



Protecting Hetch Hetchy Reservoir and the San Francisco Bay Area Water Supply

Who we are:

The San Francisco Public Utilities Commission (SFPUC) owns and operates the Hetch Hetchy water delivery system. The SFPUC delivers an average of 260 million gallons of water per day (mgd) to retail customers in San Francisco, and to 28 wholesale buyers – cities, water districts, and public utilities – that supply communities in San Mateo, Santa Clara and Alameda Counties.

High Quality, Reliable Water for 2.4 Million Bay Area Customers

Of the water delivered by the SFPUC, 85% comes from Hetch Hetchy and 15% from local sources. San Francisco uses about one-third – 84 mgd – of this water. The other two-thirds – 175 mgd – is delivered to the wholesale customers outside the city. Of the 28 wholesale customers, 18 are 100% dependent on Hetch Hetchy water, and another three are at least 75% dependent.

Proposals to drain Hetch Hetchy are Inconsistent with the Goals of CALFED:

The Bay Delta program, CALFED, is intended to *solve* the state water supply reliability and water quality challenges. CALFED's 2004 workplan states that the state and federal water systems alone (not counting local systems) need to develop between 1.2 and 1.5 million acre ft of additional water storage at a cost of at least \$15 billion. Funding for this work has not yet been identified. Today, the Delta is in ecological collapse, with key indicator fish species in danger of extinction. Adding an additional 2.4 million Californians to the Delta, a distinct possibility if Hetch Hetchy is drained, could hasten its collapse.

Proposals to drain Hetch Hetchy would *remove* from service a fully paid for storage facility that produces the state's highest quality water and 1.8 million megawatt hours of clean dispatchable power that serves San Francisco and the central valley irrigation districts. The existing Hetch Hetchy system is a gravity-based system so no electricity is consumed. A drained Hetch Hetchy would require the installation and ongoing operation of massive pumping facilities.

True Costs of Proposal Could Exceed \$10 Billion:

Some proposals to drain Hetch Hetchy indicate that costs to drain the reservoir range between \$500M-\$1.6B. This estimate does not truly reflect all the new facilities and other measures that would be required. *San Francisco's preliminary analysis indicates that costs would exceed \$10 billion.* This does not include potentially substantial rate increases that would be needed to operate and maintain these new facilities and produce additional energy to run them.

New facilities, projects and efforts needed in order to drain Hetch Hetchy include:

1. New interties
2. New pump facilities
3. New conveyance facilities
4. New capacity to accommodate the run of the river operation
5. Increased local storage
6. Treatment facilities
7. Purchase of water in critically dry years (1 in 5 years)
8. Replacement of lost power from the Hetch Hetchy Project
9. Compensation for Modesto and Turlock Irrigation Districts for storage in New Don Pedro
10. Operation, maintenance and powering of all these new facilities
11. Removal of O'Shaughnessy Dam

California State Legislation requires the immediate implementation of the SFPUC Capital Program:

In AB 1823 the Legislature declared, “The reliability of the [Hetch Hetchy] water system is of vital importance to the health, welfare, safety, and economy of the region that it supplies... a state audit has reported that the system is at risk of catastrophic failure in the event of a major earthquake...” The SFPUC is currently investing over \$4.3 Billion to seismically upgrade the system, the largest water infrastructure investment in progress in California.

The Raker Act authorizes San Francisco to store and operate in Hetch Hetchy Valley:

The Raker Act (federal law) permits San Francisco to operate O’Shaughnessy Dam in the Hetch Hetchy Valley and therefore *federal* action, rather than state, is required to make changes to how San Francisco operates its water system.

Many of the state’s key industries would be affected by any change in water quality:

Businesses requiring large amounts of water in their processes depend on high quality Hetch Hetchy water because it needs less pre-treatment and post-treatment. Over time, costly treatment means higher water bills and, in cases where the additional water is discharged in the Bay, increased pollution, higher sewer charges, and discharge taxes. Many businesses are located here in the Bay Area and Silicon Valley for this specific reason. California’s economy would be severely impacted if these businesses relocated.

Bay Area, California Leaders Concerned About Impact to Economy, Water Quality, Water Supply

Noting that the state’s population is projected to grow from 30 million today to 50 million in 2020, “I am firmly opposed to the destruction of one of the largest sources of clean drinking water in California. In a state that has faced repeated droughts and is desperate for water sources, I believe this would be a terrible mistake.”

United States Senator Dianne Feinstein

“...[Our] manufacturing operations are dependant on a consistent and economical supply of Hetch Hetchy water. The current manufacturing processes are designed for low conductivity water as supplied by the Hetch Hetchy system. A change from Hetch Hetchy system to a blended source would result in a 5% increase in water usage from backwashing and a 80% increase in the costs for treatment.”

Manufacturing Respondent, 1994 survey by MHB Consultants

“Intel Corporation uses more than 1 million gallons of Hetch Hetchy water daily in its Santa Clara wafer fabrication plant. Non-Hetch Hetchy supplies would require an upgrade of the filtration controls, and result in a decline in production because more water would be needed to produce the same output. In the longer-term, water consumption would increase, along with filtration and discharge costs.”

Hetch Hetchy Water and the Bay Area Economy - Bay Area Economic Forum

“Changes in snowpack and stream flow have important implications for water managers...the number of years with dry or critically low stream flow conditions is projected to increase from 32% to 50-65% of years... Water users lacking storage could face water shortages as summer stream flow becomes less reliable.”

Union of Concerned Scientists, 2004

“If I knew then what I know now—which is that I don’t know if I am going to get water or not—I never would have expanded here in California...unless the government and water officials do something so we can get off this roller coaster. We can’t run our business like a yo-yo.”

Cost of Industrial Water Shortages, Robert Swanson, Linear Space Technology in Milpitas, CA

Other Environmental Perspectives

Today, the Hetch Hetchy Valley above the lake level is a virtually untouched wilderness, providing priceless habitat for endangered and threatened species, as well as numerous unique recreational opportunities. One reason why the SFPUC's water quality is among the best in the nation is that the Hetch Hetchy watershed has been maintained in pristine condition for nearly 100 years.

The environmental perspective is far from unanimous regarding the desirability of draining the Valley. The late Galen Rowell, one of the last century's greatest nature photographers and a confidante of Sierra Club legend David Brower, visited the Hetch Hetchy Valley on more than one occasion to rock climb and wrote in his book *High and Wild: Essays and Photographs on Wilderness Adventure*:

"We had started the climb with a feeling of who-cares-what-they've-done-to-the-valley-we're-just-going-to-climb-the-rocks; we finished it with a new sense of the meaning of wildness. . . . There lay the valley floor. But I saw no roads, no buildings, no campfires or smoke; heard no horns, motors, or voices. Below me was only a 'narrow body of monotonous water,' whereas if I had been in Yosemite Valley, the same site would have been occupied by Curry Village, fifty motor homes, a dozen tour buses, and the Valley tram car – all dubious benefits of national park status. . . . I repeated my environmental catechism: Yosemite was made a national park, and the valley was saved for posterity; Hetch Hetchy was ruined for all time. It had a hollow ring."

And San Francisco Chronicle Outdoors writer Paul McHugh, in an op ed last year, said:

"The romantic project of draining the lake and yanking the dam. . . . would produce more problems than it could ever solve. Environmental damage would be inflicted elsewhere in developments to compensate for the water and power lost in the dam's demise. . . . Wake up and smell the diesel fumes [produced carting away 660,000 cubic yards of concrete]. The project to restore Hetch Hetchy amounts to a colossal waste of everybody's time."