SITES RESERVOIR

Protecting Fisheries

The Sites Project Authority is committed to protecting fisheries in the Sacramento River and Sacramento-San Joaquin Delta (Delta) ecosystem. Over the course of planning Sites Reservoir, we have refined construction and operation plans to protect fisheries by using the best available science to inform our approach. Additionally, a key concept of Sites Reservoir is to provide surface water storage north of the Delta that benefits ecosystems through improved water supply reliability for fish protection, habitat management, and other environmental water needs.

Key Facts & Information

- The diversion criteria for Sites Reservoir have been refined in the Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) to be protective of fish and follow the most up-to-date, best available science.
- Exchanges with Shasta Lake and Sites Reservoir would provide additional water supply that can help improve conditions for fish in the upper Sacramento River – especially in dry and critical years.
- Sites Reservoir creates an environmental water asset for California that will provide water and dedicated storage for current and future environmental needs.

Project Changes to Protect Fish

Sites Reservoir will only divert water from the Sacramento River after highly protective fish criteria have been met.

The Authority established a new minimum flow threshold for the Sacramento River before Project diversions can occur. This new flow threshold is based on a peer reviewed, scientific study for protecting outmigrating salmon. The amount of water that must be in the Sacramento River before Sites Reservoir can divert water has more than doubled as compared to the Project's previous diversion criteria. This substantially decreases the proportion of outmigrating fish that could be affected by the Project's diversions.

Key Diversion Criteria

The Project has a number of diversion criteria, but the following three standout as key for the protection of fish:

- The Project can only divert water when "excess" conditions in Delta flow are declared by the Bureau of Reclamation and Department of Water Resources consistent with the Coordinated Operations Agreement
- Flows in the Sacramento River at Wilkins Slough must be and remain about 10,700 cubic feet per second (cfs) from October through June 14 and 5,000 cfs in September (the Project is not diverting from June 15 to end of August)
- The Project will implement a pulse protection criteria and stop diversions for seven days during qualified pulse events to protect outmigrating juvenile salmonids.

What does this mean from an operational standpoint?

The Project would only divert water during high flow events, minimizing or eliminating its impacts on fishery and ecosystem resources in the Sacramento River and Delta ecosystems.

In 2023, Sites Reservoir could have diverted up to 700,000 acre feet of water while implementing our key diversion criteria and fish protections.

Annual water operations of Sites Reservoir will be dynamic.

- **Diversions** – Water could be diverted into the reservoir anytime between September 1 to June 14. Based on extensive modeling conducted for the Project, most water would be diverted into the reservoir in the winter months of December through March.
- **Exchanges** – Working with Reclamation and DWR are key to the environmental benefits of the Project. Exchanges with these agencies would occur generally from April to June.
- **Releases** – Releases can occur at any time of the year. Based on the extensive modeling conducted for the Project, most water is released from the reservoir from July to November – especially in dry and critically dry years.

Offstream Storage with Fishery Benefits

In working with Reclamation, Sites Reservoir would provide fisheries benefits that could increase the population of winter-run Chinook salmon.

Sites offers first-of-its-kind environmental benefits, by storing water specifically for the environment to support fish and their habitat. This novel approach is consistent with a **2022 report by the Public Policy Institute of California** that found it's both possible and necessary for reservoir management to support fisheries and downstream ecosystems.

Key Fisheries Benefits

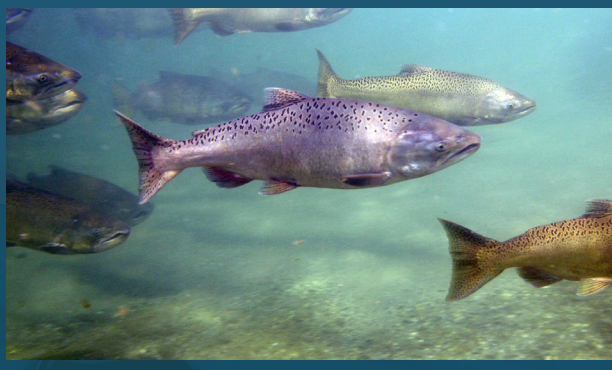
The additional water supply provided by Sites Reservoir may provide opportunities for improved management of salmonid habitat, particularly in the Sacramento River above Red Bluff. Working with Reclamation's management of Shasta Lake, the Project can benefit salmonids by:

- Maintaining the cold-water pool in Shasta Lake for longer into the summer, helping to maintain sufficient cold water for winter-run salmon spawning in the upper Sacramento River into the later summer and fall;
- Stabilizing flows in the upper Sacramento River in the fall to help prevent dewatering of fall-run salmon nests, called redds; and
- Assisting Reclamation in making spring pulse releases from Shasta Lake for the benefit of juvenile salmon out-migration.

What does this mean from a fisheries standpoint?

The Project, in working with Reclamation, has the potential to benefit all four runs of salmon in the Sacramento River along with fish with similar life histories, such as steelhead and sturgeon. This is demonstrated by a recent study conducted by the University of California, Santa Cruz using the "winter-run life cycle model" that shows that the Project would have a positive benefit to the population of winter-run salmon.

The State of California – through its investment in Sites Reservoir under Proposition 1 – is creating an environmental water asset for California that will provide water and dedicated storage for current and future environmental needs. Specifically, Sites would provide an average of 36,000 acre-feet of water dedicated to producing food for delta smelt and an average of 31,000 acre-feet under future climate change conditions (2070). This would be in addition to water dedicated to the needs of wildlife refuges and wetlands that serve as important areas for waterbirds and shorebirds of the Pacific Flyway.



TO REVIEW THE FINAL EIR/EIS, PLEASE VISIT: **SITESPROJECT.ORG/ENVIRONMENTAL-REVIEW**