

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

EXECUTIVE OFFICER SUMMARY REPORT

March 12, 2025

ITEM NO. 7

SUBJECT

City of San Diego Pure Water Program Update (*Fisayo Osibodu*).

STAFF RECOMMENDATION

Information item only, no recommendation.

KEY ISSUES

- The City of San Diego's (City) Pure Water Program is consistent with California's Water Supply Strategy's statewide recycled water goals.¹
- The Pure Water Program will provide up to half of the City's water supply by 2035, reducing the Region's reliance on imported water.
- The Pure Water Program will also reduce the amount of treated wastewater discharged through the City's Point Loma Ocean Outfall and provides an alternative to cost prohibitive upgrades to the City's Point Loma Wastewater Treatment Plant.

PRACTICAL VISION

The San Diego Water Board's Practical Vision includes strategies to achieve resilient local water supplies (Chapter 6 of the Practical Vision).² These strategies call for the San Diego Water Board to protect, restore, and regulate water resources in a manner that contributes to a sustainable local water supply and protects beneficial uses for current and future generations. Permitting the Pure Water Program and other potable reuse projects in the San Diego Region allows for sustainable use of local water supply sources in a manner that is protective of water quality.

DISCUSSION

The purpose of this item is to provide the San Diego Water Board and members of the public with an update on the City's Pure Water Program.

Pure Water Program – Phases 1 and 2

The City's Pure Water Program³ is a phased, multi-year program, to provide nearly half of the City's water supply, locally by 2035. Phase 1 of the Pure Water Program (Phase 1) will

¹ California's Water Supply Strategy is available at:
<https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf>

² The San Diego Water Board's Practical Vision is available at:
https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision

³ Additional Information on the Pure Water Program is available at:
<https://www.sandiego.gov/public-utilities/sustainability/pure-water-sd/information>

produce up to 30 million gallons per day (MGD) of highly treated recycled water, to augment Miramar Reservoir. Phase 1 includes the:

- Expansion of the City's existing North City Water Reclamation Plant (NCWRP);
- Construction of the Morena Pump Station and pipelines, which will convey additional wastewater to the NCWRP;
- Construction of the North City Pure Water Facility (NCPWF); and
- Construction of the North City Pure Water Pump Station and pipeline to convey highly treated recycled water to Miramar Reservoir.

The City is currently constructing the Phase 1 facilities. Treatment technologies to be used at the NCPWF include ozonation, biological activated carbon, membrane filtration, reverse osmosis, and ultraviolet violet disinfection/advanced oxidation. Highly treated recycled water from the NCPWF will replace imported water, currently used to fill Miramar Reservoir (Reservoir). The Reservoir is the raw water source for the City's Miramar Drinking Water Treatment Plant (DWTP) and is an important environmental buffer to protect public health. The Reservoir allows for contaminant attenuation and dilution and provides City staff with additional time to detect and respond to water management and treatment system failures, before treated water is released into the drinking water distribution system. Discharge to the Reservoir is expected to commence in 2026.

In anticipation of completion of Phase 1, the San Diego Water Board adopted Order No. R9-2020-0001 on May 13, 2020, establishing waste discharge requirements for the NCWRP and NCPWF, and for the discharge of advanced treated recycled water to the Reservoir. The San Diego Water Board adopted amendments to Order No. R9-2020-0001 on August 12, 2020, and October 9, 2020⁴. The August 12, 2020, amendment made corrections to non-substantive typographical errors in Order No. R9-2020-0001. The October 9, 2024, amendment revised certain monitoring requirements, corrected language inconsistencies, and clarified terms in specific sections of Order No. R9-2020-0001.

Phase 2 of the Pure Water Program includes the:

- Construction of a new Central Area Water Reclamation Plant; and
- Construction of a new Central Area Pure Water Facility (Central Area PWF).

The Central Area PWF will use treatment processes similar to those proposed at the NCPWF. The Central Area PWF will provide an additional 53 MGD of highly treated recycled water to be used to augment the Murray or San Vicente Reservoirs.

Implementation of the Pure Water Program is in line with California's Water Supply Strategy's statewide goals of recycling and reusing at least 800,000 acre feet of water by 2030 and 1.8 million acre feet of water by 2040. The Water Supply Strategy also lists the Pure Water Program as one of the local water sustainability projects that the state will support. In addition, the Pure Water Program provides an alternative to costly upgrades to the City's Point Loma Wastewater Treatment Plant. Implementation of the Pure Water Program will allow the City to reduce future flows to the Point Loma Wastewater Treatment Plant which will decrease the amount of treated wastewater discharged by the City to the Pacific Ocean.

PUBLIC NOTICE

A Meeting Notice and Agenda for the March 2025 Board meeting was posted on the San Diego Water Board website and sent to subscribers to the email list for Board meetings.

SUPPORTING DOCUMENTS

None