Every Drop Counts

Written by: Robert McDonald, General Manager

We don't mean to rain on your parade, but despite the area's above average precipitation this year, water conservation is still vital in our region. In April, Governor Jerry Brown issued an executive order that lifted the drought emergency in most of California; however, Santa Barbara County is still considered to be experiencing drought conditions as of the writing of this article. For Carpinteria valley water users, Stage II drought water restrictions will remain in place. While California experienced record rainfall this winter, that filled many of the states reservoirs, Governor Brown stressed that water "conservation must remain a way of life," recognizing that water resources are still limited in thirsty California.

California's winter floods, rainstorms, and the northern Sierra Nevada's wettest year on record since 1983 has caused most of the water-related conversations to focus on the staggering surface water increases. What often gets overlooked is the vital water supply right under your feet, namely groundwater. Luckily, Carpinteria Groundwater Basin carried Carpinteria Valley Water District (CVWD) customers through the drought when Lake Cachuma's supply was no longer available in 2015 and 2016.

Although it has been comforting to see Lake Cachuma's water level rise in recent months, this does not mean that the District will receive its full allotment. The reservoir's transformation from its historic low of 7 percent capacity last summer to 50 percent this April was noteworthy, but even with this substantial rise the District will only receive 40% of its Cachuma allocation in 2017. Moreover, future Cachuma allotments are expected to decline after 2020 as a result of newly proposed water releases for the benefits of downstream wildlife, sedimentation within the lake and a new understanding about the Lakes drought resiliency. Because of this, it is crucial to maintain and monitor the health of the groundwater basin as it continues to be an imperative source of water.

Because surface water supplies can be highly variable and costly, the District has been examining ways to reduce its dependence on Lake Cachuma and the State Water Project while still allowing the groundwater basin to recover. To explore additional options, CVWD, Carpinteria Sanitary District (CSD), City of Carpinteria, and the State Water Resources Control Board funded a study to determine if implementing a groundwater recharge project using CSD's recycled water could be an economical and feasible solution.

The study found that groundwater recharge with full advanced water treatment would vastly improve water supply reliability. Recharging Carpinteria Groundwater Basin with "purified" recycled water from CSD would not only provide a locally controlled drought resistant source of water, but it could also protect the groundwater supply from potential seawater intrusion. Seawater intrusion is the movement of saline water into freshwater aquifers and is caused by long-term groundwater overdraft. Artificial groundwater recharge in Carpinteria would help to minimize this risk as groundwater continues to be a major source of supply for CVWD and for irrigation in agricultural areas. Furthermore, CVWD is pursuing a project to construct several monitoring wells near the coast, which would allow for early detection of seawater intrusion.

While the recycled water-recharge project is still in the early stages of discussion, the District's current focus is managing the existing groundwater supply especially considering anticipated changes associated with the Sustainable Groundwater Management Act (SGMA) passed by Gov. Jerry Brown in 2014. Much of this work will require that the District and the groundwater basin stakeholders collaborate on ways to collectively manage the basin in a sustainable way. To support that effort, the District will be holding informational meetings with local groundwater stakeholders this summer to begin the discussion.

We recognize that groundwater is a valuable local resource shared by the residents, agriculture and businesses within Carpinteria Valley. By developing a plan we can ensure groundwater resources in Carpinteria for the future. We are doing everything we can to make certain the valley's residents, farmers, and businesses have an adequate water supply in the face of droughts, uncertainty in imported water supplies and regulatory changes. If you are interested in additional information about CVWD and the Recycled Water Facilities Plan, please visit our website www.cvwd.net, follow us on twitter @CarpWater, and like Carpinteria Valley Water District on Facebook.