



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

# Board Report

## Operations Groups

### • Operations Monthly Activities for October 2024

#### Summary

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This monthly report for the Operations Groups provides a summary of activities for October 2024 in the following key areas:

- Promote DEI and a Positive Workplace Culture
- Manage Business Operations, Budget, and Staffing
- Provide Reliable Water Deliveries and Manage Storage
- Develop New Supplies and Optimize System Flexibility
- Protect Source Waters and Ensure Water Quality Compliance
- Optimize Water Treatment and Distribution
- Protect Infrastructure and Optimize Maintenance
- Optimize Asset and Maintenance Management
- Enhance Emergency Preparedness and Response
- Prepare for Future Legislation and Regulations
- Advance Education and Outreach Initiatives
- Engage with Member Agencies and Other Stakeholders on Technical Matters

#### Purpose

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Informational by the Operations Groups on a summary of key activities for the month of October 2024.

#### Attachments

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Attachment 1: Detailed Report –Operations Groups’ Monthly Activities for October 2024

Date of Report: November 5, 2024

# Operations



## Operations Groups

### Core Business Objectives

#### Promote DEI and a Positive Workplace Culture

On September 26, Desert Section managers participated in the new Civil and Inclusive Workplace training at the Gene facility. This training is being rolled out to all employees at Metropolitan.



Desert DEI Training

#### WSO BUSINESS PLAN Strategic Priority #2: SUSTAIN

#### Manage Business Operations, Budget, and Staffing

Business Management Team (BMT) welcomed a new Administrative Assistant II to the team in October. The first monthly Accounts Payable Collaboration meeting between Accounts Payable, BMT, and Operations Groups Business Support Teams was a great success. The focus of October's meeting was on the Accounts Payable scanning system and invoice processing procedures.

#### WSO BUSINESS PLAN Strategic Priority #3: ADAPT

#### Provide Reliable Water Deliveries and Manage Storage

Metropolitan member agency water deliveries were 130,800 acre-feet (AF) for October with an average of 4,200 AF per day, which was about 400 AF per day lower than in September. Metropolitan continued delivering water to the Cyclic and Conjunctive Use Programs. Treated water deliveries were 10,700 AF lower than in September, for a total of 62,700 AF, or 48 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of

99,000 AF in October. State Water Project (SWP) imports averaged 2,500 AF per day, totaling about 76,300 AF for the month. The target SWP blend is 25 percent for Weymouth, Diemer, and Skinner plants.

Metropolitan expects to have sufficient SWP and Colorado River supplies to meet demands in 2024. Water continues to be managed according to Water Surplus and Drought Management (WSDM) principles and operational objectives with an emphasis on positioning SWP supplies to meet future demands in the SWP-dependent areas. Metropolitan continued to deliver to Desert Water Agency and Coachella Valley Water District because of the improved supply conditions. Metropolitan is continuing to minimize the use of Table A supplies this year to improve SWP carryover for next year. Total end-of-year storage is estimated at 3.8 million AF, which would be the highest storage level in Metropolitan's history.

## Develop New Supplies and Optimize System Flexibility

During October, staff continued baseline monitoring for tertiary membrane bioreactor nitrification-denitrification testing at the Pure Water Southern California Napolitano Innovation Center demonstration plant. Staff performed Volatile Organic Compound (VOC) spike testing using acetone and formaldehyde to demonstrate removal in gas and liquid forms and confirm operational setpoints to support full-scale permitting and future direct potable reuse testing. Staff also conducted N-nitrosodimethylamine (NDMA) and 1,4-dioxane spike testing on the ultraviolet light/advanced oxidation system. Metropolitan staff continued to support Los Angeles County Sanitation Districts' emissions testing to support future environmental permitting of the full-scale system.

In addition, Metropolitan staff resumed diurnal flow pattern testing to troubleshoot the biological upset that occurred in July and test possible causes and resolutions of that upset.



Staff preparing solution for VOC spiking test (left) and performing preventative maintenance on the membrane bioreactor system (right) at the Napolitano Center

## WSO BUSINESS PLAN Strategic Priority #4: PROTECT

### Protect Source Waters and Ensure Water Quality Compliance

Metropolitan complied with all water quality regulations and primary drinking water standards during October 2024.

On October 15, staff participated in the annual Department of Water Resources' (DWR) Municipal Water Quality Investigations meeting in Sacramento. The meeting covered a range of topics including harmful cyanobacterial/algae blooms, water quality modeling, taste and odor issues, and updates on monitoring programs in the Sacramento-San Joaquin Delta and State Water Project, including presentations by staff from DWR, United States Geological Survey, and UC Davis on their work to address water quality challenges in the State Water Project.

During October, the Desert Support Operations and Construction Services Units completed domestic water service line inspections at the Hinds, Eagle Mountain, Iron Mountain, and Gene pumping plants. The service line inventory was necessary to comply with recent revisions to the federal Lead and Copper Rule. After thorough field inspections and review of records, all service lines at the Desert facilities have been confirmed as non-lead service lines. The completed inventory was submitted to the State Water Resources Control Board by the October 16 deadline.



Staff potholing to inspect domestic water lines at Hinds pumping plant



## Optimize Water Treatment and Distribution

The SWP target blend entering the Weymouth and Diemer plants and in Lake Skinner stayed at 25 percent in October. Flow-weighted running annual averages for total dissolved solids from August 2023 through July 2024 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the CRA were 473, 550, and 492 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

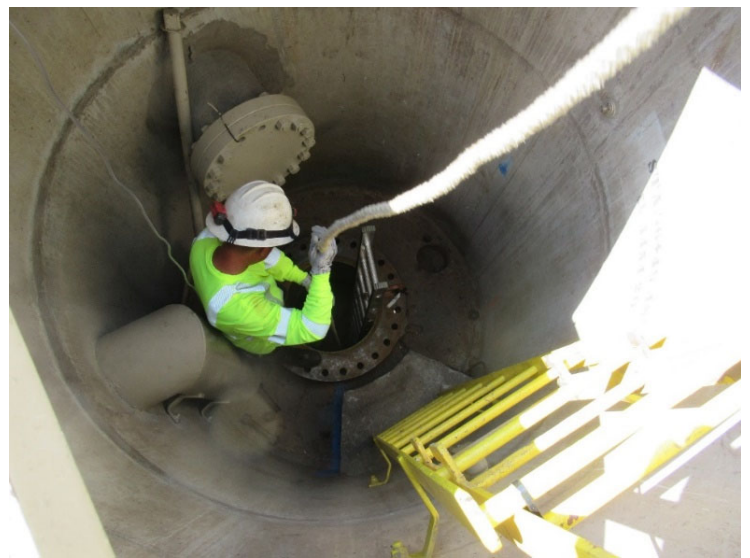
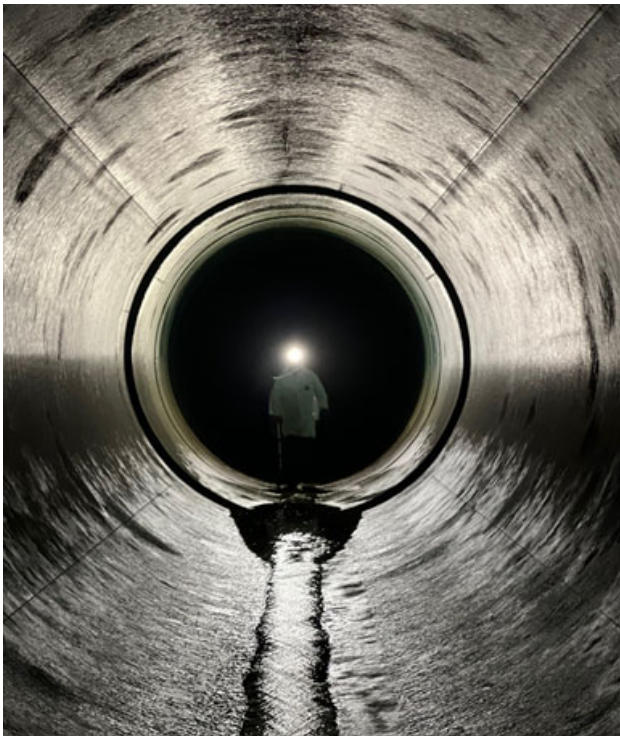
Staff replaced a section of PVC piping with carbon steel piping at the Skinner plant to improve long-term reliability. The replaced section, which is used for carrier water to create a vacuum to deliver chlorine for disinfection, had developed a crack. Upgrading to stronger materials in this part of the chlorine system will enhance overall plant reliability.



PVC pipe section before replacement (right) and staff installing carbon steel pipe at the Skinner plant

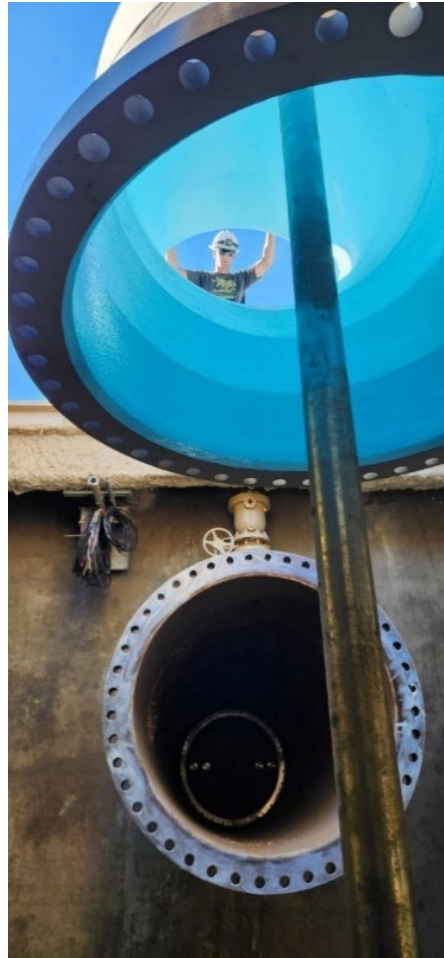
## Protect Infrastructure and Optimize Maintenance

Staff recently shut down the 142-inch, 6.5-mile Etiwanda Feeder, which conveys State Water Project supplies from the Rialto Pipeline to the Upper Feeder. During the outage, approximately 5.4 miles were removed from service, and 70 acre-feet were dewatered. This allowed for the inspection and repair of defective pipe coatings. The contractor performed warranty repairs, while Metropolitan staff addressed additional repairs outside warranty limits. Crews identified approximately 13 cubic yards of loose mortar lining debris within the pipeline which the contractor removed. The pipeline was successfully returned to service on October 18.



Staff conducting inspection of the Etiwanda Feeder (left) and lowering tools and equipment to make coating repairs inside the pipeline (right)

Staff reinstalled a recently refurbished sleeve valve at the PC-1 pressure control structure. PC-1 is a vital junction between three major raw water feeders on the eastern side of Metropolitan's service area: the CRA, Lakeview Pipeline, and Inland Feeder. Six-sleeve valves at PC-1 are used to control water pressure to ensure that it remains within the operating ranges of each feeder.



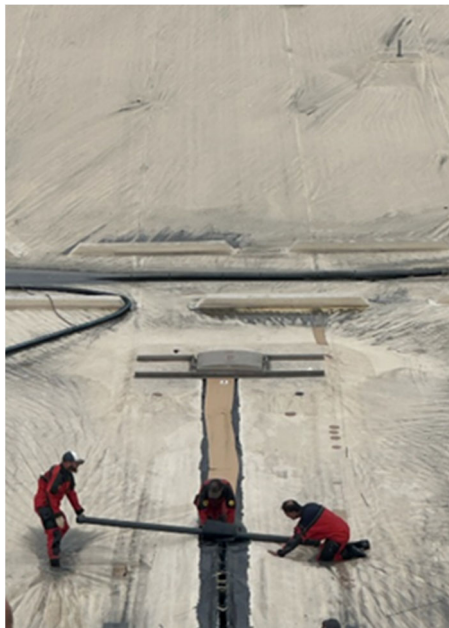
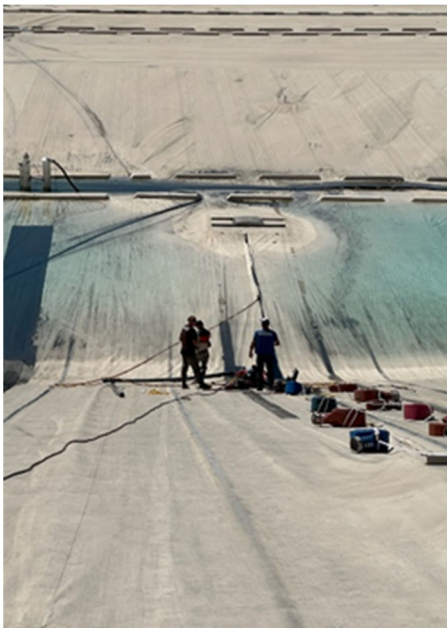
**Staff reinstalling a sleeve valve at PC-1**



The La Verne Shops responded to an urgent request to repair a large 150-foot tear in the floating cover at Garvey Reservoir. Divers successfully repaired the cover by reinforcing the torn section and pulling it back into place. The repair was completed within two days with no impact on operations.



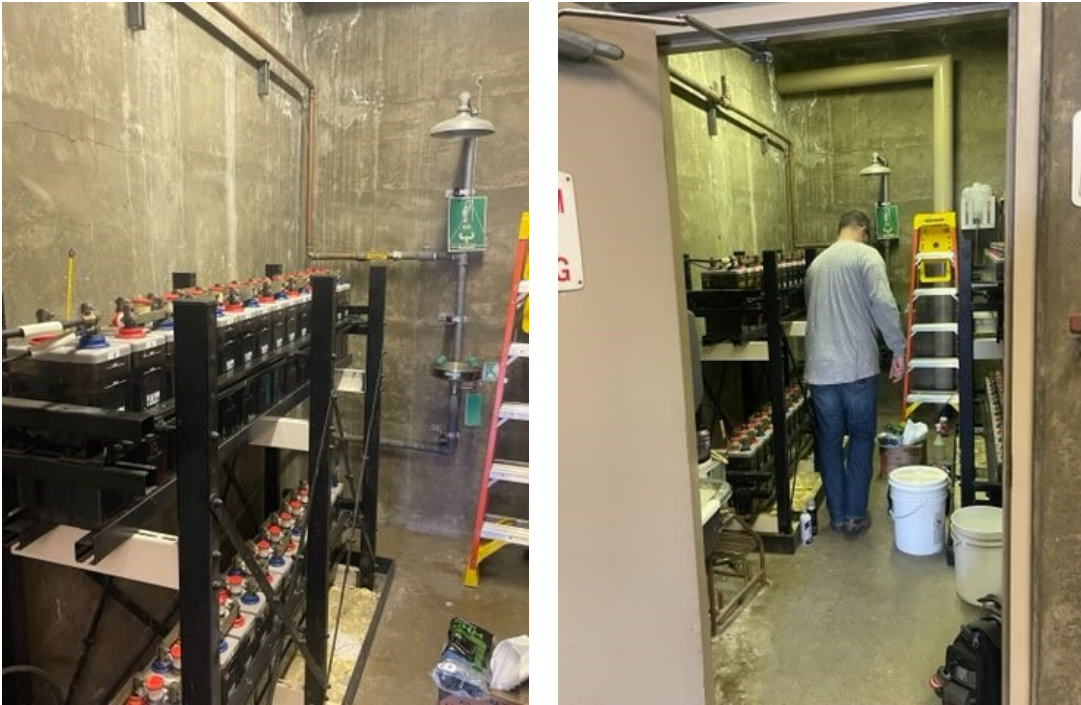
**Initial dive to reinforce both sides of the floating cover tear at Garvey Reservoir**



**Staff pulling tear together (left), patching tear (middle), and completed repair (right)**



Staff serviced the battery bank at the Yorba Linda Hydroelectric Power Plant (HEP) and performed preventative maintenance during a two-week shutdown of the facility. Preventative maintenance on battery banks ensure reliability and efficiency and include regular inspections, cleaning, monitoring battery health, temperature control, and detailed recordkeeping. These measures prolong battery life and help ensure reliable backup power for the structure.



**Staff servicing battery bank at the Yorba Linda HEP**

## Optimize Asset and Maintenance Management

Staff continued rebuilding a pump unit at the Eagle Mountain pumping plant. Given the large size of the disassembled components, safely storing them often requires custom-made holding assemblies. Staff fabricated a new cradle which will allow the shaft to be stored indoors while preventing accidental damage.



**Staff fabricating a new pump shaft cradle at Eagle Mountain pumping plant**

Corrosion and abrasive sediment in the CRA main pump cooling water systems have reduced the pipe wall thickness over time. While replacing the manifold, staff used the opportunity to upgrade the original copper-nickel alloy manifolds to more modern materials such as stainless steel, which provides excellent long-term corrosion resistance.



**Staff fabricating new stainless pipe manifolds for CRA pump cooling water systems**



The original 42-inch fixed cone drain valve at Gene Wash Reservoir drain valve, installed during the construction of the dam in the 1930s, was replaced in 2022. Testing of the new valve was delayed to complete necessary environmental precautions, including protecting nesting birds and confirming the hydraulic capacity of downstream drainage systems. After receiving environmental clearances, Desert and Engineering staff successfully tested the valve and verified its proper operation.



**Testing of newly installed dam valve at Gene Wash Reservoir**

In preparation for testing the Gene Wash discharge valve, Desert staff identified three culverts that were potentially undersized for a full flow event. The team removed the three 36-inch culverts and replaced them with 42-inch units to ensure safe operation during high flow periods.



**New 42-inch culverts and final grading**



Staff continues to enhance Desert facility infrastructure by expanding the previously constructed 37 carports. The current project includes 13 installations at Eagle Mountain, two at Hinds, six at Iron Mountain, and four at Gene. Staff is currently at Eagle Mountain village, grading, forming, and placing concrete for the driveways where the canopies will be erected.



Grading preparation (left) and concrete placement for carport construction (right) at Eagle Mountain village

## Enhance Emergency Preparedness and Response

On October 17, Operations staff participated with Emergency Management and other staff in Metropolitan's Emergency Response Organization (ERO) during the 2024 ShakeOut functional exercise. This exercise also included participation from Southern California Edison and several member agencies. The exercise simulated two major earthquakes of magnitude 7+, affecting pipelines and reservoirs across Metropolitan's service area, with all communication lines down except for radio and satellite phones. It involved a full-scale activation of Metropolitan's Emergency Operations Center, including the activation of three Incident Command Posts at Weymouth, Jensen, and Soto Street. This exercise provided valuable training for ERO members and highlighted opportunities to enhance future emergency response efforts.



Staff during full-scale EOC activation for the 2024 ShakeOut functional exercise

## WSO BUSINESS PLAN Strategic Priority #5: PARTNER

### Prepare for Future Legislation and Regulations

On September 16, the Office of Administrative Law approved CARB's Zero-Emission Forklift Regulation. The rule becomes effective on January 1, 2025, and prohibits fleet operators from purchasing new propane or gasoline-fueled Class IV (any lifting capacity) and Class V forklifts (lifting capacity up to 12,000 lbs.) starting in 2026. Fleet would need to phase out model years 2018 and older forklifts starting in 2028. Existing propane or gasoline-fueled forklifts designated as low-use (i.e., operated < 200 hrs/yr) may continue to be operated until December 31, 2030. Staff is working on a forklift replacement strategy for Metropolitan's 17 propane- and one gas-powered forklifts.

On September 18, the Office of Environmental Health Hazard Assessment (OEHHA) recommended a Notification Level (NL) for perfluorohexanoic acid (PFHxA) at 1 part per billion (ppb). NLs are nonregulatory, health-based advisory levels that the Division of Drinking Water (DDW) establishes for contaminants for which regulatory standards have not been set. DDW will now take this recommendation under advisement when potentially setting an NL for PFHxA. While staff has sporadically detected PFHxA in Metropolitan's source waters, the detections were at levels far below the proposed NL. Staff will continue to track any further developments with respect to PFAS in drinking water.

On September 24, a federal district judge ruled that fluoridation of drinking water at levels typical in the United States poses an unreasonable risk of injury to public health. The judge relied on a National Toxicology Report which concluded drinking water with fluoride at over double the recommended limit is associated with lower IQ in children. This ruling resulted from a lawsuit seeking to prohibit drinking water fluoridation under the federal Toxic Substances Control Act. Under this ruling, the U.S. Environmental Protection Agency (EPA) is required to provide a regulatory response; however, the order does not dictate what that response must be. Public health authorities continue to endorse the use of community water fluoridation as safe and beneficial to oral health. This ruling does not require any change in Metropolitan's current treatment operations. Staff will continue to monitor this issue, including any response by EPA.

On October 1, CARB released a discussion draft on AB 1594 (Garcia, 2023) amendments to the Advanced Clean Fleets Regulation for State and Local Government Fleets. The draft introduces a definition for "traditional utility-specialized vehicles" and alters exemption requirements, potentially allowing utilities to add internal combustion vehicles over 8,500 lbs. to their fleets when zero-emission trucks are not available in similar configurations or suitable for utility-specific operations. The draft was presented at a public workshop on October 3, to gather feedback for future rulemaking. Staff is assessing impacts from the latest draft for potential comments.

On October 8, the EPA announced the final Lead and Copper Rule Improvements (LCRI). The LCRI builds on the 2021 Lead and Copper Rule Revisions (LCRR) and the original Lead and Copper Rule. The final rule mandates the replacement of all lead service lines within 10 years, lowering the lead action level from 15 to 10 parts per billion (ppb), removing the lead trigger level, improving tap sampling procedures, and improving public education and outreach materials to include renters and individuals with limited English proficiency. Under the 2021 LCRR, Metropolitan is required to provide an initial lead-service-line inventory for its desert systems by October 16, 2024. For Metropolitan, the LCRI will result in additional sampling at Metropolitan's desert housing but is not applicable to the main water delivery system. Staff is working on compliance procedures for the new LCRI.



## Advance Education and Outreach Initiatives

On October 15, staff delivered a keynote presentation on regulatory, monitoring, and response aspects of constituents of emerging concern at the Association of California Water Agencies, Region 10 meeting in Yorba Linda.

A tour of the Water Quality Laboratory was provided to Golden State Water Company on October 23.

On October 24, the Water Quality Laboratory hosted a special event to commemorate the 50-year anniversary of the Safe Drinking Water Act and the formation of the Water Quality and Research Branch (now called the Water Quality Section). Guests at the event included Metropolitan board members, executive management, representatives from the State Water Resources Control Board, and current and former Water Quality staff.

This month, the Diemer pumping plant hosted a tour for the Japanese Water Works Association. The group consists of young professionals who are working in the water industry and are part of the Association's emerging leaders program. Participants learned about Metropolitan's source water supply, water treatment process, and conveyance and distribution system, together with a guided tour of the treatment plant.



**Staff hosting tour for the Japanese Water Works Association at the Diemer plant**



## Engage with Member Agencies and Other Stakeholders on Technical Matters

On October 3, the Jensen plant hosted a tour for members of the Los Angeles Mayor's Office, Los Angeles Department of Water and Power, and Los Angeles Sanitation and Environment. The tour provided this Los Angeles delegation with an overview of Jensen plant's critical role in ensuring reliability for the region, its multi-stage treatment process, and the operational collaboration with its neighboring facility, the Los Angeles Aqueduct Filtration Plant.



**Members of the Los Angeles delegation with Metropolitan staff during a tour of the Jensen plant**

On October 1, Metropolitan participated in the second workshop coordinated by the Municipal Water District of Orange County (MWDOC) focused on regional aspects of nitrification. Discussion topics included a review of various transmission mains that experienced nitrification in 2023 and how the different subagencies handled nitrification. Agencies shared information on monitoring, flushing, and use of chloramine boosting systems. Participants supported improved coordination and communication, including establishing a working group to meet regularly to better prepare and respond to future nitrification events within the Orange County region.