

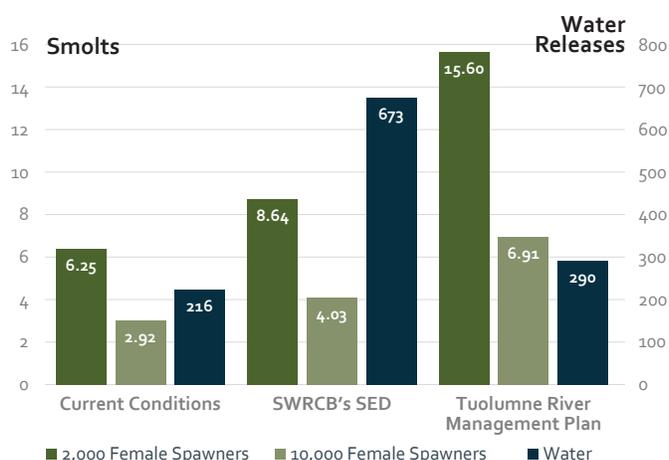
The Don Pedro Project

THE STORY BEHIND THE SCIENCE

Modifying River Flows to Help Fisheries

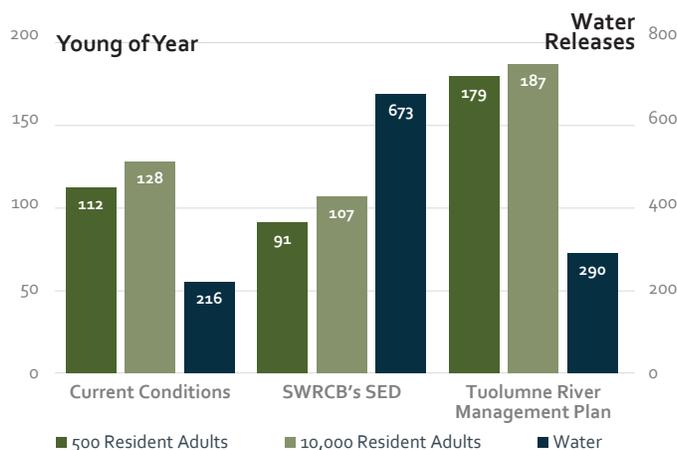
The primary environmental focus of the Tuolumne River Management Plan is the river's fish population. This includes the Fall Run Chinook Salmon and the *O. mykiss* (or Rainbow Trout). The Tuolumne River Management Plan achieves the co-equal goals of protecting and improving the natural resources of the lower Tuolumne River and protecting and sustaining the region's water supplies. A close examination of the facts uncovered through dozens of scientific studies resulted in a proposal that combines increased river flows, along with non-flow measures including predation suppression efforts. This would nearly triple the number of Fall Run Chinook Salmon smolts.

Water Proposals for Fall-Run Chinook Salmon



Average annual fall-run Chinook smolt production and required instream flows under Base Case SWRCB's flow proposal, and the Tuolumne River Management Plan (including Districts' non-flow measures (NFM)). Districts' instream flow is at La Grange gage. Flow below infiltration galleries at RM 26 is 241 TAF.

Water Proposals for O. Mykiss (Rainbow Trout)



Annual average O. Mykiss YOY production and required instream flows under Base Case, SWRCB's flow proposal, and the Tuolumne River Management Plan (including Districts' non-flow measures (NFM)). Districts' instream flow is at La Grange gage. Flow below infiltration galleries at RM 26 is 241 TAF.



The U.S. Fish & Wildlife Service proposes tripling the amount of water released from the Don Pedro Project each year. Data from multiple studies show this proposal would not help the Fall Run Chinook Salmon population nearly as much, while creating a significant impact on the water supply needed for drinking water and crop irrigation.

The National Marine Fisheries Service proposal also increases water flows dramatically while providing less benefit to the Fall Run Chinook Salmon. The U.S. Fish & Wildlife Service and National Marine Fisheries Service proposals would grow *O. mykiss* populations, but severely compromise water supplies.

These plans narrowly focus on water as the primary variable and do not consider balancing other potential impacts.

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The relicensing of the Don Pedro Project requires a comprehensive plan to mitigate its effects on the Tuolumne River and the surrounding areas. This resulted in a scientific, fact-based approach to identifying issues and finding solutions.

- 2** Cultural Resources Studies
- 4** Recreation Resources Studies
- 10** Terrestrial Resources Studies
- 21** Water & Aquatic Resources

Site-Specific science + Public & Resource Agency Input = Tuolumne River Management Plan

Site-Specific: A careful examination of the facts from all studies.

Public & Resource Agency Input: This includes federal, state and local agency requirements along with feedback from the public.

Tuolumne River Management Plan: The guideline for the future based on a balanced consideration of needs, costs and greatest overall benefits.

Cultural Resources

These studies examined archaeological sites and lands significant to Native American culture and California history.

Recreational Resources

This research evaluated the condition of current recreational facilities, minimum river flow rates to sustain boating and options to improve whitewater rafting facilities.

Terrestrial Resources

These studies focused on wetlands and habitats for birds, reptiles, bats and insects in and around the Tuolumne River.

Water & Aquatic Resources

This research addresses fisheries and non-native predators, and water flow, temperature and overall quality.

Selected Study Findings

A joint study with California Fish and Wildlife of salmon otoliths (ear bones) indicate that if salmon are pushed out of the rearing habitat too early they do not return, likely do to predation.

As much as 96 percent of salmon are consumed by non-native, predatory fish before they can ever leave the Tuolumne River.



Rainbow trout (*O. mykiss*) in the Tuolumne River can survive and thrive up to water temperatures of 23° Celsius, not the max of 18° some have claimed.



Hatchery practices call for the fins to be clipped on 25% of the fish they release. Upon analysis, all of the salmon returning to the Tuolumne are hatchery strays and not native fish.



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Where can I learn more?

Visit our website at tid.org/donpedro for the latest information on the Don Pedro Project, or call us at 209.883.8364.