



NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

UNITED STATES DEPARTMENT OF COMMERCE

NOAA Biological Opinion Finds California Water Projects Jeopardize Listed Species; Recommends Alternatives

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NOAA released its final biological opinion today that finds the water pumping operations in California's Central Valley by the federal Bureau of Reclamation jeopardize the continued existence of several threatened and endangered species under the jurisdiction of [NOAA's Fisheries Service](#).

The bureau has provisionally accepted NOAA's recommended changes to its water pumping operations, and said it will begin to implement its near-term elements as it carefully evaluates the overall opinion.

Federal biologists and hydrologists concluded that current water pumping operations in the Federal Central Valley Project and the California State Water Project should be changed to ensure survival of winter and spring-run Chinook salmon, Central Valley steelhead, the southern population of North American green sturgeon and Southern Resident killer whales, which rely on Chinook salmon runs for food.

Two independent peer review panels were conducted to ensure the opinion is solidly grounded in the best available science. The package was peer reviewed by the CalFed Independent Science Board and the Center for Independent Experts.

"What is at stake here is not just the survival of species but the health of entire ecosystems and the economies that depend on them," said Rod Mcinnis, southwest regional director for NOAA's Fisheries Service. "We are ready to work with our federal and state partners, farmers and residents to find solutions that benefit the economy, environment and Central Valley families."

As part of the final opinion, NOAA's Fisheries Service has provided a number of ways the bureau can operate the water system to benefit the species, including increasing the cold water storage and flow rates. Such methods will enhance egg incubation and juvenile fish rearing, as well as improve the spawning habitat and the downstream migration of juvenile fish.

Changing water operations will impact an estimated five to seven percent of the available annual water on average moved by the federal and state pumps, or about 330,000 acre feet per year. Agricultural water use in California is roughly 30 million acre feet per year. Water operations will not be affected by the opinion immediately and will be tiered to water year type. The opinion includes exception procedures for drought and health and safety issues.

In addition, the opinion calls for the bureau to develop a genetics management plan and an acoustic tagging program to evaluate the effectiveness of the actions and pilot passage programs at Folsom and Shasta reservoirs to reintroduce fish to historic habitat.

The American Recovery and Reinvestment Act will mitigate some costs resulting from the opinion's recommended actions. The Department of the Interior identified \$109 million to construct a Red Bluff Pumping Plant that will allow the old Red Bluff Diversion Dam to be operated in a "gates out" position to allow salmon and green sturgeon unimpeded passage. In addition, the Act contains \$26 million to restore Battle Creek, a salmon tributary to the Sacramento River.

The water projects included in the opinion are Shasta Dam at the upper headwaters of the Sacramento River, Folsom and Nimbus dams on the American River, and New Melones Dam on the Stanislaus River. The opinion also covers the state and federal export facilities in the Delta, the Nimbus hatchery on the American River, and the operations of diversion structures, including the Red Bluff Diversion Dam on the mainstem Sacramento and the Delta Cross Channel gates in the Delta.

The bureau initiated the formal phase of consultation in May 2008 and then cooperated with NOAA's Fisheries Service throughout the development of the biological opinion and alternative actions in coordination with the U.S. Fish and Wildlife Service and the California Departments of Water Resources and Fish and Game.

A copy of the final biological opinion and alternative actions may be found [online](#).

NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources.