THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Report

Engineering Services Group

- **Engineering Services Group Monthly Activities Report for December 2025**

Summary

This monthly report provides highlights and a summary of Engineering Services Group activities for December 2025 in the following key areas:

- Colorado River Aqueduct (CRA) Program
- Dams & Reservoirs Program
- Distribution System Program
- Additional Facilities and Systems Program
- Prestressed Concrete Cylinder Pipe (PCCP) Program
- Water Treatment Plants Program
- Pure Water Southern California
- Drought Mitigation – State Water Project Dependent Areas
- Value Engineering Program
- Labor Management Collaboration Meeting 2025
- South Coast Water Disctrict's (SCWD) Leadership Academy

Purpose

Informational

Attachments

Detailed Report – Engineering Services Group's Monthly Activities for December 2025

Date of Report: January 12, 2026

Engineering Services' Monthly Activities for December 2025 Highlights

In the month of December, Engineering Services embarked on the following major actions in support of the General Manager's business plan for Fiscal Year 2025/26:

Goal: Complete Environmental Impact Report and Planning (EIR), for the Board to Consider Pure Water Southern California
Outcome: Complete EIR analyses and public process
• On December 15, 2025, the Pure Water Southern California Project was certified by Governor Newsom for Judicial Streamlining under the SB 149 Infrastructure Streamlining Program. SB 149 provides CEQA-related judicial streamlining for major infrastructure projects that advance climate, water reliability, and environmental resilience. Under the SB 149 streamlining authority, PWSC qualifies as a "water-related project." This designation emphasizes the need to avoid undue litigation delays.

In support of the General Manager's Business Plan goal of providing organizational stability and delivering operational excellence, Engineering Services manages and executes projects within the adopted Capital Investment Plan (CIP) to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions. In addition, Engineering Services provides technical services to enhance reliable system operation and real property planning, valuation, acquisition, and disposition services to protect Metropolitan's assets. Engineering Services empowers our staff and partners with our business partners and the communities we serve to accomplish Metropolitan's mission.

Recent key activities on CIP programs and other key engineering functions are described below.

Protect public health, the regional economy, and Metropolitan's assets

Colorado River Aqueduct (CRA) Program

The CRA program includes CIP projects to replace or refurbish facilities and components of the CRA system to reliably convey water from the Colorado River to Southern California.

- **CRA Domestic Water Treatment System** — This project upgrades the domestic water treatment systems at all five CRA pumping plants, including the replacement of the water treatment units. The contractor has installed the temporary treatment skid system at the Intake Pumping Plant. The temporary skid will remain in operation until installation, testing, and commissioning of the new system are complete. Installation of the electrical and mechanical systems to support the new equipment is underway at Intake Pump Plant. Installation of the temporary skid at Gene Pumping Plant is nearing completion, and a 14-day water quality test will be conducted. Construction is 53 percent complete and is scheduled to be complete by April 2027.
- **CRA New Storage Buildings** — This project furnishes and installs pre-engineered storage buildings at Hinds, Eagle Mountain, and Iron Mountain pumping plants and constructs associated site improvements. Construction is ongoing at all three pumping plants. The overhead roll-up doors are being installed at Iron Mountain Pump Plant. Trim work for the buildings is underway at Eagle Mountain Pump Plant. The contractor is completing the electrical work for the buildings at Hinds Pump Plant. Construction is 89 percent complete and is scheduled to be complete by April 2026.
- **CRA Main Pump Transformers Procurement** — This project replaces thirty-five 230 kV and 69 kV step-down transformers that are used to operate the main pumps at all five of Metropolitan's Colorado River Aqueduct pumping plants. The Board awarded a procurement contract and authorized a consulting agreement for final design in May 2025. Submittal reviews are currently underway for procurement. Final design for the transformer installation is 5 percent complete and anticipated to be completed by December 2026. Deliveries are scheduled to begin in late 2028 and conclude by 2030.

CRA Domestic Water Treatment System — Temporary Skid Commissioning

CRA New Storage Buildings — Eagle Mountain Maintenance Storage Building
Techno Crew Coating (Red Paint) fire Sprinkler Pipe

Dams & Reservoirs Program

The Dams & Reservoirs Program includes CIP projects to upgrade or refurbish Metropolitan's dams, reservoirs, and appurtenant facilities to reliably meet water storage needs and regulatory compliance.

- **Diamond Valley Lake Secondary Inlet Valve Rehabilitation** — This project will rehabilitate the 72-inch-diameter inline sleeve valve and inlet piping and replace the instrumentation at the DVL Reservoir secondary inlet. Metropolitan staff has completed the rehabilitation of the sleeve valve and

has installed the valve and tested its operation. Flow testing of the 96-inch-diameter piping is expected to be complete in late December 2025.

- **Garvey Reservoir Rehabilitation —** This project will replace the aging reservoir floating cover and liner; strengthen the structure of the reservoir outlet tower to reduce the risk of damage following a major seismic event; and upgrade the reservoir's rainwater collection, pumping, and subdrain systems. Upon completion of final design, the project was advertised for bids, and the Board awarded a construction contract in December 2025. Construction is planned to be completed by spring 2028.
- **Lake Mathews Pressure Control Structure (PCS) and Electrical System Upgrades** — This project will replace the aging Lake Mathews discharge facility and electrical system. The project includes the construction of a new PCS with a bypass pipeline alongside the existing forebay, a new chlorination facility, and upgrading the electrical system to accommodate future power needs. This project utilizes a progressive design-build project delivery method. A Request for Qualifications (RFQ) for Phase 1 design-build services was released in September 2025. Six statements of qualification were received in November 2025, and a board action to authorize the Phase 1 agreement is planned for June 2026. The project is anticipated to be complete by 2032.

Distribution System Program

The Distribution System Program includes CIP projects to replace, upgrade, or refurbish existing facilities within Metropolitan's distribution system, including PCSs, hydroelectric power plants, and pipelines, to reliably meet water demands.

- **Wadsworth Sleeve Valve Replacement Refurbishment —** This project refurbishes seven sleeve valves at the Wadsworth Pumping Plant. A total of six units have been refurbished. The project is 85 percent complete and is scheduled to be complete in December 2025.
- **San Jacinto Diversion Structure Gate Replacement —** This project will replace three cast-iron slide gates at the San Jacinto Diversion Structure with stainless steel slide gates designed for throttling. The three new slide gates were procured under a separate procurement contract and were delivered in June 2025 with the electric actuators scheduled for delivery in December 2025. The construction contract was awarded in August 2025, and the contractor is preparing submittals. Construction is scheduled to start in January 2026.
- **Casa Loma & San Jacinto Pipelines Protection —** This project will construct a concrete encasement over the Casa Loma Siphon No. 1 and the San Jacinto Pipeline where the conduits cross the San Jacinto River. The concrete encasement will be buried within the riverbed and will provide protection against the potential for floatation of the conduits during high flows in the river, which can occur during rain events. Final design is ongoing and is expected to be completed in spring 2026. Due to the environmental sensitivity of the project area, permitting is expected to take an additional ten to 12 months after completion of final design. Construction is anticipated to begin in the summer of 2027.

Additional Facilities and Systems Program

The Additional Facilities and Systems Program includes CIP projects to refurbish, replace, upgrade, or provide new facilities and systems that support Metropolitan's business and district-wide operations.

- **La Verne Shops Improvements —** This project will improve the La Verne Shops building and install Metropolitan-furnished shop equipment. The contractor installed the plasma cutter, roof access ladders, air compressor equipment, and a new waterjet system. The contractor is installing the repaired vertical lathe. The construction is approximately 98 percent complete and is scheduled to be complete by January 2026.
- **CRA Kitchens & Lodging —** This project will replace the existing kitchens and lodges at Eagle and Iron Mountain pumping plants and construct a second lodge at the Gene Pumping Plant. Conceptual design was completed in September 2025. Preliminary design will be initiated in January 2026, as the design will be staged with the upcoming design of the homes within the District Housing Program.

La Verne Shops Improvements — Installing New Bellows for Refurbished Vertical Turning Lathe

Prestressed Concrete Cylinder Pipe (PCCP) Program

The PCCP Program includes CIP projects to refurbish or upgrade Metropolitan's PCCP feeders to maintain water deliveries without unplanned shutdowns.

- **Sepulveda Feeder PCCP Rehabilitation Reach 2 —** This project installs steel lining along 3.8 miles of PCCP through several cities, including Torrance and Los Angeles. The project was advertised on August 27, 2025. Three bids were received in November 2025, and a board action for a contract award is planned for January 2026. The project is expected to be complete by mid-2027.
- **Sepulveda Feeder PCCP Rehabilitation Reach 9 —** This project will rehabilitate approximately 3.7 miles of 120-inch to 96-inch diameter PCCP with a combination of solid steel and coiled steel liner systems. Reach 9 is located on Hayvenhurst Avenue from near State Route 118 to just north of the Van Nuys Airport in Los Angeles. Additionally, a new 54-inch sectionalizing valve and valve structure will be installed on the Sepulveda Feeder near the intersection of Hayvenhurst and Chatsworth Street. This valve will provide additional operational flexibility on this pipeline. Reach 9 final design is 99 percent complete and is scheduled to be complete by February 2026.

Water Treatment Plants Program

The Water Treatment Plants Program includes CIP projects to replace or refurbish facilities and components at Metropolitan's five water treatment plants to continue to reliably meet treated water demands.

- **Weymouth Administration Building Upgrades —** This project upgrades the Weymouth Administration Building to withstand a significant earthquake. The planned upgrades include structural strengthening consistent with current seismic standards for essential facilities, accessibility, and fire/life safety improvements, architectural modifications near the areas of structural upgrades, and improvements associated with the preservation of historic architectural features. Final design is complete, and the project is planned to be advertised for bids in spring 2026.
- **Diemer Chemical Feed Facility Improvements —** This project rehabilitates the Diemer plant's chemical feed facility to maintain operational reliability, meet Metropolitan's current chemical safety standards, and enhance worker safety. The Board awarded a construction contract in October 2025, and the Notice to Proceed was issued to the contractor in November 2025.

Adapt to changing climate and water resources

Pure Water Southern California

Pure Water Southern California (Pure Water) is a large regional recycled water program that will provide a new local source of safe and reliable drinking water for Southern California. Pure Water currently focuses on five areas: program management, environmental planning, advanced water purification facility (AWPF) planning, demonstration testing, and preliminary design of initial pipeline reaches. Pure Water will produce up to 150 million gallons per day of purified water from the AWPF in Carson for indirect potable reuse (IPR) and direct potable reuse (DPR) applications.

- **Program Management** — Program management activities include project controls, scheduling, budget development, risk management, coordination with program partners and stakeholders, grants and funding, and preparation of various plans and studies. The Pure Water Program Management team was engaged in the following activities during this reporting period:
    - Presented guiding principles for program partnerships in December 2025 and January 2026 for board approval. The guiding principles will be used to develop term sheets for future agreements.
    - Presented program quarterly updates to the Board in January 2026.
    - Continued coordination and grant reporting efforts with the United States Bureau of Reclamation for the $125,472,855 Large-Scale Water Recycling Program grant and the $5 million WaterSmart grant. To date, Metropolitan has received a total of approximately $25.5 million from this grant.

    - The $80 million state grant is also used to support the current phase of program work; approximately $46 million is spent as of end of November. Continued to coordinate with the CAMP4W assessments.
    - On December 15, 2025, the Pure Water Southern California Project was certified by Governor Newsom for Judicial Streamlining under the SB 149 Infrastructure Streamlining Program.
- **Environmental Planning** — The final EIR was published in January 2026. A board action to consider certification of the final EIR is scheduled for February 2026.
- **Advanced Water Purification Facility** — The AWPF will purify treated wastewater from the Los Angeles Sanitation District's (LACSD) A.K. Warren Water Resource Facility using membrane bioreactors (MBRs), reverse osmosis, and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, LACSD will be responsible for implementing the AWPF pretreatment, including the MBR facilities. A final draft of conceptual facilities report has been prepared. This document records key assumptions of AWPF components and would be used for the upcoming RFQs for the progressive design-build contracts to design and construct the full-scale AWPF.
- **Demonstration Testing —** Operational improvements have been made at the Napolitano Innovation Center (NIC) for the continued testing of the IPR processes, including the installation of a snail mitigation system. Planning of pilot-scale and demonstration-scale testing of DPR processes is in progress. The procurement process for key testing equipment is underway, and equipment will be procured in 2026 to facilitate the design of the DPR testing facility at the NIC.
- **Conveyance System —** The PWSC conveyance system consists of the backbone pipeline that extends 39 miles from the AWPF, repurposing an existing pipeline owned by the San Gabriel Valley Municipal Water District, and constructing a new DPR pipeline to convey water from the backbone eastward for raw water augmentation at Metropolitan's Weymouth plant. The Conceptual Design Report for the entire conveyance system has been completed. Preliminary design of the first two pipeline reaches across the cities of Carson, Long Beach and Lakewood is in progress. The RFQ for the CM/GC contract(s) for these two reaches is also being prepared for advertisement in 2026.

Drought Mitigation — State Water Project Dependent Areas

The Drought Mitigation — State Water Project Dependent Areas Program includes CIP projects to replace, refurbish, upgrade, or construct new facilities, which are identified to mitigate the vulnerability experienced by specific member agencies that are affected during shortages of State Water Project supplies.

- **Foothill Pump Station Intertie** — This project will connect Metropolitan's Inland Feeder to the San Bernardino Valley Municipal Water District's Foothill Pump Station. The project is the last of four Rialto Pipeline service area supply reliability improvement projects. Foothill Pump Station will provide the hydraulic lift for direct water delivery from Diamond Valley Lake to the Rialto Pipeline. The project will install supply and discharge bypass pipelines, isolation valves and their vault, and a surge protection system. Final design is undergoing final review and is planned to be complete by early 2026. The project requires permits from CA Fish and Wildlife and US Fish and Wildlife (USFWS) to address impacts to an endangered species found at the project site. The project will receive a $5 million US Bureau of Reclamation (USBR) grant, and USBR will assist Metropolitan with USFWS permitting. USBR has officially begun the USFWS consultation; however, the recent

federal shutdown delayed the consultation process, and staff is working with USBR to develop an updated permit schedule.

- **Sepulveda Feeder Pump Stations** — This project installs new pump stations at the existing Venice and Sepulveda Canyon pressure control facilities, providing the ability to reverse flow in the Sepulveda Feeder and deliver 30 cubic feet per second from the Central Pool to portions of the western State Water Project exclusive area. This project will utilize the progressive design-build (PDB) project delivery method. The PDB entity has mobilized and began installing soldier beams for the electrical building shoring at the Venice Pump Station. Construction at the Venice site is approximately 9 percent complete. A 3D model for the slope stabilization at the Sepulveda Canyon site has been submitted for MWD review, and the maximum price for this work will be developed once the design has been approved.

Sepulveda Feeder Pump Stations —
Venice PCS Contractor J.F. Shea Assembling Crane Counterweights

Sustain Metropolitan's mission with a strengthened business model

Value Engineering Program

Engineering Services conducts a Value Engineering (VE) program to review capital projects and identify opportunities and alternatives to enhance project performance, optimize funding for CIP projects, and demonstrate responsible use of public funds. The objective of the VE program is to improve the overall value of CIP projects by applying an industry-accepted assessment methodology to examine a project's function, design, equipment, material selections, and contracting approach. This comprehensive assessment is conducted at strategic stages in a project's life cycle.

Year-end Summary

Engineering's VE Program delivered 11 workshops in 2025. The range of these projects includes the desert facilities, C&D facilities, Headquarters, Pure Water, and even the Bay Delta area.

- Headquarters Building Zero Emission Vehicle Infrastructure Upgrades – Stage 1
- San Jacinto Diversion Structure Slide Gates V01, V02, and V03 Rehabilitation
- Sepulveda Feeder PCCP Rehab Reach 9
- Webb Tract Wetland Restoration
- Garvey Reservoir Rehabilitation
- PWSC DPR Testing Facility Improvement
- Headquarters HVAC System Rehabilitation
- CRA Pumping Plant Sump System Rehabilitation
- CRA Pumping Plant Delivery Line Rehabilitation – Gene Pumping Plant
- Hollywood Tunnel Equipment Upgrades
- Black Metal Mountain 2.4 kV Electrical Power Upgrade

Partner with interested parties and the communities we serve

Labor Management Collaboration Meeting 2025

The Labor Management Collaboration Meeting is a requirement of Metropolitan's Project Labor Agreement (PLA) between Metropolitan and the Building and Construction Trades Councils within the counties in Metropolitan's service area including Los Angeles and Orange Counties Building and Construction Trades Council, the Riverside-San Bernardino Counties Building and Construction Trades Council, the San Diego County Building and Construction Trades Council, and the Tri-Counties Building and Construction Trades Council.

The purpose of the meeting is to update the building trades on the progress and schedule of ongoing and future PLA-covered projects, promote harmonious labor management relations, ensure effective communications between labor and management, and evaluate and ensure an adequate supply of skilled labor for all Metropolitan's PLA-covered projects.

This year's meeting took place at Metropolitan's headquarters on December 15, 2025, and was co-chaired by Mai Hattar, Metropolitan's Chief Engineer, and Ernesto Medrano, Executive Secretary of the Los Angeles/Orange Counties Building and Construction Trades Council. Each of the co-chairs addressed the building trades, along with Albert Duarte, Executive Secretary/Business Manager for the Building and Construction Trades Council of San Bernardino and Riverside Counties, who has been instrumental in helping Metropolitan meet its PLA-related goals in the Inland Empire.

Several of the building trades performing work on Metropolitan's projects were represented, including electricians, laborers, carpenters, operating engineers, bricklayers, sheet metal workers, ironworkers, pipefitters, painters, and cement masons. Metropolitan staff delivered an update on Metropolitan's system, PLA project status, accomplishments related to employment of local and transitional workers, as well as new apprentices dispatched to Metropolitan's projects and apprentices directly sponsored by contractors. Following the presentation, staff hosted an open discussion on future partnerships, collaborations, and outreach opportunities to increase the number of workers seeking construction careers on Metropolitan's projects.

Principal Engineer, Doaa Aboul-Hosn, Addresses Labor Unions for the 2025 Labor Management Collaboration Meeting

Labor Management Collaboration Meeting Group Photo

South Coast Water District's (SCWD) Leadership Academy

On December 10th, Metropolitan's Operations and Engineering Groups welcomed 12 SCWD Leadership Academy participants to the Diemer plant for a day of training and a tour. Located in Laguna Beach, SCWD is a Municipal Water District of Orange County member agency and a recipient of treated water from Diemer. The visitors were welcomed by Chief Engineer Mai Hattar, who spent almost an hour sharing her career path that ultimately led to being the Engineering Services Group Manager. Plant Manager Nathan Shuy and the Diemer plant staff followed with a tour of the plant, with the rest of the day spent following SCWD's facilitated leadership program.