

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

**EXECUTIVE OFFICER SUMMARY REPORT  
August 9, 2023**

**ITEM 4**

**SUBJECT**

Pure Water Program Update, City of San Diego (*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 statewide goal of recycling and reusing at least 800,000 acre-feet of water per year by 2030.
- California's Water Supply Strategy identifies that the State Water Resources Control Board (State Water Board) will adopt direct potable reuse (DPR)<sup>1</sup> regulations by December 2023.

**PRACTICAL VISION**

The San Diego Water Boards' Practical Vision includes strategies to achieve resilient local water supplies (Chapter 6 of the Practical Vision).<sup>2</sup> These strategies call for the San Diego Water Board to protect, restore, and regulate water quality 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. This item will also provide information about the role of the State Water Board's Division of Drinking Water (DDW) in regulating the Pure Water Program and other potable reuse projects within the San Diego Region.

Pure Water Program – Phases 1 and 2

The City's Pure Water Program<sup>3</sup> 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 produce up to 30 million gallons per day (MGD) of highly treated recycled water, to

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<sup>1</sup> DPR is the planned introduction of recycled water either directly into a public drinking water system, or into a raw water supply, immediately upstream of a drinking water treatment plant.

<sup>2</sup> The San Diego Water Board's Practical Vision is available at:  
[https://www.waterboards.ca.gov/sandiego/water\\_issues/programs/practical\\_vision/](https://www.waterboards.ca.gov/sandiego/water_issues/programs/practical_vision/)

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

augment the local drinking water supply in the 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. 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.

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.

#### DDW Roles and Regulatory Efforts

DDW works collaboratively with Regional Water Boards in developing permits for potable reuse projects statewide. The San Diego Water Board adopted an NPDES permit for Phase 1 on May 13, 2020. DDW developed regulations and water recycling criteria for indirect potable reuse projects,<sup>4</sup> which are contained in title 22, division 4, chapter 3 of the California Code of Regulations. DDW is currently developing regulations for DPR projects.

Permits issued by a Regional Water Board contain requirements to ensure protection of beneficial uses and receiving waters. DDW develops public health-related permit conditions for potable reuse projects that are included in Regional Water Board permits. These public health-related permit conditions are necessary to ensure highly treated recycled water produced from treatment facilities meet applicable public health standards. DDW staff presenting on this item will provide: an overview of DDW's role in regulating the City's Pure Water Program and other statewide potable reuse projects, and an update on the status of the DPR regulations.

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<sup>4</sup> Indirect potable reuse projects include reservoir water augmentation and groundwater recharge projects.

**PUBLIC NOTICE**

A Meeting Notice and Agenda for the August 2023 Board meeting was posted on the San Diego Water Board's website and sent to subscribers to the email list for Board meetings.

**SUPPORTING DOCUMENTS**

None