



● **Capital Investment Plan Quarterly Report for period ending September 2022**

Summary

The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during the first 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 July to September 2022, the first quarter of fiscal year 2022/23, and the first 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.

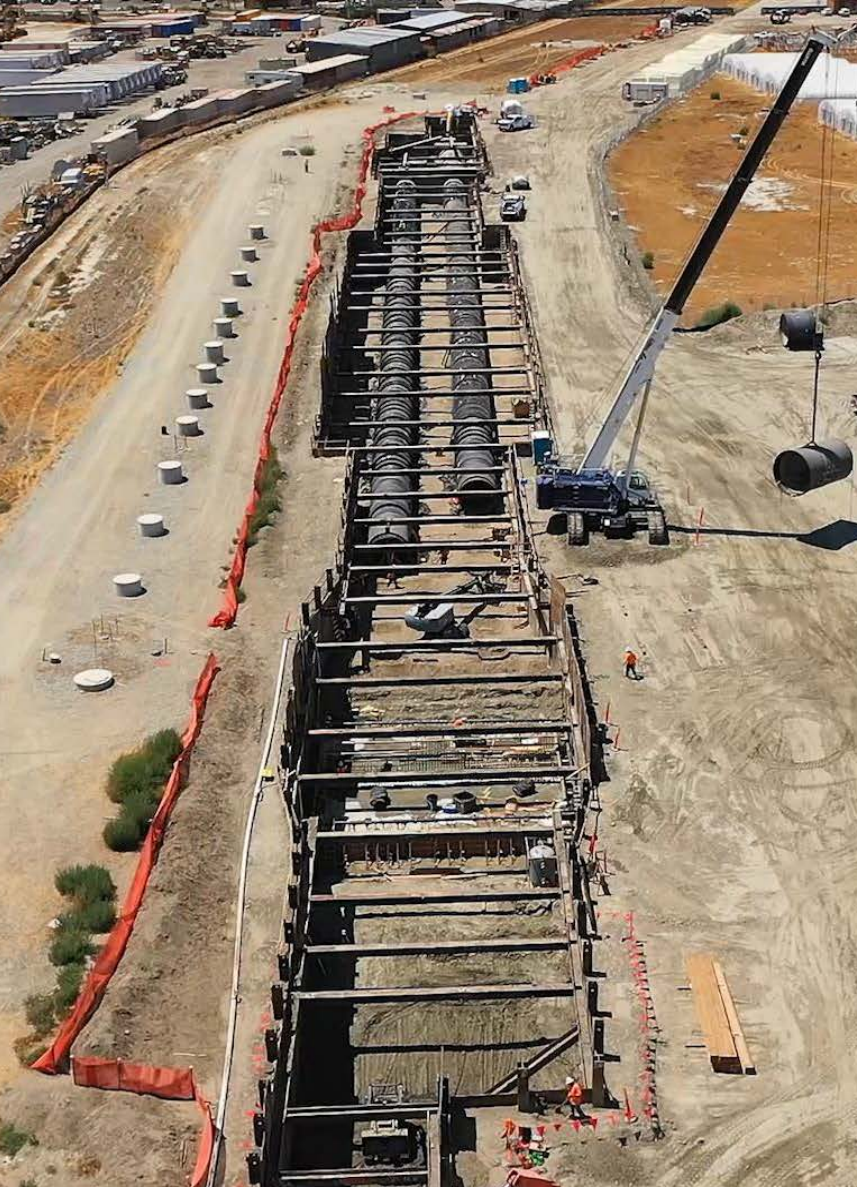
Sections 4700-4708 of Metropolitan's Administrative Code requires the General Manager to report on service connections approved by the General Manager with the estimated cost and approximate location of each.

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 September 2022



The Metropolitan Water District of Southern California

Capital Investment Plan Quarterly Report

July - September 2022



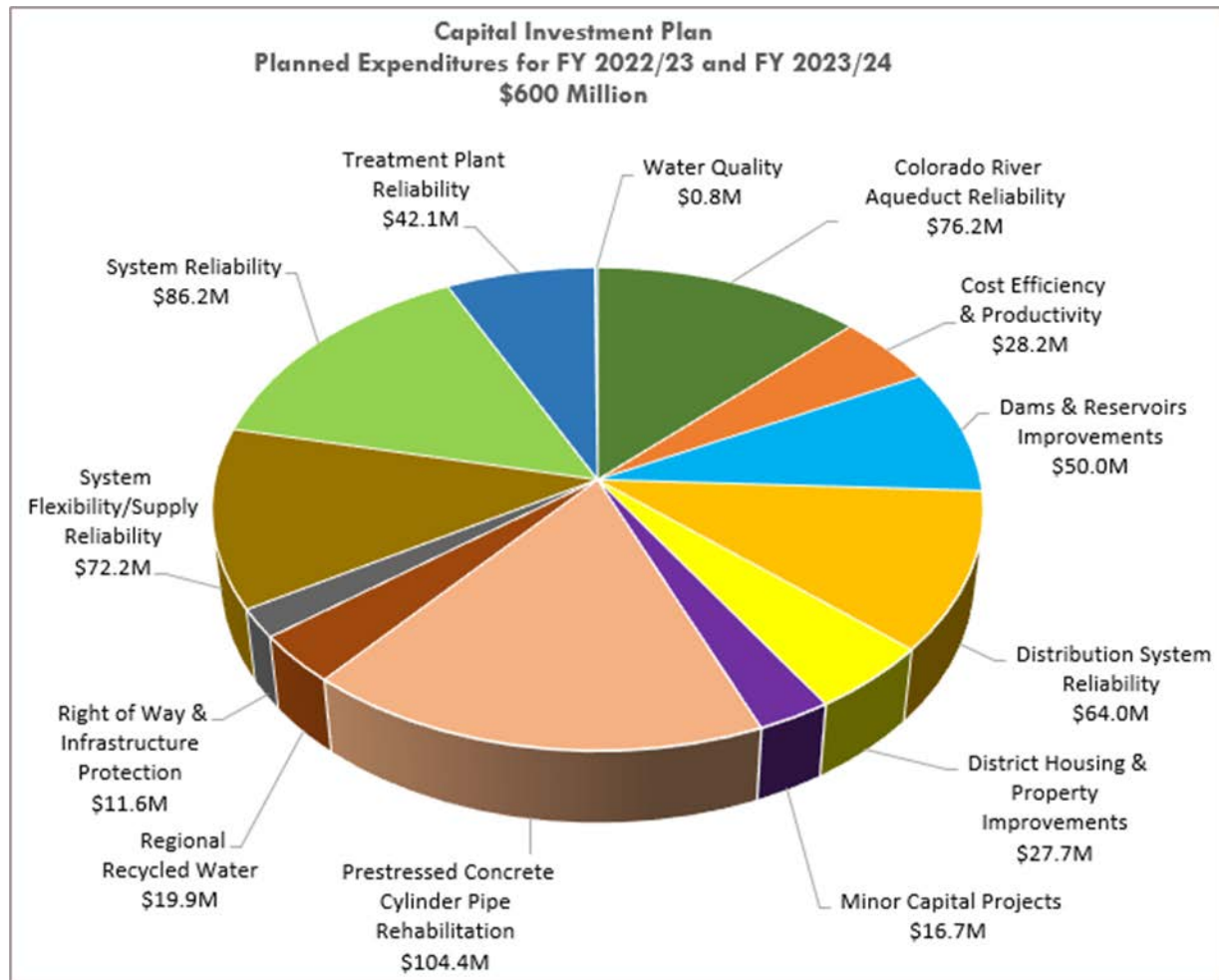
Table of Contents

Capital Investment Plan for FYs 2022/23 & 2023/24	2	CEQA Determinations	40
Executive Summary	3	Construction and Procurement Contracts	41
Board Action Summary	3	Performance Metrics	52
Planned Expenditure and Budget	6	Service Connections and Relocations	54
Major Capital Programs Overview	7	Projects Expensed to Overhead	54
Major Capital Project Programs – Highlights	9	Program/Appropriation Status	55
Minor Capital Projects Program	32	List of Tables	61
Project Actions	35	List of Figures	61

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): *Casa Loma Siphon Barrel No. 1 Seismic Upgrade* – aerial overview of project site; *Upper Feeder Expansion Joint Replacement* – removal of existing expansion joint bolts; *Metropolitan Headquarters Physical Security Improvements* – completed security desk, glass handrail, and turnstiles in rotunda]

Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 1st Quarter of Fiscal Year (FY) 2022/23, which ended in September 2022. CIP expenditures through the 1st Quarter totaled \$30.4 million and the expenditures are projected to be slightly above the planned expenditures at the end of the biennium. The CIP funds allocated during the quarter totaled \$469.9 million, leaving approximately \$130.1 million available to be allocated during the remainder of the current biennium. Approximately \$410 million of the \$469.9 million was for work, such as on-going construction projects, authorized in the prior biennium.

During the quarter, twelve project-specific board actions were heard in open sessions including an action to amend the CIP to include Upper Feeder Expansion Joint Replacement and to continue the emergency action of executing a no-bid contract for the installation of a new expansion joint on the Upper Feeder. Also, three actions on drought mitigation-related projects, which will improve water deliveries that depend on State Water Project supplies, were presented to the Board.

Two construction contracts and one procurement contract were awarded by the Board during the reporting period with a total contract amount of approximately \$31.9 million. During the same time, five construction contracts and one procurement contract were completed with a total of approximately \$22.6 million in contract payments authorized, reflecting construction progress on projects such as Casa Loma Siphon Barrel No. 1 Seismic Upgrade, CRA Pumping Plants Overhead Crane Replacement, Lake Mathews PCCP Rehabilitation Valve Storage Building, Second Lower PCCP Rehabilitation – Reach 3A, HQ Building Fire Alarm & Smoke Control Improvements, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

Board Action Summary

During the 1st Quarter, board actions heard in open session included twelve project-specific actions summarized in Table 1 below. These actions awarded three contracts totaling approximately \$31.9 million, authorized six new professional/technical services agreements totaling a not-to-exceed amount of approximately \$11.0 million, and authorized an increase to three existing agreements totaling a not-to-exceed amount of approximately \$15.7 million. Information on the awarded contracts can be found in Table 8 of this report. The table below excludes information on board items heard in closed session.

Table 1: 1st Quarter Board Actions

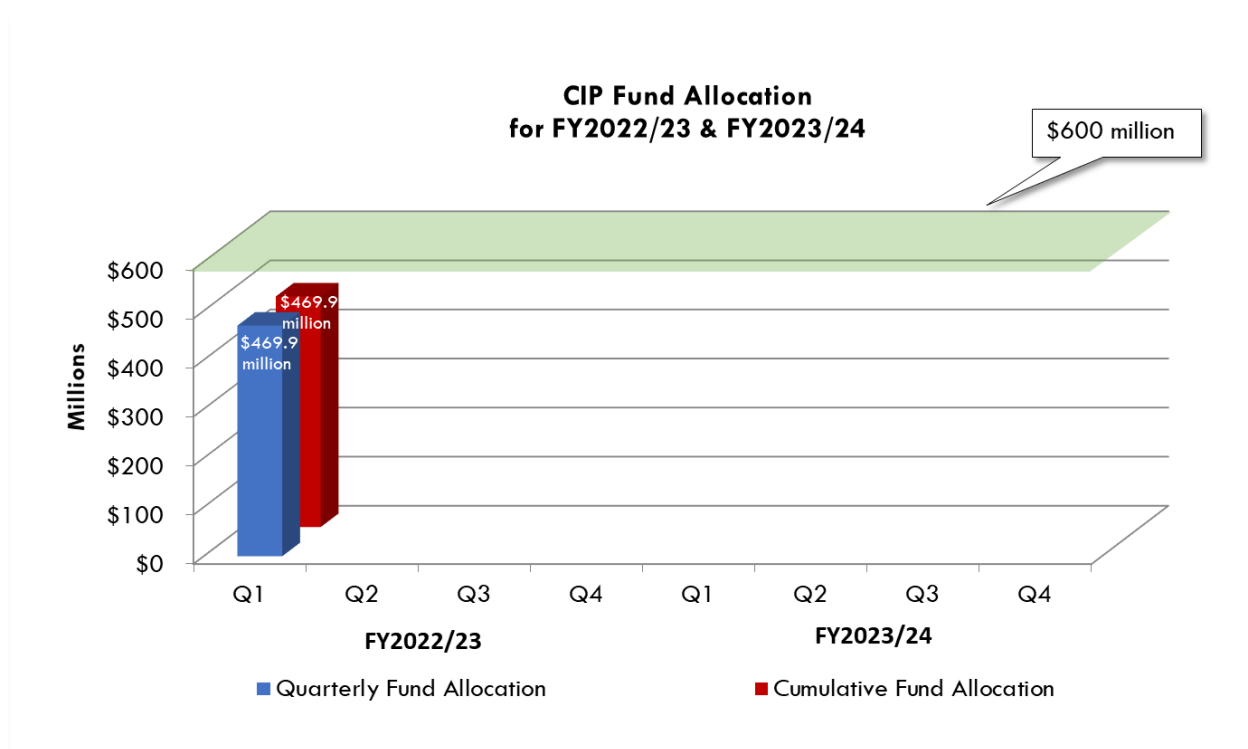
Month	Board Letter Item No.	Project	Action taken
July	7-1	Upper Feeder Expansion Joint Replacement	Authorized an unplanned project and determined the need to continue emergency action of executing a no-bid contract
July	7-2	Etiwanda Pipeline Lining Rehabilitation - Stage 3	Awarded \$25,972,700 construction contract
July	7-3	Jensen Plant Site Security Upgrades	Authorized an agreement not-to-exceed \$700,000
August	7-2	Upper Feeder Expansion Joint Replacement	Determined the need to continue the emergency action of executing a no-bid contract

Month	Board Letter Item No.	Project	Action taken
August	7-3	Electromagnetic Pipeline Inspections and Assessments; Calabasas Feeder PCCP Rehabilitation; Sepulveda Feeder North Reach	Authorized two agreements not-to-exceed \$7,000,000 and \$900,000 and authorized an increase of \$6,000,000 to an existing agreement
August	7-4	Inland Feeder/SBVMWD Foothill Pump Station Intertie	Authorized an agreement not-to-exceed \$1,300,000
August	7-5	Rialto Pipeline Water Supply Improvements	Awarded \$5,647,405 procurement contract
September	7-1	Upper Feeder Expansion Joint Replacement	Determined the need to continue the emergency action of executing a no-bid contract
September	7-2	Weymouth Administration Building Upgrades	Authorized an increase of \$1,200,000 to an existing agreement and authorized an agreement not-to-exceed \$450,000
September	7-3	Mills Maintenance Building Roof Replacement	Awarded \$287,824 construction contract
September	7-4	Sepulveda Feeder Pump Stations	Authorized an increase of \$690,000 to an existing agreement
September	7-11	District Housing and Property Improvements Program	Authorized an increase of \$8,500,000 to an existing agreement

The previously referenced April 2022 board action appropriated \$600 million to perform work on planned capital projects through the current biennium. In order 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 capital 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 1st Quarter, the board amended the CIP to include a new emergency capital project which addressed a leak that was discovered on the Upper Feeder.

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 \$469.9 million, leaving approximately \$130.1 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 \$49.9 million for work authorized during the 1st Quarter, and approximately \$410 million in previously authorized work from the prior biennium that is to be completed in the current biennium. 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



*Numbers may not sum due to rounding

Information on construction and procurement contracts activities for the 1st Quarter of FY 2022/23 is presented in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 1st Quarter totaled approximately \$22.6 million and primarily reflect construction progress on Colorado River Aqueduct Pumping Plants Overhead Crane Replacement, Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1, CRA Pumping Plants Sump Rehabilitation, Lake Mathews PCCP Rehabilitation Valve Storage Building, MWD HQ Building Fire Alarm & Smoke Control Improvements, Second Lower Feeder PCCP Rehabilitation – Reach 3A, and Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation.

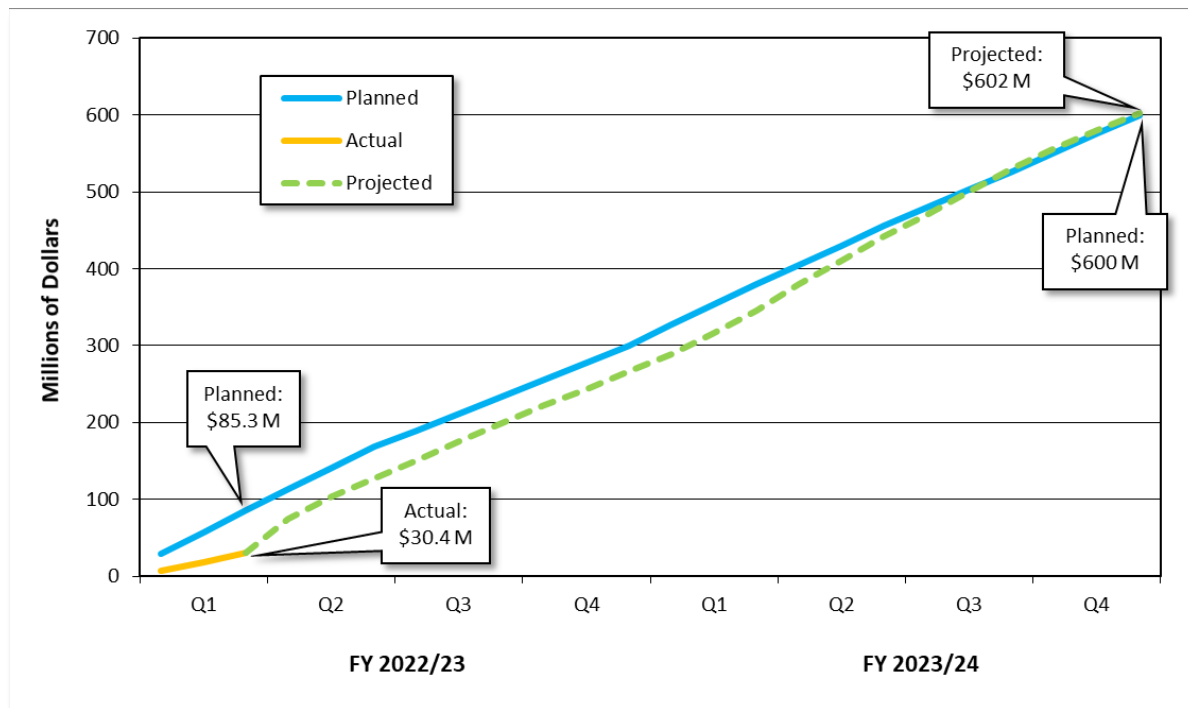
Planned Expenditure and Budget

Table 2 and Figure 3 below show planned and actual expenditures for the biennium through the end of the 1st 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 1st Quarter of FY 2022/23 were approximately 36% of planned expenditures.

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

Quarter	Planned Expenditures (millions)	Actual Expenditures (millions)
FY 2022/23, Q1	\$85.3	\$30.4
Totals	\$85.3	\$30.4

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



As shown in Figure 3, the total planned expenditures in the current biennium are \$600 million. The projected expenditures for the biennium are currently approximately \$602 million with the actual expenditures lower than the planned expenditures during the 1st Quarter of FY 2022/23. However, actual expenditures are projected to be slightly above the planned expenditures at the end of the biennium. This negative variance below the planned expenditures in this quarter is mainly due to concerted effort during the last quarter to accelerate the work that was planned for the 1st Quarter of FY 2022/23, including the work on the drought projects.

Major Capital Programs Overview

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

- Program
- Project Group/Appropriation
- Project

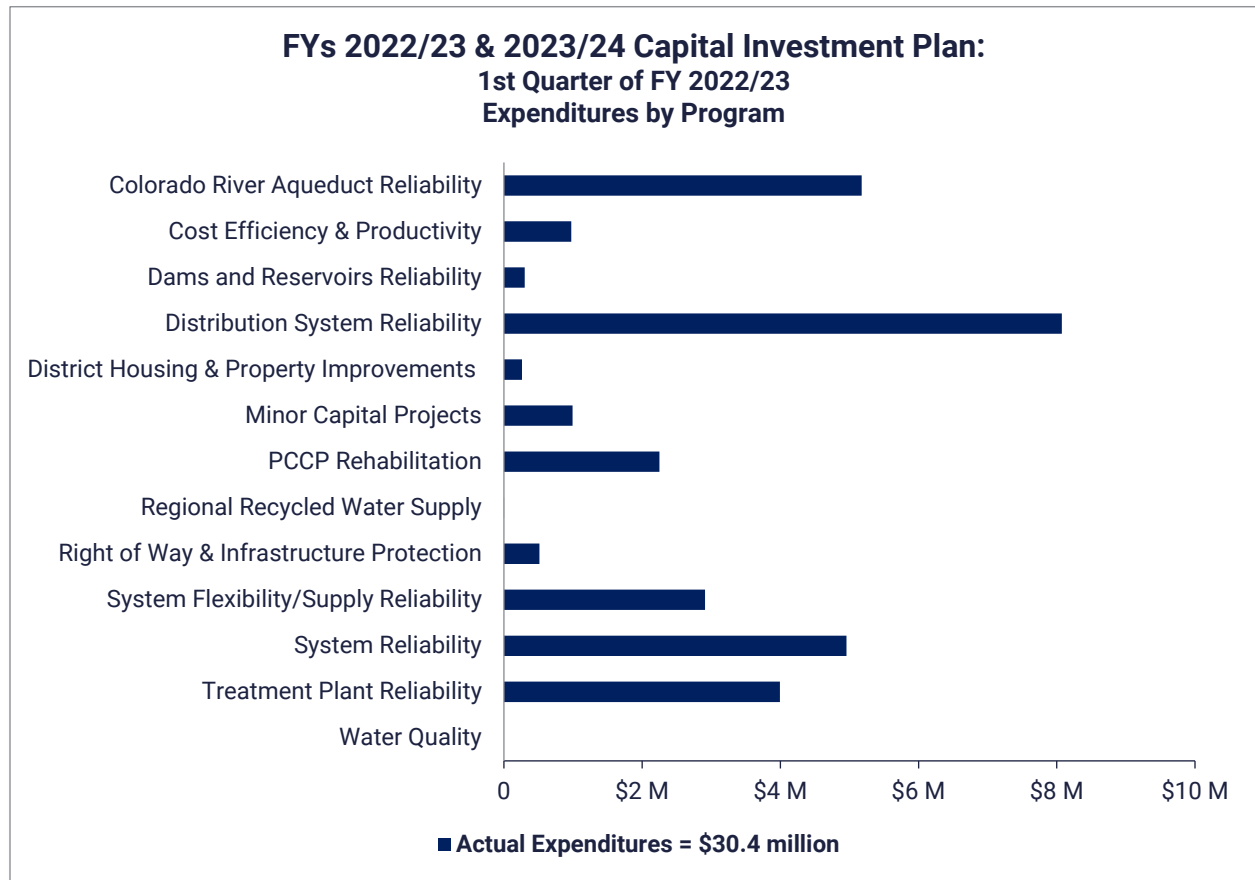
Metropolitan's CIP is comprised of 13 programs, which capture all projects within the CIP. The 13 capital programs are listed below in alphabetical order. Programs are comprised of one or more project groups/appropriations, and project group/appropriations are comprised of one or more projects. The status 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 15 at the end of this report.

Figure 4 below shows actual expenditures for the 13 capital programs for 1st Quarter of FY 2022/23.

Figure 4: Biennium-to-date Actual Expenditures through 1st Quarter FY 2022/23



Major Capital Project Programs – Highlights

The section that follows provides 1st 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 1st 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 Plant Overhead Cranes Replacement
Cost Efficiency & Productivity	Battery Energy Storage System
Dams and Reservoirs Improvements	Garvey Reservoir Rehabilitation
Distribution System Reliability	Casa Loma Siphon Barrel No. 1 Seismic Upgrade
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	Perris Valley Pipeline – Tunnels
System Reliability	La Verne Shops Building Completion – Stage 5
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 Sep. 2022)
\$5.18 million

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

Program Highlights (1st Quarter)

Accomplishments

- Continued construction activities for the following contracts:
 - CRA Domestic Water Treatment System Upgrades at all five pumping plants
 - i) Initiated installation of electrical conduits and pull boxes at Intake Pumping Plant.
 - ii) Initiated and completed excavation for the above-ground conduit support pedestals at Intake and Iron Mountain pumping plants
 - iii) Continued submittals for the water treatment equipment procurement with expected deliveries in two shipments, in late 2022 and early 2024, to coincide with the Domestic Water Treatment System Upgrades construction schedule
 - CRA Mile 12 Flow Meter Upgrades
 - i) Continued installation of above ground electrical conduits and junction boxes
 - ii) Continued installation of security system, solar panel array equipment, and control panels
 - CRA Pumping Plants Overhead Cranes Replacement
 - iv) Completed fabrication of the crane assembly and delivered it to Gene Pumping Plant
 - v) Initiated installation of the crane assembly at Gene Pumping Plant
 - vi) Initiated fabrication of the crane assembly for Eagle Mountain Pumping Plant
 - Gene Wash Reservoir Discharge Valve Structure Rehabilitation
 - vii) All work completed. Contractor has de-mobilized.
- CRA Pumping Plant Sump System Rehabilitation
 - Under Metropolitan's response to COVID-19, suspended on-site construction and continued submittals and fabrication activities
 - Received pump deliveries for Gene Pumping Plants
 - Continued fabrication of remaining pumps, piping, and other materials to be furnished for Hinds Pumping Plant
- CRA Pumping Plant Sump System Equipment Installation
 - Continued final design
- CRA 6.9 kV Power Cable Replacement
 - Continued to evaluate and establish the course of action and construction repackaging options of the remaining outstanding contract work items
- CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
 - Completed Value Engineering workshop to optimize cost savings
- Continued final design of:
 - CRA Conduits Structural Protection upgrades
 - Gene Communication Reliability Upgrades
 - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
- Continued preliminary design of:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - CRA Desert Region Security Improvements
 - Hinds Pumping Plant Discharge Valve Platform Replacement

- CRA Main Transformer Replacement
 - Completed Risk Assessment and Value Engineering workshops
 - Continued preliminary design and preparation of procurement package
- CRA Main Pump Motor Rehabilitation
 - Continued the study to install variable frequency drive pumps at Gene and Intake Pumping Plants
 - Continued preparation of procurement package for the pilot exciter system installation at Gene Pumping Plant
- CRA Pumping Plant Village Utility Replacement
 - Continued final design of Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants
- Hinds and Eagle Mountain Pumping Plants Village Paving Replacement
 - Initiated final design

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction activities planned for the following contracts:
 - CRA Domestic Water Treatment System Upgrades at all five CRA pumping plants
 - CRA Mile 12 Flow Meter Upgrades
 - CRA Pumping Plants Overhead Crane Replacement
- CRA Pumping Plant Sump System Rehabilitation
 - Continue fabrication activities and receive final equipment deliveries for Hinds Pumping Plants
- Continue final design of:
 - CRA Conduits Structural Protection Upgrades
 - Gene Communication Reliability Upgrades
 - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
- Continue preliminary design of:
 - Black Metal Mountain 2.4 kV Electrical Power Upgrades
 - CRA Desert Region Security Improvements
 - Hinds Pumping Plant Discharge Valve Platform Replacement
- CRA Main Transformer Replacement
 - Continue preliminary design and preparation of a procurement package
- CRA Main Pump Motor Rehabilitation
 - Complete the study to install variable frequency drive pumps at Gene and Intake Pumping Plants
 - Continue design of recirculation line up to the connection point at Eagle Mountain Pumping Plant
 - Continue preparation of a procurement package for the pilot exciter system installation at Gene Pumping Plant
- CRA Pumping Plants 2.3 kV Switchrack Rehabilitation
 - Continue study for four CRA pumping plants
 - Continue preliminary design of a pilot project at Iron Mountain Pumping Plant
- CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
 - Initiate final design to incorporate Value Engineering recommendations to the construction bid package
- CRA Conveyance System Flow Level Sensor Installation
 - Initiate final design

CRA Reliability Program:
CRA Pumping Plants Overhead Cranes Replacement

Total Project Estimate:
 \$20.4 million

Total Project Cost to Date:
 \$4.3 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	22%
Construction Contract Awarded	September 2020
Estimated Construction Completion Date	September 2023
Contract Number	1946

The contractor mobilized, removed existing cranes, installed new cranes, and began operational testing at Gene Pumping Plant. In the upcoming quarter, the contractor plans to complete the operational testing at Gene Pumping Plant and mobilize at Eagle Mountain Pumping Plant.



Contractor installing new crane girder at Gene Pumping Plant

Cost Efficiency and Productivity Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.98 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 (1st Quarter)

Accomplishments

- Payroll-Timekeeping Reimplementation
 - Advertised a request for proposal (RFP)

Upcoming Activities

Upcoming work for the next quarter will include:

- Battery Energy Storage Systems at Jensen, Weymouth, and Skinner Plants
 - Continue construction
- WINS Water Billing System Upgrade
 - Continue system upgrade
- Real Property Group Business System Replacement
 - Continue system replacement
- Enterprise Content Management Phase II
 - Advertise an RFP
- Payroll-Timekeeping Reimplementation
 - Authorize an agreement to begin design

Cost Efficiency & Productivity Program: Battery Energy Storage Systems

Total Project Estimate:
\$27.0 million

Total Project Cost to Date:
\$6.7 million

This project will install battery energy storage systems (BESS) at three locations: (1) one-megawatt (MW) BESS at the Jensen plant, (2) one-MW BESS at the Skinner plant, and (3) one-MW BESS at the Weymouth plant. The project is eligible for participation in the Self-Generation Incentive Program (SGIP).

Phase	Construction
% Complete for Construction of Jensen and Skinner	35%
% Complete for Construction of Weymouth	3%
Contract Awarded for Jensen and Skinner	September 2021
Contract Awarded for Weymouth	June 2022
Estimated Construction Completion Date for Jensen and Skinner	November 2024
Estimated Construction Completion Date for Weymouth	July 2023
Contract Number for Jensen and Skinner	1998
Contract Number for Weymouth	2014

Submittal review continued, construction of the fire access road at the Skinner plant continued, and construction of the equipment pads began for the Jensen and Skinner plants. A Notice to Proceed (NTP) was issued to the contractor for Weymouth plant and submittal review began. In the upcoming quarter, the contractor will continue construction of the fire access road at the Skinner plant, continue construction of the equipment pads at the Jensen and Skinner plants, and begin construction of electrical conduits at the Jensen and Skinner plant. At the Weymouth plant, the contractor will mobilize and submittal review will continue.



Contractor excavating equipment pad area at the Jensen plant

Dams and Reservoirs Improvements Program

Actual Biennium Expenditures
(July 2022 through Sep. 2022)
\$0.30 million

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

Program Highlights (1st Quarter)

Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Completed evaluation of RFQ submittals for dam monitoring systems upgrades and identified qualified consultants to support the implementation of the upgrades
- Garvey Reservoir Rehabilitation
 - Completed Value Engineering study to support the preliminary design of the reservoir rehabilitation project
 - Completed evaluation of RFQ submittals for dam monitoring systems upgrades and identified qualified consultants to support the implementation of the upgrades
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - Completed evaluation of RFQ submittals for dam safety engineering services and identified qualified consultants to complete preliminary and final design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Evaluated the structural analysis approach and methodologies proposed by the consultant to perform detailed structural analysis of the outlet tower

Upcoming Activities

Upcoming work for the next quarter will include:

- Diamond Valley Lake Dam Monitoring System Upgrades
 - Establish an agreement with the selected consultant to support implementation of dam monitoring system upgrades
- Garvey Reservoir Rehabilitation
 - Continue preliminary design of the comprehensive reservoir rehabilitation project
 - Establish an agreement with the selected consultant to support implementation of dam monitoring system upgrades
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
 - Establish on-call agreements for dam safety services with qualified consultants and initiate task orders for the preliminary design
- Lake Skinner Outlet Tower Seismic Upgrade
 - Establish project specific agreement with the selected consultant to perform the detailed structural analysis of the outlet tower

Dams and Reservoirs Improvements Program: Garvey Reservoir Rehabilitation

Total Project Estimate:

\$68.5 million

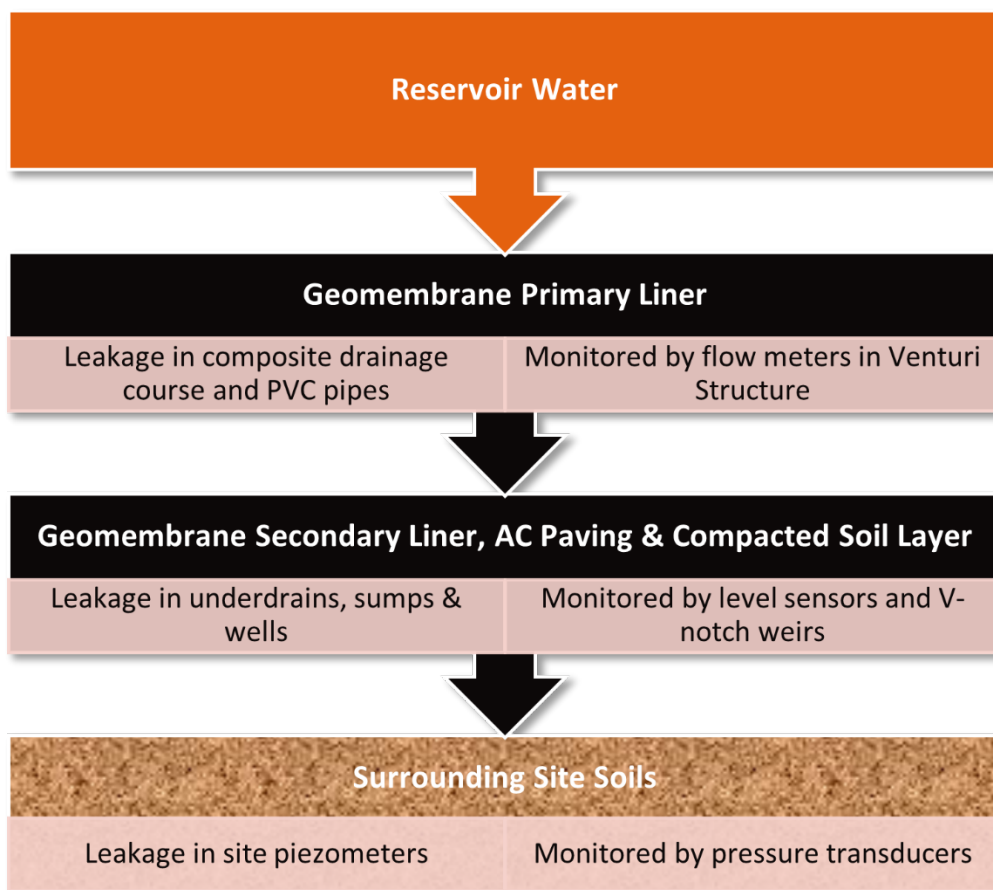
Total Project Cost to Date:

\$2.1 million

This project will refurbish aging facilities at the Garvey Reservoir site and restore them to reliable operating condition.

Phase	Preliminary Design
% Complete for Current Phase	65%
Current Phase Authorized	March 2021
Estimated Preliminary Design Completion Date	February 2023

Metropolitan staff and the design consultant worked on developing the preliminary design report and a value engineering (VE) workshop was completed. A scope for the of the dam monitoring system upgrade was developed and a prequalified consultant was selected for design. In the upcoming quarter, the preliminary design report will be updated with VE recommendations.



Proposed reservoir liner system design for Garvey Reservoir

Distribution System Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$8.07 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, in order to reliably meet water demands.

Program Highlights (1st Quarter)

Accomplishments

- Awarded construction contracts for:
 - Etiwanda Pipeline Lining Rehabilitation – Stage 3
 - Live Oak Reservoir Pipelines Cathodic Protection
- Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing
 - Completed design, fabrication, and installation during a shutdown of the Upper Feeder. The shutdown was completed ahead of schedule.
- Garvey Reservoir Drainage and Erosion Improvements – Areas 6 to 8, 10, and 11
 - Completed construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing
 - Ratify an emergency contract for construction
- Garvey Reservoir Sodium Hypochlorite Feed System Upgrades
 - Complete testing of the upgraded system
- Casa Loma Siphon No. 1 Seismic Upgrade
 - Continue construction

Distribution System Reliability Program: Casa Loma Siphon Barrel No. 1 Seismic Upgrades

Total Project Estimate:
\$37.2 million

Total Project Cost to Date:
\$28.6 million

This project will retrofit the Casa Loma Siphon Barrel No. 1 with earthquake resistant ductile iron pipe (ERDIP) for the estimated Casa Loma Fault seismic displacement, and non-tectonic ground subsidence.

Phase	Construction
% Complete for Construction	65%
Contract Awarded	December 2021
Estimated Construction Completion Date	June 2023
Contract Number	1958

Construction of the north and south barrel of ERDIP was completed and geofoam was installed. In the upcoming quarter, an ERDIP joints pressure testing and ERDIP zone backfill will be completed. Steel pipe installation will continue.



ERDIP to steel pipe transition thrust block construction with concrete temperature control system

District Housing & Property Improvements Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.26 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 (1st Quarter)

Accomplishments

- Completed a board action to amend an existing consulting services agreement to perform final design of the housing, village enhancements, and the kitchen and lodging improvements at four pumping plants – Hinds, Eagle Mountain, Iron Mountain, and Gene Pumping Plants

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue preparation of the environmental documentation in support of the housing and property improvements program
- Initiate an amendment to an existing consulting services agreement to perform final design of the housing, village enhancements, and the kitchen and lodging improvements at four pumping plants – Hinds, Eagle Mountain, Iron Mountain and Gene Pumping Plants
- Initiate final design of the housing, village enhancements, and the kitchen and lodging improvements at Hinds and Eagle Mountain Pumping Plants

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$2.25 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 (1st Quarter)

Accomplishments

- Second Lower Feeder:
 - Reach 3A – Approved contractor submittals and initiated materials procurement for construction, which will reline approximately 1.2 miles of pipeline from Oak Street Pressure Control Structure south through City of Rolling Hills Estates to the Palos Verdes Reservoir
 - Reach 3B – Completed design and advertised construction specifications, which will reline approximately 3.6 miles of pipeline from the intertie with Sepulveda Feeder south to Oak Street PCS, through the cities of Torrance, Los Angeles, and Lomita, and will replace three 48-inch diameter sectionalizing valves at the intertie with Sepulveda Feeder
 - Isolation Valve Procurement – Continued fabrication of the sixth through tenth of the thirteen large-diameter conical plug valves and actuators. Worked with the manufacturer to schedule the shipment of completed valves until PCCP Rehabilitation Valve and Equipment Storage Building is completed.
- Allen-McColloch Pipeline:
 - Continued preliminary design for rehabilitation, including identification of proposed pipe access excavation pits for approximately nine miles of PCCP
 - Continued evaluating a member agency partnership proposal that may facilitate rehabilitation work
- Sepulveda Feeder Reach 1 – Continued final design to rehabilitate approximately three miles of Sepulveda Feeder 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. Work includes preparation of final design drawings, traffic control plans, and permitting.
- Sepulveda Feeder Reach 2 – Continued final design to rehabilitate approximately 3.8 miles of Sepulveda Feeder from the Dominguez Gap Channel crossing south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles. Work includes preparation of final design drawings, traffic control plans, and permitting.
- Sepulveda Feeder North Reach – Obtained board authorization to amend an existing engineering services agreement to conduct a detailed evaluation and to complete preliminary design for the northern 20-mile portion of the Sepulveda Feeder, including both steel and PCCP portions of the pipe and appurtenances.
- PCCP Rehabilitation Valve and Equipment Storage Building – Began construction of concrete foundation and fabrication of the pre-engineered metal building for a new valve storage building at Lake Mathews. This building will safely store large-diameter valves and actuators to support the PCCP Rehabilitation Program.
- Calabasas Feeder – Received board authorization for an engineering services agreement to complete preliminary design work the relining of the entire approximately nine-mile-long Calabasas Feeder PCCP line.

Upcoming Activities

Upcoming work for the next quarter will include:

- Second Lower Feeder:
 - Reach 3A – Begin installation of temporary traffic controls and pipe access shaft excavations
 - Reach 3B – Open bids and prepare a board letter to award a construction contract
 - Isolation Valve Procurement – Receive delivery of two 54-inch conical plug valves in November 2022.
- Allen-McColloch Pipeline – Complete preliminary design
- Sepulveda Feeder South Reaches 1 and 2 – Continue developing final designs and initiate permitting process for long-lead permits from Caltrans, City of Los Angeles, and City of Torrance
- Sepulveda Feeder North Reach – Initiate preliminary design
- PCCP Rehabilitation Valve and Equipment Storage Building – Complete storage building foundations and site work including drainage improvements and utilities
- Calabasas Feeder – Continue preliminary design

PCCP Rehabilitation Program:
Second Lower Feeder PCCP Rehabilitation –
Reach 3B

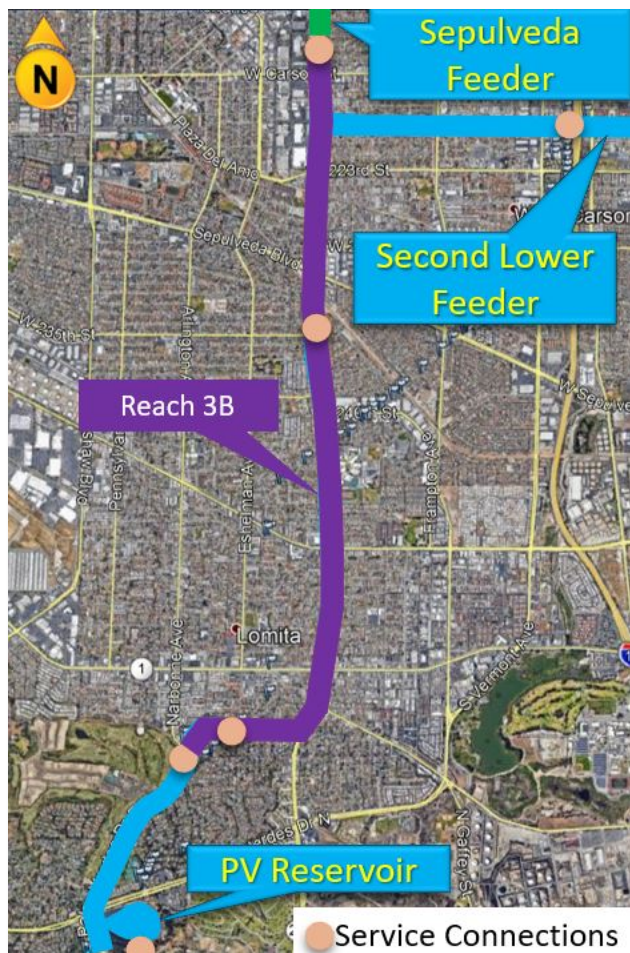
Reach 3B Total Project Estimate:
 \$68.0 million

Reach 3B Total Project Cost to
Date:
 \$13.7 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 Torrance, Los Angeles, and Lomita.

Phase	Final Design
% Complete for Current Phase	99%
Current Phase Authorized	January 2015
Final Design Completion Date	September 2022

Reach 3B construction bid package was completed and advertised. In the upcoming quarter, a board letter to award a construction contract will be prepared.



Second Lower Feeder Reach 3B project location – in the cities of Torrance, Los Angeles, and Lomita

Regional Recycled Water Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.03 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 (1st Quarter)

Accomplishments

- Advanced Water Treatment Demonstration Facility
 - Obtained approval from the Division of Drinking Water (DDW) for the secondary membrane bioreactor (MBR) testing and monitoring plan
 - Obtained Southern California Air Quality Management District (SCAQMD) permit to operate the demonstration facility with a capacity of up to 1 million gallons per day (MGD)
 - Replaced MBR and reverse osmosis (RO) membranes and installed additional system/site improvements to prepare for secondary MBR testing
 - Coordinated with the independent scientific advisory panel to review Phase 1 draft testing report
- Direct Potable Reuse Demonstration Facility
 - Continued study and developed draft technical memoranda to identify potential studies for testing future direct potable reuse (DPR) processes

Upcoming Activities

Upcoming work for the next quarter will include:

- Advanced Water Treatment Demonstration Facility
 - Continue coordination with the State Water Resources Control Board to submit final reimbursement invoice as part of the grant funding agreement
 - Finalize Phase 1 testing report
 - Continue post-construction contract improvements to enhance safety and operational reliability of the AWT
 - Initiate secondary MBR testing
- Direct Potable Reuse Demonstration Facility
 - Continue study and prepare framework to modify the AWT Demonstration Facility to allow testing of future direct potable reuse processes

Right-Of-Way and Infrastructure Protection Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.51 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 in order to address access limitations, erosion-related issues, and security needs.

Program Highlights (1st Quarter)

Accomplishments

- Western San Bernardino County – Stage 1
 - Continued construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Western San Bernardino County Region – Stage 2
 - Continue final design
- Riverside and San Diego County Region – Stage 2
 - Continue final design for two urgent repair sites along San Diego Pipelines 4 & 5

System Flexibility/Supply Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$2.91 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 (1st Quarter)

Accomplishments

- Secured passage of legislation to allow Metropolitan to utilize progressive design-build delivery for drought related projects
- Completed evaluation of the West Service Area Supply Reliability Improvements consisting of the following individual projects:
 - West Area Supply and Delivery Alternatives
 - Drought Response West Side Pump Station
- Rialto Pipeline Water Supply Reliability Improvements
 - Awarded a contract to procure large diameter isolation valves
- Sepulveda Feeder Pump Stations
 - Authorized increase of an existing agreement for an owner's advisor services to assist with the preparation of a progressive design-build contract
- Wadsworth Pumping Plant – Eastside Pipeline Intertie
 - Completed final design and advertised

Upcoming Activities

- Perris Valley Pipeline Tunnels
 - Open bids to award a construction contract Q3 of FY 2022/23
- Wadsworth Pumping Plant – Eastside Pipeline Intertie
 - Award a construction contract
- Rialto Pipeline Water Supply Reliability Improvements
 - Continue design of the following individual projects that make up the improvements effort:
 - Wadsworth Pumping Plant – Eastside Pipeline Intertie
 - Wadsworth Pumping Plant Stage 2 – Badlands Tunnel Surge Tank Facility
 - Inland Feeder/Rialto Pipeline Intertie
 - Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Pump Station Intertie

System Flexibility/Supply Reliability Program: Perris Valley Pipeline – Tunnels

Total Project Estimate:
\$79.3 million

Total Project Cost to Date:
\$7.1 million

This project will connect northern and southern reaches of Perris Valley Pipeline by micro-tunneling and constructing approximately 3,000 linear feet of 97-inch diameter welded steel pipe. The project will also construct four access shafts, cathodic protection test stations, and geotechnical instrumentation and monitoring equipment.

Phase	Final Design
% Complete for Current Phase	100%
Current Phase Authorized	January 2010
Final Design Completion Date	June 2022

The construction bid package was advertised and a mandatory pre-bid meeting was conducted. Negotiations continued with March Joint Powers Authority and Caltrans to obtain the necessary easements and permits prior to the start of construction. In the upcoming quarter, bids for the construction bid package is scheduled to be opened for award during the following quarter.



Example of micro-tunneling technology that will be used for the Perris Valley Pipeline – Tunnels project

System Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$81.30 million

Program Information: The System Reliability Program is comprised of projects to improve or modify facilities located throughout Metropolitan's service area in order 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 (1st Quarter)

Accomplishments

- Asset Management and Monitoring System
 - Released pre-production revenue meter dashboard
- Datacenter Backup Infrastructure Upgrade
 - Advertised request for proposal (RFP)
- Desert Microwave Site Tower Upgrades
 - Continued preparation of design
- Fuel Management System Upgrade
 - Installed fuel management units at ten facilities along with corresponding equipment to facilitate fueling in several hundred vehicles
- Headquarters Fire Alarm & Smoke Control Upgrades
 - Completed fire alarm system portion of the upgrade work
- Skinner Facility Area Paving
 - Completed construction

Upcoming Activities

Upcoming work for the next quarter will include:

- Applications-Servers Upgrade
 - Continue to migrate and upgrade applications in batches
- Control System Upgrade – Phase 3
 - Begin pilot project at Mills Water Treatment Plant
- Headquarters Fire Alarm & Smoke Control Upgrades
 - Begin work on the smoke control portion of the project
- Headquarters Security Upgrade Stage 2
 - Continue installation of new interior building security features
- Maximo Mobile Upgrade
 - Continue deployment of devices to field staff
- MWD Cyber Security Upgrade
 - Continue deployment of secure web gateway software to MWD-owned workstations and laptops
 - Continue deployment of privileged access management software to MWD-owned workstations, laptops, and servers

System Reliability Program: La Verne Shops Building Completion – Stage 5

Total Project Estimate:
\$27.9 million

Total Project Cost to Date:
\$4.4 million

This project will procure and install new fabrication and machine shop equipment, including a hydraulic shear, hydraulic press brake, waterjet cutting system, horizontal band saw, and vertical milling center and complete building and utility improvements for several shop buildings on the grounds of the Weymouth plant.

Phase	Construction
% Complete for Current Phase	6%
Construction Contract Awarded	May 2022
Estimated Construction Completion Date	May 2024
Contract Number	1885

The contractor mobilized and prepared submittals for review. Construction of temporary protective containment walls for machine shop equipment began. These walls will protect the machines during construction. In the upcoming quarter, the contractor will complete the containment walls and begin refurbishing machine shop walls.



Construction of containment wall structure for vertical machine area

Treatment Plant Reliability Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$89.26 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 in order to continue to reliably meet treated water demands.

Program Highlights (1st Quarter)

Accomplishments

- Continued preliminary design of:
 - Diemer Filter Rehabilitation
 - Jensen Reservoir Bypass Gate Replacement
 - Water Quality Laboratory Upgrades
- Continued construction of:
 - Jensen Ozone PSU Replacement – Stage 1
 - Mills Electrical Upgrades – Stage 2
 - Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades
 - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Diemer Power and Distribution Panel Upgrade
 - Continued equipment procurement
- Jensen Ozone PSU Replacement – Stage 1
 - Received delivery of power supply units (PSU) and dielectrics
- Weymouth Administration Building Upgrades
 - Obtained board authorization of two agreements for final design and field investigation

Upcoming Activities

Upcoming work for the next quarter will include:

- Continue preliminary design of:
 - Diemer Filter Rehabilitation
 - Jensen Reservoir Bypass Gate Replacement
 - Water Quality Laboratory Upgrades
 - Mills Perimeter Security & Erosion Control Improvements
- Continue construction of:
 - Jensen Ozone PSU Replacement – Stage 1
 - Mills Electrical Upgrades – Stage 2
 - Mills Module Nos. 3 and 4 Flash Mix Chemical Containment Upgrades
 - Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
- Diemer Power and Distribution Panel Upgrade
 - Continue equipment procurement
- Diemer Washwater Reclamation Plant Improvements
 - Begin preliminary design to stabilize the slope next to the existing washwater reclamation plant
- Weymouth Administration Building Upgrades
 - Begin final design

Treatment Plant Reliability Program: Mills Electrical Upgrades – Stage 2

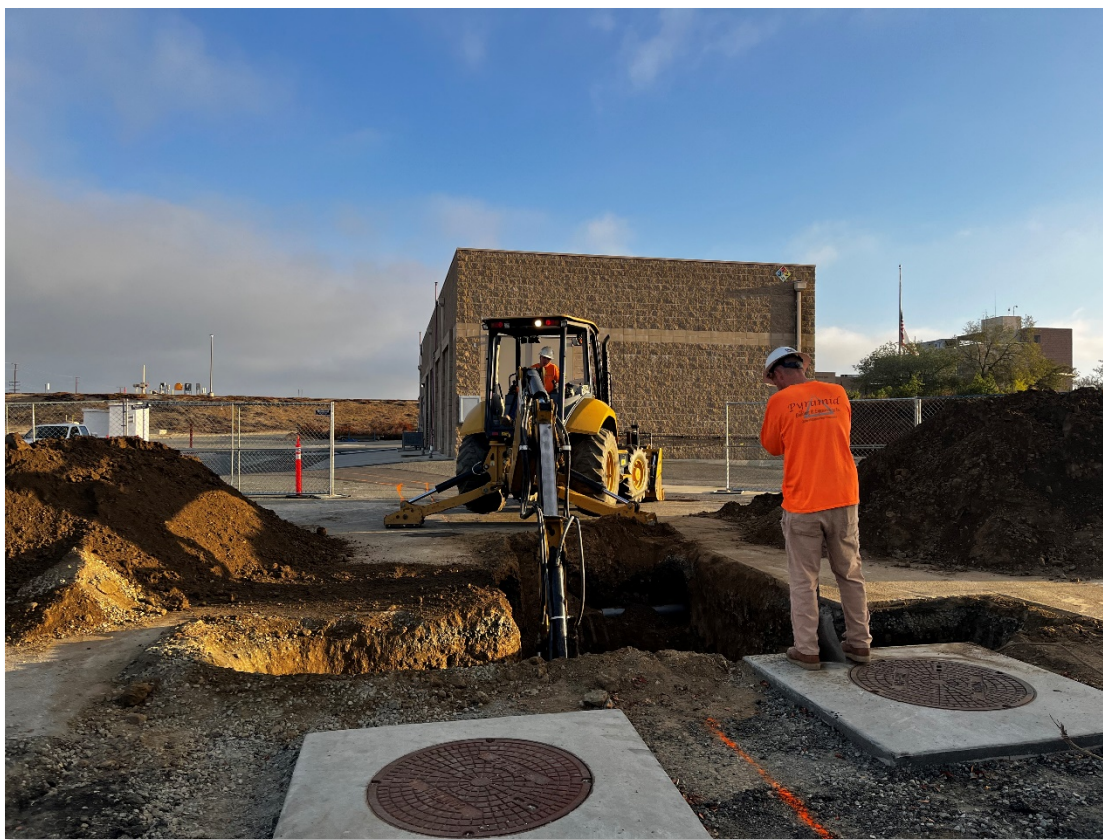
Total Project Estimate:
\$18.5 million

Total Project Cost to Date:
\$4.0 million

This project will add a second incoming 12 kV 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 & Closeout
% Complete for Construction	17%
Construction Contract Awarded	November 2021
Construction Completion Date	January 2025
Contract Number	1990

The contractor completed excavation, conduit installation, and backfill of the new Riverside Public Utility (RPU) electrical accessway structures and duct banks. Demolition of the 4160 V cable between the ozone switchgear and Unit Power Center 12 was completed. In the upcoming quarter, the contractor will relocate Accessway No. A48 in preparation of the ozone switchgear building expansion and continue construction of the new RPU switchyard.



Excavating to construct electrical ductbanks A-1 and A-2 at Mills plant

Water Quality Program

Actual Biennium Expenditures
(Jul. 2022 through Sep. 2022)
\$0.33 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 (1st Quarter)

Accomplishments

- Mills Enhanced Bromate Control Facilities
 - Continued final design

Upcoming Activities

Upcoming work for the next quarter will include:

- Mills Enhanced Bromate Control Facilities
 - 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. In order 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.

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.

Table 4: Minor Capital Projects Program

	Fiscal Year				Totals
	2016/17– 2017/18	2018/19– 2019/20	2020/21– 2021/22	2022/23– 2023/24	
Amount Appropriated	\$10M	\$15.5M	\$20M	\$10M	\$55.5M
Expenditures (through September 2022)	\$7.2M	\$11.7M	\$7.1M	\$0.3M	\$26.3M
Number of Projects Approved	41	48	54	11	154
Number of Projects Completed (through September 2022)	40	33	4	0	77
Number of Projects with Durations of Over 3 Years	1	6	0	0	7

Through September 2022, 77 of the 154 projects have been completed, and seven active projects have exceeded three years in duration, as described below.

- Garvey Reservoir Sodium Hypochlorite Tank Replacement has experienced delays due to the Texas deep freeze event, which caused power and resin supply chain disruptions in 2021, and delivery of the new tank was delayed. The tank was delivered in July 2022. Metropolitan force construction will complete tank installation by December 2022.
- Gene Inlet Surge Chamber Access Improvement has experienced delays due to re-scheduling of the installation of recently fabricated hatch cover, which can only occur when Gene Wash Reservoir water level is lowered. Metropolitan force construction plans to complete the hatch cover installation during the 2023 CRA shutdown and complete the project by April 2023.
- Gene Pool Refurbishment has experienced delays due to 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 December 2022.
- Jensen Ozone Diffuser Reliability Upgrades has been completed and the project is scheduled to be closed in November 2022, upon payment of pending invoices and completion of record drawings.
- Lower Feeder Blow-Off Drain Line Replacement experienced delays in obtaining Caltrans permit for Highway 90. Construction has started and the project is scheduled to be completed by April 2023.
- OC-88 Fire Protection System Upgrades started construction in late 2021, however, the contract was terminated as a result of the contractor's debarment by the State of California's Department of Industrial Relations. A new contract has been awarded, and the project is scheduled to be completed by November 2022.
- San Diego Pipeline No. 2 Access Road Relocation was originally advertised for bids in November 2020 to be constructed by a contractor, but construction did not start in Spring 2021 as planned due to COVID-19 pandemic restrictions and the contract was terminated. Metropolitan forces have completed construction and the project will be closed by December 2022.

Actual biennium expenditures to date (July 2022 through September 2022) for the Minor Capital Projects Program were \$0.99 million.

Minor Cap Projects, 1st Quarter

Authorized Projects

Eleven projects were authorized under the Minor Cap Program during the 1st Quarter of fiscal year 2022/23 (July through September 2022). The total amount authorized for these projects was \$2,921,087:

- Conveyance and Distribution SCADA Network Switch and Router Replacement – This project will procure and replace network switches and routers for Metropolitan's control system network in Conveyance and Distribution (C&D) locations, which includes Operations Control Center and Diemer, Skinner, Weymouth, and Jensen Water Treatment Plants, that are either no longer supported by the manufacturers or the support is soon to end. The project budget is \$392,954.
- Jensen Chemical Flow Meter Replacement – This project will replace 26 chemical flow meters at the Jensen plant, which have exceeded their service life and are difficult to read due to deterioration of the meter display caused by prolonged sun exposure. The project budget is \$397,133.
- Jensen Chlorine Ejector System Pipe Replacement – This project will replace the existing chlorine service water and solution piping for the chlorine ejector system at the Jensen plant, which has exceeded its service life, to maintain chlorine system reliability. The project budget is \$68,000.
- Jensen Modules 2 and 3 Filter Surface Wash Valve Replacement – This project will replace four leaky filter surface wash valves for Filter Nos. 24, 28, 31, and 40 and install new couplings downstream of the valves to improve access for maintenance. The project budget is \$144,000.
- Mills Sodium Hypochlorite Storage System Improvements – This project will procure and install mechanical, electrical, and instrumentation equipment to place two existing spare sodium hypochlorite storage tanks into service to enhance water treatment reliability. The project budget is \$365,000.

- Mills WTP Wildlife Barrier Screen Installation – This project will provide primary and secondary exclusion screens at the Mills plant to prevent wildlife entry into the water treatment process, consistent with California Health & Safety provisions. The project budget is \$385,000.
- Sepulveda PCS to Venice PCS Valve Replacement – This project will replace 16 valves ranging in size from 4 to 6 inches on the Sepulveda Feeder between Sepulveda Pressure Control Structure (PCS) and Venice PCS, which have exceeded their service life. The project budget is \$350,000.
- Skinner Plant Lighting Upgrades – This project will replace obsolete low-pressure sodium light fixtures that are used to illuminate the plant with new LED light fixtures, which are brighter, use less power, and require less maintenance, to increase visibility and enhance safety. The project budget is \$335,000.
- Skinner Plant 1 UPS Upgrades – This project will replace nine existing 15-year-old uninterruptible power supply (UPS) units for Skinner Plant 1 with new UPS units that are easier to operate and maintain. The project budget is \$240,000.
- Water Quality Laboratory Walk-In Refrigerator Replacement – This project will procure and replace the main components of the existing source water microbiology/pathogen analysis walk-in refrigerator at Metropolitan Water Quality Laboratory in La Verne, which have been in service for over 27 years and have exceeded their service life. The project budget is \$199,000.
- WB-06A Flow Meter Replacement – This project will replace the electromagnetic flow meter at the WB-06A service connection, which is no longer supported by the manufacturer, to enhance system reliability. This project will also replace flow meter transmitter and power/signal cables. The project budget is \$50,000.

Completed Projects

Four projects were completed under the Minor Cap Program during the 1st Quarter of fiscal year 2022/23 (July through September 2022):

- Irvine Regulating Structure Sump Drain Line Modification
- Mills Industrial Wastewater Handling Facility Improvements
- OC-88 Pump Station PLC Upgrade
- Water Quality HVAC Energy Management Upgrade

Cancelled Projects

- None

Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 1st Quarter of FY 2022/23, through the authority delegated by the Board in April 2022. The total funding amount authorized during the 1st Quarter is \$49,870,000 through eighteen management actions. In some cases 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 1st Quarter

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Calabasas Feeder PCCP Rehabilitation ¹	Additional Preliminary Design	\$553,000	\$1,500,000
CIP Budgeting System SharePoint Enhancements	Design, Development, and Deployment	\$200,000	\$200,000
CRA Utility Replacement – Eagle Mountain Pumping Plant ²	Additional Final Design	\$753,000	\$753,000
CRA Utility Replacement – Hinds Pumping Plant ³	Additional Final Design	\$807,000	\$807,000
Diamond Valley Lake and Skinner Area Flow Meter Replacement	Study	\$100,000	\$100,000
Eagle Mountain Pumping Plant Village Pavement Replacement	Preliminary Design and Final Design	\$120,000	\$120,000
Etiwanda Pipeline North Relining – Stage 3	Construction	\$33,000,000	\$33,000,000
Hinds Pumping Plant Village Pavement Replacement	Preliminary Design and Final Design	\$120,000	\$120,000
Hollywood Tunnel North Portal Equipment Upgrades	Final Design	\$1,304,000	\$1,375,000

¹ Additional funds were required to finalize preliminary design including identifying construction reaches, identifying isolation locations, determining construction packaging and sequencing determining locations and evaluating pipe access sites, developing shutdown requirements, and evaluating construction impacts to the community.

² Additional final design funds were required to perform additional utility investigation and hydraulic analysis for the Eagle Mountain Site and to revise design to incorporate desert housing project improvements features.

³ Additional final design funds were required to perform additional utility investigation and hydraulic analysis for the Hinds Site and to revise design to incorporate desert housing project improvements features.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Inland Feeder/SBVMWD Foothill Pump Station Intertie	Preliminary Design	\$998,000	\$998,000
Iron Mountain Transformer Bank Projection Relays Replacement	Final Design and Procurement	\$600,000	\$600,000
Lake Mathews Administration and Warehouse Building Roof Upgrade	Study, Preliminary Design, and Final Design	\$240,000	\$240,000
Lower Feeder Air Entrainment Improvement	Study	\$410,000	\$450,000
Oracle Database Upgrade	Design, Development, and Deployment	\$1,200,000	\$1,980,800
Replacement of Network Switches at MWD Headquarters Building	Design, Development, and Deployment	\$25,000	\$2,750,000
Sepulveda Feeder PCCP Rehabilitation ⁴	Additional Preliminary Design	\$6,500,000	\$6,500,000
Sepulveda Feeder West Area Water Supply Reliability Pipeline Improvements	Preliminary Design	\$2,000,000	\$2,000,000
Upper Feeder Expansion Joint Replacement	Final Design	\$900,000	\$900,000
	Total	\$49,870,000	\$64,393,800

⁴ Additional funds were required for detailed preliminary design activities including updated geotechnical and subsurface utility investigations, survey, environmental planning, and permitting to comply with the updated pipeline access safety criteria for the northern 20-mile portion of the Sepulveda Feeder PCCP portions.

Table 6 lists capital projects which were authorized during the previous biennium with an unfunded portion of authorized work remaining to be funded at the end of the biennium, as the work authorized was scheduled to extend beyond the biennium. The unfunded portion of these projects were funded from Appropriation 15525 at the start of the current biennium.

Table 6: Previously Authorized Capital Projects Funded from Appropriation No. 15525

Project	Amount Authorized for Current Biennium
Applications-Servers Upgrade from Old Windows Operating Systems	\$3,040,609
Arc Flash Software Model Development	\$12,000,000
Battery Energy Storage System at Jensen, Skinner, and Weymouth Water Treatment Plants	\$18,578,521
Black Metal Mountain 2.4 kV Power Upgrade	\$533,000
Cabazon Radial Gate Facility Upgrades	\$1,440,000
Casa Loma Siphon No. 1 Seismic Upgrades	\$12,506,000
CRA Conduit Erosion Control Improvements	\$4,600,000
CRA Pumping Plants 6.9 kV Power Cables Replacement	\$600,000
CRA 6.9 kV Power Cable Replacement Units 6 to 9	\$1,550,000
CRA Desert Region Security Improvements	\$1,430,000
CRA Domestic Water Treatment System Upgrades	\$39,300,000
CRA Pumping Plant Sump Rehabilitation	\$16,000,000
CRA Pumping Plants Crane Improvement	\$9,270,100
Datacenter Backup Infrastructure Upgrade	\$788,072
Datacenter Modernization Relocation	\$1,166,819
Desert Housing Improvements	\$300,000
Desert Microwave Tower Sites Upgrades (Phase 1 of 2)	\$3,676,000
Diemer Chemical Feed System Improvements	\$3,268,000
Diemer Filter Rehabilitation	\$1,232,000
Diemer Power and Distribution Panel Upgrades	\$1,065,000
Direct Potable Reuse Demonstration Facility	\$1,500,000
Districtwide Near Zero and Zero Emissions Fleet Infrastructure	\$133,000

Project	Amount Authorized for Current Biennium
Drought Response Westside Pump Station	\$175,000
East Lake Skinner Bypass and Bypass No. 2 Screening Structure Upgrade	\$75,000
Etiwanda Pipeline North Relining – Stage 3	\$6,675,000
Garvey Hypochlorite Feed System Upgrades	\$75,000
Greg Avenue Pump Station Rehabilitation	\$1,270,910
Headquarters Fire Alarm and Smoke Control Upgrades	\$9,000,000
Hinds Transformer Bank Protection Relays Replacement	\$676,000
Inland Feeder/Rialto Pipeline Intertie	\$916,000
Iron Mountain and Gene Pumping Plant Utility Replacement	\$3,500,000
Iron Mountain Pumping Plant Station and Lighting Switchrack Rehabilitation	\$1,200,000
Jensen Electrical Upgrades Stage 3	\$2,660,000
Jensen Solids Mechanical Dewatering Facility	\$5,000
Jensen Ozone PSUs Replacement – Stage 2	\$222,000
Jensen Ozone PSUs Replacement - Stage 1	\$3,938,897
Jensen Reservoir Bypass Gate Refurbishment	\$374,000
Jensen Sulfuric Acid Tank Rehabilitation	\$251,000
La Verne Machine and Fabrication Shop Equipment Design and Procurement	\$87,600
La Verne Shops - Stage 5 Buildings Completion & Equipment Procurement	\$24,172,800
La Verne Water Quality Laboratory Upgrades	\$7,120,000
Lake Mathews Wastewater System Replacement	\$144,020
Lake Skinner Pipelines Cathodic Protection	\$74,200
Live Oak Reservoir Asphalt Liner Replacement	\$60,000
Mills Electrical Upgrades – Stage 2	\$10,700,000
Mills Plant Control System Upgrade	\$19,705,000
OC-88 Pumping Plant Chillers Replacement	\$4,100,000

Project	Amount Authorized for Current Biennium
Orange County and Riverside/San Diego County Operating Regions Valve Replacement	\$693,600
Orange County Feeder Relining - Reach 3	\$21,400,000
PCCP Rehabilitation Valve Storage Building	\$6,300,000
Payroll and Timekeeping System Upgrade	\$1,420,000
San Diego Canal Radial Gate Replacement	\$1,679,000
Second Lower Feeder PCCP Rehabilitation Remaining Budget	\$7,000,000
Second Lower Feeder PCCP Rehabilitation - Reach 3A	\$19,100,000
Sepulveda Feeder PCCP Rehabilitation - Reach 1	\$1,220,000
Sepulveda Feeder PCCP Rehabilitation - Reach 2	\$1,344,868
Skinner Facility Area Paving	\$1,000,000
Upgrades at Three Sepulveda Feeder Structures	\$4,650,000
Wadsworth Pumping Plant Stage 2 - Badlands Tunnel Surge Tank Facility	\$1,340,000
Water Information System	\$1,175,000
West Area Supply and Delivery Alternatives	\$175,500
Western San Bernardino County Operating Region Erosion Control Improvements – Stage 1	\$662,898
Western San Bernardino County Operating Region Erosion Control Improvements - Stage 2	\$667,000
Weymouth Treatment Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	\$109,000,000
Total:	\$409,982,414

CEQA Determinations

Table 7 lists CEQA exemption determinations made by the General Manager during the 1st Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2020. 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 heard in closed session.

Table 7: CEQA Exemption Determinations

Projects
Iron Mountain Pumping Plant Station and Lighting Switchrack Replacement
Hinds Village Paving Replacement
Inland Feeder Foothill Pump Station - Geotech Investigation
San Diego Pipeline No. 1 Rainbow Tunnel Rehabilitation

Construction and Procurement Contracts

The table below summarizes the status of all construction and procurement contracts that were active during the reporting quarter. These contracts are listed in Table 9, Table 11, and Table 12. Total contract earnings for the 1st Quarter were approximately \$41,702,349. Tables in this section exclude contracts for minor capital projects.

Table 8: 1st Quarter Contract Action

Contract Actions during Q1 for FY 2022/2023, July 2022 through September 2022	
Contracts Awarded by Board	2 construction contracts totaling \$26.26 million (Table 10) 1 procurement contract totaling \$5.65 million (Table 10)
Total Payments Authorized	\$22.56 million
Construction Contracts Completed	Notice of Completion was filed for 5 construction contracts (Table 9)
Procurement Contracts Delivery Completed	Delivery of all items completed for 1 procurement contract (Table 12)
Active Contracts at end of Q1 ⁵	25 construction contracts, totaling \$370.89 million (Table 11) 15 procurement contracts, totaling \$71.01 million (Table 12) \$441.90 million total value*

*Numbers may not sum due to rounding

The figures on the next two pages show the locations of the twenty-five construction contracts that were active through the end of the 1st Quarter.

⁵ Active contracts at the end of the 1st Quarter are those that are ongoing at the end of September 2022. In other words, contracts completed during the reporting quarter are excluded.

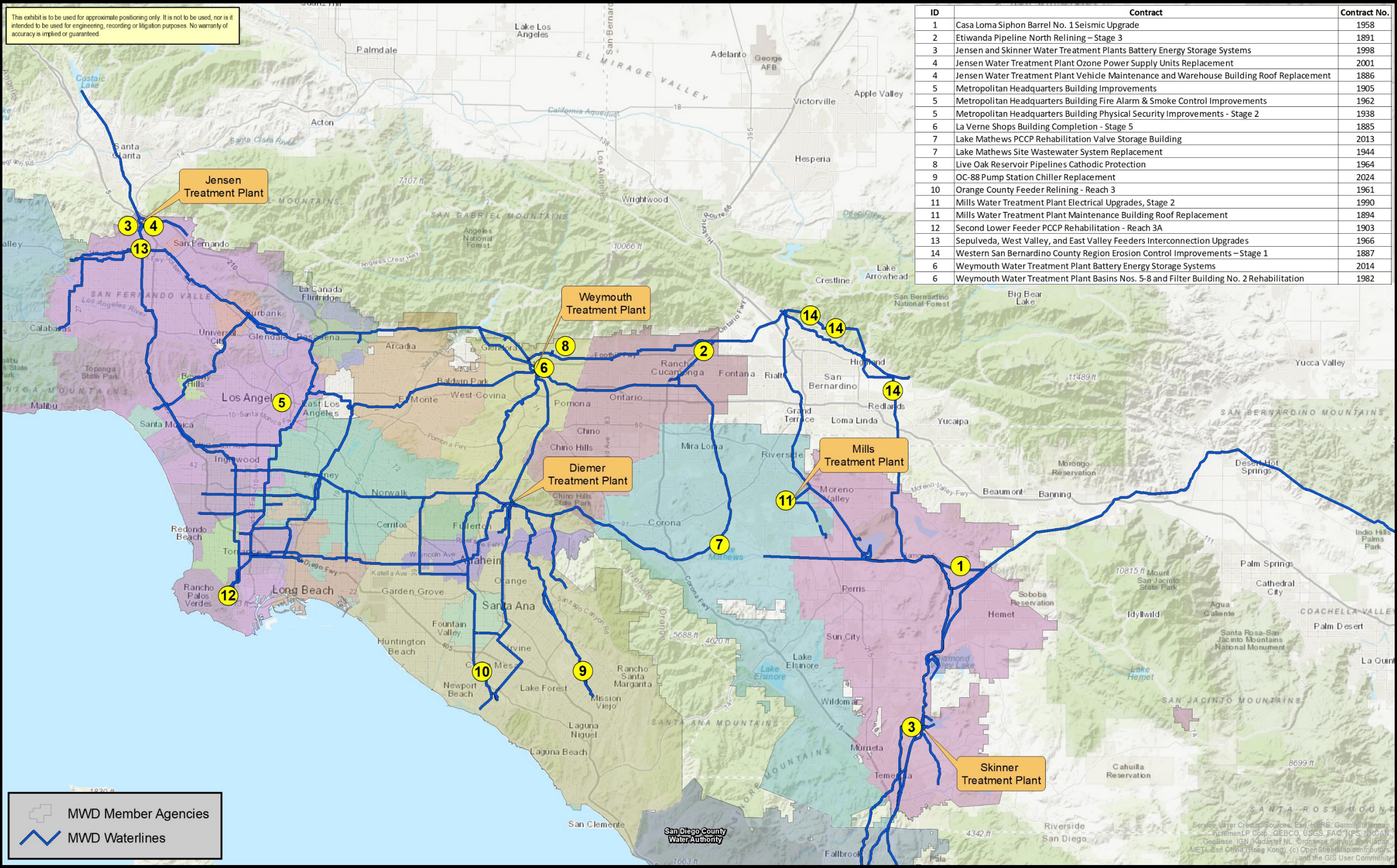


Figure 5: Construction Contracts – Greater Los Angeles Region

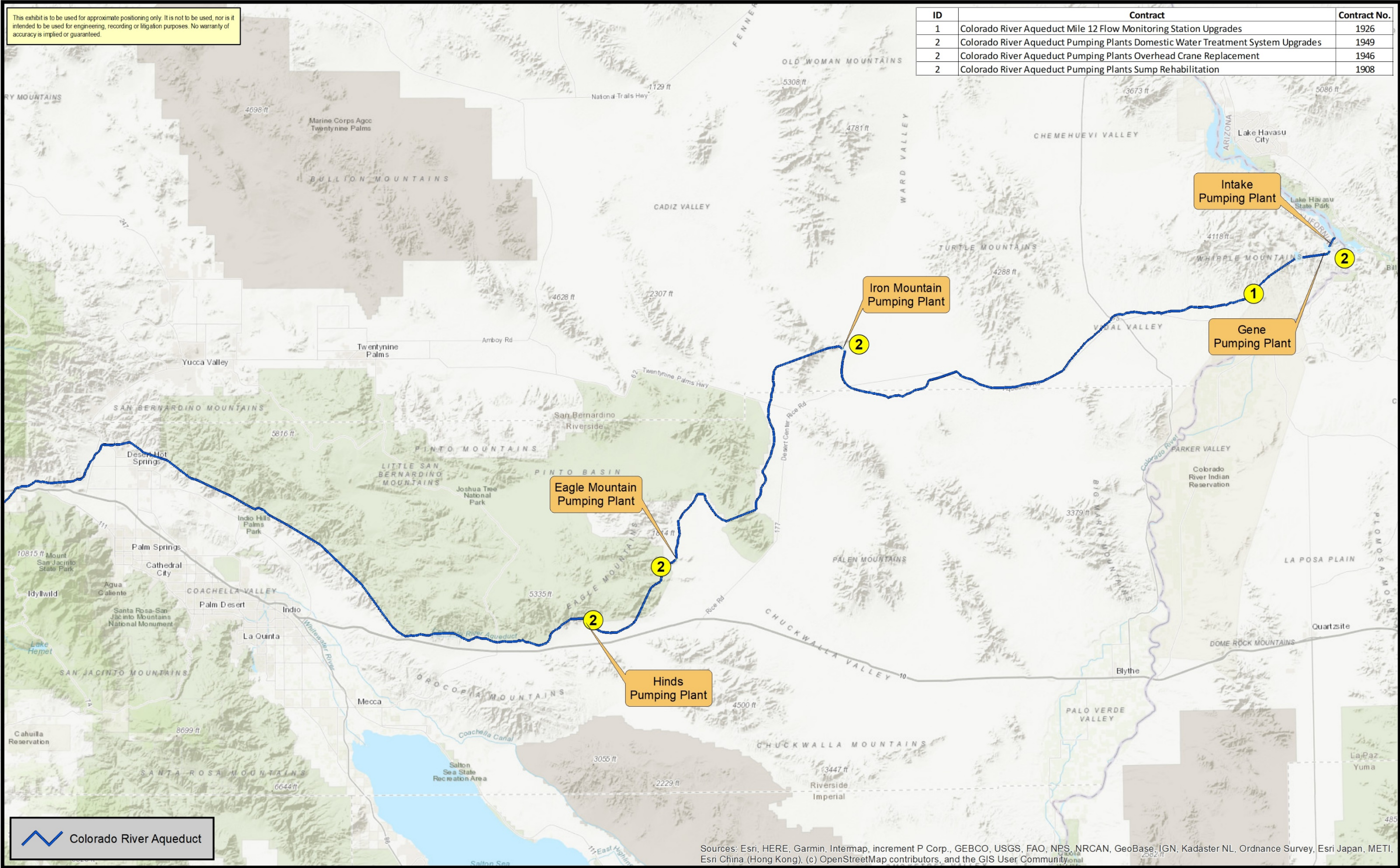


Figure 6: Construction Contracts – Colorado River Aqueduct

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 1st Quarter, the Board did not authorize any increases to the General Manager's change order authority.

Notices of Completion during 1st Quarter:

The following table shows the five construction contracts for which Metropolitan accepted the contract as completed during the 1st 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.

Table 9: Notices of Completion Filed This Quarter

Contract No.	Construction Contract	Notice of Completion	Original Bid Amount	Final Contract Costs	Change Order	Change Order %
1884	Garvey Reservoir Sodium Hypochlorite Feed System Upgrade	July 2022	\$2,418,149	\$2,430,457	\$12,308	0.5%
1951	Skinner Water Treatment Plant Cathodic Protection	July 2022	\$240,933	\$247,053	\$6,120	2.5%
1984	Skinner Water Treatment Plant Facility Area Paving	July 2022	\$1,936,977	\$2,110,339	\$173,362	9.0%
1970	Garvey Reservoir Drainage and Erosion Improvements - Areas 6, 7, 8, 10, and 11	September 2022	\$1,294,800	\$1,542,553	\$247,753	19.1%
2045	Upper Feeder Santa Ana River Crossing Expansion Joint Replacement	September 2022	N/A	\$855,624	N/A	N/A
Totals:			\$5,890,859			

For the 1st Quarter, the total bid amount of the completed construction contracts was approximately \$5.9 million. As for the Contract Number 2045, Upper Feeder Santa Ana River Crossing Expansion Joint Replacement, the General Manager awarded the contract under the emergency contracting provisions in the administrative code, after a leak was discovered, without going through the competitive bid process. Therefore, the work under this contract was performed with an estimated budget of \$1.2 million instead of a set bid amount. As for Contract 1970, change orders include an extension of drainage piping, replacement of asphalt pavement, construction of a concrete block wall due to differing site conditions discovered during construction and to complete the work that would have otherwise been completed in a future contract. Contract 1984 change orders include utility relocation, drainage restoration, and asphalt paving due to differing site conditions discovered during construction and to complete the work that would have otherwise been completed in a future contract.

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 (October 2021 through September 2022) is 3.75 percent⁶.

⁶ Original amount of construction contracts completed (Oct. 2021 through Sept. 2022) = \$42,008,373
Change orders for completed construction contracts (Oct. 2021 through Sept. 2022) = \$1,574,617
Change order percentage (Oct. 2021 through Sept. 2022) = 3.75%

Contracts Awarded by the Board during 1st Quarter:

During the period of July through September 2022, two construction contracts totaling \$26,260,524 and one procurement contract totaling \$5,647,405, were awarded by the Board.

Table 10: Construction and Procurement Contracts Awarded This Quarter

Construction Contracts	
Etiwanda Pipeline North Relining - Stage 3	
Contract Number	1891
Contractor	Mladen Buntich Construction Co., Inc.
Amount	\$25,972,700
Mills Plant Maintenance Building Roof Replacement	
Contract Number	1894
Contractor	Bishop, Inc.
Amount	\$287,824
Procurement Contracts	
Furnishing Butterfly Valves for the Wadsworth Bypass Pipeline, Inland Feeder-Rialto Pipeline Intertie, and Badlands Tunnel Isolation Surge Tanks	
Contract Number	2022
Contractor	Sojitz Machinery Corporation of America
Amount	\$5,647,405

The table on this page lists the 25 ongoing construction contracts through the end of the 1st Quarter. Also, Metropolitan is negotiating a settlement with the contractor on Construction Contract No. 1908 to remove the remaining construction portion of the contract, which was suspended due to Metropolitan's response to COVID-19. As part of the settlement, Metropolitan is procuring materials and equipment from the contractor for a future construction contract. This list does not contain construction contracts for minor capital projects.

Table 11: Active Construction Contracts at the End of 1st Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount ⁷	Earnings Through September 2022	Start Date	Est. Completion Date	Est. Percent Complete
1	1885	La Verne Shops Building Completion – Stage 5	Woodcliff Corporation, Inc.	\$18,930,000	\$1,217,960	6/10/22	5/24	6%
2	1886	Joseph Jensen Water Treatment Plant Vehicle Maintenance Building Roof Replacement ⁸	AME Builders, Inc. dba AME Roofing	\$282,390	\$236,583	11/1/21	10/22	84%
3	1887	Western San Bernardino County Region Erosion Control Improvements – Stage 1	Jeremy Harris Construction, Inc.	\$677,898	\$611,488	4/1/22	11/22	90%
4	1891	Etiwanda Pipeline North Relining - Stage 3	Mladen Buntich Construction Co., Inc.	\$25,972,700	\$618,000	8/19/22	10/23	2%
5	1894	Mills Plant Maintenance Building Roof Replacement	Bishop, Inc.	\$287,824	\$0	10/12/22	6/23	0%
6	1903	Second Lower Feeder PCCP Rehabilitation – Reach 3A	J. F. Shea Construction, Inc.	\$11,884,700	\$3,260,000	6/6/22	6/23	27%
7	1905	Metropolitan Headquarters Building Improvements ⁸	Bernards Bros. Inc.	\$50,689,760	\$50,645,831	1/14/19	12/22	99%
8	1908	CRA Pumping Plants – Sump Rehabilitation ⁹	Michels Construction, Inc.	\$27,242,360	\$12,615,770	1/24/19	12/22	46%
9	1926	CRA Mile 12 Flow Monitoring Station Upgrades	R2 Engineering dba R2Build	\$2,053,567	\$1,622,457	6/16/21	1/23	79%

⁷ 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.

⁸ Granting of additional working days to complete construction are being considered.

⁹ Contract 1908 has exceeded the contract working days and Metropolitan is assessing liquidated damages.

	Cont. No.	Contract Title	Contractor	Contract Amount ⁷	Earnings Through September 2022	Start Date	Est. Completion Date	Est. Percent Complete
10	1938	MWD HQ Bldg. Physical Security Improvements ⁸	Bernards Bros. Inc.	\$5,998,980	\$5,944,666	9/22/20	12/22	99%
11	1944	Lake Mathews Reservoir Wastewater System Replacement	Creative Home dba CHI Construction	\$3,815,000	\$2,209,050	12/13/21	3/23	58%
12	1946	Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement	J.F. Shea Construction, Inc.	\$13,518,670	\$3,024,867	10/14/20	9/23	22%
13	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement	J.F. Shea Construction, Inc.	\$32,824,000	\$2,758,438	1/20/22	2/25	8%
14	1958	Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1	J.F. Shea Construction, Inc.	\$11,499,000	\$8,315,907	1/20/22	6/23	72%
15	1961	Orange County Feeder Relining – Reach 3	Spiniello Infrastructure West, Inc.	\$17,226,250	\$771,272	5/11/22	9/23	4%
16	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements	Bernards Bros. Inc.	\$14,165,888	\$8,672,379	9/24/20	1/23	61%
17	1964	Live Oak Reservoir Pipelines Cathodic Protection	Exaro Technologies Corporation	\$182,800	\$0	9/28/22	3/23	0%
18	1966	Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	Blois Construction, Inc.	\$3,143,592	\$50,383	7/7/22	8/23	2%
19	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J. F. Shea Construction, Inc.	\$93,840,000	\$7,597,716	6/10/22	5/25	8%
20	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	\$9,200,000	\$1,543,366	12/13/21	1/25	17%
21	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems ⁸	Ameresco, Inc.	\$11,604,521	\$3,136,668	10/7/21	11/24	27%

	Cont. No.	Contract Title	Contractor	Contract Amount ⁷	Earnings Through September 2022	Start Date	Est. Completion Date	Est. Percent Complete
22	2001	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	Leed Electric, Inc.	\$2,257,897	\$56,098	7/20/22	12/23	2%
23	2013	Lake Mathews PCCP Rehabilitation Valve Storage Building	Facility Builders & Erectors, Inc.	\$4,759,000	\$1,970,047	3/10/22	8/23	41%
24	2014	Weymouth Plant Battery Energy Storage System	Siemens Industry, Inc.	\$6,176,521	\$0	7/18/22	7/23	0%
25	2024	OC-88 Pump Station Chiller Replacement	Mehta Mechanical Co., Inc. dba MMC Inc.	\$2,654,000	\$114,000	6/6/22	6/23	4%
Total contract value for active construction contracts:				\$370,887,318				

The following table lists the 15 ongoing procurement contracts at the end of the 1st Quarter.

Table 12: Active Procurement Contracts at the End of 1st Quarter

	Cont. No.	Contract	Contractor	Contract Amount ¹⁰	Earnings Through September 2022	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹¹
1	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	\$2,380,909	\$2,362,968	9/11/17	D ¹²	99%
2	1867 ¹³	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1	Crispin Valve, LLC	\$5,066,975	\$2,674,908	12/18/17	12/22	53%
3	1868	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 2	DeZurick, Inc.	\$771,984	\$760,384	12/18/17	D ¹²	98%
4	1873	Furnishing One Hydraulic Shear System for the La Verne Maintenance Shops	Landmark Solutions, LLC	\$151,870	\$146,970	3/21/18	D ¹²	97%
5	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	\$23,750,060	\$17,157,856	12/24/18	6/23	72%
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 ¹²	99%
7	1948	Refurbishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Limatorque	\$3,532,700	\$2,399,089	2/16/19	3/23	68%
8	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	\$1,244,535	\$529,166	5/28/20	7/25	43%

¹⁰ 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.

¹¹ 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.

¹² All items were delivered prior to this reporting quarter but contract remains open pending use of manufacturer field services.

¹³ 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 ¹⁰	Earnings Through September 2022	Start Date	Est. Delivery Completion Date	Est. Percent Complete ¹¹
9	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	\$4,141,194	\$2,025,325	3/30/20	D ¹⁴	86%
10	1968	Furnishing Earthquake-Resistant Ductile Iron Pipe for the Casa Loma Siphon Barrel No. 1	Kubota Corporation	\$9,237,782	\$9,224,982	2/12/20	D ¹²	99%
11	1969	Furnishing Inlet Valve Gearboxes for Skinner Module No. 7	R&B Automation, Inc.	\$224,510	\$207,035	4/29/20	2/24	92%
12	1978	Furnishing Steel Pipe for the Casa Loma Siphon Barrel No. 1	Northwest Pipe Company	\$6,134,208	\$5,860,701	1/16/20	12/23	96%
13	2011	Furnishing Steel Pipe for Etiwanda Pipeline North Relining, Stage 3	Northwest Pipe Company	\$6,044,897	\$5,400,744	12/20/21	12/23	89%
14	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%
15	PO 206047	Furnish Equipment to Upgrade the Ozone Control System at the Mills Water Treatment Plant	Royal Industrial Solutions	\$492,440	\$0	12/6/21	10/22	0%
Total contract value for active procurement contracts:				\$71,014,825				

¹⁴ All items were delivered during the reporting quarter but contract remains open pending use of manufacturer field services.

Performance Metrics

In order 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 13 and Table 14 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 performance for in-house construction projects and minor capital projects are not reported in this section since the efforts required for final design and inspection are different.

Table 13: Performance Metric Actuals, Construction Costs > \$3 Million

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Etiwanda Pipeline Lining Replacement Stage 3	Final Design	\$800,054	\$32,795,097	9-12%	2.4%

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

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Garvey Reservoir Drainage & Erosion Improvements - Areas 6, 7, 8, 10, and 11	Inspection	\$497,570	\$1,594,198	9-15%	31.2% ¹⁵
Garvey Reservoir Sodium Hypochlorite Feed System Upgrades	Inspection	\$327,156	\$2,700,580	9-15%	12.1%
Live Oak Reservoir Pipelines Cathodic Protection	Final Design	\$43,211	\$196,000	9-15%	22.0% ¹⁶
Mills Maintenance Building Roof Replacement	Final Design	\$47,000	\$464,824	9-15%	10.1%
Skinner Facility Area Paving	Inspection	\$320,000	\$2,316,977	9-15%	13.8%
Skinner Pipelines Cathodic Protection	Inspection	\$45,497	\$311,144	9-15%	14.6%
Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing	Final Design	\$224,560	\$2,334,624	9-15%	9.6%
Upper Feeder Expansion Joint Replacement at the Santa Ana River Crossing	Inspection	\$163,653	\$2,334,624	9-15%	7.0%

¹⁵ Inspection costs for Garvey Reservoir Drainage & Erosion Improvements Areas 6, 7, 8, 10, & 11 were higher than the target range due to contractor issues which resulted in significant contract delays and increased inspection expenditures. Issues included a lapse of the contractor's license and the contractor contemplating closing the business, which resulted in inspection staff investigating the use of a bonding company to complete the construction.

¹⁶ Final design cost for the Live Oak Reservoir Pipelines Cathodic Protection were higher than the target range due to changes made during final design to convert to a stand-alone, solar-power system and higher than anticipated cost of construction.

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 (July through September 2022).

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

There are no expensed projects to report during the 1st Quarter of FY 2022/23 (July through September 2022).

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 15: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Colorado River Aqueduct Reliability Program	Total	\$554,437	\$430,713	\$11,670	\$5,176
Cabazon Radial Gate Facility Improvements	15320	\$2,456	\$740	\$0	\$35
White Water Siphon Protection	15341	\$15,585	\$14,492	\$1,820	\$8
CRA - Conveyance Reliability	15373	\$117,828	\$116,600	\$520	\$224
CRA Pumping Plant Reliability	15374	\$24,467	\$24,005	\$0	\$2
CRA - Electrical/Power Systems Reliability	15384	\$58,665	\$49,688	\$600	\$1,198
CRA – Discharge Containment	15385	\$8,129	\$7,976	\$0	\$1
CRA - Reliability for FY2006/07 through FY2011/12	15438	\$150,194	\$119,839	\$2,710	\$367
CRA Main Pump Reliability	15481	\$75,000	\$54,586	\$3,600	\$1,529
CRA - Reliability for FY2012/13 through FY2017/18	15483	\$90,967	\$37,411	\$1,880	\$1,530
CRA - Reliability for FY2018/19 through FY2023/24	15507	\$11,146	\$5,377	\$540	\$283
Cost Efficiency & Productivity Program	Total	\$162,645	\$104,644	\$1,350	\$975
DVL Recreation Facilities	15334	\$87,104	\$59,456	\$0	\$71
Yorba Linda Power Plant Modifications	15446	\$17,125	\$17,093	\$0	\$1
Business Operations Improvement	15484	\$19,441	\$10,540	\$580	\$302

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$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	\$6,307	\$0	\$5
Enterprise Content Management	15500	\$3,600	\$3,595	\$480	\$0
DVL Recreation Rehabilitation & Refurbishment	15515	\$1,030	\$972	\$150	\$59
Energy Sustainability Improvements	15521	\$27,905	\$6,682	\$140	\$537
Dams and Reservoirs Reliability Program	Total	\$76,514	\$69,289	\$600	\$301
Reservoir Cover and Replacement	15417	\$65,214	\$59,587	\$320	\$219
Dam Rehabilitation & Safety Improvements	15419	\$11,300	\$9,702	\$280	\$82
Distribution System Reliability Program	Total	\$472,162	\$376,201	\$14,040	\$8,073
Conveyance and Distribution System - Rehabilitation	15377	\$125,961	\$102,581	\$3,070	\$836
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	\$155,912	\$118,347	\$170	\$2,858
Hydroelectric Power Plant Improvements	15458	\$20,403	\$17,425	\$1,950	\$149
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	\$139,666	\$116,682	\$5,710	\$3,030
Pipeline Rehabilitation and Replacement	15482	\$1,143	\$1,033	\$60	\$0
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY2023/24	15503	\$29,077	\$20,133	\$3,080	\$1,200

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
District Housing & Property Improvements Program	Total	\$10,907	\$6,813	\$2,100	\$263
Employee Village Enhancement	15513	\$10,907	\$6,813	\$2,100	\$263
Minor Capital Projects Program	Total	\$45,500	\$19,120	\$2,400	\$993
Capital Program for Projects Costing Less Than \$400,000 for FY2018/19 through FY2019/20	15504	\$15,500	\$11,734	\$650	\$310
Capital Program for Projects Costing Less Than \$400,000 for FY2020/21 through FY2021/22	15518	\$20,000	\$7,103	\$1,270	\$400
Capital Program for Projects Costing Less Than \$400,000 for FY2022/23 through FY2023/24	15526	\$10,000	\$283	\$480	\$283
Prestressed Concrete Cylinder Pipe Rehabilitation Program	Total	\$346,345	\$269,918	\$17,150	\$2,250
PCCP Rehabilitation and Replacement	15471	\$24,243	\$22,722	\$450	\$48
Sepulveda Feeder PCCP Rehabilitation	15496	\$39,590	\$28,412	\$1,000	\$489
Second Lower Feeder PCCP Rehabilitation	15497	\$266,827	\$207,775	\$14,800	\$1,410
Allen-McColloch Pipeline, Calabasas Feeder, and Rialto Pipeline PCCP Rehabilitation	15502	\$15,685	\$11,009	\$900	\$303
Regional Recycled Water Supply Program	Total	\$24,350	\$20,304	\$1,150	\$3
Demonstration-Scale Recycled Water Treatment Plant	15493	\$24,350	\$20,304	\$1,150	\$3
Right of Way & Infrastructure Protection Program	Total	\$31,715	\$27,573	\$1,410	\$513
Right of Way & Infrastructure Protection	15474	\$31,715	\$27,573	\$1,410	\$513

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
System Flexibility/Supply Reliability Program	Total	\$679,098	\$644,459	\$7,400	\$2,911
Hayfield and Lake Perris Groundwater Recovery	15402	\$1,500	\$1,116	\$80	\$2
Perris Valley Pipeline	15425	\$133,500	\$131,427	\$3,550	\$309
Water Delivery System Improvements	15488	\$82,279	\$72,101	\$3,030	\$2,495
Verbena Property Acquisition	15492	\$264,000	\$262,027	\$710	\$79
Delta Wetlands Properties (Delta Islands)	15494	\$197,819	\$177,789	\$30	\$24
System Reliability Program	Total	\$448,836	\$311,888	\$19,400	\$4,957
Information Technology System - Infrastructure	15376	\$51,306	\$47,761	\$20	\$43
Information Technology System - Security	15378	\$12,351	\$11,009	\$0	\$194
La Verne Shop Facilities Upgrade	15395	\$71,348	\$47,755	\$0	\$435
Water Operation Control	15467	\$71,359	\$42,335	\$1,820	\$253
Union Station Headquarters Improvements	15473	\$107,845	\$87,497	\$2,500	\$1,271
IT Infrastructure Reliability	15487	\$57,968	\$38,024	\$3,960	\$1,231
Operations Support Facilities Improvement	15495	\$32,558	\$20,349	\$8,700	\$807
Metropolitan Security System Enhancements	15499	\$15,910	\$11,282	\$975	\$230
Infrastructure Reliability Information System	15501	\$17,970	\$2,982	\$75	\$116
System-Wide Paving & Roof Replacements for FY 2020/21 through FY 2021/22	15516	\$4,791	\$1,762	\$400	\$168
System-Wide Paving & Roof Replacements for FY2020/21 through FY2023/24	15519	\$1,741	\$1,076	\$200	\$158

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Enterprise Data Analytics	15522	\$3,690	\$55	\$750	\$50
Treatment Plant Reliability Program	Total	\$922,722	\$752,076	\$6,669	\$3,993
Weymouth Water Treatment Plant Improvements	15369	\$195,711	\$188,336	\$80	\$196
Jensen Water Treatment Plant Improvements	15371	\$47,062	\$46,638	\$310	\$0
Diemer Water Treatment Plant Improvements	15380	\$213,657	\$208,699	\$1,190	\$369
Mills Water Treatment Plant Improvements	15381	\$5,525	\$5,277	\$0	\$1
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	\$74,707	\$66,202	\$1,900	\$530
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	\$138,079	\$28,348	\$430	\$832
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	\$91,376	\$84,954	\$1,410	\$258
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	\$39,852	\$25,195	\$30	\$603
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	\$77,539	\$77,014	\$39	\$56
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15478	\$1,425	\$1,423	\$120	-\$13
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	\$1,094	\$882	\$0	\$35
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	\$8,339	\$7,485	\$0	\$1

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru September 2022 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Weymouth Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15505	\$685	\$390	\$0	\$88
Jensen Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15508	\$17,323	\$5,842	\$40	\$637
Diemer Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15510	\$3,758	\$914	\$0	\$159
Skinner Water Treatment Plant, Improvements for FY 2020/21 Through FY 2023/24	15512	\$3,961	\$3,680	\$1,120	\$43
Mills Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15520	\$2,631	\$796	\$0	\$199
Water Quality Program	Total	\$10,240	\$9,615	\$0	\$0
Enhanced Bromate Control	15472	\$10,240	\$9,615	\$0	\$0
Total CIP		\$3,785,472	\$3,042,612	\$85,339	\$30,409

Notes on above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 10/10/2022.
- \$0 under Planned Expenditures indicate 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: 1 st Quarter Board Actions	3
Table 2: Planned & Actual Expenditures for FYs 2022/23 & 2023/24	6
Table 3: Major Capital Projects Programs	9
Table 4: Minor Capital Projects Program	32
Table 5: Capital Projects Funded in 1 st Quarter	35
Table 6: Previously Authorized Capital Projects Funded from Appropriation No. 15525.....	37
Table 7: CEQA Exemption Determinations.....	40
Table 8: 1 st Quarter Contract Action.....	41
Table 9: Notices of Completion Filed This Quarter.....	44
Table 10: Construction and Procurement Contracts Awarded This Quarter.....	46
Table 11: Active Construction Contracts at the End of 1st Quarter.....	47
Table 12: Active Procurement Contracts at the End of 1st Quarter.....	50
Table 13: Performance Metric Actuals, Construction Costs > \$3 Million.....	52
Table 14: Performance Metric Actuals, Construction Costs < \$3 Million.....	53
Table 15: Program and Appropriation Budget vs. Cost and Planned Expenditures vs. Actuals	55

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 1 st Quarter FY 2022/23	8
Figure 5: Construction Contracts – Greater Los Angeles Region	42
Figure 6: Construction Contracts – Colorado River Aqueduct.....	43