Calaveras Dam rebuilding projected approved

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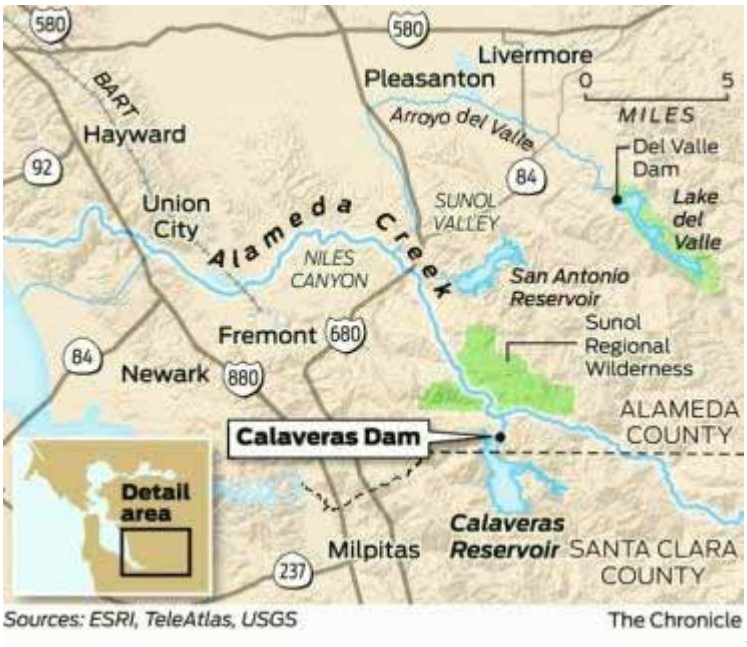

Work to replace an 85-year-old dam holding back the Bay Area's biggest reservoir will begin later this year, providing a crucial insurance policy for San Francisco's water supply and a cornerstone in the plan to restore steelhead trout in Alameda Creek.

On Thursday, the San Francisco Planning Department and the San Francisco Public Utilities Commission each unanimously approved the $405 million project to rebuild Calaveras Dam, located northeast of Milpitas at the Alameda-Santa Clara county line.

The 230-foot-high earthen barrier, which buttresses the largest drinking water reservoir in the nine-county region, has faced structural problems since it was completed in 1925. But its location in an active fault zone prompted California dam regulators a decade ago to order the San Francisco Public Utilities Commission to drain the reservoir to about one-third of its capacity.

Drawing up new plans

Several years later, the commission drew up plans for a new dam just downstream of the current structure as part of its $4.6 billion retrofit of the entire water system. The upgraded Calaveras Dam represents the most expensive and important single piece of the overall project.

"We've been without this storage for 10 years," said Steve Ritchie, assistant general manager of the agency's water division. "It hasn't been a major problem because we've had relatively wet weather for that time. But 2007 and 2008 were getting tough - not having it available for drought storage is a real problem."

More than 80 percent of the water used by 2.5 million San Francisco, Peninsula and East Bay residents comes from the Hetch Hetchy Reservoir on the Tuolumne River in Yosemite National Park. The rest flows from local watersheds. The Calaveras Reservoir sits in the Alameda Creek watershed, which drains much of the southern sections of the East Bay, including the southern slopes of Mount Diablo.

The ability to once again stockpile water at Calaveras ensures a backup supply for the system serving one-third of the Bay Area.

New requirements on the dam's operation also intend to revive Alameda Creek's besieged steelhead trout, which haven't spawned in the stream in any significant numbers since the mid-1960s.

At one time, huge numbers of steelhead and coho swam up the 45-mile creek, the third-largest tributary of San Francisco Bay behind the Sacramento and San Joaquin rivers.

There, they laid their eggs and raised their young, eventually traveling to the sea where they spent much of their adult lives before returning to the creek to spawn. Over time, various water diversions and dams depleted flows, chopped up the creek and cut off migratory pathways. Stranded fish populations above the dams have essentially become genetically distinct from their ancestors.

Year-round releases

For decades, environmentalists have pushed to remove some of the blockages, limit diversions and guarantee creek flows necessary for migration and spawning.

One of the hard-fought concessions they won from the San Francisco Public Utilities Commission guarantees year-round releases from the new dam.

"The cold water flows they're going to release from the reservoir are definitely going to benefit trout rearing during the hot summer months," said Jeff Miller, director of the Alameda Creek Alliance and conservation advocate with the Center for Biological Diversity. "And the winter flows are going to help with migration."

While the fish still will not be able to swim past the Calaveras Dam into Calaveras Creek, the utility will build a fish ladder around a small, 32-foot diversion dam downstream of the Calaveras Reservoir. That mechanism will help steelhead move into upper Alameda Creek, an isolated, verdant area ideal for juveniles.