# The Sites Reservoir

## An Archaic "Solution" to Water Storage

SIERRA CLUB CALIFORNIA

## A 20th century solution to a 21st century problem

The most recent proposed addition to California's water storage system of nearly 1,400 dams and reservoirs is known as the **Sites Reservoir** — an offstream water storage facility that could store up to 1.5 million acre-feet of water diverted from the Sacramento River. Through the construction of several large dams and two expansive tunnels, the Sites Reservoir would flood 13,200 acres of valuable woodland and wetland habitat.

The project, purported by state officials to be a crucial addition in fighting drought, is in reality an exorbitant piece of gray infrastructure that fails at meaningfully expanding water supplies during drought years while hastening the extinction of endangered fish species throughout the Sacramento River and its tributaries.

*Sites Reservoir Location Map, Source: Sites Project Authority*

## A Threat to Endangered Fish

Numerous endangered fish species, including the Chinook Salmon, Longfin Smelt, and Steelhead Trout, inhabit the Sacramento River and downstream water bodies. These fish species are integral parts of both Sacramento river ecosystems and local fishing economies. Tragically, they are already critically endangered due to years of decreased flows and increased water temperatures from over-pumping.

### Existing Crises...

Salmon counts in the Sacramento River have been recorded as far below average for the past six years. During the worst of the 2020-2022 drought, water temperatures in the river grew so high that they became deadly for salmon eggs, killing 97.4% of salmon eggs before hatching. The risk of salmon extinction is not only troubling for the overall well-being of the greater Sacramento ecosystem, but also for California's fishing industry and the cultural heritage of Indigenous communities along the Sacramento River.

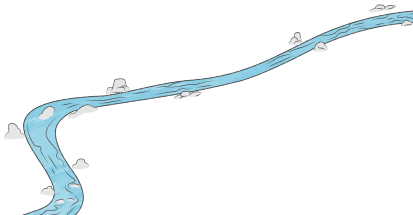
### Relationship Between Flows and Salmon Survival

Many studies have observed a strong relationship between water flow and survival of salmonids in the Sacramento River, with salmon populations dropping drastically to a 19% survival rate when flows go below 10,700 cubic-feet-per-second (cfs).

Environmental advocates and fish scientists have long advocated for a 15,000 cfs threshold to ensure the survival of these critically endangered species. Instead, the Sites Authority, the agency in charge of planning the reservoir, has only committed to a bare minimum flow of 10,700 cfs, revealing their eagerness to divert as much water as possible with little regard for fish casualties.

### A Strained Ecosystem

The Sacramento River is over-allocated by 151%, meaning "that there are more rights to divert water out of the river than the river can provide in an average water year." Despite this, the Authority fast-tracked Sites through a hastened environmental review process, failing to adequately mitigate impacts to fish in the Draft Environmental Impact Statement.



SIERRA CLUB CALIFORNIA

# The cost of Sites Reservoir - for your wallet and the climate

→ The Authority estimates that Sites Reservoir will cost ***$4.4 billion, or $1300 per acre-feet of water***. This heavy cost burden will be carried by taxpayers via a bond meant to fund sustainable water storage improvements and by ratepayers up and down the state who simply want access to fairly-priced water. Instead, the Sites Reservoir minimally expands the State's water resources while skirting environmental review. Notably, the project adds ***less than 1% to California's total water storage capacity*** during wet years while sitting dry during longer dry spells.

→ Unfortunately, Sites Reservoir has many other costs associated with it, primarily for the climate. A Friends of the River analysis estimated that the project will emit approximately ***362,000 metric tons of CO2E annually***, equivalent to the annual emissions of ***80,000 gas-powered cars***. Additionally, the 13,200-acre site that the Authority plans to flood with water is currently home to 24 different endangered species whose habitat would be destroyed should Sites be approved and constructed. For these reasons, a broad coalition of environmental justice groups currently oppose Sites Reservoir, including Save California Salmon, Restore the Delta, the California Sportfishing Protection Alliance, and San Francisco Baykeeper.

## Sustainable Project Alternatives

There are many water infrastructure alternatives left unexplored that could be funded with $4.4 billion of taxpayer dollars, all while prioritizing ecological health and furthering California's water storage goals.

***A Winter-Run Chinook Salmon in Redding, California***

### Groundwater Recharge

Groundwater recharge is a natural means of water storage that is incredibly promising, with the possibility of meeting both storage goals and aquifer recharge goals.

### Recycled Water

In the City of Los Angeles, urban water recycling has proven to be a sustainable alternative to new dams and reservoirs. The City is currently investing in a facility called Pure Water Southern California that will recycle wastewater into clean drinking water for half a million homes, during both wet years and drought years, without diverting any new water away from fish.

### Water Efficiency Upgrades + Conservation

Improving water management and efficiency in California's agricultural sector through reducing the farming of water-intensive crops, investing in new systems for water data collection, and implementing water-saving irrigation techniques could save 5.6 to 6.6 million acre-feet of water annually. Through grants and rebates, state water agencies can incentivize smarter water usage across the agricultural industry.

For more information visit *sierraclub.org/california* or contact Associate Organizer Layne Fajeau at *layne.fajeau@sierraclub.org*