

# Exploring Sediment Removal Behind Prado Dam to Maximize Orange County's Water Resources

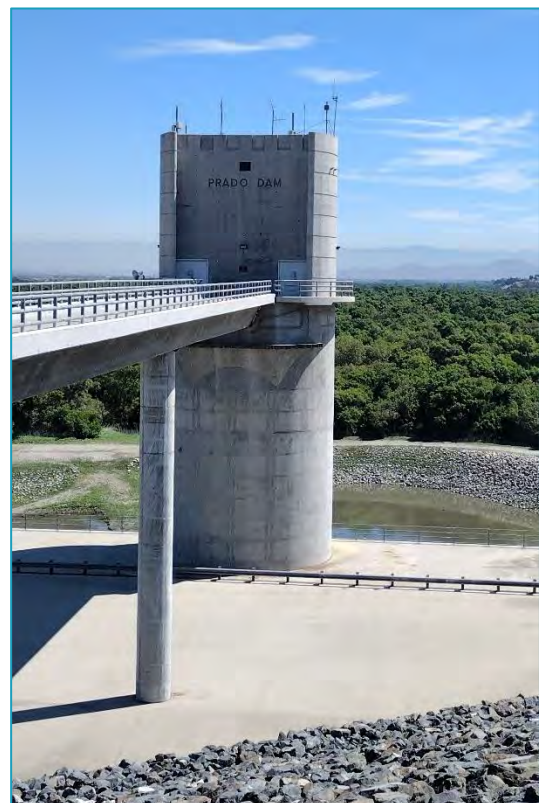


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In Orange County, a large groundwater basin lies underneath most of north and central Orange County, providing up to 85% of the drinking water supply for 2.5 million people. The basin, managed by the Orange County Water District (OCWD), contains a wide range of water sources including purified recycled water produced locally from the Groundwater Replenishment System (GWRS), Mother Nature's rain, and a small percentage of water imported from far distances like northern California and the Colorado River.

A large portion of the basin's water is also sourced from the Santa Ana River, along with stormwater captured and held behind Prado Dam in Riverside County. Stormwater is an important source of locally available water that is essential for recharging the Orange County Groundwater Basin.

OCWD works in partnership with the U.S. Army Corps of Engineers to hold this water behind the dam and release it at rates where the District can capture it and increase its water supply. It has been a successful effort for decades that allows safely storing water while managing the dam for flood control.



Unfortunately, sediment continually accumulates behind the dam, which is reducing the volume of stormwater that can be temporarily retained. To address this, OCWD is exploring an innovative sediment removal initiative.

This project involves extracting sediment from the Prado Basin and making it available to replenish sand in coastal areas and for use in local construction projects. This approach not only addresses the sediment management needs of the dam but also provides substantial benefits to coastal communities suffering from severe sand depletion due to atmospheric river storms, urbanization, and infrastructure development.

Exploring sediment removal is one of many examples reflecting the District's robust history of innovation. Whether it was getting the world's largest water recycling facility online (the GWRS in Fountain Valley), proactively tackling important water quality issues, especially those dealing with emerging contaminants of concern, operating the Prado Wetlands, the largest constructed wetlands on the west coast of the United States, which improves the quality of water sent to the basin, or managing an advanced recharge system to store more water – we've done a lot over our 90-plus years of operations.

We're proud of our tradition of innovation and achieving many "firsts" in the industry – all to better protect and manage the Orange County Groundwater Basin, benefiting our 19 cities and retail water agencies, such as the city of Fullerton. Enhancing OCWD's capacity for groundwater recharge ensures a reliable water supply for the region, which is vital for sustaining our water needs today, tomorrow and for generations to come.

*In collaboration with Orange County Water District staff, this article was provided by Orange County Water District Director Bruce Whitaker, who represents Division 10, which covers the city of Fullerton. Contact Director Whitaker at [BWWhitaker@live.com](mailto:BWWhitaker@live.com).*