



## ● **Capital Investment Plan Quarterly Report for Period Ending March 2023**

### **Summary**

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The attached report provides a summary of actions and accomplishments on the Capital Investment Plan (CIP) during the third 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 January to March 2023, the third quarter of fiscal year 2022/23, and the third quarter of the fiscal years 2022/23 and 2023/24 biennium.

### **Purpose**

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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**

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Capital Investment Plan quarterly report for period ending March 2023



The Metropolitan Water District of Southern California

# Capital Investment Plan Quarterly Report

January - March 2023



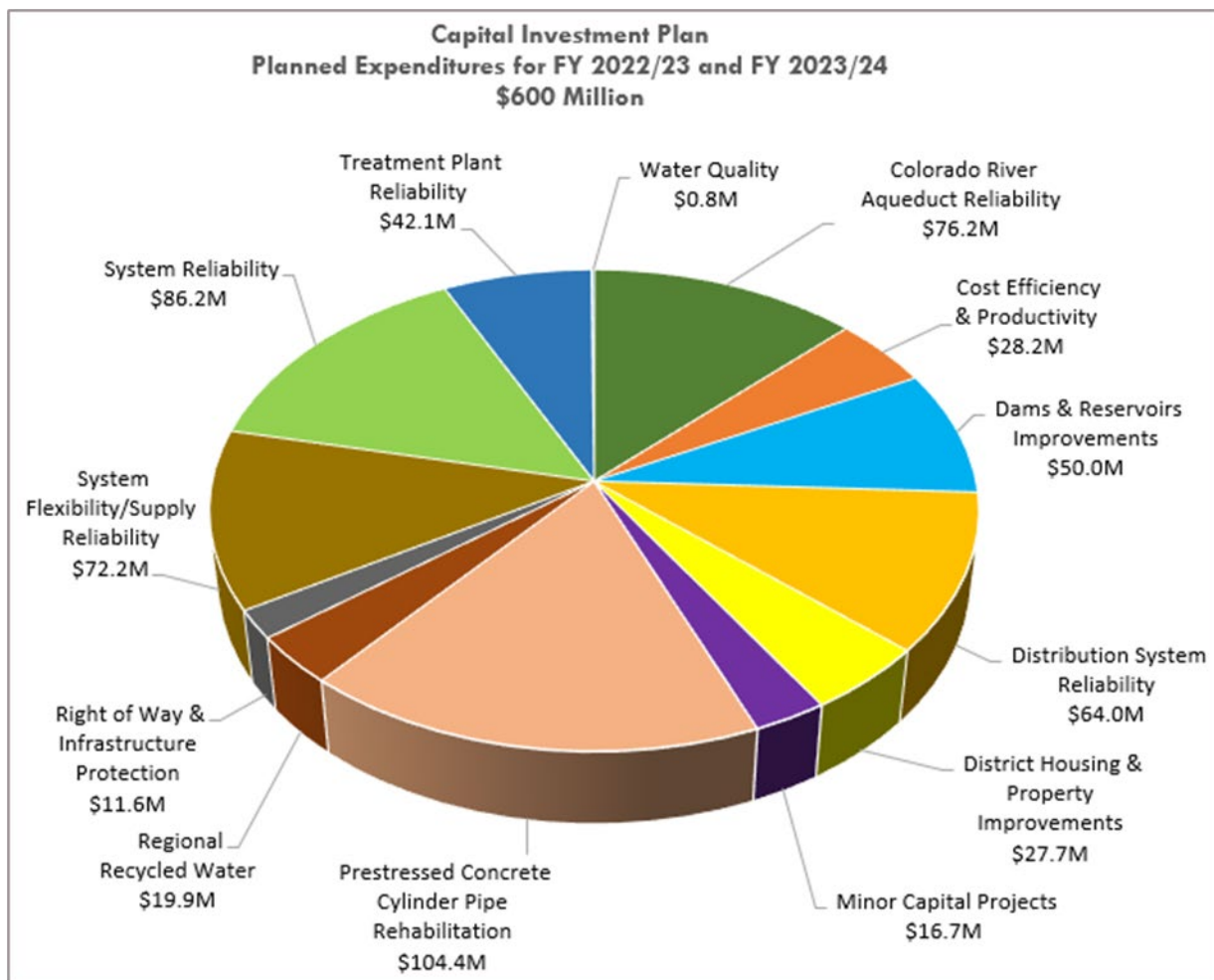
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# Capital Investment Plan for Fiscal Years 2022/23 & 2023/24

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): *Second Lower Feeder PCCP Rehabilitation - Reach 3A* – laborers rig up a section of steel liner during rainy weather conditions; *La Verne Shops Building Completion - Stage 5* – machine shop electrical system installation; *Electromagnetic Inspections of PCCP Lines* – pipe diver removal at Sepulveda Feeder]

## Executive Summary

This report provides a summary of the Capital Investment Plan (CIP) activities and accomplishments during the 3<sup>rd</sup> Quarter of Fiscal Year (FY) 2022/23, which ended in March 2023. CIP expenditures through the 3<sup>rd</sup> Quarter totaled \$164.0 million and the expenditures are projected to stay near but under the planned expenditures through the end of the biennium. The CIP funds allocated during the quarter totaled \$574.1 million, leaving approximately \$25.9 million available to be allocated during the remainder of the current biennium.

During the quarter, eleven project-specific board actions were heard in open sessions. Four construction contracts and one procurement contract were awarded by the Board during the reporting period with a total contract amount of approximately \$144.0 million. During the same time, two construction contracts were completed with a total of approximately \$45.5 million in contract payments authorized, reflecting construction progress on projects such as Colorado River Aqueduct Pumping Plants Overhead Crane Replacement, Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1, Etiwanda Pipeline North Relining – Stage 3, MWD HQ Building Fire Alarm & Smoke Control Improvements, Orange County Feeder Relining – Reach 3, San Diego Pipeline No. 1 Rainbow Tunnel Concrete Liner Rehabilitation, Second Lower Feeder PCCP Rehabilitation – Reach 3A, Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation, and Weymouth Battery Energy Storage System.

## Board Action Summary

During the 3<sup>rd</sup> Quarter, board actions heard in open session included eleven project-specific actions summarized in Table 1 below. These actions awarded five contracts totaling approximately \$144.0 million, authorized one new procurement agreement in an amount not-to-exceed approximately \$1.5 million, authorized five new professional/technical services agreements for a total amount not-to-exceed approximately \$8.1 million, authorized an access and permitting agreement in an amount not-to-exceed approximately \$0.3 million, authorized an increase in change order authority for one existing construction contract totaling \$0.5 million, and adopted a Mitigated Negative Declaration for a CIP project. Information on the awarded contracts can be found in Table 10 of this report. The table below excludes information on board items heard in closed session.

Table 1: 3<sup>rd</sup> Quarter Board Actions

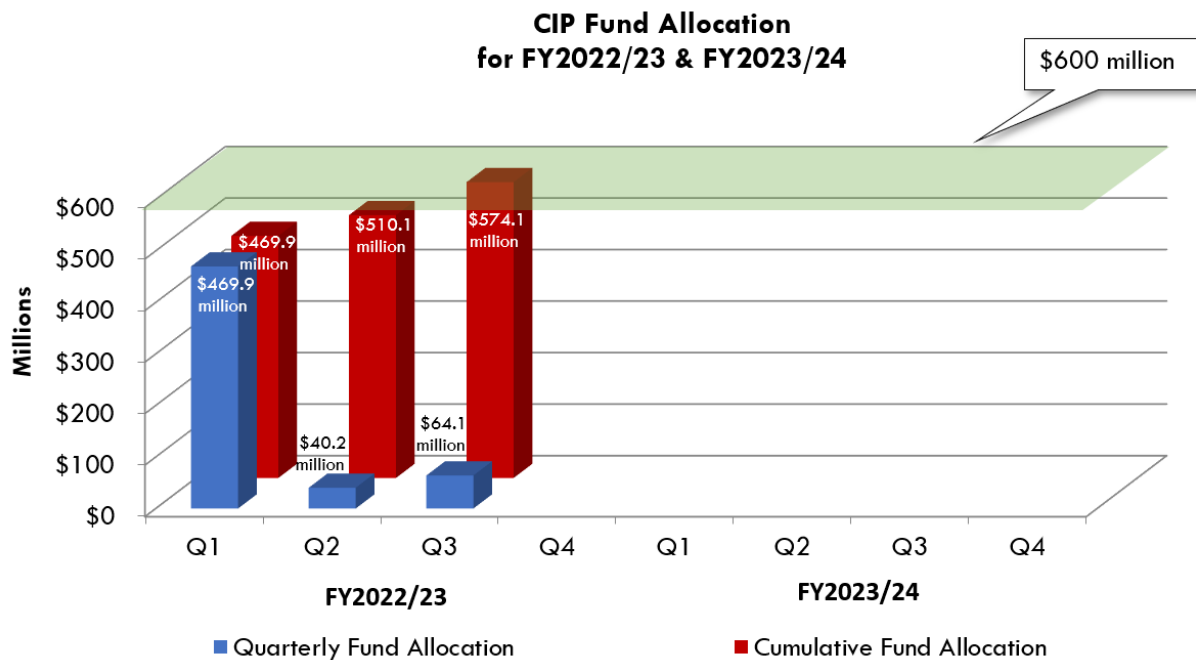
Month	Board Letter Item No.	Project	Action taken
January	7-1	Wadsworth Pumping Plant Bypass Pipeline	Awarded \$14,820,500 construction contract
January	7-2	Second Lower Feeder PCCP Rehabilitation - Reach 3B	Awarded \$68,847,000 construction contract and authorized an access and permitting agreement not to exceed \$310,000
January	7-3	Perris Valley Pipeline Interstate 215 Tunnel Crossing	Awarded 59,489,720 construction contract, and authorized three agreements not-to-exceed \$1,000,000, \$3,500,000, and \$250,000
January	7-4	Mills and Jensen Finished Water Reservoirs Rehabilitation	Authorized an agreement not-to-exceed \$2,000,000
January	7-6	Foothill Feeder Valve Replacement	Authorized an unplanned project

Month	Board Letter Item No.	Project	Action taken
January	7-7	Payroll-Timekeeping Reimplementation	Authorized an agreement not-to-exceed \$1,300,000
January	7-8	Headquarters Network Switch Replacement	Authorized a procurement agreement not-to-exceed \$1,469,000
February	7-1	Rialto Pipeline Rehabilitation: Service Connection CB-11 20-inch Ball Valve Procurement	Awarded \$407,800.33 procurement contract
March	7-4	CRA Pumping Plant Overhead Cranes Replacement	Authorized an increase of \$500,000 in change order authority
March	7-6	Skinner Ozone Contactor Structure Rehabilitation	Awarded \$394,534 construction contract
March	7-7	Copper Basin Discharge Valve Replacement and Access Road Improvements	Adopted Mitigated Negative Declaration and Mitigated Monitoring & Reporting Program

The previously referenced April 2022 board action appropriated \$600 million to perform work on planned CIP 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 3<sup>rd</sup> Quarter, the Board amended the CIP to include a new capital project to replace fourteen valves at seven blowoff locations along the Foothill Feeder to maintain water delivery reliability.

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 \$574.1 million, leaving approximately \$25.9 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 \$143.1 million for work authorized during the 3<sup>rd</sup> Quarter, and approximately \$79.0 million reallocated back to the CIP Appropriation 15525. Details of the allocations for work authorized during the reporting quarter and from the prior biennium can be found in the **Project Actions** section.

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



\*Numbers may not sum due to rounding

Information on construction and procurement contracts activities for the 3<sup>rd</sup> Quarter of FY 2022/23 is presented in the **Construction and Procurement Contracts** section of this report. Progress payments for these contracts in the 3<sup>rd</sup> Quarter totaled approximately \$45.5 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, Etiwanda Pipeline North Relining – Stage 3, MWD HQ Building Fire Alarm & Smoke Control Improvements, Orange County Feeder Relining – Reach 3, San Diego Pipeline No. 1, Rainbow Tunnel Concrete Liner Rehabilitation, Second Lower Feeder PCCP Rehabilitation – Reach 3A, Weymouth Basins 5-8 & Filter Building No. 2 Rehabilitation, and Weymouth Plant Battery Energy Storage System.

## Planned Expenditure and Budget

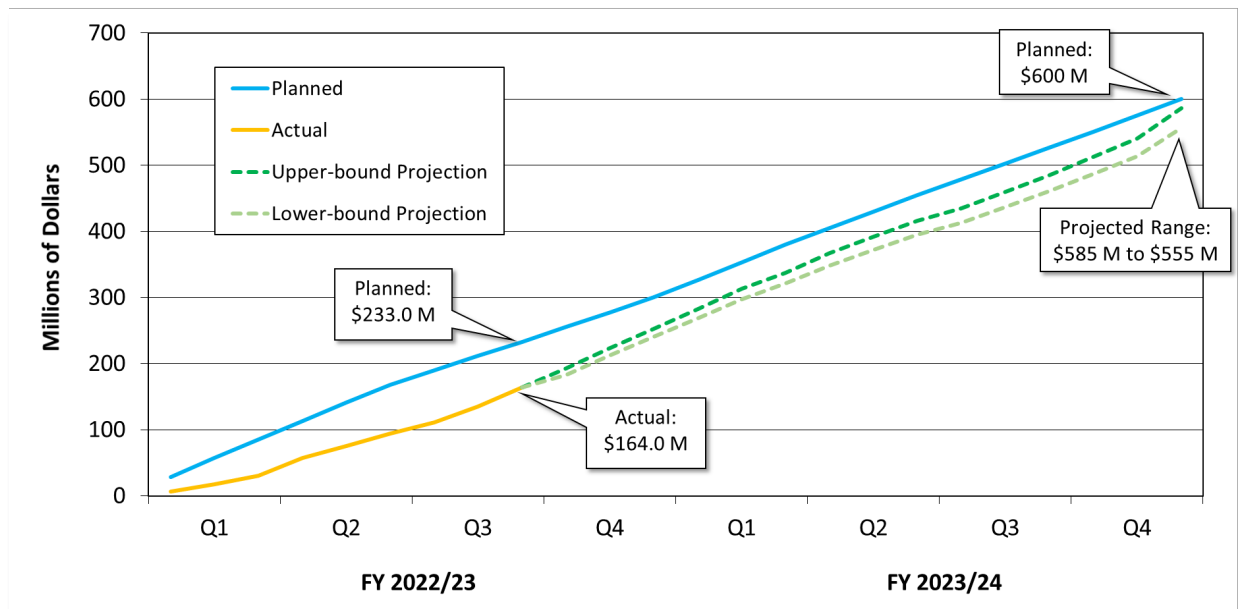
Table 2 and Figure 3 below show planned and actual expenditures for the biennium through the end of the 3<sup>rd</sup> Quarter of FY 2022/23, and the forecast of expenditures through the end of the current biennium, against planned expenditures for the same time interval. Actual expenditures through the 3<sup>rd</sup> Quarter of FY 2022/23 were approximately 70% 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
FY 2022/23, Q2	\$82.8	\$63.4
FY 2022/23, Q3	\$69.4	\$70.2
<b>Totals</b>	<b>\$233.0</b>	<b>\$164.0</b>

\* Numbers may not sum due to rounding.

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 projected to be between \$555 million and \$585 million with the actual expenditures tracking close to the planned expenditures during the 3<sup>rd</sup> Quarter of FY 2022/23. This negative variance below the planned expenditures for the first three quarters is mainly due to a concerted effort during the last quarter to accelerate the work that was planned for the 1<sup>st</sup> Quarter of FY 2022/23, including the work on the drought projects; staff redeployment to work on non-CIP projects such as Pure Water Southern California; and shift in the timing of the contract awards and delays in completing some construction and procurement contracts due to difficulties in obtaining permits within the planned timeline, equipment/materials delivery delays due to manufacturing and supply chain issues, and other factors that add time to awarding and completing contracts.

## Grant Funding of Capital Projects

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

### Pure Water Southern California

In December 2022, Metropolitan's Board authorized the General Manager to use \$80 million in project funding from the State Water Resources Control Board (SWRCB) to commence activities related to the initiation of the Pure Water Southern California program. Per AB 179, the \$80 million will be allocated directly to Metropolitan in one lump sum payment no later than January 1, 2024, to support the design activities for the program. Funds are available for expenditure until June 30, 2026. During the reporting quarter, a funding agreement between Metropolitan and SWRCB was drafted, and the agreement is anticipated to be executed next quarter. A lump sum disbursement of the funds is anticipated to be made to Metropolitan in the next quarter. Staff anticipates that the State funds will be used to support the environmental planning and implementation phases of the program.

### Drought Mitigation Projects

In December 2022, Metropolitan's Board adopted a resolution to accept \$50 million in state funding from the California Department of Water Resources to support Metropolitan's drought mitigation projects. The Board also designated the Group Manager of Engineering Services to be the signatory to execute actions related to the funds. The California Department of Water Resources (DWR) will administer the funds and release the reimbursement after Metropolitan invoices expenses. Per AB 211, the \$50 million fund will be available for encumbrance or expenditure until June 30, 2024, and five percent of this amount may be used for administrative costs by DWR. From the state-allocated amount, it allocated to Metropolitan \$47.5 million to improve and expand its infrastructure to make its entire jurisdiction resilient to fluctuating water supplies from each of its imported water sources and to allow conveyance of water throughout all its jurisdiction. Unlike the funds received for Pure Water discussed above, under this grant, staff will be required to submit invoices to DWR in order to receive reimbursement of expenditures that comply with the grant requirements. During the reporting quarter, a funding agreement between Metropolitan and DWR was drafted, and the agreement is anticipated to be executed next quarter. The funds are planned to be used for capital activities only.



## Major Capital Programs Overview

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

- Program
- Project Group/Appropriation
- Project

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

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

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

Figure 4 below shows actual expenditures for the 13 capital programs for 3<sup>rd</sup> Quarter of FY 2022/23.

Figure 4: Biennium-to-date Actual Expenditures through 3rd Quarter FY 2022/23



## Major Capital Project Programs – Highlights

This section provides 3<sup>rd</sup> 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 3<sup>rd</sup> 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 Conduit Structural Protection
Cost Efficiency & Productivity	mwdh2o.com Redesign
Dams and Reservoirs Improvements	Garvey Reservoir Rehabilitation
Distribution System Reliability	Etiwanda Pipeline Lining Replacement - Stage 3
District Housing & Property Improvements	Program highlights only
Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation	Second Lower Feeder PCCP Rehabilitation - Reach 3A
Regional Recycled Water Supply	Program highlights only
Right-of-Way & Infrastructure Protection	Program highlights only
System Flexibility/Supply Reliability	Badlands Tunnel Surge Tank Facility
System Reliability	Datacenter Modernization Upgrade – Phase 2
Treatment Plant Reliability	Weymouth Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation
Water Quality	Program highlights only

## Colorado River Aqueduct (CRA) Reliability Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$23.58 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 (3<sup>rd</sup> 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 Gene Pumping Plant
    - ii) Continued installation of electrical conduits and pull boxes at Iron Mountain Pumping Plant
    - 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 construction schedule
  - CRA Mile 12 Flow Meter Upgrades
    - i) Completed installation of above ground electrical conduits and junction boxes
    - ii) Continued installation of security system, solar panel array equipment, and control panels
    - iii) Initiated start-up and testing of equipment
  - CRA Pumping Plants Overhead Cranes Replacement
    - i) Initiated modifications to the new crane at Eagle Mountain Pumping Plant to accommodate differing site conditions
    - ii) Continued fabrication of the crane assembly for Iron Mountain Pumping Plant
  - CRA Pumping Plant Sump System Rehabilitation
    - i) Under Metropolitan's response to COVID-19, suspended on-site construction and continued submittals and fabrication activities
    - ii) Continued fabrication of remaining pumps, piping, and other materials to be furnished for Hinds Pumping Plant
- Continued final design of the following projects
  - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
  - CRA Pumping Plant Sump System Equipment Installation
  - CRA Pumping Plant Village Utility Replacement
  - Eagle Mountain Pumping Plant Village Paving Replacement
  - Gene Communication Reliability Upgrades
- Continued preliminary design of the following projects
  - Black Metal Mountain 2.4 kV Electrical Power Upgrades
  - CRA Desert Region Security Improvements
  - CRA Main Transformer Replacement
  - Hinds Pumping Plant Discharge Valve Platform Replacement
- 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
  - A construction contract was awarded under General Manager's authority to complete remaining terminations work including four pump units at Hinds Pumping Plant.
- CRA Conduits Structural Protection upgrades
  - Completed final design
  - Advertised a construction bid package and opened bids

- CRA Conveyance System Flow Level Sensor Installation
  - Completed final design
  - Advertised a construction bid package and opened bids
- CRA Main Pump Motor Rehabilitation
  - Continued the study to install variable frequency drive pumps at Gene and Intake Pumping Plants
  - Continued design of recirculation line up to the connection point at Eagle Mountain Pumping Plant
  - Continued preparation of procurement package for the pilot exciter system installation at Gene Pumping Plant
- CRA Main Transformer Replacement
  - Continued preliminary design and preparation of procurement package
- CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
  - Completed final design and advertised a construction bid package
- Hinds Pumping Plant Village Paving Replacement
  - Opened bids for a construction bid package

### Upcoming Activities

Upcoming work for the next quarter will include:

- Award the following construction contracts
  - CRA Conduit Structural Protection Upgrades
  - CRA Conveyance System Flow Level Sensor Installation
  - CRA Storage Building Replacement at Hinds, Eagle Mountain, and Iron Mountain
  - Hinds Pumping Plant Village Paving Replacement
- 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
- Continue final design of the following projects
  - Copper Basin Reservoir Discharge Valve Structure Rehabilitation
  - CRA Pumping Plant Sump System Equipment Installation
  - Gene Communication Reliability Upgrades
- Continue preliminary design of following projects
  - Black Metal Mountain 2.4 kV Electrical Power Upgrades
  - CRA Desert Region Security Improvements
  - CRA Main Transformer Replacement
  - Hinds Pumping Plant Discharge Valve Platform Replacement
- CRA Main Pump Motor Rehabilitation
  - Continue 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
  - Complete preparation of a procurement package for the pilot exciter system installation at Gene Pumping Plant
- CRA Main Transformer Replacement
  - Continue preliminary design and preparation of a procurement package
- 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 Pumping Plant Sump System Rehabilitation
  - Continue fabrication activities and receive final equipment deliveries for Hinds Pumping Plant

- Eagle Mountain Pumping Plant Village Paving Replacement
  - Advertise a construction bid package

**CRA Reliability Program:  
CRA Conduit Structural Protection**

**Total Project Estimate:**  
\$2.6 million

**Total Project Cost to Date:**  
\$15.2 million

This project will install new reinforced concrete slab protection crossings over portions of the CRA conveyance system as well as other conduit protective measures and other upgrades such as structural pads to support heavy equipment operations and access road realignments to support maintenance activities.

Phase	Final Design
% Complete for Current Phase	100%
Current Phase Authorized	February 2020
Estimated Construction Contract Award Date	April 2023

The construction bid package was advertised and bids opened. In the upcoming quarter, the construction contract will be awarded and submittal review will begin.



CRA Conduit Structural Protection project sites

## Cost Efficiency and Productivity Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$6.69 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- CIP Budget System Improvements
  - RFP published and vendor selection completed
- DVL to Lake Skinner Trail
  - Completed 90% design
- Enterprise Content Management Phase II
  - RFP published
- Oracle Database Upgrade
  - Initiated execution of the migration plan
- Payroll-Timekeeping Reimplementation
  - Board authorized an agreement for the reimplementation
- WIFI Implementation project
  - Received and evaluated proposals for the request for bids

#### Upcoming Activities

Upcoming work for the next quarter will include:

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



**Cost Efficiency & Productivity Program:**  
**mwdh2o.com Redesign**

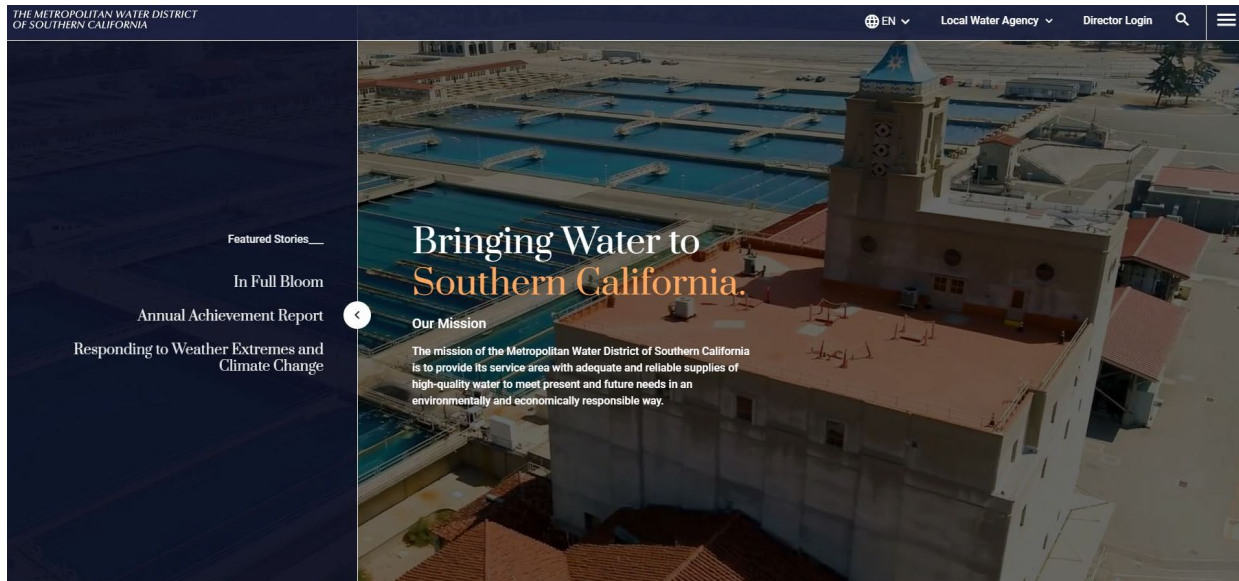
**Total Project Estimate:**  
 \$1.86 million

**Total Project Cost to Date:**  
 \$0.96 million

This project will redesign and incorporate the implementation of a content management system for the current mwdh2o.com website. This project will migrate this website and four other MWD external facing websites (SocalWaterDialogue, MWDInnovates, BeWaterWise, and educational website) to be hosted on the cloud for increased security.

Phase	Deployment
% Complete for Current Phase	85%
Current Phase Authorized	May 2019
Estimated Deployment Completion Date	September 2023

The mwdh2o.com and SocalWaterDialogue websites have been migrated and are currently operating 100% on the cloud. In the upcoming quarter, migration will begin for BeWaterWise, MWDInnovates, and educational websites.



Redesigned mwdh2o.com website

## Dams and Reservoirs Improvements Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$1.57 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Completed evaluation of the consultant's proposed technical approach and methodology for design and implementation of the dam monitoring system upgrades
- Garvey Reservoir Dam Monitoring System Upgrades
  - Completed evaluation of the consultant's proposed technical approach and methodology for design and implementation of the dam monitoring system upgrades
- Garvey Reservoir Rehabilitation
  - Completed preliminary design
- Lake Skinner Outlet Tower Seismic Upgrade
  - Finalized the scope of work required for the structural analysis of the outlet tower

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Diamond Valley Lake Dam Monitoring System Upgrades
  - Authorize a professional services agreement for design, procurement, and integration of the dam monitoring system
- Garvey Reservoir Dam Monitoring System Upgrades
  - Authorize a professional services agreement for design, procurement, and integration of the dam monitoring system
- Garvey Reservoir Rehabilitation
  - Authorize a professional services agreement for final design
- Lake Mathews and Lake Skinner Dam Monitoring System Upgrades
  - Initiate task orders with consultants to begin preliminary design
- Lake Skinner Outlet Tower Seismic Upgrade
  - Authorize a professional services agreement to perform the detailed structural analysis of the outlet tower

**Dams and Reservoirs Improvements Program:**  
**Garvey Reservoir Rehabilitation**

**Total Project Estimate:**  
 \$98.5 million

**Total Project Cost to Date:**  
 \$3.0 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	95%
Current Phase Authorized	March 2021
Estimated Final Design Start Date	April 2023

The preliminary design was completed. In the upcoming quarter, a board action is planned to amend an existing consulting services agreement to begin final design.



Exterior view of the Garvey Reservoir junction structure

## Distribution System Reliability Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$45.10 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- Rainbow Tunnel Concrete Liner Rehabilitation
  - Completed construction
- Rialto Pipeline Rehabilitation at STA 2986+30
  - Awarded a procurement contract for a triple offset ball valve to rehabilitate Service Connection CB-11
- San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation
  - Awarded procurement contract for three slide gates

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Continue construction activities for:
  - Etiwanda Pipeline North Relining – Stage 3
  - La Verne Shops Building Completion – Stage 5
  - Lake Mathews Wastewater System Replacement
  - Orange County Feeder Relining – Stage 3
  - Sepulveda, West Valley, and East Valley Feeders Interconnection Electrical Upgrades
- Casa Loma Siphon Barrel No. 1 Seismic Upgrade
  - Complete construction
- Rialto Pipeline Rehabilitation at STA 2986+30
  - Continue design and valve procurement

**Distribution System Reliability Program:  
Etiwanda Pipeline Lining Replacement - Stage 3**

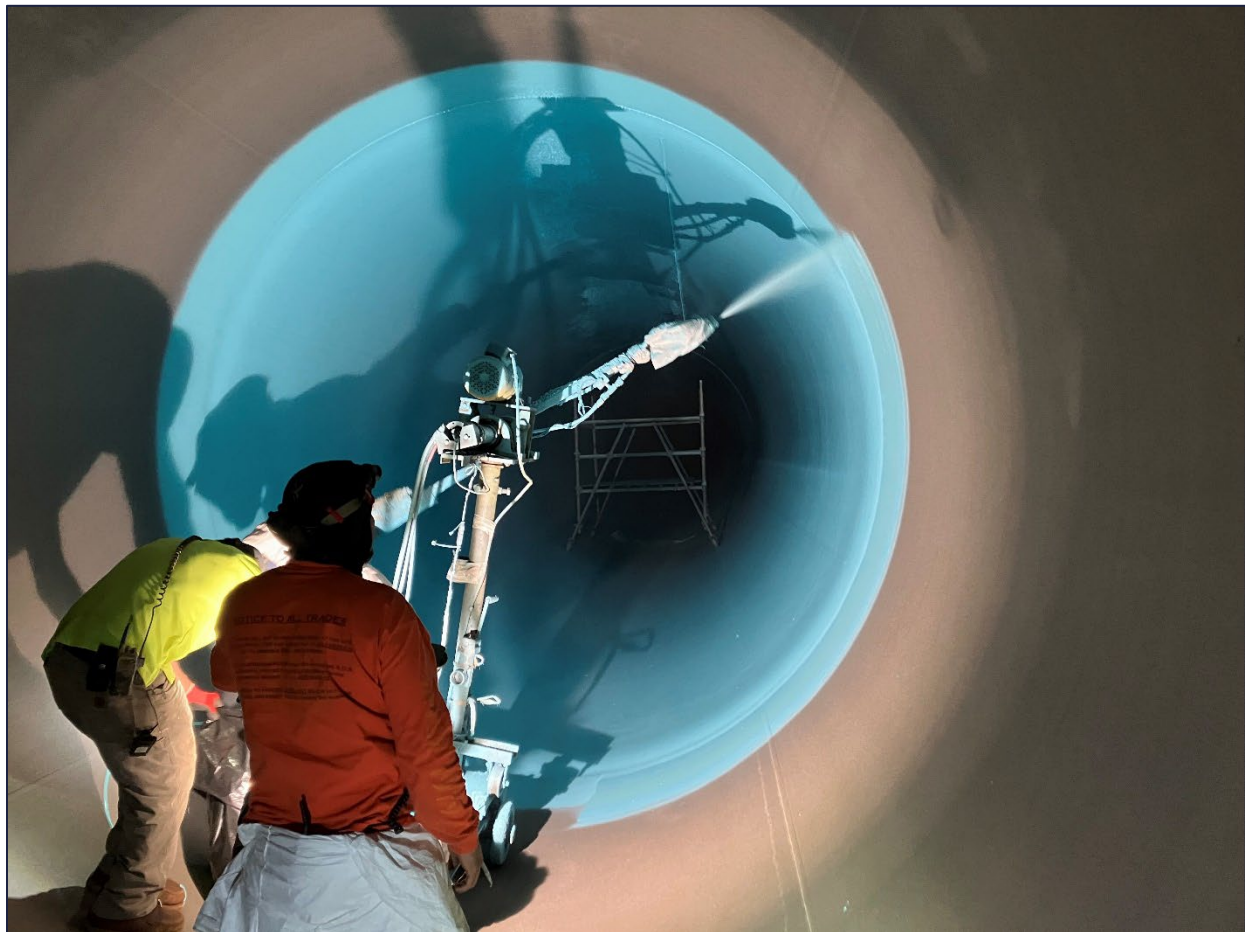
**Total Project Estimate:**  
\$37.5 million

**Total Project Cost to Date:**  
\$26.8 million

This project will replace approximately 2.5 miles of the deteriorated internal mortar lining with a flexible polyurethane lining that could better withstand the significant changes in pressures experienced by the pipeline when operating the Etiwanda Hydroelectric Plant. This project will also reline approximately 1,300 feet of pipe with steel liner.

Phase	Construction
% Complete for Construction	68%
Contract Awarded	July 2022
Estimated Construction Completion Date	August 2023
Contract Number	1891

The contractor completed removal of all mortar lining and began installing steel liner. Half mile portion of the pipeline with epoxy lining was replaced with polyurethane liner. In the upcoming quarter, the contractor will continue to install steel liner and apply polyurethane lining to the remaining two miles.



Contractor applying polyurethane liner to interior of pipe

## District Housing & Property Improvements Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$2.52 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.

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### Program Highlights (3<sup>rd</sup> Quarter)

#### Accomplishments

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

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Initiate evaluation of supplementary housing alternatives in support of the housing and property improvements program

## Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$16.28 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- Allen-McColloch Pipeline:
  - Completed preliminary design for rehabilitation of 8.9 miles of PCCP pipeline, including identification of proposed pipe access excavation pits
  - Continued evaluating a member agency cost-sharing proposal that may facilitate rehabilitation work
- Calabasas Feeder:
  - Continued validating assumptions on pipeline hydraulic capacity necessary to reline the entire approximately nine-mile-long Calabasas Feeder PCCP pipeline
- PCCP Rehabilitation Valve and Equipment Storage Building:
  - Completed removal of the concrete pad formwork for the new valve storage building
  - Continued erecting primary structural framing and installation of utilities
- Second Lower Feeder:
  - Reach 3A – Completed installation of new steel liner sections, continued grouting, and began mortar lining: This project will reline approximately 1.2 miles of Second Lower Feeder PCCP pipeline from Oak Street Pressure Control Structure south through City of Rolling Hills Estates to the Palos Verdes Reservoir.
  - Reach 3B – Awarded a construction contract and began reviewing contractor submittals. This project will reline approximately 3.6 miles of Second Lower Feeder PCCP pipeline from the intertie with Sepulveda Feeder south to Oak Street PCS, through the cities of Torrance, Los Angeles, and Lomita, and replace three 48-inch diameter sectionalizing valves at the intertie with Sepulveda Feeder.
  - Isolation Valve Procurement – Received the third and fourth of ten 54-inch-diameter conical plug valves. Continued fabrication of the remaining 54-inch valves. To date, Metropolitan has received seven of thirteen large-diameter conical plug valves and actuators, including three 48-inch and the four aforementioned 54-inch valves.
- Sepulveda Feeder:
  - Reach 1 – Completed constructability review and continued final design to rehabilitate approximately three miles of Sepulveda Feeder PCCP pipeline, from just north of the Inglewood Lateral south to the West Coast Feeder, through the cities of Inglewood and Hawthorne, and unincorporated Los Angeles County.
  - Reach 2 – Completed constructability review and continued final design to rehabilitate approximately 3.8 miles of Sepulveda Feeder PCCP pipeline, from the Dominguez Gap Channel south to the intertie with Second Lower Feeder, through the cities of Torrance and Los Angeles.
  - North Reach – Continued preliminary design of the northern 20-mile portion of the Sepulveda Feeder, including both steel and PCCP portions of the pipeline and appurtenances.
- Electromagnetic PCCP Inspections
  - Completed PipeWalker inspection of portions of Yorba Linda Feeder
  - Completed PipeDiver inspection of portions of Sepulveda Feeder.
  - Identified three locations in the North Reach of Sepulveda Feeder that require urgent relining

## Upcoming Activities

Upcoming work for the next quarter will include:

- Allen-McColloch Pipeline:
  - Continue evaluating member agency's cost-sharing proposal
  - Initiate final design on a selected portion of the pipeline
- Calabasas Feeder:
  - Complete validation of pipeline hydraulic capacity assumptions and initiate preliminary design.
- PCCP Rehabilitation Valve and Equipment Storage Building:
  - Erect the pre-engineered metal building at the Lake Mathews site including all framing, roofing, and wall panels. Begin installation of fire sprinkler systems.
- Second Lower Feeder:
  - Reach 3A – Complete construction
  - Reach 3B:
    - i) Continue reviewing contractor submittals
    - ii) Initiate procurement and fabrication of materials
  - Isolation Valve Procurement:
    - i) Continue fabrication of remaining valves
- Sepulveda Feeder:
  - Reach 1:
    - i) Continue final design
    - ii) Initiate permitting process for long-lead permits from Caltrans, City of Los Angeles, and City of Torrance
  - Reach 2:
    - i) Continue the permitting process
    - ii) Continue final design
  - North Reach:
    - i) Continue preliminary design
    - ii) Initiate design of urgent relining at three locations



**PCCP Rehabilitation Program:**  
**Second Lower Feeder PCCP Rehabilitation - Reach 3A**

**Total Project Estimate:**  
 \$23.0 million

**Total Project Cost to Date:**  
 \$14.4 million

This project will rehabilitate approximately 1.2 miles of PCCP segments of the Second Lower Feeder within the City of Rolling Hills Estates with steel liner. The project will also develop a pipe access site into a maintenance hole for improved egress and relocate one air release and vacuum valve.

Phase	Construction
% Complete for Construction	82%
Current Phase Authorized	May 2022
Estimated Construction Completion Date	June 2023
Contract Number	1903

The contractor completed pipe installation, welding, and grouting; and commenced the cement mortar lining. In the upcoming quarter, the contractor will complete the construction, which will include cement mortar lining, install the closure pieces, relocate the air release and vacuum valve assemblies, rehabilitate the maintenance holes, construct a new maintenance hole, backfill, and restore the construction site to previous condition.



Inspection of new steel liner circumferential welds

## Regional Recycled Water Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$0.11 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- Advanced Water Treatment Demonstration Facility
  - Continued baseline testing and monitoring of the secondary membrane bioreactor (MBR)
  - Continued with site and equipment improvements to support the secondary MBR testing
  - Conducted a two-day workshop with Independent Scientific Advisory Panel (ISAP) to provide an update on the secondary MBR testing results and the ongoing nitrogen management studies led by the Los Angeles County Sanitation Districts, and to present the proposed plan for optimization of the tertiary MBR operations
  - Prepared the draft tertiary MBR testing report for ISAP review
  - Submitted the draft tertiary MBR testing report to the State Water Resource Control Board to fulfill grant funding requirements for final reimbursement
- Direct Potable Reuse (DPR) Demonstration Facility
  - Completed literature review of potential DPR technologies
  - Presented potential options for DPR treatment processes and pilot testing strategy to ISAP for feedback
  - Initiated the development of a bench testing plan for potential DPR processes

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Advanced Water Treatment Demonstration Facility
  - Complete baseline testing and monitoring of the secondary MBR system
  - Submit the draft tertiary MBR testing report to ISAP for review
  - Develop a tertiary MBR optimization strategy to close the data gap and facilitate full-scale program implementation
  - Update record drawings to incorporate recent site improvements
- Direct Potable Reuse (DPR) Demonstration Facility
  - Evaluate options to procure membrane filtration (MF) and reverse osmosis (RO) skids to perform additional pilot testing to evaluate early delivery treatment train options
  - Initiate and continue development of bench scale and pilot testing plans for DPR implementation
  - Incorporate ISAP comments on bench/pilot testing and initiate procurement process for equipment to modify the AWT Demonstration Facility to allow for testing of potential future DPR processes

## Right-Of-Way and Infrastructure Protection Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$1.09 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.

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### Program Highlights (3<sup>rd</sup> Quarter)

#### Accomplishments

- Western San Bernardino County Region – Stage 2
  - Continue final design

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Riverside and San Diego County Region – Stage 1
  - Final design for urgent rehabilitation of one site along San Diego Pipeline No. 4 – address review comments
- Western San Bernardino County Region – Stage 2
  - Complete final design

## System Flexibility/Supply Reliability Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$10.13 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- Awarded the following construction contracts
  - Perris Valley Pipeline Interstate 215 Tunnel Crossing
  - Wadsworth Pumping Plant Bypass Pipeline
- Sepulveda Feeder Pump Stations
  - Developed progressive design-build contract documents
  - Prepared a conceptual design report
  - Issued Request for Qualifications No. 1340 to solicit proposals for Stage 1 progressive design-build services
- West Area Supply and Delivery Alternatives
  - Initiated a series of workshops with member agencies to further develop and evaluate alternatives for a potential east-west conveyance

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Continue progress on four individual projects to allow the delivery of water from Diamond Valley Lake to the Rialto Pipeline
  - Badlands Tunnel Surge Tank Facility: Complete final design and advertise for bid
  - Inland Feeder/Rialto Pipeline Intertie: Complete final design and advertise for bid
  - Inland Feeder/San Bernardino Valley Municipal Water District (SBVMWD) Foothill Pump Station Intertie
    - i) Continue final design
    - ii) Award a valve procurement contract
  - Wadsworth Pumping Plant Bypass Pipeline: Continue construction
- Sepulveda Feeder Pump Stations
  - Receive and evaluate statements of qualifications from prospective design-build entities

**System Flexibility/Supply Reliability Program:**  
**Badlands Tunnel Surge Tank Facility**

**Total Project Estimate:**  
 \$16.6 million

**Total Project Cost to Date:**  
 \$1.7 million

This project will construct an above grade surge tank to protect the Badlands Tunnel on the Inland Feeder from excessive negative pressures, which could occur when the pumps at the Wadsworth Pumping Plant trip offline during Diamond Valley Lake to Inland Feeder pumping operation. This project is part of the Rialto Pipeline Water Supply Reliability Improvements, a series of drought resiliency projects.

Phase	Final Design
% Complete for Current Phase	95%
Current Phase Authorized	December 2021
Estimated construction contract award date	September 2023

The 90% final design package was reviewed, and the review comments were incorporated. In the upcoming quarter, the final design package will be completed and advertised for bid.



Badlands Tunnel south portal vault location on Inland Feeder

## System Reliability Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$24.29 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 (3<sup>rd</sup> Quarter)

#### Accomplishments

- Control System Upgrade – Phase 3
  - Conducted field investigation for pilot project at Mills Water Treatment Plant
- Headquarters Fire Alarm & Smoke Control Upgrades
  - Continued construction of the smoke control portion of the project
- Headquarters Network Switch Replacement
  - Advertised a request for bids
- Headquarters Security Upgrade Stage 3
  - Issued notice to proceed and began construction of security upgrades

#### Upcoming Activities

Upcoming work for the next quarter will include:

- AMR System RTU and Radio Modem Upgrade
  - Receive radio modem equipment
- Applications-Servers Upgrade
  - Continue to migrate and upgrade applications in batches
- Datacenter Backup Infrastructure Upgrade
  - Complete vendor selection
- Desert Microwave Site Tower Upgrades
  - Conduct customer witnessed test
- Headquarters Fire Alarm & Smoke Control Upgrades
  - Continue work on the smoke control portion of the project
- Headquarters Security Upgrade Stage 3
  - Continue construction of exterior building security upgrade
- Maximo Mobile Upgrade
  - Continue deployment of devices to field staff
- MWD HQ Network Switch Replacement
  - Receive equipment delivery, followed by installation and configuration.
- Security Operations Center MWD Cyber Security Upgrade – Stage 1
  - 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
  - Complete Security Operations Center cyber security upgrades

**System Reliability Program:**  
**Datacenter Modernization Upgrade – Phase 2**

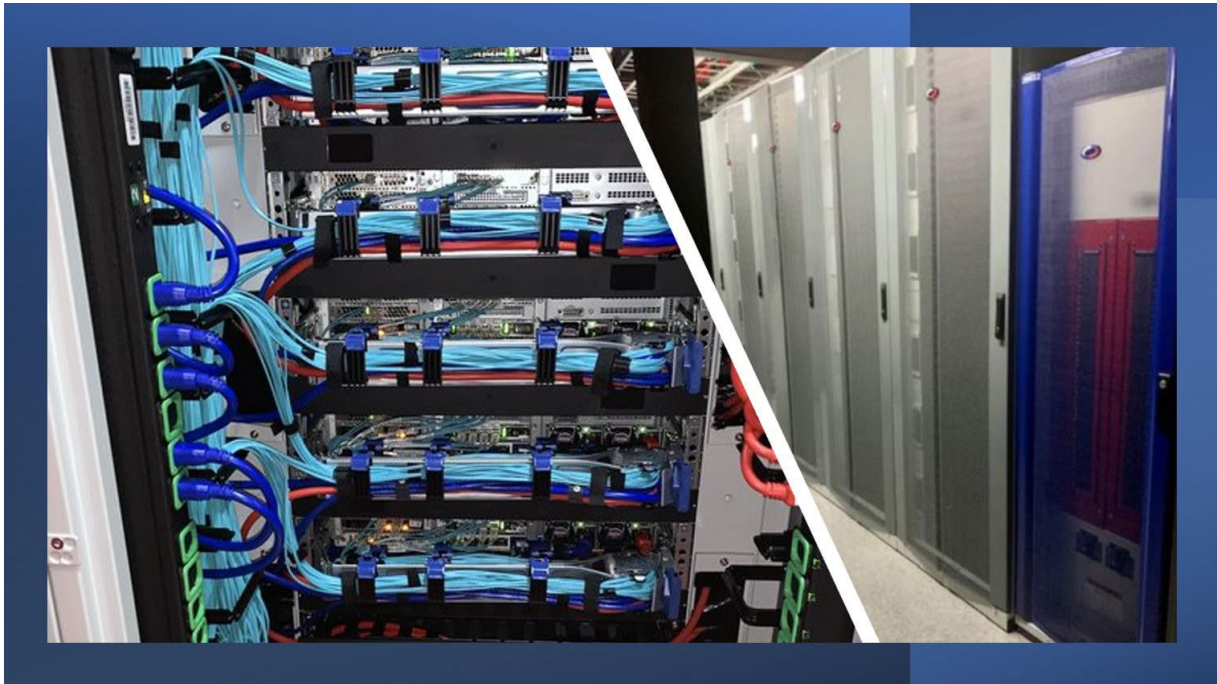
**Total Project Estimate:**  
 \$10.6 million

**Total Project Cost to Date:**  
 \$10.5 million

This project will improve Metropolitan’s datacenter system resiliency and reliability by relocating the Metropolitan’s datacenters to in-region and out-of-region facilities.

Phase	Deployment
% Complete for Current Phase	100%
Current Phase Authorized	May 2022
Deployment Completion Date	January 2023

Both primary and secondary datacenters have been successfully migrated and are fully operational. The final consulting services invoice payment has been processed and the agreement closeout executed as part of the project closeout process. In the upcoming quarter, the remaining administrative project closure process will be completed.



Metropolitan datacenter at undisclosed location

## Treatment Plant Reliability Program

Actual Biennium Expenditures  
(Jul. 2022 through Mar. 2023)  
\$28.96 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 (3<sup>rd</sup> 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
- Diemer Washwater Reclamation Plant Improvements
  - Began preliminary design
- Mills Ozone PLC Control and Communication Equipment Upgrade
  - Began testing and startup
- Weymouth Administration Building Upgrades
  - Continued final design

#### Upcoming Activities

Upcoming work for the next quarter will include:

- Continue preliminary design of:
  - Diemer Filter Rehabilitation
  - Jensen Reservoir Bypass Gate Replacement
  - Mills Perimeter Security & Erosion Control Improvements
  - Water Quality Laboratory Upgrades
  - Diemer Washwater Reclamation Plant 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
- Mills Ozone PLC Control and Communication Equipment Upgrade
  - Complete startup



- Weymouth Building Administration Upgrades
  - Continue final design and field investigation

**Treatment Plant Reliability Program:  
Weymouth Basins Nos. 5-8 & Filter Building No. 2  
Rehabilitation**

**Total Project Estimate:**  
\$117.0 million

**Total Project Cost to Date:**  
\$28.4 million

This project will rehabilitate and replace the Weymouth Water Treatment Plant’s Basins 5-8 major mechanical equipment, structural components, and auxiliary systems, along with seismic upgrades to the Basins 1-8 inlet channels and needed improvements, including replacement of basin inlet gates for Basins 1-8.

Phase	Construction & Closeout
% Complete for Construction	15%
Construction Contract Awarded	May 2022
Construction Completion Date	May 2025
Contract Number	1982

The contractor completed all activities planned for the first half plant shutdown including replacement of six header valves in Filter Building No. 2 and installation of temporary remote terminal units (RTUs) for Basins 5 & 6. The contractor began the first quarter plant shutdown activities including installation of two temporary cranes and demolition of mechanical equipment within Basin Nos. 7 & 8 and Filter Building No. 2. In the upcoming quarter, the contractor plans to continue activities during the first quarter plant shutdown including mechanical equipment demolition from the flocculation and sedimentation basins, filter building, hazardous material abatement, and seismic improvements for the basin and inlet channel walls



Weymouth Basin No. 8 launder trough demolition during the first quarter-plant shutdown

## Water Quality Program

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

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

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### Program Highlights (3<sup>rd</sup> 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 to date.

### Minor Cap Program Historical Summary

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

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 March 2023)	\$7.2M	\$12.3M	\$8.3M	\$1.3M	\$29.1M
Number of Projects Approved	41	48	54	29	172
Number of Projects Completed (through March 2023)	40	37	5	0	82
Number of Projects with Durations of Over 3 Years	1	7	0	0	8

\* Numbers may not sum due to rounding.

Through March 2023, 82 of the 172 projects have been completed, and eight active projects have exceeded three years in duration, as described below.

- Central Basin CNB-48 Service Connection Access Improvement was impacted by ongoing supply chain delays. Procurement of the valves is underway. The project is scheduled to be completed by September 2023.
- East Valley Feeder Vaults Upgrades has been experiencing delays due to additional time for permits by external agency. The project is scheduled to be completed by March 2024.
- 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 has been installed and is now in service. Metropolitan force construction is currently fabricating brackets for the installation of tank canopy roof. The project is scheduled to be completed by May 2023.
- Gene Inlet Surge Chamber Access Improvement has experienced delays due to re-scheduling of the installation of a recently fabricated hatch cover, which can only occur when Gene Wash Reservoir water level is lowered. Metropolitan force construction plans to complete the project by June 2023.
- Gene Pool Refurbishment has experienced delays due to a shortage of local contractors for this type of work due to increased construction activity in the region. Metropolitan force construction will complete the work and the project is scheduled to be completed by September 2023.
- Lower Feeder Blow-Off Drain Line Replacement experienced delays in obtaining a Caltrans permit for Highway 90. Construction 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 construction is underway. The project is scheduled to be completed by April 2023.
- Orange County Region RTU Air Conditioning Unit Replacement was impacted by ongoing supply chain delays. The AC units were delivered in March 2023 and are currently being installed. The project is scheduled to be completed by July 2023.

Actual biennium expenditures to date (July 2022 through March 2023) for the Minor Capital Projects Program were \$3.69 million.

## Minor Cap Projects, 3<sup>rd</sup> Quarter

### Authorized Projects

Eight projects were authorized under the Minor Cap Program during the 3<sup>rd</sup> Quarter of fiscal year 2022/23 (January through March 2023). The total amount authorized for these projects was \$2,357,197.

- CRA Carport Installations at Gene Pump Plant – This project will install 17 carports, 16 at the CRA Gene Pumping Plant village housing facilities and one at the Cooper Basin Reservoir house. The project budget is \$380,000.
- Jensen CFE Channel & Washwater Tank Pumping System Upgrades – This project will install new chemical injection and feed system along with a jet mix pump for the combined filter effluent (CFE) channel. A small variable frequency drive-controlled lift pump for the filter wash water tank will also be installed. These upgrades will support the Jensen plant's low-flow operation. The project budget is \$294,000.
- Jensen Washwater Reclamation Plant Upgrades – This project will procure and install two variable frequency drive pumps at the Jensen plant's Washwater Reclamation Plant No. 2 to support the Jensen plant's low-flow operation. The project budget is \$328,000.
- Lower Feeder Air Release Valve Replacement – This project will replace 30 air release valves along the Lower Feeder to reduce the possibility of air hammer to increase water conveyance system reliability. The project budget is \$240,000.

- Mills Sodium Hypochlorite Injection Upgrade – This project will upgrade the filter backwash sodium hypochlorite injection and feed system at the Mills plant to enhance chemical mixing and improve filter efficiency. The project budget is \$330,000.
- Red Mountain Pressure Control Structure UPS Replacement – This project will replace an obsolete uninterruptable power supply unit at the Red Mountain Pressure Control Structure, which has exceeded its service life. The project budget is \$225,197.
- Skinner Ozone PSU Transistor Replacement – This project will replace 48 insulated-gate bipolar transistors in the ozone power supply units at the Skinner plant, which have exceeded their service life. This project will maintain the reliability of the plant's ozone generation system. The project budget is \$310,000.
- Skinner Plant Turbidity Meter Replacement – This project will replace 21 obsolete turbidity meters and controllers at Skinner Plant 3 and the inlet and outlet channels of the plant's finished water reservoir. The project budget is \$250,000.

### Completed Projects

Five projects were completed under the Minor Cap Program during the 3<sup>rd</sup> Quarter of fiscal year 2022/23 (January through March 2023):

- E-Forms Conversion to Adobe Experience Manager
- Jensen Ozone Diffuser Replacement
- San Diego Pipeline No. 2 Access Road Relocation
- Skinner Plant 1 Filter Inlet Baffle Board Replacement
- Weymouth Natural Gas System Improvement

### Cancelled Projects

- None

## Project Actions

Table 5 lists capital project actions authorized by the General Manager along with funding allocation amounts during the 3<sup>rd</sup> Quarter of FY 2022/23, through the authority delegated by the Board in April 2022. The total funding amount authorized during the 3<sup>rd</sup> Quarter is \$143,052,333 through forty management actions. In some case listed below, the Total Amount Authorized may differ from the Amount Authorized for Current Biennium when the work authorized is scheduled to extend beyond the current biennium. In these cases, it is anticipated that staff will request sufficient funds to be allocated from the CIP Appropriation for the next biennium to cover the planned remaining future-year costs of the project. When the Amount Authorized for Current Biennium is equal to the Total Amount Authorized, the authorized work is planned to be completed within the current biennium. Table 5 excludes any board items heard in closed session and minor cap authorizations. Minor cap authorizations can be found in the Minor Capital Projects Program section of this report.

**Table 5: Capital Projects Funded in 3<sup>rd</sup> Quarter**

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Apprentice Training Center Facility	Study and Preliminary Design	\$644,500	\$709,500
Automatic Meter Reading Radio System Upgrade	Procurement and Deployment of Radio Equipment	\$3,340,000	\$3,340,000
Badlands Tunnel Surge Tank Facility	Procurement	\$1,882,468	\$1,960,668
CIP Budgeting System SharePoint Enhancements <sup>1</sup>	Additional Design, Develop, Deploy	\$200,000	\$200,000
CRA Pumping Plants Lower Guide Access Improvements	Study	\$40,000	\$40,000
CUF Dechlorination System Upgrade	Study	\$50,000	\$50,000
Diamond Valley Lake Floating Wave Attenuator System Improvements – Stage 2 <sup>2</sup>	Investigations and Additional Final Design	\$350,000	\$350,000
Diemer Finished Water Reservoir Slope Protection Improvements	Study	\$50,000	\$50,000
DVL Boat Deck Anchoring System	Investigations, Preliminary Design, and Final Design	\$210,740	\$210,740
DVL Floating Restroom Replacement	Study, Preliminary Design, and Final Design	\$307,110	\$307,110

<sup>1</sup> Additional funding was required for labor and for scope items related to document tracking for the enhanced SharePoint system.

<sup>2</sup> Additional final design funds were required to revise the design to incorporate the reuse of the existing attenuator system anchors and cables for the new attenuators to save construction cost.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
East Lake Skinner Bypass and Bypass No. 2 Screening Structure Upgrade	Slide Gate Assemblies Procurement Design	\$115,000	\$115,000
Foothill Hydroelectric Plant Rehabilitation <sup>3</sup>	Construction and Additional Final Design	\$8,208,000	\$8,808,000
Foothill Feeder Acoustic Fiber Optic PCCP Monitoring System	Study	\$95,000	\$95,000
Foothill Feeder Valve Replacement	Preliminary Design, Final Design, and Procurement	\$150,000	\$150,000
Freda Siphon Barrel No. 1 Repairs	Final Design	\$440,000	\$440,000
Headquarters Building Physical Security Improvement - Stage 3	Construction	\$4,200,000	\$4,200,000
Headquarters Chiller Plant Upgrade	Study	\$144,000	\$170,000
Headquarters HVAC System Equipment Upgrades	Study	\$156,000	\$180,000
Inland Feeder Rialto Pipeline Intertie	Procurement	\$1,882,468	\$1,960,668
Jensen Finished Water Reservoir Rehabilitation <sup>4</sup>	Additional Preliminary Design	\$1,848,000	\$1,848,000
La Verne Field Engineering Building Replacement	Study	\$360,000	\$360,000
Lake Mathews Dam Erosion Control	Preliminary Design	\$30,000	\$30,000
Lake Mathews Outlet Tower No. 2 Valve Replacement	Study	\$45,000	\$45,000

<sup>3</sup> Additional final design funds were required to complete the final design that includes replacement of additional power plant control and electrical systems that were not originally planned to be replaced. The funds were also required to perform value engineering and hazardous materials testing.

<sup>4</sup> Additional preliminary design funds were required to perform additional computational fluid dynamic flow mixing simulations to minimize stagnant water in the reservoirs and to complete the preliminary design of the reservoir rehabilitation.



Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Mills Finished Water Reservoir Rehabilitation <sup>5</sup>	Additional Preliminary Design	\$1,802,000	\$1,802,000
Mills Fluoride Tank Replacement <sup>6</sup>	Additional Final Design and Procurement	\$800,000	\$800,000
New La Verne Warehouse Facilities	Preliminary Design	\$1,800,000	\$1,800,000
Oracle EBusiness Suite Upgrade	Design	\$50,000	\$50,000
Payroll and Timekeeping System Upgrade	Additional Design, Development, and Deployment <sup>7</sup>	\$300,000	\$300,000
Perris Valley Pipeline Interstate 215 Tunnel Crossing	Construction	\$47,000,000	\$75,000,000
Replacement of Network Switches at MWD Headquarters Building	Procurement, Implementation, and Deployment	\$2,325,000	\$2,325,000 <sup>8</sup>
San Diego Canal Concrete Liner Replacement – Site No. 1055	Design and Construction	\$439,675	\$439,675
San Diego Canal Concrete Liner Replacement – Site No. 622	Design and Construction	\$500,550	\$500,550
San Jacinto Diversion Structure Slide Gates V-01, V-02, V-03, and V-04 Rehabilitation	Slide Gate Procurement	\$1,030,853	\$1,100,000
Second Lower Feeder PCCP Rehabilitation Reach 3B	Construction	\$40,000,000	\$93,800,000
Service Connection A-02 Rehabilitation	Preliminary Design	\$475,000	\$475,000

<sup>5</sup> Additional preliminary design funds were required to perform additional computational fluid dynamic flow mixing simulations to minimize stagnant water in the reservoirs and to complete the preliminary design of the reservoir rehabilitation.

<sup>6</sup> The additional final design and procurement funds were required to procure the higher-performance and larger capacity tanks than initially planned. The funds were also required for additional design efforts to address piping reconfiguration and changes to the foundation and anchoring system.

<sup>7</sup> Additional funding was required due to the shift in project delivery method from internal design, development, and deployment to the use of consulting services.

<sup>8</sup> Previously reported total amount authorized of \$2,750,000 in Q1 of FY 2022–23 has been reduced to \$25,000 for study only. With an additional total amount authorized of \$2,325,000 for the reporting quarter, the total amount authorized to date for this project is \$2,350,000.

Project Authorized	Activity Authorized	Amount Authorized for Current Biennium	Total Amount Authorized
Skinner Finished Water Reservoir Slide Gate Rehabilitation <sup>9</sup>	Refurbishment of Effluent Slide Gate and Additional Final Design for Backup Process Water System	\$680,000	\$680,000
Skinner Plant Control System Upgrade	Design	\$325,000	\$375,000
Skinner Ozone Contactor Structure Rehabilitation	Construction	\$598,000	\$598,000
Wadsworth Pumping Plant Bypass Pipeline	Procurement and Construction	\$20,092,969	\$21,878,664
West Valley Feeder No. 1 PCCP Rehabilitation	Study	\$85,000	\$85,000
	<b>Total</b>	<b>\$143,052,333</b>	<b>\$227,628,575</b>

Due to changes to the project implementation schedules or completion of projects under budget, \$78,977,320 was reallocated back to the CIP Appropriation (Appropriation No. 15525) from the previously authorized projects listed in Table 6 below. The reallocated funds were used to fund the projects listed in Table 5 and will be used to support the upcoming projects in the current biennium.

**Table 6: General Manager Actions to Reallocate Capital Project Funds**

Project Authorized (Title)	Amount Authorized for Reallocation to CIP Appropriation	Total Amount from CIP Appn. for Current Biennium
Arc Flash Model Development	(\$2,000,000)	\$9,400,000
Conveyance & Distribution Rehabilitation for FY 2006/07 through FY2011/12 Remaining Budget	(\$1,500,000)	\$2,166,403
Conveyance & Distribution Rehabilitation for FY 2012/13 through FY 2017/18 Remaining Budget	(\$1,268,800)	\$0
CRA Domestic Water Treatment System Upgrade	(\$8,000,000)	\$30,453,000
CRA Pumping Plant Sump System Rehabilitation	(\$16,000,000)	\$0
Datacenter Backup Infrastructure Upgrade	(\$625,520)	\$0
Desert Housing Improvements	(\$3,700,000)	\$1,612,851

<sup>9</sup> The additional final design funds were required to design a backup process water system for the chemical feed systems to deliver treated water during the finished water reservoir outages for the slide gate rehabilitation.

Project Authorized (Title)	Amount Authorized for Reallocation to CIP Appropriation	Total Amount from CIP Appn. for Current Biennium
Employee Village Enhancement Remaining Budget	(\$1,322,000)	\$0
Mills Plant Control System Upgrade	(\$6,500,000)	\$12,422,000
Second Lower Feeder PCCP Rehabilitation - Remaining Budget	(\$7,900,000)	\$195,300
Sepulveda Feeder PCCP Rehabilitation Remaining Budget	(\$777,000)	\$0
Employee Village Enhancement	(\$6,900,000)	\$65,149
West Area Supply and Delivery Alternatives	(\$484,000)	\$0
Weymouth Treatment Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation	(\$22,000,000)	\$82,253,000
Total:	(\$78,977,320)	

## CEQA Determinations

Table 7 lists CEQA exemption determinations made by the General Manager during the 3<sup>rd</sup> Quarter. Consistent with CEQA, the Board delegated this authority to the General Manager in April 2022. Adoption of Negative Declarations and Mitigated Negative Declarations, and certification of Environmental Impact Reports will continue to require action by Metropolitan’s Board. This table excludes information on board items.

Table 7: CEQA Exemption Determinations

Projects
Diamond Valley Lake Dam Monitoring System Upgrade – Stage 3
Headquarters Fire Sprinkler Piping Replacement
Garvey Reservoir Dam Monitoring System Upgrade
Jensen WWRP No. 2 Flocculator Rehabilitation

## Construction and Procurement Contracts

The table below summarizes the status of all construction and procurement contracts that were awarded by the Board and active during the reporting quarter. These contracts are listed in Table 9, Table 11, and Table 12. Total contract earnings for the 3<sup>rd</sup> Quarter were approximately \$45.51 million.

Table 8: 3<sup>rd</sup> Quarter Contract Action

Contract Actions during Q3 for FY 2022/2023, January 2023 through March 2023	
Contracts Awarded by Board	4 construction contracts totaling \$143.55 million (Table 10) 1 procurement contract totaling \$0.41 million (Table 10)
Total Payments Authorized	\$45.51 million
Construction Contracts Completed	Notice of Completion was filed for 2 construction contracts (Table 9)
Active Contracts at end of Q3 <sup>10</sup>	26 construction contracts, totaling \$459.23 million (Table 11) 15 procurement contracts, totaling \$56.55 million (Table 12) \$515.79 million total value*

\*Numbers may not sum due to rounding

The figures on the next two pages show the locations of the twenty-six construction contracts that were active through the end of the 3<sup>rd</sup> Quarter.

<sup>10</sup> Active contracts at the end of the 3<sup>rd</sup> Quarter are those that are ongoing at the end of March 2022 and have not filed Notice of Completion with the county where the work was performed.

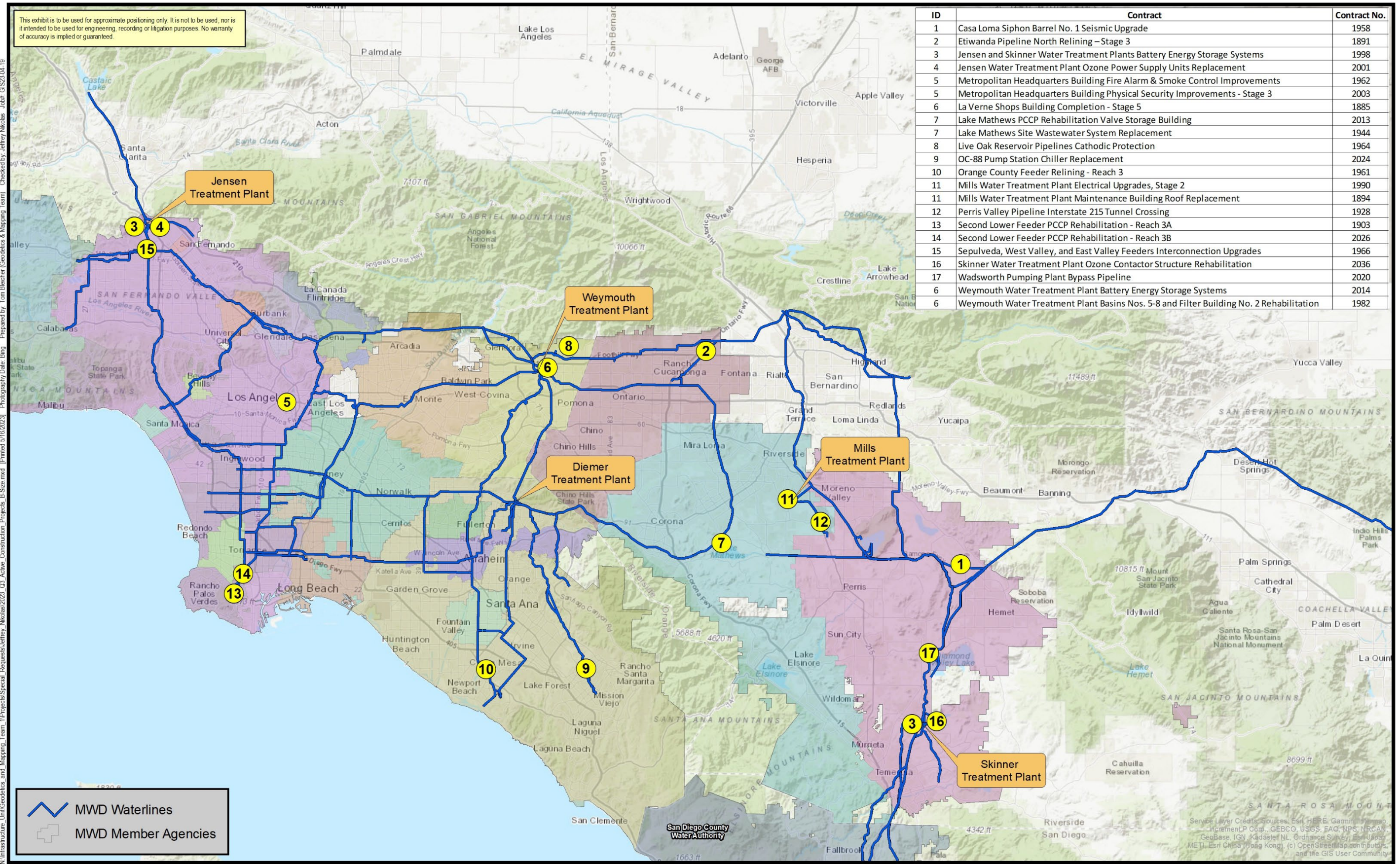
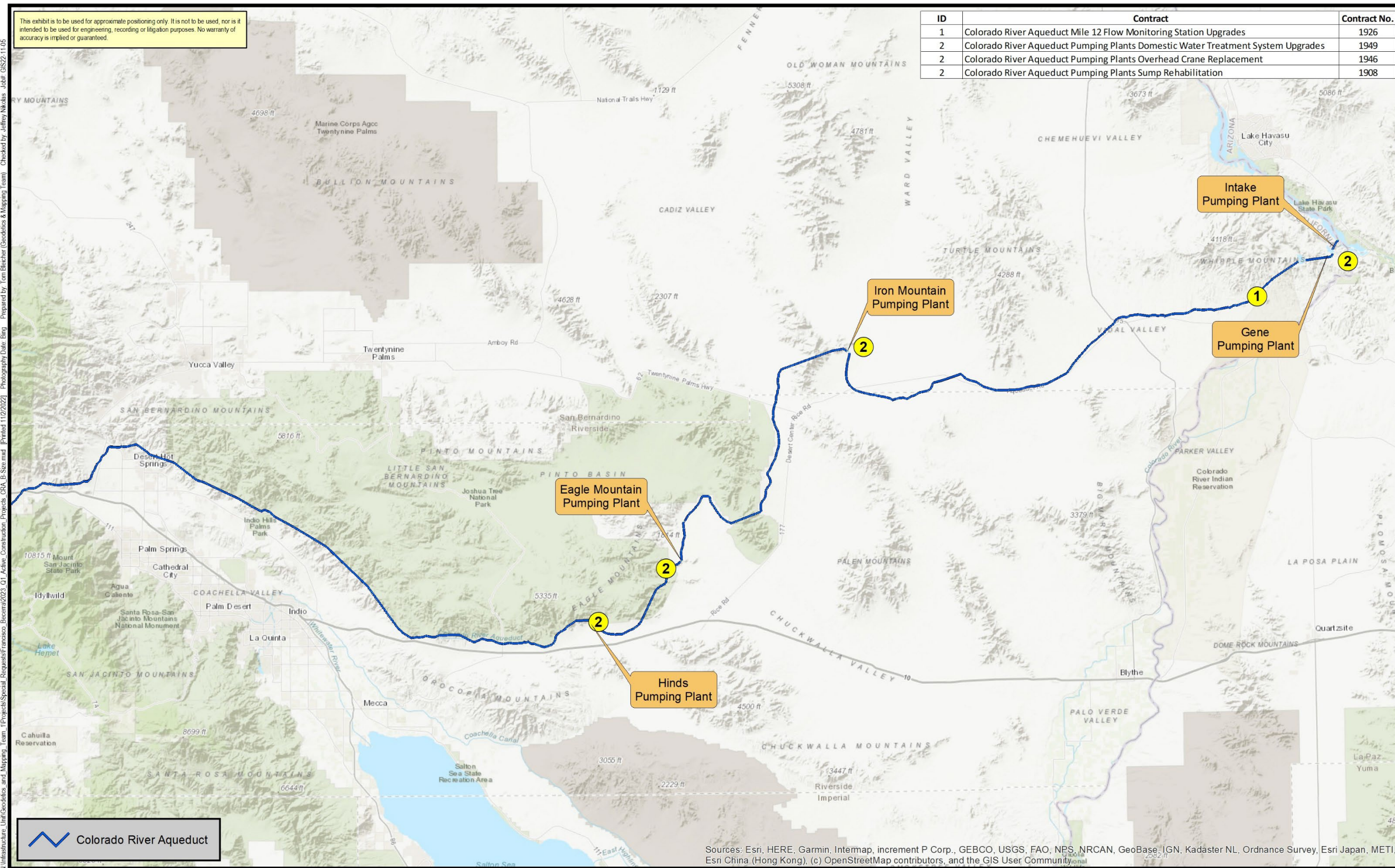



Figure 5: Construction Contracts – Greater Los Angeles Region



N:\Infrastructure\_Units\Geodetics\_and\_Mapping\_Team\1\Projects\Spatial\_Requests\Franisco\_Beer\2023\_Q1\_Active\_Construction\_Projects\CRA\_B\_Site.mxd [Printed 11/20/2022] Photography Date: Bing Prepared by: Tom Blecher (Geodetics & Mapping Team) Checked by: Jeffrey Nicklas Job#: 01522-11-05

This exhibit is to be used for approximate positioning only. It is not to be used, nor is it intended to be used for engineering, recording or litigation purposes. No warranty of accuracy is implied or guaranteed.

 Colorado River Aqueduct

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

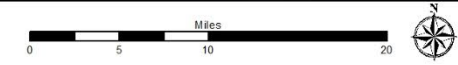


Figure 6: Construction Contracts – Colorado River Aqueduct

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 3<sup>rd</sup> Quarter, the Board authorized a \$500,000 increase to the General Manager's change order authority for Construction Contract No. 1946 for CRA Pumping Plants – Overhead Crane Replacement.

#### Notices of Completion during 3<sup>rd</sup> Quarter:

The following table shows the three Board awarded construction contracts for which Metropolitan accepted the contract as completed during the 3<sup>rd</sup> 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 %
1905	Metropolitan Headquarters Building Improvements	February 2023	\$43,998,000	\$51,034,265	\$7,036,265	16.0%
2038	San Diego Pipeline No.1 Rainbow Tunnel Concrete Liner Rehabilitation	March 2023	\$1,228,607	\$1,182,695	-\$45,912	-3.7%
Totals:			<b>\$45,226,607</b>			

For the 3<sup>rd</sup> Quarter, the total bid amount of the completed construction contracts was approximately \$45 million.

For Contract 1905 listed above, Metropolitan's Board authorized an increase of \$5,600,000 in change order authority, to an aggregate amount of \$7,799,900 in August 2020. The extra work included upgrading the board and committee room technology and security, installation of the UV-C air disinfection systems, replacing the carpet on floors 5 to 11 and in the second-floor rotunda area, installation of door assist devices on all building egress doors, and other ancillary work in and around the Headquarters Building.

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 (April 2022 through March 2023) is 10.56 percent<sup>11</sup>. This sharp increase in the rolling average of change orders is mainly due to the aforementioned extra work on Contract 1905. The rolling average of change orders drops to 3.79 percent if Contract 1905 is excluded.

<sup>11</sup> Original amount of construction contracts completed (Apr. 2022 through Mar. 2023) = \$79,305,178  
Change orders for completed construction contracts (Apr. 2022 through Mar. 2023) = \$8,372,955  
Change order percentage (Apr. 2022 through Mar. 2023) = 10.56%



**Contracts Awarded by the Board during 3<sup>rd</sup> Quarter:**

During the period of January through March 2023, four construction contracts totaling \$143,551,754 and one procurement contract totaling \$407,800, were awarded by the Board.

**Table 10: Construction and Procurement Contracts Awarded This Quarter**

<b>Construction Contracts</b>	
<b>Perris Valley Pipeline Interstate 215 Tunnel Crossing</b>	
Contract Number	1928
Contractor	James W. Fowler Co.
Amount	\$59,489,720
<b>Wadsworth Pumping Plant Bypass Pipeline</b>	
Contract Number	2020
Contractor	Steve P. Rados, Inc.
Amount	\$14,820,500
<b>Second Lower Feeder PCCP Rehabilitation - Reach 3B</b>	
Contract Number	2026
Contractor	J.F. Shea Construction, Inc.
Amount	\$68,847,000
<b>Skinner Water Treatment Plant Ozone Contactor Structure Rehabilitation</b>	
Contract Number	2036
Contractor	Slater Waterproofing, Inc
Amount	\$394,534
<b>Procurement Contracts</b>	
<b>Furnishing a 20-inch Triple Offset Ball Valve for Service Connection CB-11</b>	
Contract Number	2046
Contractor	Cascade Consultants, LLC.
Amount	\$407,800

The table on this page lists the 26 ongoing construction contracts through the end of the 3<sup>rd</sup> 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 contains construction contracts awarded by the Board.

Table 11: Active Construction Contracts at the End of 3<sup>rd</sup> Quarter

	Cont. No.	Contract Title	Contractor	Contract Amount <sup>12</sup>	Earnings Through March 2023	Start Date	Est. Completion Date	Est. Percent Complete
1	1885	La Verne Shops Building Completion – Stage 5	Woodcliff Corporation, Inc.	\$18,930,000	\$3,586,960	6/10/22	5/24	19%
2	1891	Etiwanda Pipeline North Relining - Stage 3	Mladen Buntich Construction Co., Inc.	\$25,562,413	\$17,483,421	8/19/22	10/23	68%
3	1894	Mills Plant Maintenance Building Roof Replacement	Bishop, Inc.	\$302,030	\$121,704	10/12/22	6/23	40%
4	1903	Second Lower Feeder PCCP Rehabilitation – Reach 3A	J. F. Shea Construction, Inc.	\$11,884,700	\$9,714,235	6/6/22	6/23	82%
5	1908	CRA Pumping Plants – Sump Rehabilitation <sup>13</sup>	Michels Construction, Inc.	\$27,242,360	\$12,615,770	1/24/19	5/23	46%
6	1926	CRA Mile 12 Flow Monitoring Station Upgrades	R2 Engineering dba R2Build	\$2,067,096	\$1,996,886	6/16/21	5/23	97%
7	1928	Perris Valley Pipeline Interstate 215 Tunnel Crossing	James W. Fowler, Company	\$59,489,720	\$2,301,323	2/13/23	2/25	4%
8	1944	Lake Mathews Reservoir Wastewater System Replacement	Creative Home dba CHI Construction	\$3,815,000	\$3,374,900	12/13/21	6/23	88%
9	1946	Colorado River Aqueduct Pumping Plants - Overhead Crane Replacement	J.F. Shea Construction, Inc.	\$13,611,460	\$6,394,115	10/14/20	9/23	47%

<sup>12</sup> 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.

<sup>13</sup> Contract 1908 and Contract 1998 have exceeded the contract working days and Metropolitan is assessing liquidated damages.

	Cont. No.	Contract Title	Contractor	Contract Amount <sup>12</sup>	Earnings Through March 2023	Start Date	Est. Completion Date	Est. Percent Complete
10	1949	Colorado River Aqueduct Pumping Plants Domestic Water Treatment System Replacement	J.F. Shea Construction, Inc.	\$32,824,000	\$6,150,605	1/20/22	3/25	19%
11	1958	Colorado River Aqueduct Replacement of Casa Loma Siphon Barrel No. 1	J.F. Shea Construction, Inc.	\$11,581,575	\$11,218,135	1/20/22	6/23	97%
12	1961	Orange County Feeder Relining – Reach 3	Spiniello Infrastructure West, Inc.	\$17,226,250	\$6,319,764	5/11/22	10/23	37%
13	1962	MWD HQ Building Fire Alarm & Smoke Control Improvements	Bernards Bros. Inc.	\$14,165,888	\$11,612,571	9/24/20	9/23	82%
14	1964	Live Oak Reservoir Pipelines Cathodic Protection	Exaro Technologies Corporation	\$182,800	\$0	9/28/22	4/23	0%
15	1966	Sepulveda, West Valley, and East Valley Feeders Interconnection Upgrades	Blois Construction, Inc.	\$3,143,592	\$1,188,046	7/7/22	9/23	38%
16	1982	Weymouth Water Treatment Plant Basins Nos. 5-8 & Filter Building No. 2 Rehabilitation	J. F. Shea Construction, Inc.	\$94,314,347	\$20,016,068	6/10/22	5/25	21%
17	1990	Henry J. Mills Water Treatment Plant Electrical Upgrades, Stage 2	CSI Electrical Contractors, Inc.	\$9,203,606	\$2,094,414	12/13/21	2/25	23%
18	1998	Jensen and Skinner Water Treatment Plants Battery Energy Storage Systems <sup>13</sup>	Ameresco, Inc.	\$11,604,521	\$3,870,857	10/7/21	11/24	33%
19	2001	Jensen Water Treatment Plant Ozone Power Supply Units Replacement	Leed Electric, Inc.	\$2,257,897	\$916,900	7/20/22	12/23	41%
20	2003	Metropolitan Headquarters Building Exterior Physical Security Improvements	Caltec, Corp.	\$2,165,000	\$72,487	1/12/23	1/24	3%
21	2013	Lake Mathews PCCP Rehabilitation Valve Storage Building	Facility Builders & Erectors, Inc.	\$4,766,776	\$3,578,093	3/10/22	9/23	75%

	Cont. No.	Contract Title	Contractor	Contract Amount <sup>12</sup>	Earnings Through March 2023	Start Date	Est. Completion Date	Est. Percent Complete
22	2014	Weymouth Plant Battery Energy Storage System	Siemens Industry, Inc.	\$6,176,521	\$2,075,861	7/18/22	8/23	34%
23	2020	Wadsworth Pumping Plant Bypass Pipeline	Steve P. Rados, Inc.	\$14,820,500	\$490,000	2/2/23	6/24	3%
24	2024	OC-88 Pump Station Chiller Replacement	Mehta Mechanical Co., Inc. dba MMC Inc.	\$2,654,000	\$259,600	6/6/22	7/23	10%
25	2026	Second Lower Feeder PCCP Rehabilitation - Reach 3B	J.F. Shea Construction, Inc.	\$68,847,000	\$1,475,000	2/13/23	9/25	2%
26	2036	Skinner Water Treatment Plant Ozone Contactor Structure Rehabilitation	Slater Waterproofing, Inc.	\$394,534	\$0	4/12/23	12/23	0%
<b>Total contract value for active construction contracts:</b>				<b>\$459,233,586</b>				

The following table lists the 15 ongoing procurement contracts at the end of the 3<sup>rd</sup> Quarter.

**Table 12: Active Procurement Contracts at the End of 3<sup>rd</sup> Quarter**

	Cont. No.	Contract	Contractor	Contract Amount <sup>14</sup>	Earnings Through March 2023	Start Date	Est. Delivery Completion Date	Est. Percent Complete <sup>15</sup>
1	1861	Furnishing Lubricated Plug Valves for Second Lower Feeder	Southwest Valve & Equipment, Inc.	\$2,380,909	\$2,362,968	9/11/17	D <sup>16</sup>	99%
2	1867 <sup>17</sup>	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 1	Crispin Valve, LLC	\$5,066,975	\$2,674,908	12/18/17	12/23	53%
3	1868	Furnishing Butterfly Valves for the Weymouth Water Treatment Plant – Schedule 2	DeZurick, Inc.	\$771,984	\$760,384	12/18/17	D <sup>16</sup>	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 <sup>16</sup>	97%
5	1912	Furnishing Large-Diameter Conical Plug Valves	Ebara Corporation	\$23,750,060	\$17,562,939	12/24/18	6/23	74%
6	1922	Furnishing One Double Column Vertical Machining Center for the La Verne Maintenance Shops	Gosiger Machine Tools, LLC (Gosiger West)	\$2,193,356	\$2,170,295	9/17/18	D <sup>16</sup>	99%
7	1948	Refurbishing Valve Actuators for the Diemer Water Treatment Plant	Flowserve Limatorque	\$3,370,402	\$2,922,963	2/16/19	9/24	87%
8	1955	Furnishing Membrane Filtration Systems for the CRA Domestic Water Treatment Systems	Wigen Water Technologies	\$1,244,535	\$599,970	5/28/20	7/25	48%
9	1965	Furnishing Equipment for the Jensen Ozone Power Supply Units Upgrades	Suez Treatment Solutions, Inc.	\$4,141,194	\$3,229,976	3/30/20	D <sup>16</sup>	78%

<sup>14</sup> 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.

<sup>15</sup> 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.

<sup>16</sup> All items were delivered prior to this reporting quarter but contract remains open pending use of manufacturer field services.

<sup>17</sup> 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 <sup>14</sup>	Earnings Through March 2023	Start Date	Est. Delivery Completion Date	Est. Percent Complete <sup>15</sup>
10	1969	Furnishing Inlet Valve Gearboxes for Skinner Module No. 7	R&B Automation, Inc.	\$224,510	\$207,035	4/29/20	2/24	92%
11	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%
12	2012	Furnishing Electrical Panels for Diemer Treatment Plant	Integrated Power System, LLC	\$247,789	\$0	11/30/22	5/23	0%
13	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%
14	2028	Furnishing Slide Gates for the San Jacinto Diversion Structure	Whipps, Inc.	\$820,853	\$0	12/8/22	6/24	0%
15	2046	Furnishing a 20-inch Triple Offset Ball Valve for Service Connection CB-11	Cascade Consultants, LLC	\$407,800	\$0	3/8/23	8/24	0%
<b>Total contract value for active procurement contracts:</b>				<b>\$56,553,850</b>				

## 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 performances are reported for the Board awarded construction contract projects.

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

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Headquarters Building Improvements	Inspection	\$6,610,946	\$54,400,690	9-12%	12.2% <sup>18</sup>
Perris Valley Pipeline Interstate 215 Tunnel Crossing	Final Design	\$5,907,564	\$60,089,720	9-12%	9.8%
Second Lower Feeder PCCP Rehabilitation - Reach 3B	Final Design	\$6,301,138	\$85,659,000	9-12%	7.4%

<sup>18</sup> Inspection costs for Headquarters Building Improvements were higher than the target range due to longer than anticipated time to complete construction, which required additional inspection. The construction delays were mainly due to differing site conditions and additional work to replace the outdated cafeteria kitchen cold room refrigeration system, improve the board and committee rooms, and other additional work as described in the August 2020 Board Letter, Item 7-1.

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Wadsworth Pumping Plant Bypass Pipeline	Final Design	\$1,891,753	\$17,238,500	9-12%	11%

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

Project	Metric	Actual Cost of Metric	Construction Cost	Target Range	Actual %
Rainbow Tunnel Concrete Liner Rehabilitation	Inspection	\$150,398	\$1,549,763	9-15%	9.7%
Skinner Ozone Contactor Structure Rehabilitation	Final Design	\$55,152	\$412,534	9-15%	13.4%



## 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 (January through March 2023).

### Relocations

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

## Projects Expensed to Overhead

There are no expensed projects to report during the 3<sup>rd</sup> Quarter of FY 2022/23 (January through March 2023).

## 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 March 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
<b>Colorado River Aqueduct Reliability Program</b>	<b>Total</b>	\$532,217	\$449,115	\$29,160	\$23,578
Cabazon Radial Gate Facility Improvements	15320	\$2,456	\$845	\$0	\$141
White Water Siphon Protection	15341	\$15,585	\$14,498	\$2,650	\$14
CRA - Conveyance Reliability	15373	\$117,828	\$116,970	\$1,500	\$593
CRA Pumping Plant Reliability	15374	\$24,467	\$24,012	\$0	\$8
CRA - Electrical/Power Systems Reliability	15384	\$58,665	\$51,625	\$1,507	\$3,135
CRA – Discharge Containment	15385	\$8,129	\$7,977	\$0	\$2
CRA - Reliability for FY2006/07 through FY2011/12	15438	\$134,194	\$121,891	\$7,530	\$2,419
CRA Main Pump Reliability	15481	\$75,000	\$60,869	\$8,445	\$7,812
CRA - Reliability for FY2012/13 through FY2017/18	15483	\$82,967	\$43,510	\$6,212	\$7,630
CRA - Reliability for FY2018/19 through FY2023/24	15507	\$12,926	\$6,918	\$1,316	\$1,825
<b>Cost Efficiency &amp; Productivity Program</b>	<b>Total</b>	\$161,488	\$110,354	\$8,750	\$6,686
DVL Recreation Facilities	15334	\$87,104	\$59,975	\$1,350	\$590
Yorba Linda Power Plant Modifications	15446	\$17,125	\$17,103	\$0	\$11
Business Operations Improvement	15484	\$17,416	\$11,363	\$1,810	\$1,126

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Project Controls and Reporting System	15490	\$6,440	\$6,292	\$0	-\$10
Enterprise Content Management	15500	\$3,600	\$3,595	\$2,480	\$0
DVL Recreation Rehabilitation & Refurbishment	15515	\$1,898	\$1,133	\$150	\$220
Energy Sustainability Improvements	15521	\$27,905	\$10,893	\$2,960	\$4,748
<b>Dams and Reservoirs Reliability Program</b>	<b>Total</b>	<b>\$80,294</b>	<b>\$70,557</b>	<b>\$3,000</b>	<b>\$1,569</b>
Reservoir Cover and Replacement	15417	\$68,864	\$60,658	\$640	\$1,289
Dam Rehabilitation & Safety Improvements	15419	\$11,430	\$9,899	\$2,360	\$280
<b>Distribution System Reliability Program</b>	<b>Total</b>	<b>\$486,278</b>	<b>\$413,227</b>	<b>\$43,840</b>	<b>\$45,099</b>
Conveyance and Distribution System - Rehabilitation	15377	\$125,961	\$109,091	\$8,760	\$7,346
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	\$154,412	\$134,181	\$170	\$18,693
Hydroelectric Power Plant Improvements	15458	\$28,611	\$17,750	\$3,960	\$474
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	\$138,942	\$123,399	\$23,800	\$9,747
Pipeline Rehabilitation and Replacement	15482	\$1,143	\$1,042	\$160	\$9
Conveyance and Distribution System - Rehabilitation for FY2018/19 through FY2023/24	15503	\$37,209	\$27,764	\$6,990	\$8,831
<b>District Housing &amp; Property Improvements Program</b>	<b>Total</b>	<b>\$12,285</b>	<b>\$9,069</b>	<b>\$10,100</b>	<b>\$2,519</b>
Employee Village Enhancement	15513	\$12,285	\$9,069	\$10,100	\$2,519

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
<b>Minor Capital Projects Program</b>	<b>Total</b>	\$45,500	\$21,821	\$6,600	\$3,694
Capital Program for Projects Costing Less Than \$400,000 for FY2018/19 through FY2019/20	15504	\$15,500	\$12,258	\$1,750	\$833
Capital Program for Projects Costing Less Than \$400,000 for FY2020/21 through FY2021/22	15518	\$20,000	\$8,253	\$3,270	\$1,550
Capital Program for Projects Costing Less Than \$400,000 for FY2022/23 through FY2023/24	15526	\$10,000	\$1,311	\$1,580	\$1,311
<b>Prestressed Concrete Cylinder Pipe Rehabilitation Program</b>	<b>Total</b>	\$380,391	\$283,942	\$38,810	\$16,275
PCCP Rehabilitation and Replacement	15471	\$26,966	\$23,057	\$510	\$383
Sepulveda Feeder PCCP Rehabilitation	15496	\$38,813	\$29,257	\$2,900	\$1,334
Second Lower Feeder PCCP Rehabilitation	15497	\$298,927	\$219,666	\$32,900	\$13,301
Allen-McColloch Pipeline, Calabasas Feeder, and Rialto Pipeline PCCP Rehabilitation	15502	\$15,685	\$11,962	\$2,500	\$1,256
<b>Regional Recycled Water Supply Program</b>	<b>Total</b>	\$24,350	\$20,410	\$3,350	\$110
Demonstration-Scale Recycled Water Treatment Plant	15493	\$24,350	\$20,410	\$3,350	\$110
<b>Right of Way &amp; Infrastructure Protection Program</b>	<b>Total</b>	\$31,715	\$28,152	\$6,740	\$1,092
Right of Way & Infrastructure Protection	15474	\$31,715	\$28,152	\$6,740	\$1,092
<b>System Flexibility/Supply Reliability Program</b>	<b>Total</b>	\$750,240	\$651,679	\$22,070	\$10,131
Hayfield and Lake Perris Groundwater Recovery	15402	\$1,500	\$1,121	\$525	\$8

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
Perris Valley Pipeline	15425	\$180,500	\$133,720	\$10,653	\$2,603
Water Delivery System Improvements	15488	\$106,420	\$76,606	\$8,281	\$7,001
Verbena Property Acquisition	15492	\$264,000	\$262,130	\$2,560	\$182
Delta Wetlands Properties (Delta Islands)	15494	\$197,819	\$178,102	\$51	\$337
<b>System Reliability Program</b>	<b>Total</b>	<b>\$454,331</b>	<b>\$331,225</b>	<b>\$39,310</b>	<b>\$24,294</b>
Information Technology System - Infrastructure	15376	\$51,306	\$47,803	\$30	\$85
Information Technology System - Security	15378	\$12,351	\$12,051	\$0	\$1,236
La Verne Shop Facilities Upgrade	15395	\$71,348	\$51,268	\$680	\$3,949
Water Operation Control	15467	\$68,524	\$42,894	\$4,580	\$813
Union Station Headquarters Improvements	15473	\$108,221	\$91,712	\$7,040	\$5,486
IT Infrastructure Reliability	15487	\$59,667	\$40,327	\$6,690	\$3,534
Operations Support Facilities Improvement	15495	\$35,363	\$22,875	\$13,880	\$3,333
Metropolitan Security System Enhancements	15499	\$20,110	\$11,637	\$3,145	\$585
Infrastructure Reliability Information System	15501	\$16,500	\$4,877	\$95	\$2,011
System-Wide Paving & Roof Replacements for FY 2020/21 through FY 2021/22	15516	\$4,791	\$4,023	\$1,450	\$2,430
System-Wide Paving & Roof Replacements for FY2020/21 through FY2023/24	15519	\$2,461	\$1,681	\$730	\$763
Enterprise Data Analytics	15522	\$3,690	\$75	\$990	\$70

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2023 (\$1,000's)	Biennium to Date Planned Expenditures (\$1,000's)	Biennium Actual Expenditures (\$1,000's)
<b>Treatment Plant Reliability Program</b>	<b>Total</b>	\$908,472	\$777,042	\$21,270	\$28,959
Weymouth Water Treatment Plant Improvements	15369	\$195,711	\$188,762	\$3,090	\$622
Jensen Water Treatment Plant Improvements	15371	\$47,062	\$46,649	\$310	\$11
Diemer Water Treatment Plant Improvements	15380	\$216,907	\$207,811	\$3,060	-\$519
Mills Water Treatment Plant Improvements	15381	\$5,525	\$5,281	\$0	\$4
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	\$74,207	\$67,414	\$3,660	\$1,743
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	\$116,079	\$44,679	\$1,559	\$17,163
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	\$91,376	\$85,102	\$3,270	\$406
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	\$39,852	\$26,543	\$72	\$1,950
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	\$77,539	\$77,176	\$39	\$218
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15478	\$2,955	\$1,510	\$120	\$75
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	\$2,664	\$1,010	\$0	\$163
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	\$8,339	\$7,482	\$0	-\$2

Capital Programs/Appropriations	Appn. No.	Total to Date		Biennium to Date	
		Appn. Amount (\$1,000's)	Costs thru March 2023 (\$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	\$632	\$0	\$330
Jensen Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15508	\$17,895	\$9,885	\$4,690	\$4,679
Diemer Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15510	\$3,758	\$1,544	\$0	\$788
Skinner Water Treatment Plant, Improvements for FY 2020/21 Through FY 2023/24	15512	\$5,239	\$3,982	\$1,400	\$345
Mills Water Treatment Plant Improvements for FY2020/21 through FY2023/24	15520	\$2,631	\$1,572	\$0	\$975
Chlorine System Improvements	15523	\$50	\$6	\$0	\$6
<b>Water Quality Program</b>	<b>Total</b>	<b>\$10,240</b>	<b>\$9,615</b>	<b>\$0</b>	<b>\$0</b>
Enhanced Bromate Control	15472	\$10,240	\$9,615	\$0	\$0
<b>Total CIP</b>		<b>\$3,877,802</b>	<b>\$3,176,208</b>	<b>\$233,000</b>	<b>\$164,005</b>

Notes on the above table:

- Numbers may not sum due to rounding.
- Numbers are based on the general ledger information downloaded on 04/12/2023.
- \$0 under Planned Expenditures indicates that while no expenditures are planned during the reporting period, expenditures may be planned during upcoming periods.
- Negative actual expenditures indicate the result of cost transfers, write-offs, or credits greater than actual costs for this biennium through the reporting quarter.

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