



Media Release

Orange County completes world's largest wastewater recycling and purification system

Board funded project to generate drinking water for 1 million people

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SACRAMENTO – The State Water Resources Control Board joined the [Orange County Water District](#) and the [Orange County Sanitation District](#) today to mark completion of the [Groundwater Replenishment System \(GWRS\)](#), the world's largest advanced wastewater purification system, for indirect potable reuse. The new system creates a local supply of high-quality drinking water large enough to meet the needs of 1 million residents in north and central Orange County.

"Now, more than ever, we need sustainable water solutions that enhance our resilience capacity in wet weather, to withstand our state's cyclical droughts," said Yana Garcia, California's Secretary for Environmental Protection. "We cannot build those solutions without deep partnerships and innovation. Orange County's completion of the world's largest advanced wastewater purification system is a prime example of this. We're excited that this project will help deliver high quality drinking water to as many as 1 million people, and we look forward to seeing more projects like this one across our state."

The board's [Division of Financial Assistance](#) provided \$491 million in funding for the GWRS over the past 17 years, over 54% of its entire capital costs. This includes \$10 million in grants from Propositions 1 and 13 and \$481 million in 11 low-interest loans, primarily from the [Clean Water State Revolving Fund](#), a federal-state partnership that provides low-cost financing for a wide range of water quality infrastructure projects.

"What the districts have accomplished with the Groundwater Replenishment System is an example of the vision, patience, investment, and above all, partnership at the local, state and federal levels that's required to secure future water supplies," said Sean Maguire, member of the State Water Board. "The board has been a partner on this project since we first committed funding in 2006, and the scale of our investment demonstrates that helping local agencies diversify supplies and build water resilience is a top priority for the state."

Located in Fountain Valley, the GWRS takes highly treated wastewater that would have been discharged into the Pacific Ocean and purifies it further through a three-step advanced treatment process. The purified water is then injected and percolated into Orange County Groundwater Basins, where it ultimately becomes part of Orange



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County's drinking water supply. The GWRS has expanded twice since first opening in 2008, completing its final phase this year with a production capacity of 130 million gallons per day of high-quality drinking water.

"The completion of the Groundwater Replenishment System means increased water supply reliability for Orange County and the state of California," said Cathy Green, president of the Orange County Water District. "We appreciate the financial support from the board through programs like the State Revolving Fund to help this project come to fruition. The low-interest loans we received from the fund helped us keep the replenishment assessment rate low, benefitting everyone that pumps groundwater from the Orange County Groundwater Basin."

While OCWD relies heavily on groundwater, it also imports about 15% of the water supplying north and central Orange County from the Colorado River and the Sacramento-San Joaquin River Delta. The water district estimates that the GWRS will replace 134,000 acre-feet per year (AFY) of water historically imported from sources outside the county, reducing demands on the Sacramento-San Joaquin Delta by 60,000 acre-feet annually.

"Thanks to the funding we received from the state and federal partners through the Revolving Fund, the Orange County Sanitation District is now recycling 100% of our reclaimable flow, an industry first and unheard of with other wastewater recycling projects," stated O.C. Sanitation District Chairman Chad Wanke. "This makes the county less reliant on outside sources, reduces the price of water and also leaves more of it in the environment."

Water recycling forms one pillar of Gov. Gavin Newsom's [Water Supply Strategy](#) to make up for the projected loss of 10% of the state's water supplies by 2030 due to hotter, drier weather. The strategy sets forth actions to outpace climate impacts, including a goal to recycle 2.5 million acre-feet of wastewater per year by 2030.

During the last fiscal year, the board distributed over \$1.2 billion to 15 recycling projects statewide that will produce an additional 75,000 acre-feet of water per year for the state by 2030, or enough to sustain 500,000 people annually.

The State Water Board's mission is to preserve, enhance and restore the quality of California's water resources and drinking water for the protection of the environment and public health, and to ensure proper resource allocation and efficient use for present and future generations.