



Groundwater: Our Hidden Local Gem

This month we celebrate [National Ground Water Association \(NGWA\)](#)'s Groundwater Awareness Week, taking place March 5-11, 2023, to highlight the responsible development, management, and use of groundwater. Groundwater Awareness Week is also a platform to encourage the promotion of policies impacting groundwater quality and supply.

If you live or work in north or central Orange County, you are using water from the Orange County Groundwater Basin. The groundwater basin is one of our local “hidden” gems, spanning 358 square miles right beneath our feet, holding billions of gallons of water, and providing up to 85% of the drinking water supply for 2.5 million people. A complex system of wells, levees, dams, pipes, pumps, and recharge basins help store and move water around the region, where it is eventually pumped by 19 local cities and retail water districts, such as the city of Fullerton, and served to homes and businesses.



A recharge basin in nearby Anaheim slowly puts water back into the groundwater basin while naturally filtering and purifying it.

At the Orange County Water District (OCWD), our agency is responsible for managing this groundwater basin and ensuring it continues to serve as a reliable water source for our communities. Although the basin is vast, the average annual withdrawals must be balanced by recharge from a variety of sources. OCWD relies on multiple sources of water to fill the basin including the Santa Ana River, stormwater, imported water from northern California and the Colorado River, and recycled water from the [Groundwater Replenishment System \(GWRS\)](#).

Over the years, we've made [significant investments to increase local water supplies](#) in the basin. With the latest expansion of the GWRS, the facility can produce up to 130 million gallons of drinking water a day – enough water to serve nearly one million people. GWRS water accounts for approximately 35% of the basin's overall water supply. We continue to capture as much stormwater as possible and are working with the U.S. Army Corps of Engineers to capture even more water behind Prado Dam. This water eventually gets released at a rate that can be captured by OCWD where it travels down the Santa Ana River and reaches Orange County. Once here, the water percolates throughout the more than two dozen recharge facilities that OCWD operates in Anaheim and Orange and gets stored in the basin for future use.

Additionally, groundwater is constantly monitored and tested to ensure that water delivered to you meets all state and federal drinking water standards. The District responds quickly and efficiently to solve threats to groundwater, clean up polluted areas caused by industrial chemicals, and address issues of new or emerging contaminants like [per- and polyfluoroalkyl substances \(PFAS\)](#), where the District has successfully tested effective treatment techniques and has built treatment plants that remove PFAS from water.

We have to implement a broad range of solutions to safeguard our water supply. You can help keep our groundwater safe, too. There are many factors that can have a harmful impact on the quality of our local water sources ranging from industrial and household chemicals, oils, and other pollutants to the pesticides we use in our own backyards. By thinking about the little things that you do on a daily basis that could have a negative effect on the environment and local water sources, you are also helping to keep our precious groundwater basin clean, safe, and reliable.

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.