

Water Supply Evaluation for Saltworks Development Project

Redwood City, CA



Project has acquired surface water rights transfer from the State Water Project



New sustainable development will incorporate multiple water conservation and re-use measures

EKI evaluated water supply alternatives for a large master-planned community in Redwood City. This work was conducted on behalf of the developer for the preparation of a Water Supply Assessment (WSA) for the Project.

EKI performed the following:

- Conducted preliminary investigation of groundwater extraction opportunities at the Project site and within the city's water service area, analyzed aquifer testing data to estimate local aquifer characteristics, developed a basin water balance to estimate sustainable yield, performed preliminary saltwater intrusion and subsidence evaluations, and recommended potential supply well locations and capacities.
- Performed water demand and conservation evaluations using a comprehensive statistical model for indoor residential water use and a climate-specific landscape irrigation model. As part of this work, EKI evaluated the potential for additional water savings through implementation of end-use conservation measures, water re-use opportunities (i.e., recycled water, greywater, stormwater and rainwater), and Project-wide enforcement mechanisms. EKI identified opportunities to reduce potable water demands for the Project by up to 60% of originally estimated baseline demands.
- Projected potable water demand and evaluated water supply, transport, and treatment options. Water demands were based on aggressive water conservation assumptions and incorporation of greywater and rainwater systems, in addition to use of recycled water.
- Worked closely with the developer and its water counsel to secure highly reliable surface water rights for the Project and to identify potential transfer opportunities to utilize this water at the Project site. Identified potential water resources for the development, including desalination, recycled water, and local Bayside groundwater resources.
- Produced preliminary design and estimates of probable cost for identified water and wastewater treatment and supply options and performed stormwater and wastewater planning for the Project.