



Engineering, Operations, and Technology Committee

10/13/2025 Committee Meeting

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Subject

Pure Water Southern California Quarterly Update

Executive Summary

Pure Water Southern California (PWSC) has made steady progress to advance the environmental planning, engineering studies, CAMP4W assessment, financial analysis, and collaboration with member agencies and program partners to prepare for upcoming board decisions on the program. This report provides updates on various program activities and next steps to advance PWSC.

Fiscal Impact

Not applicable

Applicable Policy

Not applicable

Related Board Action(s)/Future Action(s)

- December 2025 – Approve Guiding Principles for PWSC Partnerships
- January 2026 – Certify Pure Water Southern California program environmental impact report and approve the program
- February 2026 – Award five equipment procurement contracts and amend the agreement with Stantec to support the final design for the direct potable reuse demonstration testing facility
- Mid 2026 – Appropriate initial funding and amend or award agreements to advance PWSC

Details and Background

Background

PWSC is a large regional recycled water program that will provide a new local source of safe and reliable drinking water for Southern California. PWSC currently focuses on five areas: program management, environmental planning, advanced water purification facility (AWPF) planning, demonstration testing, and preliminary design of initial pipeline reaches. Staff is also engaged in collaboration with member agencies and other program partners to develop agreements for water purchase.

PWSC 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. The AWPF will purify treated wastewater from the Los Angeles Sanitation Districts' (LACSD) A.K. Warren Water Resource Facility using membrane bioreactors (MBRs), reverse osmosis (RO), and ultraviolet/advanced oxidation. With its expertise in biological wastewater treatment, LACSD will be responsible for implementing the AWPF pretreatment, including the MBR facilities. The PWSC conveyance system consists of the backbone pipeline that may extend 39 miles from the

AWPF, repurposing an existing pipeline, and constructing a new DPR pipeline to convey water from the backbone eastward for raw water augmentation at Metropolitan's Weymouth plant.

Program Updates

- **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 PWSC Program Management team was engaged in the following activities during this reporting period:
 - **Program Cost Update** – Completed and presented updated program cost estimate updates, schedules, and cashflow projections to the Board in September.
 - **Grant Status** - Continued coordination and grant reporting efforts with the United States Bureau of Reclamation for the \$125,472,855 Large-Scale Water Recycling Program grant. Metropolitan has received approximately \$17.4 million to date. Additional reimbursements are anticipated in October.
 - **Environmental Planning** – The draft environmental impact report (EIR) was published in May 2025, and the 60-day public review period has closed. Staff is reviewing comments received and preparing responses. A board action to consider certification of the final EIR is anticipated in January 2026.
 - **SB 149** - Completed the SB149 draft application for streamlining potential California Environmental Quality Act (CEQA) litigation, received comments from the California Office of Land and Climate Innovation, and will submit the final application in October.
 - **CAMP4W Assessments** – Prepared initial information to support preliminary CAMP4W assessments for 45-, 75-, and 150-mgd scenarios.
- **Advanced Water Purification Facility** – A final draft of the 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 for the continued testing of the IPR processes, including the installation of a RO concentrate pilot testing system and more MBR cassettes.
- **Preliminary Design of Initial Pipeline Reaches** – A conceptual design report for the conveyance system has been completed.

Direct Potable Reuse Planning

A key step for DPR planning is testing at the Napolitano Innovation Center. Planning of pilot-scale and demonstration-scale testing of DPR processes is in progress. Key testing equipment will be procured in the coming months to facilitate the design of the DPR testing facility with a board action for procurement planned for early next year. Information from this testing will allow Metropolitan to assess both treated water augmentation and raw water augmentation alternatives.

Upcoming Technical Studies

Some technical studies are underway to address the program's planning needs, as well as the specific questions previously raised by the Board, including:

- System Turn-down Analysis
- Envision/LEED Certification Analysis
- DPR Implementation Analysis
- Traffic Study
- Pump-in Policy Considerations for DPR

Member Agency and Program Partner Collaboration

Metropolitan has been meeting with its member agencies, Southern Nevada Water Authority (Southern Nevada), the Arizona Department of Water Resources and the Central Arizona Water Conservation District (collectively, the Arizona Parties), and San Gabriel Valley Municipal Water District to develop a path that advances partnerships that could support Pure Water Southern California (PWSC). Based on these meetings, a four-step plan was initially developed, which included: (1) Step 1 – the development of letters of intent (LOIs), (2) Step 2 – the development of term sheets, (3) Step 3 – the development of Interim Agreements, that would control during the remainder of planning, permitting, design, and construction phases, and (4) Step 4 – the development of Long-Term Agreements, that would control during the period of operation.

The Board of Directors provided input on the partnership process at its July PWSC workshop. As a result of that input, Step 2 has been revised to include a preliminary step. Before preparing term sheets, staff proposes that agreement “guiding principles” be prepared. If the Board supports these guiding principles and the Board decides to take the CEQA actions of certifying the PWSC EIR and approving PWSC (CEQA Actions), the principles will frame the development of term sheets for Interim Agreements, the contemplated Step 3.

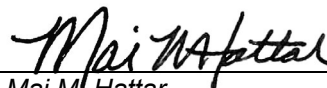
Preparation of the agreement guiding principles does not presume a particular outcome for PWSC. Staff is preparing these guiding principles to elicit direction from the Board on the preferred partnerships’ structure, so that the Board (and its partners) have greater certainty on important aspects of the partnership. The principles are not intended to constrain the Board’s discretion or usurp the CAMP4Water process.

Return on Investment for Recharge Basins

Staff has completed an initial evaluation of the return on investment (ROI) of the purchase of new recharge basins. A new basin would provide at least 7,700 acre-feet per year of additional PWSC deliveries. Three potential sites near the city of Irwindale were considered and evaluated. Including cost to purchase property, improvements, sale of water and maintenance, the ROI would vary from approximately 44 percent to 140 percent, with the investment recovered in six to 12 years.

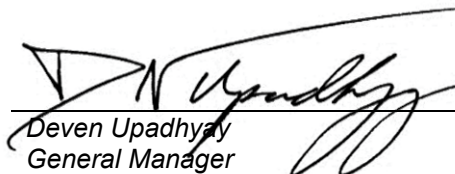
Next Steps

Staff will prepare additional information on the guiding principles for partnerships in November and seek the Board’s approval of these principles in December. The CAMP4W assessment will also conclude in November. These activities are planned to provide the key information needed for the Board to make decisions in January on CEQA certification and the overall program for CEQA purposes. Other decisions on program staging and implementation will follow the January action in the first or second quarter of 2026.



Mai M. Hattar
Chief Engineer

10/9/2025
Date



Deven Upadhyay
General Manager

10/9/2025
Date