An All of the Above Approach to Secure Water for Orange County

When you hear about California's current drought and various reports about water storage levels from places that are hundreds of miles away and in some cases, located outside of the state, it's often difficult to put that all in perspective. How do reservoir levels from so far away impact us locally?

It's important to understand how water supply works in Southern California and how that affects us here in Orange County. The region's imported water wholesaler, the Metropolitan Water District of Southern California (MWD), who provides water for 19 million people in six counties, imports water from two primary sources: the Sacramento and San Joaquin rivers, via the State Water Project (SWP), and the Colorado River, via the Colorado River Aqueduct.

In March 2021, the California Department of Water Resources (DWR) announced a decrease from an already low 10% to just 5% of requested supplies from the SWP allocation this year. This impacts MWD, though fortunately, MWD has a significant amount of water in storage and will be able to maintain normal water deliveries this year. Most recently in August 2021, the United States Bureau of Reclamation (USBR) announced a first-ever Lake Mead Level 1 Shortage Condition. The nation's largest reservoir, Lake Mead, sits on the Colorado River. The Colorado River Basin provides drinking water supply for 40 million people in seven U.S. states, including California, and also in Mexico. USBR's Lake Mead shortage declaration does not affect our state's water supply allocations from the Colorado River at this time. Following the Lake Mead shortage announcement, MWD declared a Water Supply Alert, encouraging residents and businesses to voluntarily reduce their water use and help preserve the region's storage reserves.

Part of the State Water Project, the San Luis Reservoir stores water diverted from the Sacramento-San Joaquin Delta for later deliveries to the Silicon Valley, San Joaquin Valley, the Central Coast, and Southern California. It is pictured here with the storage at 363,587 acre-feet, 18 percent capacity, or 38 percent of historical average. (Photo credit: Department of Water Resources, taken August 20, 2021)

These actions highlight the need for locally-controlled, reliable supplies of water, particularly in Orange County where we live in a semi-arid region that receives approximately 13 inches of annual rainfall. Here in the Orange County Water District (OCWD; the District) service area, our residents benefit from the financially sound investments that have created a diversified water supply portfolio.

For example, OCWD manages and protects one of the region's most valuable assets which provides 77% of the water supply to 2.5 million people in north and central Orange County – the Orange County Groundwater Basin (Basin). The Basin holds water from a variety of sources including the Santa Ana River, local stormwater, and rainfall, imported water from MWD, and recycled water that we create from the Groundwater Replenishment System (GWRS). This means we're not just relying on one source of water and ensures that our 19 cities and water agencies who pump water from the Basin have the water they need to serve their customers, which includes water users like you. At present, the Basin can provide water for two consecutive years at current pumping levels even if drought conditions persist.

Since drought conditions are prevalent in California and we can't rely on Mother Nature alone to provide our region with the water that we need, we must implement an "all of the above" approach to water management. Accordingly, the District is also expanding water recycling at the GWRS to create 130 million gallons of water a day by 2023, increasing stormwater capture at Prado Dam in Corona by adding an additional 6,000 to 12,000 acre-feet of water, and exploring ocean water desalination as a potential way to enhance our local water reliability efforts. These are just a few examples of how OCWD remains committed to increasing local water supplies – to weather any condition and ensure water reliability for future generations.

How water works in Southern California and Orange County can sound complicated, but we are here to help you understand where your water supply comes from, how we manage this precious resource, and maintain its high quality and reliability. We encourage you to visit www.ocwd.com, attend a water webinar, or email us at info@ocwd.com with your water question.

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.