



# ORANGE COUNTY WATER DISTRICT

## NEWS RELEASE

### FOR IMMEDIATE RELEASE

**CONTACT:** Eleanor Torres, (714) 378-3268, etorres@ocwd.com

### DROUGHT-FIGHTING PROJECT EARNS COOL PLANET AWARD

**FOUNTAIN VALLEY, Calif.** (Nov. 15, 2016) — The Climate Registry and Southern California Edison honored the Orange County Water District (OCWD; District) with a 2016 Cool Planet Award for its initial expansion of the Groundwater Replenishment System (GWRS), which takes treated wastewater and purifies it to drinking water standards. The plant, which is the world's largest of its kind, produces 100 million gallons of pure water per day (MGD), enough water for 850,000 residents in north and central Orange County.

The recent expansion came online in 2015 and took GWRS production from 70 MGD to 100 MGD, making the region less susceptible to droughts. One of the most notable changes to the design was the energy recovery process associated with the upgraded reverse osmosis (RO) system. The RO system is the heart of the purification process and removes dissolved salts or minerals, and organic materials like fertilizers and pesticides, pharmaceuticals and viruses. The expansion included energy recovery devices on the RO system that capture energy normally lost when water is released through a throttling valve from a high pressure system. The system captures the energy by use of turbines that resemble the configurations on an automotive turbo charger. It is anticipated that the high-tech energy recovery system will save 14 million kilowatt hours and approximately \$1.3 million annually for the life of the system. Another benefit of this device is its corresponding reduction in CO<sub>2</sub> greenhouse gas emissions, estimated at 14 million pounds per year.

"It is energy-intensive to "make" and purify water, but when we planned the GWRS Initial Expansion one of our major goals was to reduce operating costs and emissions by optimizing the performance of the existing system based on data from operation of the original GWRS, which opened in 2008," stated OCWD President Cathy Green. "We constantly consider alternative energy purchasing strategies and research new technologies and when they make sense for us to help cut energy usage and costs, we embrace them."

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### **DROUGHT-FIGHTING PROJECT EARNS COOL PLANET AWARD**

According to the California Energy Commission, transportation and treatment of water, treatment and disposal of wastewater, and the energy used to heat and consume water account for nearly 20 percent of the total electricity and 30 percent of non-power plant related natural gas consumed in California. The GWRS uses half the energy required to move imported water to Orange County and further protects the environment by reusing a precious resource.

The Cool Planet Program/Award is run by The Climate Registry (TCR), a non-profit organization governed by U.S. states and Canadian provinces and territories that designs and operates voluntary and compliance greenhouse gas (GHG) reporting programs. The Cool Planet Award recognizes the valuable contribution of Southern California Edison business customers who demonstrate exemplary leadership in energy and carbon management within their business size and industry. For a complete list of winners, visit [www.theclimateregistry.org](http://www.theclimateregistry.org)

### **ABOUT OCWD**

OCWD manages the vast Orange County Groundwater Basin which provides 75% of the water demands of 2.4 million people in north and central Orange County. The District is committed to enhancing Orange County's groundwater quality and reliability in an environmentally friendly and economical manner. The following cities utilize the groundwater basin: Anaheim, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Palma, Los Alamitos, Newport Beach, Orange, Placentia, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster and Yorba Linda. For more information about the Orange County Water District, call (714) 378-3200 or visit [www.ocwd.com](http://www.ocwd.com).

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