contracts totaling \$5,242,577, were awarded by the Board.

Table 10: Construction and Procurement Contracts Awarded This Quarter

Construction Contracts					
Colorado River Aqueduct C	Conduit Structural Protection				
Contract Number	1895				
Contractor	Granite Construction Company				
Amount	\$8,656,568				
Jensen Administration Buil	lding Entrance Glass Fiber Reinforced Concrete Panels Replacement				
Contract Number	1896				
Contractor	MMJ Contracting, Inc.				
Amount	\$281,900				
Metropolitan Headquarters	Building First Floor Video Suite Renovation				
Contract Number	1989				
Contractor	Acro Constructors				
Amount	\$637,520				
Foothill Hydroelectric Powe	er Plant Seismic Upgrade				
Contract Number	1999				
Contractor	West Valley Investment Group, Inc.				
Amount	\$6,174,000				
CRA Conveyance System S	Solar Level Sensor Installation				
Contract Number	2042				
Contractor	LEED Electric, Inc.				
Amount	\$5,266,000				
Procurement Contracts					
Furnishing Butterfly Valves	for the Inland Feeder/SBVMWD Foothill Pump Station Intertie				
Contract Number	2048				
Contractor	Sojitz Machinery Corporation of America				
Amount	\$2,601,437				
Furnishing Two Butterfly V	alves for the Lake Skinner Outlet Tower Valve Replacement				
Purchase Order Number	214904				
Contractor	B&K Valves and Equipment, Inc.				
Amount	\$1,174,475				
Furnishing Air Release and Vacuum Valves for San Diego Pipeline Nos. 3 and 5					
Purchase Order Number	214941				
Contractor	B&K Valves and Equipment, Inc.				
Amount	\$1,466,665				

The table on this page lists the 29 ongoing construction contracts through the end of the 4^{th} Quarter. This list contains construction contracts awarded by the Board.

Table 11: Active Construction Contracts at the End of 4th Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount ⁸	Earnings Through June 2023 ⁹	Start Date	Est. Completion Date	Est. Percent Complete
1	1885	La Verne Shops Building Completion – Stage 5	Woodcliff Corporation, Inc.	\$18,930,000	\$9,378,590	6/10/22	6/24	50%
2	1891	Etiwanda Pipeline North Relining - Stage 3	Mladen Buntich Construction Co., Inc.	\$25,631,519	\$23,281,069	8/19/22	9/23	91%
3	1894	Mills Plant Maintenance Building Roof Replacement	Bishop, Inc.	\$341,130	\$291,452	10/12/22	8/23	85%
4	1895	Colorado River Aqueduct Conduit Structural Protection	Granite Construction Company	\$8,656,568	\$129,849	5/11/23	1/25	2%
5	1896	Jensen Admin. Bldg. Entrance Glass Fiber Reinforced Concrete Panels Replacement	MMJ Contracting, Inc.	\$281,900	\$0	7/14/23	1/24	0%
6	1903	Second Lower Feeder PCCP Rehabilitation – Reach 3A	J. F. Shea Construction, Inc.	\$11,884,700	\$11,647,383	6/6/22	6/23	100%
7	1926	CRA Mile 12 Flow Monitoring Station Upgrades	R2 Engineering dba R2Build	\$2,067,096	\$2,051,656	6/16/21	8/23	99%
8	1928	Perris Valley Pipeline Interstate 215 Tunnel Crossing	James W. Fowler, Company	\$59,489,720	\$4,670,057	2/13/23	2/25	8%
9	1944	Lake Mathews Reservoir Wastewater System Replacement	Creative Home dba CHI Construction	\$3,815,000	\$3,515,471	12/13/21	10/23	92%
10	1946	Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement	J.F. Shea Construction, Inc.	\$13,611,460	\$6,464,015	10/14/20	9/23	47%

⁸ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

⁹ Earnings reported in this table are the total contract earnings as they are known to be at the end of the reporting quarter.

	Cont. No.	Contract Title	Contractor	Contract Amount ⁸	Earnings Through June 2023 ⁹	Start Date	Est. Completion Date	Est. Percent Complete
11	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement	J.F. Shea Construction, Inc.	\$32,869,737	\$9,310,138	1/20/22	3/25	28%
12	1958	Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1	J.F. Shea Construction, Inc.	\$11,759,319	\$11,627,319	1/20/22	7/23	99%
13	1961	Orange County Feeder Relining - Reach 3	Spiniello Infrastructure West, Inc.	\$17,226,250	\$12,386,595	5/11/22	10/23	72%
14	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements	Bernards Bros. Inc.	\$14,172,027	\$12,618,720	9/24/20	9/23	89%
15	1966	Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	Blois Construction, Inc.	\$3,143,592	\$1,708,670	7/7/22	9/23	54%
16	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J. F. Shea Construction, Inc.	\$94,324,423	\$31,896,293	6/10/22	5/25	34%
17	1989	Metropolitan Headquarters Building First Floor Video Suite Renovation	Acro Constructors	\$637,520	\$0	6/15/23	2/24	0%
18	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	\$9,246,064	\$2,633,221	12/13/21	2/25	28%
19	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems ¹⁰	Ameresco, Inc.	\$11,604,521	\$4,239,443	10/7/21	11/24	37%
20	1999	Foothill Hydroelectric Power Plant Seismic Upgrade	West Valley Investment Group, Inc.	\$6,174,000	\$150,120	4/27/23	9/24	2%
21	2001	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	Leed Electric, Inc.	\$2,257,897	\$1,033,200	7/20/22	12/23	46%
22	2003	Metropolitan Headquarters Building Exterior Physical Security Improvements	Caltec, Corp.	\$2,165,000	\$551,115	1/12/23	1/24	25%

	Cont. No.	Contract Title	Contractor	Contract Amount ⁸	Earnings Through June 2023 ⁹	Start Date	Est. Completion Date	Est. Percent Complete
23	2013	Lake Mathews PCCP Rehabilitation Valve Storage Building	Facility Builders & Erectors, Inc.	\$4,766,776	\$3,948,620	3/10/22	9/23	83%
24	2014	Weymouth Plant Battery Energy Storage System ¹⁰	Siemens Industry, Inc.	\$6,176,521	\$2,647,731	7/18/22	8/23	43%
25	2020	Wadsworth Pumping Plant Bypass Pipeline	Steve P. Rados, Inc.	\$14,820,500	\$839,294	2/2/23	6/24	6%
26	2024	OC-88 Pump Station Chiller Replacement	Mehta Mechanical Co., Inc. dba MMC Inc.	\$2,654,000	\$549,810	6/6/22	1/24	21%
27	2026	Second Lower Feeder PCCP Rehabilitation - Reach 3B	J.F. Shea Construction, Inc.	\$68,847,000	\$3,532,881	2/13/23	9/25	5%
28	2036	Skinner Water Treatment Plant Ozone Contactor Structure Rehabilitation	Slater Waterproofing, Inc.	\$394,534	\$17,368	4/12/23	12/23	4%
29	2042	CRA Conveyance System Solar Level Sensor Installation	LEED Electric, Inc.	\$5,266,000	\$0	6/15/23	5/24	0%
	Total	contract value for active constru	\$453,214,774					

 $^{^{\}rm 10}$ Granting of additional working days to complete construction is being considered.

The following table lists the 17 ongoing procurement contracts at the end of the 4th Quarter.

Table 12: Active Procurement Contracts at the End of 4th Quarter

	Cont. No.	Contract	Contractor	Contract Amount ¹¹	Earnings Through June 2023 ¹²	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹³
1	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	\$2,380,909	\$2,362,968	9/11/17	D ¹⁴	99%
2	1867 ¹⁵	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1	Crispin Valve, LLC	\$5,066,975	\$2,752,936	12/18/17	12/23	54%
3	1868	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 2	DeZurick, Inc.	\$771,984	\$761,584	12/18/17	D ¹⁴	99%
4	1873	Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops	Landmark Solutions, LLC	\$151,870	\$146,970	3/21/18	D ¹⁴	97%
5	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	\$23,750,060	\$17,562,939	12/24/18	1/25	74%
6	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	\$2,193,356	\$2,170,295	9/17/18	D ¹⁴	99%
7	1948	Refurbishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Limitorque	\$3,370,402	\$3,027,804	2/16/19	9/24	90%
8	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	\$1,244,535	\$599,970	5/28/20	7/25	48%

¹¹ The Contract Amount may differ from the original bid amount due to periodic change orders approved by the General Manager or, if required, by the Board.

¹² Earnings reported in this table are the total contract earnings as they are known to be at the end of the reporting quarter.

¹³ Estimated Percent Complete is based on contract payments and may not reflect actual progress of fabrication. The contract will be 100% complete upon delivery of fabricated items and field services.

¹⁴ All items were delivered prior to this reporting quarter but contract remains open pending use of manufacturer field services.

¹⁵ Contract 1867 includes tariff and work on Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1 per extra work directed in the November 2020 Board Letter, Item 7-1.

	Cont. No.	Contract	Contractor	Contract Amount ¹¹	Earnings Through June 2023 ¹²	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹³
9	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	\$4,141,194	\$3,229,976	3/30/20	D ¹⁴	78%
10	1969	Furnishing Inlet Valve Gearboxes for Skinner Module No. 7	R&B Automation, Inc.	\$224,510	\$207,035	4/29/20	2/24	92%
11	2012	Furnishing Electrical Panels for Diemer Treatment Plant	Integrated Power System, LLC	\$247,789	\$165,439	11/30/22	8/23	67%
12	2022	Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks	Sojitz Machinery Corp. of America	\$5,647,405	\$0	10/3/22	9/25	0%
13	2028	Furnishing Slide Gates for the San Jacinto Diversion Structure	Whipps, Inc.	\$820,853	\$0	12/8/22	6/24	0%
14	2046	Furnishing a 20-inch Triple Offset Ball Valve for Service Connection CB-11	Cascade Consultants, LLC	\$407,800	\$0	3/8/23	8/24	0%
15	2048	Furnishing Butterfly Valves for the Inland Feeder/SBVMWD Foothill Pump Station Intertie - Schedule 1	Sojitz Machinery Corp. of America	\$2,601,437	\$0	6/15/23	5/25	0%
16	PO #214904	Furnishing Two Butterfly Valves for the Lake Skinner Outlet Tower Valve Replacement	B&K Valves and Equipment, Inc.	\$1,174,475	\$0	TBD	2/25	0%
17	PO #214941	Furnishing Air Release and Vacuum Valves for San Diego Pipeline Nos. 3 and 5	B&K Valves and Equipment, Inc.	\$1,466,665	\$0	TBD	6/24	0%
	Total contract value for active procurement contracts:		\$55,662,219					

Project Labor Agreement

Project Labor Agreement

Metropolitan's Board of Directors adopted a Project Labor Agreement (PLA) in October 2022. PLAs require all contractors – union and non-union – to follow certain labor requirements such as paying prevailing wages, ensuring worker training and workforce development, supporting apprenticeship programs, and hiring local and transitional workers. PLAs promote the hiring of skilled, reliable workers, and help avoid labor disputes and work stoppages, to ensure that projects are done on-time, safely, and within budget.

Major Provisions of Metropolitan's Project Labor Agreement

Metropolitan's PLA covers 33 projects over the five-year term of the agreement, including all construction contracts under the Pure Water Southern California Program. These projects equate to 90% of the CIP covered by the PLA, on a cost-basis for the next five years. Major provisions and tenets of the PLA include:

- A 60 percent goal for employment of local workers. Although the local worker provision covers the entirety
 of Metropolitan's service area, the PLA can also be customized on a contract-by-contract basis using firsttier zip codes, which would benefit those who are near the project sites.
- A 15 percent goal for employment of transitional workers
- Metropolitan's PLA strikes an important balance with Metropolitan's Business Outreach Program ensuring
 coverage of a substantial portion of Metropolitan's public works construction contracts, while preserving the
 integrity of its robust Small Business Program.
- A unique core employee carveout, which allows three core employees per craft, providing flexibility for nonunion, small, or micro-small businesses with 25 or fewer employees
- Workforce development benefits including the required use of the nationally recognized Helmets to Hardhats Program, Construction Career Pipeline Program (CCPP), and the Multi-Core Craft (MC3) Apprenticeship Readiness Programs.
- Ability to add projects in the future, upon agreement by the Board and the associated trade councils

Active PLA Contracts

As of June 2023, five construction contracts totaling approximately \$158 million were awarded by the Board which are covered by the PLA.

Contract Contract **Board Award Contract Title** Contractor **Amount** Number Date (\$ million) Perris Valley Pipeline 1928 James W. Fowler Company \$59.49 01/23 Interstate 215 Crossing Second Lower Feeder PCCP 2026 J.F. Shea Construction, Inc. \$68.85 01/23 Rehabilitation - Reach 3B Wadsworth Pumping Plant 01/23 2020 Steve P. Rados, Inc. \$14.82 Bypass Pipeline Colorado River Aqueduct

Granite Construction Company

Table 13: Active PLA Contracts

1895

Conduit Structural Protection

\$8.66

04/23

Contract Number	Contract Title	Contractor	Contract Amount (\$ million)	Board Award Date
1999	Foothill Hydroelectric Power Plant Seismic Upgrade	West Valley Investment Group, Inc.	\$6.17	04/23
	Т	\$157.99		

At the end of this reporting quarter, PLA administration costs have totaled 2.4% of the total contract costs incurred to date. These administrative costs include both Metropolitan staff and consultants that routinely work with the contractors on the PLA. While this percentage represents the initial costs associated with the PLA, the number is not indicative of long-term PLA administration costs, as there were upfront costs in setting-up the PLA templates that will be used on future Metropolitan projects. Staff continuously monitors the costs for PLA administration, as well as any impacts to biddability of projects, and will update the Board annually in a stand-alone PLA Annual Report.

Major Achievements of the PLA

The PLA has allowed Metropolitan to better engage with the contracting community. Major achievements since the inception of the PLA include:

- Performed reoccurring contractor training on Metropolitan's PLA and labor compliance requirements
- Conducted various outreach events, providing information and educating them about Metropolitan's upcoming projects and business practices:
 - o March 3, 2023: Helmets to Hardhats PLA Orientation
 - o March 21, 2023: PLA Orientation with the Inland Empire Building Trades Council
 - March 22, 2023: MetWorks PLA and Construction Overview to Small Businesses in Moreno Valley
 - o April 18, 2023: General PLA & CCPP, Overview to MC3 Programs
 - o April 28, 2023: MetWorks PLA and Construction Overview to Small Businesses in Irvine
 - o May 15, 2023: MC3 Meeting with Center for Employment Training Colton Campus
 - o May 15, 2023: MC3 Meeting with San Bernardino Community College
 - o May 18, 2023: MC3 Meeting with Norte Vista High School in Riverside
- Two micro SBEs are taking advantage of the carve-out for core employees.

Performance Metrics

To measure project performance efficiency and to identify areas for continuous improvements, Metropolitan's Engineering Services Group has established two primary performance metrics for projects that will result in construction activities. These metrics serve as performance targets for Metropolitan staff for both final design and inspection activities. The inspection metric includes fabrication and construction inspection, as well as construction management services.

Separate performance targets have been established for two categories of project size: those with projected construction costs greater than \$3 million, and those with projected construction costs less than \$3 million.

Metropolitan's performance metric targets for the two categories of construction projects are listed below:

Project Category	Final Design, % of Construction	Inspection % of Construction
Projects with Construction Costs > \$3 Million	9% to 12%	9% to 12%
Projects with Construction Costs < \$3 Million	9% to 15%	9% to 15%

Prior to proceeding with final design or construction, budgets are established for design and inspection that best provide a quality and timely product. Efforts are made to optimize staff and consultant hours based on project complexity and location. The calculated values for the design and inspection costs, as a percentage of total construction costs, in most cases lie within or below the metric target ranges. In select cases, the calculated values may exceed the metric target ranges.

Once a project phase is complete, either final design or construction, staff's performance against these metrics is then calculated and compared to the target metrics. Table 14 and Table 15 on the following page summarize the comparison between the target metrics and the actual performance metrics for each project category for the current reporting period. In cases where the actual performance exceeded the target metric, explanations for the variance are provided. Actual performances are reported for the Board awarded construction contract projects.

Table 14: Performance Metric Actuals, Construction Costs > \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
CRA Conduit Structural Protection	Final Design	\$1,154,211	11,436,568	9% to 12%	10.1%
CRA Conveyance System Flow Monitoring Stations	Final Design	\$735,547	\$6,100,000	9% to 12%	12.1%
CRA Pumping Plant Sump Rehabilitation	Inspection	\$888,884	\$11,297,697	9% to 12%	7.9%
Foothill Hydroelectric Plant and Control Building Seismic Upgrade ¹⁶	Final Design	\$784,000	\$6,300,000	9% to 12%	12.4%

¹⁶ Final design costs for Foothill Hydroelectric Plant and Control Building Seismic Upgrade were higher than the target range due to additional design efforts required to modify structural columns, control room wiring bundles, and a walkway bridge ramp to enhance safety and reduce cost.

Table 15: Performance Metric Actuals, Construction Costs < \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Headquarters Video Room Upgrades	Final Design	\$37,955	\$968,520	9% to 15%	3.9%
Jensen Administration Building Column Panel Replacement	Final Design	\$35,073	\$308,900	9% to 15%	11.4%
Live Oak Reservoir Pipelines Cathodic Protection ¹⁷	Inspection	\$28,730	\$182,800	9% to 15%	15.7%

 $^{^{17}}$ Inspection costs for Live Oak Reservoir Pipelines Cathodic Protection were higher than the target range due to weather delays, which required additional inspection.

Service Connections and Relocations

Service Connections

No new agreements for service connections were approved by the General Manager pursuant to Sections 4700-4708 during the reporting period (April through June 2023).

Relocations

No new relocation agreements involving an amount in excess of \$100,000 were approved under the authority of Section 8122(c) during the reporting period.

Projects Expensed to Overhead

Progress, costs, and future plans for the projects listed below were evaluated by Engineering Services, Finance, Water System Operations, and Real Property. This assessment determined that no further work on Diamond Valley Lake East Marina, Phase 2 is warranted. The project received the necessary authorization for various levels of effort conducted. However, no Metropolitan capital asset was ever placed into service. Accrued costs have been expensed since no capital asset will be constructed in the foreseeable future. As for Desert Housing Improvements, a portion of the project expenditures were later determined to be not capitalizable and were expensed.

Table 16: Projects Expensed to Overhead

Project	Expensed Amount
Diamond Valley Lake East Marina, Phase 2	\$150,385
Desert Housing Improvements	\$2,075,209

Program/Appropriation Status

The following table provides the program and appropriation level budget versus cost-to-date and biennium planned expenditures versus actuals-to-date.

Table 17: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals

		Total t	o Date	Biennium to Date	
Capital Programs/Appropriations	Appn. No.	Appn. Amount (\$1,000's)	Costs thru June 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Colorado River Aqueduct Reliability Program	Total	\$546,785	\$458,846	\$39,270	\$33,309
Cabazon Radial Gate Facility Improvements	15320	\$2,456	\$914	\$0	\$209
White Water Siphon Protection	15341	\$15,585	\$14,501	\$2,650	\$17
CRA - Conveyance Reliability	15373	\$117,828	\$117,181	\$1,750	\$805
CRA Pumping Plant Reliability	15374	\$24,467	\$24,011	\$0	\$8
CRA - Electrical/Power Systems Reliability	15384	\$59,465	\$53,387	\$1,507	\$4,897
CRA – Discharge Containment	15385	\$8,129	\$7,977	\$0	\$2
CRA - Reliability for FY2006/07 through FY2011/12	15438	\$134,194	\$122,462	\$11,130	\$2,990
CRA Main Pump Reliability	15481	\$75,000	\$63,263	\$10,005	\$10,205
CRA - Reliability for FY2012/13 through FY2017/18	15483	\$90,805	\$47,599	\$10,532	\$11,719
CRA - Reliability for FY2018/19 through FY2023/24	15507	\$18,856	\$7,550	\$1,696	\$2,456
Cost Efficiency & Productivity Program	Total	\$161,688	\$113,181	\$15,610	\$9,512
DVL Recreation Facilities	15334	\$87,004	\$60,106	\$2,650	\$721
Yorba Linda Power Plant Modifications	15446	\$17,125	\$17,109	\$0	\$18
Business Operations Improvement	15484	\$17,716	\$12,154	\$1,820	\$1,916

		Total to Date		Biennium to Date	
Capital Programs/Appropriations	Appn. No.	Appn. Amount (\$1,000's)	Costs thru June 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Project Controls and Reporting System	15490	\$6,440	\$6,292	\$0	-\$10
Enterprise Content Management	15500	\$3,600	\$3,595	\$3,330	\$0
DVL Recreation Rehabilitation & Refurbishment	15515	\$1,898	\$1,236	\$150	\$324
Energy Sustainability Improvements	15521	\$27,905	\$12,688	\$7,660	\$6,544
Dams and Reservoirs Reliability Program	Total	\$90,888	\$71,274	\$5,300	\$2,286
Reservoir Cover and Replacement	15417	\$76,830	\$61,248	\$740	\$1,879
Dam Rehabilitation & Safety Improvements	15419	\$14,058	\$10,026	\$4,560	\$407
Distribution System Reliability Program	Total	\$495,952	\$433,123	\$51,250	\$64,996
Conveyance and Distribution System - Rehabilitation	15377	\$125,961	\$115,891	\$9,310	\$14,147
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	\$154,412	\$142,499	\$170	\$27,011
Hydroelectric Power Plant Improvements	15458	\$34,976	\$17,962	\$4,760	\$686
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	\$138,942	\$125,552	\$29,220	\$11,900
Pipeline Rehabilitation and Replacement	15482	\$1,143	\$1,081	\$210	\$48
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY2023/24	15503	\$40,518	\$30,138	\$7,580	\$11,205
District Housing & Property Improvements Program	Total	\$12,285	\$11,120	\$12,000	\$4,570
Employee Village Enhancement	15513	\$12,285	\$11,120	\$12,000	\$4,570

		Total to Date		Biennium to Date	
Capital Programs/Appropriations	Appn. No.	Appn. Amount (\$1,000's)	Costs thru June 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Minor Capital Projects Program	Total	\$55,500	\$30,238	\$8,700	\$4,939
Capital Program for Projects Costing Less Than \$400,000 For Fiscal Years 2018/19 And 2019/20	15498	\$10,000	\$7,176	\$0	\$5
Capital Program for Projects Costing Less Than \$400,000 for FY2018/19 through FY2019/20	15504	\$15,500	\$12,358	\$2,050	\$934
Capital Program for Projects Costing Less Than \$400,000 for FY2020/21 through FY2021/22	15518	\$20,000	\$8,308	\$4,580	\$1,605
Capital Program for Projects Costing Less Than \$400,000 for FY2022/23 through FY2023/24	15526	\$10,000	\$2,395	\$2,070	\$2,395
Prestressed Concrete Cylinder Pipe Rehabilitation Program	Total	\$370,391	\$297,034	\$51,210	\$29,367
PCCP Rehabilitation and Replacement	15471	\$26,966	\$24,249	\$510	\$1,575
Sepulveda Feeder PCCP Rehabilitation	15496	\$38,813	\$30,848	\$3,900	\$2,925
Second Lower Feeder PCCP Rehabilitation	15497	\$288,927	\$229,562	\$43,500	\$23,198
Allen-McColloch Pipeline, Calabasas Feeder, and Rialto Pipeline PCCP Rehabilitation	15502	\$15,685	\$12,375	\$3,300	\$1,669
Regional Recycled Water Supply Program	Total	\$24,350	\$20,514	\$3,860	\$214
Demonstration-Scale Recycled Water Treatment Plant	15493	\$24,350	\$20,514	\$3,860	\$214
Right of Way & Infrastructure Protection Program	Total	\$31,715	\$28,336	\$7,770	\$1,276
Right of Way & Infrastructure Protection	15474	\$31,715	\$28,336	\$7,770	\$1,276

		Total t	to Date	Biennium to Date	
Capital Programs/Appropriations	Appn. No.	Appn. Amount (\$1,000's)	Costs thru June 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
System Flexibility/Supply Reliability Program	Total	\$740,315	\$659,170	\$31,590	\$17,622
Hayfield and Lake Perris Groundwater Recovery	15402	\$1,500	\$1,128	\$740	\$15
Perris Valley Pipeline	15425	\$170,500	\$137,206	\$14,208	\$6,089
Water Delivery System Improvements	15488	\$106,420	\$80,522	\$13,141	\$10,917
Verbena Property Acquisition	15492	\$264,000	\$262,148	\$3,450	\$200
Delta Wetlands Properties (Delta Islands)	15494	\$197,894	\$178,166	\$51	\$401
System Reliability Program	Total	\$457,064	\$343,715	\$48,500	\$36,784
Information Technology System - Infrastructure	15376	\$51,306	\$47,806	\$50	\$88
Information Technology System - Security	15378	\$12,351	\$11,714	\$0	\$898
La Verne Shop Facilities Upgrade	15395	\$71,348	\$55,388	\$1,750	\$8,069
Water Operations Control	15467	\$67,441	\$44,613	\$5,970	\$2,531
Union Station Headquarters Improvements	15473	\$109,552	\$93,634	\$8,330	\$7,408
IT Infrastructure Reliability	15487	\$56,667	\$41,577	\$6,870	\$4,784
Operations Support Facilities Improvement	15495	\$35,721	\$23,936	\$14,000	\$4,394
Metropolitan Security System Enhancements	15499	\$24,516	\$12,292	\$4,365	\$1,240
Infrastructure Reliability Information System	15501	\$17,221	\$6,541	\$95	\$3,675
System-Wide Paving & Roof Replacements for FY 2018/19 through FY 2019/20	15516	\$4,791	\$4,092	\$5,050	\$2,498

		Total to Date		Biennium to Date	
Capital Programs/Appropriations	Appn. No.	Appn. Amount (\$1,000's)	Costs thru June 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
System-Wide Paving & Roof Replacements for FY2020/21 through FY2023/24	15519	\$2,461	\$2,045	\$930	\$1,126
Enterprise Data Analytics	15522	\$3,690	\$78	\$1,090	\$73
Treatment Plant Reliability Program	Total	\$895,722	\$790,871	\$24,940	\$42,788
Weymouth Water Treatment Plant Improvements	15369	\$195,711	\$189,310	\$5,000	\$1,169
Jensen Water Treatment Plant Improvements	15371	\$47,062	\$46,681	\$310	\$43
Diemer Water Treatment Plant Improvements	15380	\$216,907	\$208,500	\$3,320	\$170
Mills Water Treatment Plant Improvements	15381	\$5,525	\$5,284	\$0	\$7
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	\$74,207	\$67,858	\$3,660	\$2,187
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	\$101,332	\$52,628	\$2,159	\$25,111
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	\$91,376	\$85,468	\$3,670	\$771
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	\$39,852	\$27,512	\$92	\$2,919
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	\$77,539	\$77,244	\$39	\$286
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15478	\$2,955	\$1,788	\$120	\$352

		Total to Date		Biennium to Date	
Capital Programs/Appropriations	Appn. No.	Appn. Amount (\$1,000's)	Costs thru June 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	\$2,664	\$1,033	\$0	\$186
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	\$8,339	\$7,482	\$0	-\$2
Weymouth Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15505	\$915	\$755	\$0	\$453
Jensen Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15508	\$19,662	\$11,275	\$5,090	\$6,069
Diemer Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15510	\$3,758	\$2,203	\$0	\$1,448
Skinner Water Treatment Plant, Improvements for FY 2020/21 Through FY 2023/24	15512	\$5,239	\$4,130	\$1,460	\$493
Mills Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15520	\$2,631	\$1,633	\$20	\$1,036
Chlorine System Improvements	15523	\$50	\$88	\$0	\$88
Water Quality Program	Total	\$10,240	\$9,615	\$0	\$0
Enhanced Bromate Control	15472	\$10,240	\$9,615	\$0	\$0
Total CIP		\$3,892,895	\$3,267,037	\$300,000	\$247,663

Notes on the above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 07/25/2023.
- \$0 under Planned Expenditures indicates that while no expenditures are planned during the reporting period, expenditures may be planned during upcoming periods.
- Negative actual expenditures indicate the result of cost transfers, write-offs, or credits greater than actual costs for this biennium through the reporting quarter.

List of Tables

Table 1: 4th Quarter Board Actions	3
able 2: Planned & Actual Expenditures for FYs 2022/23 & 2023/24	6
Table 3: Major Capital Projects Programs	11
Table 4: Minor Capital Projects Program	35
able 5: Capital Projects Funded in 4 th Quarter	38
Table 6: General Manager Actions to Reallocate Capital Project Funds	41
Table 7: CEQA Exemption Determinations	42
Table 8: 4th Quarter Contract Action	43
able 9: Notices of Completion Filed This Quarter	46
Table 10: Construction and Procurement Contracts Awarded This Quarter	47
Table 11: Active Construction Contracts at the End of 4 th Quarter	48
Table 12: Active Procurement Contracts at the End of 4 th Quarter	51
able 13: Active PLA Contracts	53
Table 14: Performance Metric Actuals, Construction Costs > \$3 Million	55
Table 15: Performance Metric Actuals, Construction Costs < \$3 Million	56
Table 16: Projects Expensed to Overhead	57
Table 17: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals	58
List of Figures	
Figure 1: CIP for FY 2022/23 and FY 2023/24 by Program	2
Figure 2: CIP Fund Allocation from Appropriation No. 15525 – FY 2022/23 and FY 2023/24	5
Figure 3: Current Biennium – Planned, Actual & Forecasted Expenditures	6
Figure 4: Biennium-to-date Actual Expenditures through 4th Quarter FY 2022/23	10
Figure 5: Construction Contracts – Greater Los Angeles Region	44
Figure 6: Construction Contracts - Colorado River Aqueduct	45