

Groundwater: Nature's Hidden Gem, Providing Precious Water Supply

Orange County residents and businesses rely on different sources of drinking water for their everyday use. Some water comes from Northern California through the Sacramento San Joaquin Delta, some from the Colorado River, and some from Orange County's local and regional sources, including far beneath the ground.

By the time drinking water reaches your home, it has travelled a long way – in some cases hundreds of miles – and through hundreds of pumps and pipes that you may never see, or even notice. Locally, much of our water infrastructure isn't visible because it's located underground. This "hidden gem" is the Orange County Groundwater Basin which supplies 77% of the water for most of Orange County, including the City of Fullerton.

The Orange County Water District (OCWD; District) serves as the steward of the Orange County

Groundwater Basin, one of the largest of several coastal basins in Southern California. The basin contains billions of gallons of stored water supplies. The underground basin is millions of years old, measuring 4,000 feet at its deepest point.

Foremost among responsibilities as steward is to ensure that the groundwater supply is safe, reliable, and of the highest quality. OCWD's Philip L. Anthony Water Quality Laboratory performs more than 400,000 analyses of approximately 20,000 water samples each year to ensure that water supplies in Orange County meet or exceed state and federal drinking water standards. Testing supports regulatory compliance and aids in identifying potential water quality issues to which the District rapidly responds.

Water flows into Anaheim Lake, where it will be recharged into the Orange County Groundwater Basin. This is one of many sources used to replenish the Orange County Groundwater Basin, which supplies 77% of the water for most of Orange County, including the City of Fullerton.

One such issue that OCWD is currently

addressing is the presence of per- and polyfluoroalkyl substances (PFAS) detected in groundwater supplies. PFAS are a group of thousands of manmade chemicals used in consumer products, such as Teflon pans, stain resistant carpets and fast-food packaging. Chemical manufacturers are the original source of PFAS chemicals. Despite playing no role in releasing PFAS into the environment, cities and water agencies must find ways to remove it from groundwater supplies. Over the past year, the acceptable levels for PFAS compounds had been lowered by state regulators in charge of setting drinking water standards. This action has caused dozens of local groundwater wells to be taken out of service.

In a proactive and swift response to address PFAS in the basin, OCWD launched the nation's largest pilot project to identify effective treatment, led monitoring and testing efforts, conducted a regional study, and implemented a treatment policy to absorb the majority of the cost to design, build and operate treatment facilities. Currently, 10 PFAS treatment plants are under design or construction with the goal of getting plants online within one to two years. In fact, it was a City of Fullerton well that received the first treatment solution for PFAS and more plans for treatment are underway. A treatment facility is expected to come online in Fullerton as early as April 2021.

OCWD, cities and retail water agencies in Orange County take seriously the duty to provide reliable high-quality drinking water to residents throughout the county and will continue to meet and exceed all state and federal drinking water standards and regulations.

OCWD is committed to ensuring that the community is well informed and has the resources available to better understand local water supply and quality. The District invites you to learn more by visiting www.ocwd.com and Fullerton's water service web page.

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