

## **Why Recycled Water?**

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Despite this year's annual rainfall, the prolonged drought took a toll on Carpinteria Valley's local water supplies and they are still recovering. Lake Cachuma reached a historic low of 7 percent capacity during the summer of 2016, which demonstrated how vulnerable and unreliable the lake is as a water supply. As Lake Cachuma's capacity dwindled, Carpinteria Valley became further dependent on groundwater in order to survive the drought. Luckily, Carpinteria Groundwater Basin (CGB) is relatively healthy compared to many others throughout the state; however, groundwater and expensive State Water Project (SWP) water are not enough to sustain our region forever. Although the Carpinteria Valley survived the driest five years on record in Santa Barbara County, it is evident that our current portfolio of water sources is vulnerable and needs to be supplemented by an alternative supply.

Currently, Carpinteria Valley Water District (CVWD) relies on three sources of supply to meet the valley's water demand. These include the Cachuma Project, State Water Project, and pumping from the CGB. Although these sources have been sufficient in years past, the California drought extending from 2012 to 2016 was the worst drought since the compilation of meteorological and hydrological data began in the Santa Barbara region. Future water supply management and planning will be based upon the recent drought.

Furthermore, major changes are anticipated that will impact all of Carpinteria's existing water supplies. Contract and regulatory changes are predicted to decrease CVWD's water allotment from the Lake Cachuma. A recent Biological Opinion prepared by the National Marine Fisheries Service will require more downstream releases to protect the endangered steelhead trout in the Santa Ynez River. In addition, siltation continues to decrease the available storage space in the lake. In 2020, the U.S. Bureau of Reclamation will reconsider the sustainable yield of the lake and it is likely that Carpinteria's and other water supply user's allocation will be considerably reduced.

The State Water Project remains an expensive source that brings with it increasing issues related to its reliability. State water delivery depends on the Sierra Nevada's snowpack, available conveyance through the Sacramento-San Joaquin Delta, operational capacity, and the amount of water stored at Lake Oroville. On average, the SWP has delivered 62 percent of its annual allotment; however, between 2012 and 2016, CVWD only received an average of 37 percent of its annual allotment. It is clear that the SWP is not a reliable source of supply during extended periods of drought. In order to plan for future droughts, there is a need for CVWD to diversify its water supply portfolio.

Lastly, all groundwater extractions will be more closely regulated under the Sustainable Groundwater Management Act (SGMA), which was signed into law by Governor Jerry Brown in 2014. A local groundwater sustainability agency (GSA) will be formed and a groundwater sustainability plan (GSP) will be developed in order to manage the basin and allocate the available annual yield. CVWD is using 1,000 AFY as a planning estimate for its long-term available groundwater supply under SGMA.

In spring of 2016, CVWD partnered with the Carpinteria Sanitary District and the City of Carpinteria to develop a recycled water facilities plan for the Carpinteria Valley and identify a preferred recycled water project. It was determined that a Recycled Water Project with groundwater recharge via direct injection was the best option for Carpinteria. This project is anticipated to produce 1,100 AFY, which would make up 22 percent of CVWD's water supply portfolio. This local supply would not only be less expensive than water from the SWP, but would also help protect CGB from the threat of seawater intrusion. The recycled water project will incorporate advanced water treatment techniques to purify it before injection. This new source will augment CVWD's water supplies and will serve as a dependable drought proof water supply.

It is crucial to invest in a local water supply that is not subject to the same vulnerabilities as the existing imported supplies. It is the District's goal to improve the reliability and sustainability of its water supplies and secure water resources for the future. If you are interested in additional information about CVWD and the Recycled Water Facilities Plan, please visit our website [www.cvwd.net](http://www.cvwd.net), follow us on twitter @CarpWater, and like Carpinteria Valley Water District on Facebook.