



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Board Report

Operations Groups

• August Operations Groups Monthly Activities Report

Summary

This monthly report for the Operations Groups includes updates to the General Manager's Business Plan goals, outcomes, and target measures. It also provides a summary of activities for July 2025 in the following key areas:

- Enhance Workforce Safety and Security
- Manage Business Operations, Budget, and Staffing
- Develop New Solutions to Enhance Operational and Business Processes
- Ensure Resilient and Reliable Operations
- Advance Pure Water Southern California
- Protect Source Waters
- Optimize Water Treatment and Distribution Operations
- Optimize Maintenance and Asset Management
- Enhance Emergency Preparedness and Response
- Ensure Power and Environmental Regulatory Compliance
- Engage in Legislative and Regulatory Processes
- Advance Education and Outreach Initiatives
- Engage with Member Agencies and Other Stakeholders on Technical Matters

Purpose

Informational by the Operations Groups on a summary of key activities and updates for the month of July 2025.

Attachments

Attachment 1: Detailed Report –Operations Groups' Monthly Activities for July 2025

Operations Groups

GM Business Plan Goals, Outcomes, & Target Measure Updates

GOAL: Develop a Biennial Budget that Meets Metropolitan's Needs

OUTCOME: Implement risk-informed capital investment planning to ensure reliable critical infrastructure

TARGET MEASURE: Update and commit to the Strategic Asset Management Plan and incorporate climate adaptation into the SAMP

UPDATE: Work on the updated SAMP continues with the final report expected in August 2024.

GOAL: Execute CAMP4W Implementation Strategy to Integrate Climate Adaptation District-Wide

OUTCOME: Assess climate risks and vulnerabilities

TARGET MEASURE: Develop power transmission assessment and strategic plan

UPDATE: Board approval for transmission planning professional services agreement received in July 2025. Working with a potential strategic partner to explore developing and submitting transmission projects in the 2025 CAISO project window.

TARGET MEASURE: Refine asset management with climate risks and signposts

UPDATE: Following SAMP self-assessment, industry review & benchmarking will include how we are incorporating climate risk. A consultant was also engaged this month to perform an industry review of signposts.

OUTCOME: Identify climate adaptation strategies

TARGET MEASURE: Study DVL pumped storage expansion

UPDATE: Professional services agreement approved by the Board in July 2025 will include hydroelectric generation valuation services.

OUTCOME: Evaluate projects and programs using the CAMP4W assessment criteria

TARGET MEASURE: Evaluate possible investments using CAMP4W Assessments (include PureWater, Sites, DCP, SWPDA strategies, conservation) and develop "portfolio views" where feasible, to support Board decision-making (WRM as convenor of org-wide assessment committee)

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UPDATE: Operations staff continued participating in the assessment of two CAMP4W projects – Pure Water and Sites Reservoir.

OUTCOME: Integrate climate considerations and implement adaptation strategies

TARGET MEASURE: Integrate climate adaptation strategies into water quality ops and plans, and update the nitrification control plan

UPDATE: In addition to extensive monitoring across the distribution system, Metropolitan proactively adjusted total chlorine residual levels at its treatment plants to help mitigate the potential for nitrification. As summer progresses, additional nitrification management strategies are being considered to further safeguard water quality.

GOAL: Complete EIR and Planning, for the Board to Consider Pure Water Southern California

OUTCOME: Prepare for possible implementation through contractor outreach and water quality research

TARGET MEASURE: Conduct research and testing at the Napolitano Innovation Center to support design development and future permitting needs

UPDATE: System modifications continued at the demonstration plant in preparation for the next phase of tertiary membrane bioreactor (MBR) testing, anticipated to begin in the fall of 2025. On July 2, a workshop was held with the program's Independent Science Advisory Panel to discuss the MBR test plan, a future DPR pilot test plan, and recent research on public engagement and acceptance of potable reuse.

GOAL: Achieve Equitable Supply Reliability for State Water Project Dependent Areas

OUTCOME: Evaluate further potential investments toward addressing State Water Project Dependent Areas

TARGET MEASURE: Develop and present portfolio approach, including CAMP assessment

UPDATE: Operations staff continue to analyze future drought sequences and identify potential vulnerabilities to SWP-dependent areas.

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GOAL: Provide Organizational Stability and Deliver Operational Excellence

OUTCOME: Maintain excellence in daily operations and reliability

TARGET MEASURE: Monitor, develop, and implement strategies to manage emerging contaminants and invasive species, ensuring operational reliability and regulatory compliance

UPDATE: With invasive golden mussels now present in the State Water Project, Metropolitan established a multi-disciplinary Invasive Mussels Task Force to develop management and control strategies aimed at protecting our infrastructure, lakes, and groundwater replenishment deliveries.

TARGET MEASURE: Balance operational demands and organizational objectives in executing the Annual Operating Plan

UPDATE: Water continues to be managed according to Water Surplus and Drought Management (WSDM) principles and operational objectives according to the Annual Operating Plan, with an emphasis to position SWP supplies to meet future demands in the SWP-dependent areas

TARGET MEASURE: Maximize long-term asset performance through preventative maintenance, while minimizing corrective maintenance

UPDATE: Work is ongoing, and a board action is planned for August to increase consultant support and accelerate the effort.

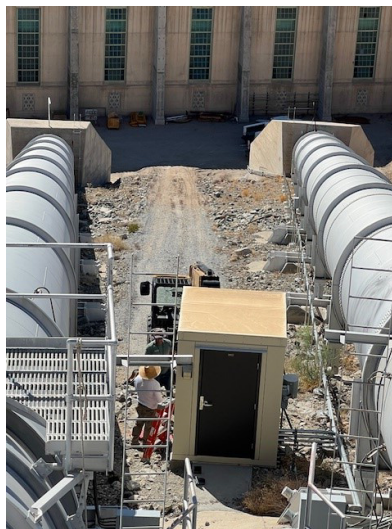
Operations Groups

Operations Groups Business Plan Strategic Priorities & Objectives

Strategic Priority #1: EMPOWER

Enhance Workforce Safety and Security

At Eagle Mountain, a small building was constructed on the steep slope between delivery lines due to manufacturer-recommended cable length limitations for the flowmeters it houses. The flowmeters also require air conditioning, but the steep terrain makes maintenance of the A/C unit very challenging. To address this, staff designed and built a maintenance platform to improve safety and accessibility.



Staff installing maintenance platform (left and middle), and maintenance platform ready for painting (right)

Staff from various Desert teams are taking the annual asbestos worker refresher training class held in the Gene Camp assembly hall.



Asbestos worker annual refresher training class

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Strategic Priority #2: SUSTAIN

Manage Business Operations, Budget, and Staffing

The Business Management Team has been working with Operations Groups to streamline monthly reporting and produce more targeted reports to support operational planning and budgeting. The FY 26/27 and FY 27/28 budget development is progressing with final submissions and review of operating equipment and staffing plans completed. BMT staff have also restructured the Operations Groups Monthly Report to integrate each group's newly issued Business Plans, as well as incorporate updates to the General Manager's Goals, Outcomes, and Target Measures.

Develop Solutions to Enhance Operational and Business Processes

Staff completed the installation of new ozone residual analyzers equipped with data storage capabilities. These upgraded units replace the existing analyzers and offer a key advantage: in the event of a SCADA data acquisition failure, compliance data can be downloaded and retrieved directly from the analyzers. To ensure data collection redundancy and reliability, each of the four contactors have been upgraded with two new analyzers.



Staff working on replacing the existing ozone residual analyzer

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Strategic Priority #3: ADAPT

Ensure Resilient and Reliable Operations

Metropolitan member agency water deliveries were 131,000 acre-feet (AF) for July, with an average of 4,200 AF per day, which was about 500 AF per day lower than in June. Treated water deliveries were 2,600 AF lower than June for a total of 72,200 AF, or 55 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) pumped a total of 88,400 AF in July. State Water Project (SWP) imports averaged 3,000 AF per day, totaling about 93,900 AF for the month. The target SWP blend is currently 40 percent for Diemer, Weymouth, and Skinner plants. SWP blends at Weymouth and Diemer were adjusted to 100 percent SWP temporarily to accommodate a five-day shutdown of the Lake Mathews facility.

Metropolitan has sufficient SWP, Colorado River supplies, and storage to meet demands in 2025. 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 area. The SWP Allocation is expected to remain at 50 percent for the calendar year. Metropolitan is continuing to manage Table A supplies to preserve supplies for the SWP-dependent area. At the same time, Metropolitan has shifted operations to manage surplus supplies. With the additional supplies, Metropolitan is delivering to member agency cyclic programs and to Desert Water Agency and Coachella Valley Water District in 2025.

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Advance Pure Water Southern California

Staff continued baseline monitoring for tertiary membrane bioreactor (tMBR) nitrification-denitrification testing and continued working with the Los Angeles County Sanitation Districts (LACSD) to modify the Napolitano Innovation Center demonstration plant for snail mitigation efforts. Multiple demonstration plant outages were coordinated with a vendor and LACSD to facilitate construction activities and system modifications—including snail mitigation improvements, LACSD’s off-gas testing, and the conversion of the second pass of the reverse osmosis (RO) system into a second two-stage RO train. This latter modification enables testing of additional RO membranes, with the resulting data supporting the pre-qualification of RO membranes compatible with the PWSC source water.

A virtual workshop for the PWSC Independent Science Advisory Panel (ISAP) was held on July 2. Topics presented for discussion included an overall program update, direct potable reuse pilot testing plan, RO concentrate nitrogen removal, optimized N-only tMBR test plan, and public engagement and acceptance of water reuse. The ISAP will provide a report detailing their response to questions and recommendations on future activities.



Modifying the reverse osmosis system during a week-long shutdown at the Napolitano Innovation Center demonstration plant

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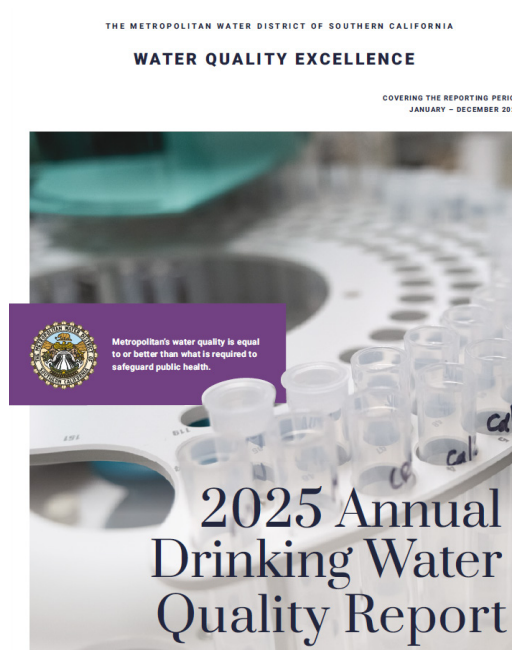
Strategic Priority #4: PROTECT

Protect Source Waters

Metropolitan complied with all water quality regulations and primary drinking water standards during June 2025.

The Annual Drinking Water Quality Report was posted on Metropolitan's website on July 1, and hard copies were distributed to District facilities. The report covers regulatory compliance monitoring for calendar year 2024 and demonstrates that as in previous years, Metropolitan's treated water meets or surpasses all state and federal regulatory requirements.

In response to the discovery of invasive golden mussels in the California Delta and State Water Project in October 2024, and subsequent southward spread through the SWP, a multi-disciplinary task force has been developed to assess, design, and implement management and control options to protect Metropolitan's infrastructure, lakes, and groundwater replenishment deliveries. Multiple meetings of the task force and individual topic-focused strike teams were held throughout July.



2025 Annual Drinking Water Quality Report cover

Optimize Water Treatment and Distribution Operations

The SWP target blend entering the Weymouth and Diemer plants increased from 40 to 100 percent to support the Lake Mathews facility outage. Upon completion of the outage, the SWP target blend decreased to 60 percent by the end of July and is targeting 40 percent by early August. The SWP target blend entering Lake Skinner remained at 40 percent in July. Flow-weighted running annual averages for total dissolved solids from June 2024 through May 2025 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the CRA were 586 mg/L, 568 mg/L, and 569 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Operations Groups

Mills plant successfully coordinated the relocation and installation of a new turbidity meter and a chlorine analyzer for the sampling of the Combined Filter Effluent (CFE). This effort was made possible through the collaboration of the electrical, mechanical, control systems, and operations teams, who worked in unison. This cross-disciplinary effort resulted in a successfully upgraded sampling point, significantly enhancing operational efficiency and water quality monitoring capabilities at the Mills plant.



New cabinet and equipment near the CFE structure at the Mills plant

Staff continued efforts to replace older copper communication lines at remote locations across the District. The new fiber optic cables will provide greater bandwidth, enhanced security capabilities, and improved reliability in areas prone to communication issues. Along the CRA, a crew at the Desert Water—Coachella Valley meter structure began work on the necessary prerequisites required by the communication provider to support the upcoming fiber optic cable installation.



Excavating for new conduit installation (left) and installing pull rope into conduit (right) along the CRA

Operations Groups

Desert staff began a project to replace a section of sewer pipe at the Iron Mountain pump plant. The project will address a deteriorated section of sewer pipe that has required multiple repairs in recent years and is likely to fail in the near future.



Staff laying out slope (left) and open trench (middle) for replacement sewer pipe, and new sewer pipe partially complete and backfilled (right)

Optimize Maintenance and Asset Management

This month, staff completed the pilot asset hierarchy for water treatment plants and distribution regions, supporting maintenance management improvements aligned with the Strategic Asset Management Plan (SAMP) goals. Developed through strong cross-team collaboration, the updated hierarchy includes process system layers and a criticality ranking that accounts for varying hydrological scenarios to identify facilities essential to meeting operational goals. These enhancements lay the foundation for condition-based data collection and analysis to better evaluate, prioritize, and optimize Metropolitan's operations, maintenance, and capital activities.

Operations Groups

Skinner plant repaired a 4,160-volt circuit breaker that had a damaged breaker removal component. To complete the repair, staff machined a replacement component onsite. This component is not sold as a singular replacement item and would have required the breaker to be sent out to be repaired. This knowledge of machining and resourcefulness demonstrates the capabilities of Metropolitan's staff to make complex repairs efficiently and economically.



Breaker removal component for a circuit breaker at the Skinner plant

Weymouth staff is responsible for performing National Fire Protection Association-mandated testing and maintenance on all low-voltage circuit breakers (below 600 volts) that utilize electronic or digital protection devices. This ongoing work requires coordination with multiple teams to ensure timely completion. Recently, staff completed testing on circuit breakers that supply power to various equipment in the Ozone Generator building. One main breaker tested outside of specifications but was successfully serviced and returned to operation without impacting the process equipment. These maintenance efforts are essential to ensuring continued reliability of the treatment process.



Testing circuit breakers (left) and equipment returned to service (right) at the Weymouth plant

Operations Groups

Lake Mathews was shut down for five days to perform dive operations for urgent repairs at Outlet Tower 1 and the junction shaft. Staff had previously encountered an issue with a roller gate within the junction shaft associated with Outlet Tower 1 which prevented the gate from operating. This 10-foot by 10-foot roller gate is set 120 feet below the water surface. Specialized dive services were needed to assess the impacted gate, remove debris and clean quagga-infested valves and gates, install blind flanges at the tower, and complete temporary repairs to restore the roller gate to an operable condition. Another shutdown is planned for later this year to make permanent repairs to the gate. This team did an outstanding job coordinating and executing this shutdown, demonstrating excellent collaboration across multiple teams at Metropolitan, as well as with the member and retail agency.



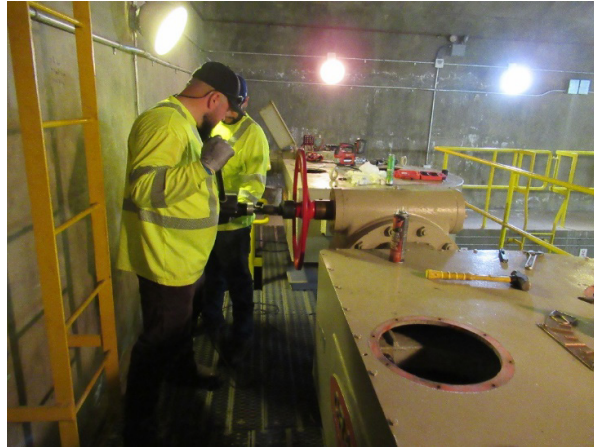
Diving contractor barge (left) used to access Outlet Tower 1 at Lake Mathews (not visible above water), and the junction shaft in the foreground (right)



Contract diver lowered into the Lake Mathews junction shaft to inspect and clean the impacted gate

Operations Groups

Staff recently performed preventive maintenance (PM) on the Palos Verdes Relief structure. Valves at this location range from 12 to 24 inches. This location provides critical system protection on the 50-inch diameter Palos Verdes Feeder in the southern portion of Metropolitan's distribution system, known as the Central Pool. Staff completed inspection of coatings, electrical components, and security features as part of this PM work.



Staff operating a 24-inch conical plug valve during routine preventive maintenance on the Palos Verdes Feeder

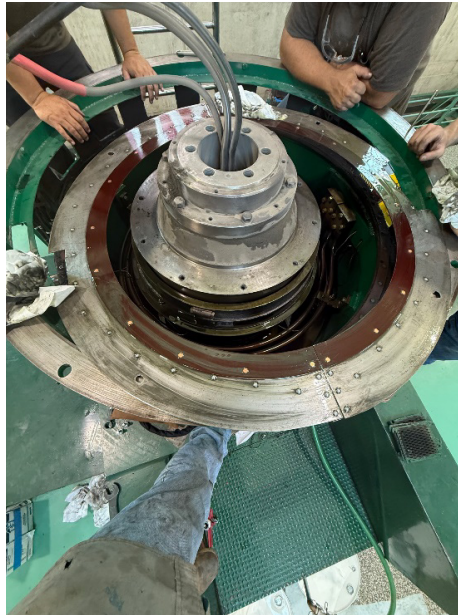
This month, staff completed refurbishing and reinstalling five needle valves on the Sepulveda hydroelectric plant. Needle valves are used to control the flow of water in hydroelectric generators. After 37 years of continuous service, the valves required refurbishment to ensure clean, reliable generation during routine water deliveries from the Jensen plant into the Central Pool.



Staff installing refurbished needle valve (left) and completed needle valve installation (right) at Sepulveda HEP

Operations Groups

Desert staff disassembled a pump unit at the Iron Mountain pump plant to replace its thrust bearings. Staff observed the thrust bearing temperature increasing over the last month. Once the unit was removed from service and disassembled, it was noted that the thrust bearings needed replacement. Work is expected to be completed in 3 to 4 weeks.



Staff disassemble a pump unit for bearing replacement at Iron Mountain

Desert staff installed new power distribution equipment at the Hinds pump plant to meet current electrical code standards and improve system reliability. The existing electrical feed did not meet modern code requirements, and much of the associated equipment was obsolete.



Electrician installing new equipment on a deenergized electrical panel at Hinds

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Enhance Emergency Preparedness and Response

Staff continued construction of the Diemer helicopter hydrant facility (heli-hydrant). The heli-hydrant consists of an open-top tank and supporting infrastructure, allowing helicopters to collect water for firefighting quickly. Metropolitan collaborated with the Yorba Linda Water District to develop a project benefiting both agencies. The Yorba Linda Water District provided up to \$500,000 in grant funding, technical support during design and construction, and coordination with the California Department of Forestry and Fire Protection and Orange County Fire Authority to ensure acceptable design and operational conditions. Metropolitan will own and operate the facility upon its completion this summer.



Staff installing the fire line for the heli-hydrant (left) and placing concrete sidewalk around the heli-hydrant water tank (right)

Operations Groups

Ensure Power and Environmental Regulatory Compliance

The early to mid-summer operating period to date has been relatively mild across the California Independent System Operator (CAISO) and Western Electricity Coordinating Council operational footprints. Energy markets in July 2025 have seen plentiful natural gas supplies and moderate energy prices.

The CRA averaged about six pumps in July 2025. The CRA energy cost budget for fiscal year 2024/25 was \$71.4 million; the actual costs forecast for the 2024/25 fiscal year came in slightly lower at \$64.3 million, due to moderate energy costs. The CRA energy cost forecast for fiscal year 2025/26 is \$83.8 million, and current forecasts are tracking close to the budget amount.

Staff continued work on Metropolitan's first-ever affected system cluster study for generation developers wishing to connect to transmission systems adjacent to the Colorado River Aqueduct transmission system (CRATS). This study encompasses seven generation projects connecting to the Southern California Edison (SCE) and Western Area Power Administration systems, which impact Metropolitan's 230 kV transmission system. Preliminary results were released in April 2025, and a stakeholder meeting was held to review the results and field questions from the generation developers. Staff are concurrently working on developing preliminary interim mitigation agreements, or "bridge agreements", to allow generation developers to secure funding by demonstrating a provisional agreement with Metropolitan to allow them to reach commercial operation while permanent mitigations are in development. This would also include an agreement with CAISO to temporarily limit the amount of energy generated by these projects until permanent system upgrades are in place.

Staff is currently investigating potential participation in a real-time pricing pilot program offered by SCE. This has the potential to reduce retail energy costs at several retail services supplied by SCE. The program is authorized by the California Public Utilities Commission, and as promulgated, would have no net cost to participating customers.

Operations Groups

Strategic Priority #5: PARTNER

Engage in Legislative and Regulatory Processes

On June 17, the State Water Board adopted updates to the 2024 Cross-Connection Control Policy Handbook to clarify roles, modernize requirements, and align with current plumbing codes. The updated policy establishes statewide standards to prevent backflow contamination and took effect January 1, 2025. All public water systems were required to submit a Cross-Connection Control Plan by July 1, 2025. Metropolitan submitted its plan and continues to support implementation and assess impacts on member agencies.

On July 3, the State Water Board proposed revised Notification Levels (NLs) and Response Levels (RLs) for several PFAS compounds to align with federal MCLs and updated health risk data. Key changes include lowering the NLs for PFOA and PFOS to 4 ppt and establishing a new RL for PFHxS at 10 ppt and new NL and RL for PFHxA at 1,000 and 10,000 ppt, respectively. While only advisory, these levels help guide risk communication and source management decisions. Staff will monitor the State Water Board informational meeting on this item on August 6.

On July 28, the National Drinking Water Advisory Council (NDWAC) met to discuss USEPA's plans to rescind portions of its 2024 PFAS MCL rule. U.S. Environmental Protection Agency plans to issue a proposed rule this fall to maintain the MCLs for PFOA and PFOS at 4.0 parts per trillion (ppt) while rescinding the MCLs and Hazard Index concept for the other four PFAS (PFHxS, PFBS, Gen-X, and PFNA). Staff monitored the NDWAC meeting and will engage in any future rulemaking activity with respect to PFAS.

The California Air Resources Board (CARB) is anticipated to release a 45-day rulemaking package that combines the repeal of the private fleets provisions in the Advanced Clean Fleets (ACF) rule, which must be completed by October 2025, and the AB 1594 rulemaking. CARB staff acknowledge that the 45-day package does not include any changes that were discussed during recent meetings with Metropolitan staff. Additional changes will be publicized after the 45-day package, via 15-day changes. Staff are reviewing the 45-day language and will closely follow any future rulemaking language.

Operations Groups

Advance Education and Outreach Initiatives

On July 17, staff from various sections across Metropolitan participated in a meeting with Peter Grevatt, CEO of the Water Research Foundation (WRF). The meeting was hosted at the Water Quality Laboratory and provided an opportunity for staff to learn about the wide variety of research topics funded by WRF. Metropolitan is a subscriber and has representation on WRF's Board of Directors, and has both contributed to and benefited from WRF's research products over many years.

A tour of the Water Quality Laboratory was provided for Engineering Services Group interns on July 30.



Meeting with Peter Grevatt, CEO of the Water Research Foundation (left) and student interns and co-op students visiting the Water Quality Lab (right)

Engage with Member Agencies & Other Stakeholders on Technical Matters

Jensen plant staff provided a guided tour to Director Jay Lewitt of Las Virgenes Municipal Water District (LVMWD), Director Miguel Luna of the City of Los Angeles, Director Gretchen Shepherd-Romey of the City of San Marino, and guests. Also in attendance were Metropolitan Assistant General Manager John Bednarski, Assembly Member Jessica Caloza, and LVMWD General Manager Dave Pedersen. The tour began with a presentation of the Jensen plant treatment process, followed by an in-depth walking tour of the facility. All three Directors and guests expressed interest in the treatment process, our distribution system, and how we ensure a consistent and reliable water supply for their service areas. Staff were eager to share how water is reliably treated and distributed to serve these portions of our region.



Directors and guests during a presentation of the Jensen plant treatment process