Carpinteria Valley Water District Works to Develop a Local and Sustainable Water Supply

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The next phase of the Carpinteria Advanced Purification Project (CAPP) is underway, with preliminary design of this project that will produce up to one million gallons of water per day – enough to cover one quarter of CVWD's water needs.

This phase of the project comes after six consecutive years of moderate to exceptional drought in the Carpinteria Valley and extensive analysis by the Carpinteria Valley Water District (CVWD), Carpinteria Sanitary District (CSD), and the City of Carpinteria to maximize water resources. In 2016, the agencies evaluated several recycled water project designs and determined that indirect potable reuse (IPR) using purified water was the most feasible option. Potable reuse is the planned introduction of purified water either directly or indirectly into a water system for future drinking water purposes.

The project, now in design, involves taking water that has already been highly treated at the CSD Wastewater Treatment Plant (WWTP), purifying it in a newly-constructed Advanced Water Purification System, then delivering it through a pipeline to injection wells for storage in the groundwater basin. This new facility will allow us to capture, clean, and reuse this valuable resource rather than discharging the treated water to the Pacific Ocean. The CAPP will provide a dependable, drought-resistant, and locally controlled water source.

At the existing WWTP, treated water would be purified by utilizing a multi-step treatment process including membrane filtration, reverse osmosis, and ultraviolet/advanced oxidation. The purified water would be injected into the Carpinteria Groundwater Basin to replenish groundwater levels and would be pumped out months later by the District's drinking water wells. This technology is being utilized throughout California to develop renewable water sources. The CAPP will help the District augment our existing water supplies and prepare for future dry periods and disaster related outages of imported water supplies.

The years of drought, wildfires and flooding that Santa Barbara County has experienced recently have emphasized the need for a diversified water portfolio. Lake Cachuma reached a historic low at 7% capacity in the summer of 2016, and even with above average rainfall this winter, the reservoir is only around 50% capacity. Decreases in these surface water supplies have resulted in more dependence on our groundwater resources. After the debris flows in 2018, we saw firsthand that local water supplies are the most reliable during a disaster. In addition, imported water from the State Water Project is expensive and deliveries are unpredictable. Added to these challenges is the Sustainable Groundwater Management Act

(SGMA) which will likely bring changes to the way in which groundwater is managed and used in the Carpinteria Valley.

On January 24, 2019, CVWD and CSD held a public scoping meeting at the Carpinteria Veterans Memorial Building to introduce the proposed project details as well as the ongoing environmental analysis be conducted as part of the California Environmental Quality Act (CEQA). A Public Draft Environmental Impact Report will be available in June 2019, at which time a public meeting will be held for community members to review the report and provide comments. A project website – CVWD.net/CAPP – has also been set up to provide up-to-date details and to take questions and comments.

CVWD will finish the CAPP Preliminary Design Report and the final EIR before the end of the year and then will begin to seek funding including State and Federal Grants, and Low Interest Loans in an effort to reduce the impacts to rates. The current schedule calls for the final CAPP design to be completed by December 2020 and the construction of the pipelines, injection pumps, and AWPF to be finalized by the end of 2023.

The CAPP will provide a safe, reliable, and renewable source of water for future residents and businesses. A website is being developed for the project that will provide answers to frequently asked questions and contain information about the project as it progresses. We encourage you to visit the site and welcome you to attend future workshops and meetings throughout the process. For other District updates, please visit our website cvwd.net, follow us on Twitter @CarpWater, or like Carpinteria Valley Water District on Facebook.