



Carpinteria Valley Water District Central Zone Pipeline Improvements and Demonstration Aquifer Storage and Recovery (ASR) Well

Prop 50 Funding

In a competitive grant for Integrated Regional Water Management monies under Proposition 50, the Carpinteria Valley Water District was awarded \$2,000,000 from the State Water Resources Control Board for the Central Zone Pipeline (CZP) Improvements and Demonstration Aquifer Storage and Recovery (ASR) Well project.

Central Zone Pipeline Improvements and Demonstration Aquifer Storage and Recovery (ASR) Well

The CPZ Improvements and ASR El Carro Well Rehabilitation Project adds to the conjunctive use capability of the CVWD's surface and groundwater supply, since the well can inject (and store) water in the groundwater basin, as well as, extract groundwater. The project includes the replacement of one (1) of CVWD's four (4) failed wells with a new production well that is also capable of artificial recharge. Additionally, the project is upgrading and optimizing CVWD's main central pressure zone (CPZ) via installing a new transmission main that will inter-tie the new well directly into the Central pressure zone as well as the existing 3 MG Storage Tank.

Need for the Project

Carpinteria Valley Water District blends local groundwater with imported surface waters in order to meet state and federal health-related water quality regulations. These regulations require that water systems reduce total Trihalomethanes and Haloacetic acids to 80 parts per billion and 60 parts per billion on all of the worst sample sites in the system by 2012. In order to blend efficiently and leverage the limited groundwater supply, ultimately ensuring that that surface water entering the system will be blended with groundwater to reduce formation of TTHms and Haa5s, the District has constructed a tank for groundwater storage, a new well, and a blending system. The missing piece to the current system is a transmission main that would allow the District to hook up one existing well to the new tank, a new ASR capable well, and filtration plant with some associated piping to connect to the proposed transmission main. This provides redundancy to the system and ensures there will always be groundwater available for blending. It also allows the District operations staff the flexibility to manage the water supply more efficiently.

Project Benefits

In addition to water quality benefits, the new system allows the District to offset demands placed on the South Coast Conduit and Cater Treatment Plant by using local groundwater supply in high peak times rather than burdening the South Coast transmission system. Further, in an emergency or natural disaster setting the District will be able to offset or provide water supply back towards the communities of Santa Barbara and Montecito as well as Carpinteria form its groundwater.