

Design and Construction Management of Water Facilities Improvements for the City of Calistoga

Calistoga, CA



View of the primary clarifier to be modified as part of the project



View of new pressure filter train added for redundancy and improved particulate removal

EKI provided design and construction management services for the Kimball Water Treatment Plant (WTP) and Kimball Reservoir Improvement Projects for the City of Calistoga. These projects, funded by the United States Department of Agriculture's (USDA's) Rural Development Program, included performing clarifier and filter modifications at the City's WTP to improve particle removal, therefore improving reliability of the treated water pump station through pump replacement; and replacement of approximately 14,000 lineal feet of water conveyance pipeline. EKI also evaluated alternative processes for a proposed water treatment process aimed at removing arsenic and antimony from geothermal well water at the City's Fiege Well Site.

In addition, EKI was the program manager for this group of projects and performed the following:

- Assisted the City in securing planning, design, and construction funding from the USDA Disadvantaged Community Program.
- Coordinated with the City's legal counsel, bond counsel, and financial advisors to bring together all portions of the funding application package within the appropriate timeframe.
- Provided program management and engineering design services to implement safety improvements on the Kimball Reservoir spillway, improve efficiency of existing flocculating clarifier, provide redundancy for existing dual-media filtration system, provide redundancy for existing process pumps, and upgrade existing online water quality monitoring systems to comply with current regulatory requirements.
- Assisted in preparation of necessary environmental documents and permit applications.
- Provided conceptual engineering services to evaluate improvements to the existing spent backwash water system to provide flexibility in recirculation rates (project component was eliminated by City due to funding constraints).
- Provided construction management services including full-time field observation, contract management, submittal review, response to RFIs, and change order negotiations.

EKI is currently assisting the City with the scoping and preliminary design for geothermal flow metering project at three existing spa facilities.