HETCH HETCHY
WATER SYSTEM
IMPROVEMENT
PROGRAM

Calaveras Dam Replacement
Fact Sheet

Hetch Hetchy
Regional
Water
System
Services of San Francisco
Public Utilities Commission

www.sfwater.org/sunolvalley 866-973-1476


Calaveras Reservoir

Project Summary

The San Francisco Public Utilities Commission, operator of the Hetch Hetchy Regional Water System, is rebuilding Calaveras Dam, our largest local Bay Area drinking water reservoir. The existing earth fill dam is located near the active Calaveras earthquake fault. We lowered water levels in the reservoir in response to seismic concerns in 2001. The project will construct a new dam equal in height next to the existing seismically-vulnerable dam so that the historic capacity of the reservoir can be restored. The new Calaveras Dam will be one of only a few major dams built in the State of California in the last 30 years.

The $416 million project breaks ground in September 2011. The Calaveras Dam Replacement Project is the largest project among the 81 projects of our $4.6B Water System Improvement Program. The Hetch Hetchy Regional Water System delivers drinking water to 2.5 million Bay Area customers.

Construction Began: August 2011
Projected Completion: August 2015
Total Project Cost: $416 Million

Construction Contractor:

Joint Venture of Dragados USA, Flatiron Construction, and Sukut Construction

Project Details

The project consists of building a new zoned earth and rock fill dam immediately downstream of the existing dam. This work will restore the Calaveras Reservoir to its historic capacity. The reservoir provides approximately half of the Hetch Hetchy Regional Water System's local Bay Area water storage. This storage is crucial to providing adequate water to our customers in times of drought and when Sierra Nevada resources are not available.

- The new dam will have a structural height of **220 feet**, a crest length of **1,210 feet**, and a width of **80 feet** at the crest and **1,180 feet** at the base
- **7 million cubic yards of excavation** is required to construct the new dam. This is the equivalent of 1,200 football fields buried 1 yard deep. Approximately 3.5 million cubic yards will go into the construction of the new dam, including a buttress fill to stabilize an existing landslide
- The **new spillway will be 1,550 feet long** utilizing 40,000 cubic yards of concrete
- Upon completion, the Calaveras Reservoir will be restored to its historic storage capacity of 96,850 acre-feet (**31 billion gallons**)
- The new dam will allow us to **release water into Alameda Creek** in a manner that controls water temperatures and flow rates depending upon the life cycle needs of the fish. We will also install fish screens and a fish ladder at the Alameda Creek Diversion Dam to **support the restoration of Steelhead** to the Alameda Creek Watershed
- A **new intake/outlet shaft tower** will be constructed, consisting of a 20-foot diameter by 163 foot deep vertical shaft and three new adit tunnels. This inlet/outlet structure will convey water to and from the reservoir through a **72-inch diameter steel lined tunnel** and a **78 inch diameter pipeline** downstream

Although 90 percent of the materials for the new dam will come from on-site borrow areas, approximately 300,000 cubic yards of sands and gravels will need to be imported to the site for construction of the internal filters and drains within the zoned embankment dam. Therefore, the SFPUC has sought permission from Alameda County to temporarily close Calaveras Road south of Geary Road to the county line at two separate intervals – two months and 18 months respectively – on weekdays only to protect public safety on the road while large trucks haul in sands and gravels.

Rendering of the new Calaveras Dam

Need More Information?

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San Francisco Public Utilities Commission

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