



FOR IMMEDIATE RELEASE

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**GROUNDWATER REPLENISHMENT SYSTEM PREVENTS THE NEED TO USE
EMERGENCY OCEAN OUTFALL**

FOUNTAIN VALLEY, Calif. (February 27, 2017) — The Groundwater Replenishment System (GWRS), the world’s largest advanced water purification facility of its kind, has been online since January 2008. The project is a joint partnership between the Orange County Water District (OCWD; the District) and the Orange County Sanitation District (OCSD).

On January 22-23, 2017, OCSD saw influent flows that had not been seen since 1995. OCSD experienced peak flows of up to 586 million gallons per day (mgd) coming into both of their wastewater treatment plants. As events started to unfold, OCSD staff worked tirelessly to ensure that its facilities could handle the unprecedented flows and OCWD staff worked to ensure that the GWRS would continue to run at its normal 100 mgd flow rate. This alleviated any concerns that flows would exceed their discharge capacity of the five mile outfall line and force OCSD to use its one mile outfall, which would have resulted in beach closures.

"I am very proud to be part of this organization," said OCSD Board Chairman Greg Sebourn. "Facing the highest flows ever seen at OCSD, we were able to keep the flow in the pipes without any interruption in service to our customers. This was possible through the hard work and dedication of our staff, and the sound policy making, foresight and commitment of our past and current board to invest in infrastructure for the future. All of these factors came into play to allow OCSD to stay true to our mission of protecting public health and the environment, even during challenging times."

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OCWD originally planned to develop a project to replace and increase flows of its predecessor Water Factory 21, a sophisticated treatment plant that provided high-quality water for the Talbert Seawater Intrusion Barrier. Injection of freshwater into the barrier formed a ridge that kept seawater of the Pacific Ocean from contaminating the Orange County Groundwater Basin. The basin provides about 75 percent of the drinking water needs for north and central Orange County, California.

Water Factory 21 had reached the end of its life and its production capacity of 15 mgd could not keep up with the required seawater intrusion demands of 30 mgd. At the same time, OCSD was concerned that a second ocean outfall pipeline was needed for sufficient capacity to discharge treated secondary effluent from its wastewater treatment plants into the Pacific Ocean. During stormflow events, the sewer collection system flows can increase dramatically—several times greater than normal sewer flows. These events tend to be short in duration (1-2 days typically) and only a few times at most each year, but the population was growing and future sewer flows were sure to increase as well.

This concern led to discussions between both agencies on a project that could satisfy everyone's needs and ultimately to the development of the GWRS.

The GWRS was developed to reclaim up to 130 mgd of treated secondary effluent wastewater. At this flow rate, not only could OCWD feed its seawater intrusion barrier to meet current demands, but it could also use this water to directly replenish Orange County's groundwater aquifer.

In discussions with OCSD staff, the question was raised whether the initial GWRS design of 70 mgd could allow the plant to be operated at a higher flow rate of 130 mgd for short periods at only a few times per year during the wintertime. This would allow OCSD to address its peak flow event issues, while avoiding the difficult task of building a second deep ocean

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outfall. In order to allow for this peaking capacity to be designed into the GWRS, OCSD agreed to pay half of the capital costs of the project minus any grant monies received.

During the first nine years of its history, the GWRS was not required to produce more than 70 mgd to satisfy OCSD peak winter storm events. The GWRS facility was expanded in 2015 from a flow capacity of 70 to 100 mgd, primarily to meet the water needs of a growing population, especially during cyclical droughts. A five-year drought, one of the worst in California history, and the extreme conservation efforts of people living in Southern California resulted in lower and manageable amounts of wastewater.

During these recent peak flow periods in January, OCWD was able to operate the GWRS normally at 100 mgd and beneficially use the water for the Orange County Groundwater Basin. "The Orange County Water District applauds OCSD staff who met adversity and, through their dedication, overcame it," stated Orange County Water District Board President Denis Bilodeau. "Additionally, we look at the outstanding GWRS design, the 2015 GWRS expansion and its ongoing management by devoted OCWD employees who keep it running optimally,"

In the end, the GWRS was able to do what it was designed to accomplish: replenish and protect the Orange County Groundwater Basin while providing winter peak flow relief to the Orange County Sanitation District. This is what makes the GWRS a successful project and an example of what can be accomplished with mutual cooperation between public agencies.

California looks forward to seeing many projects and programs implemented to combat drought and the water supply challenges the state faces, and Orange County is eager to lead the way by increasing local water reliability. Prior to the startup of the GWRS, groundwater pumping was restricted to 62 percent of total water demands. Today, while other California communities are grappling with significant shortages due to the drought, the GWRS has helped increase groundwater pumping in the Orange County Groundwater Basin to 75 percent. The

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GWRS is Orange County's shining example of innovation, sound planning and tremendous leadership. To learn more about this water reliability project or to schedule a tour, please visit <http://www.ocwd.com/gwrs/>.

About OCWD

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 managed by OCWD and receive approximately 75 percent of their water supply from it: 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 and its Board of Directors, call (714) 378-3200 or visit www.ocwd.com.

About OCSD

OCSD is a public agency that provides wastewater collection, treatment, and recycling for approximately 2.5 million people in central and northwest Orange County. OCSD is a special district that is governed by a 25-member Board of Directors comprised of 20 cities, four special districts, and one representative from the Orange County Board of Supervisors. OCSD has two operating facilities that treat wastewater from residential, commercial and industrial sources. For more information about the Orange County Sanitation District call (714) 962-2411 or visit www.ocsd.com. Follow us at @OCSEwers.

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