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Science Panel Releases Review of Fish Protection Requirements for Water Operations

An independent science panel recently released the second annual review of how well environmental protection requirements were followed last year in the operation of the two main water diversion projects in the Delta. Among the panel's findings: many of the protections were not needed during a year of abundant water, it's too soon to tell if those protections are having an effect, and the protections need to be more closely linked to specific goals.

The protections were developed by the National Marine Fisheries Service (NMFS) and the US Fish & Wildlife Service (USFWS) in 2008 as alternatives to an operating plan for the federal Central Valley Project and State Water Project. The Plan and subsequent alternatives are intended to allow the projects to operate in a way that will not further jeopardize the survival or adversely modify critical habitat for Chinook salmon, steelhead, green sturgeon, and delta smelt.

NMFS and USFWS, along with the Bureau of Reclamation, asked for the independent review, which was convened by the Delta Stewardship Council's Delta Science Program. Among the panel's specific observations and recommendations:

- Two years does not a trend make. After only two years of operating under the alternative protections, it is still too early to make definitive assessments of long-term effects on the species populations considered to be in decline. And there was little evidence to indicate any change in the status of those species in the short-term.
- The current panel continues to perceive that the agencies are focused on meeting physical targets such as flows and temperatures without explicitly relating the success or failure in meeting those targets to the biological and ecological responses of the fish species in question.
- The Panel recommends linking protections to mortality rates within various life stages (such as juvenile survival rates), and ultimately to the annual changes in population size of the fish species within the ecosystem.
- The Panel recommends speeding up the pace of studies aimed at refining tools for accurately predicting the variation in physical factors such as temperature, tides, turbidity, and the behavior of the fish species.
- The Panel suggests adopting a comprehensive and accessible web-based data management system that uses real-time data and state-of-the-art predictive models for physical variables such as flows, temperatures, sediment transport and biological responses under changing flow regimes.

Panel members were: James J. Anderson (Panel Chair), James A. Gore, Ronald T. Kneib (Lead Author), Mark Lorang, and John Van Sickle. The Panel commended all of the agencies "charged with this daunting task for their efforts to date as they strive to cooperate and integrate activities" to balance existing commitments and the mandated coequal goals of providing a reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem.

Detailed information on the 2011 OCAP Annual Review and the Panel's report can be found on the Delta Science Program web page: <http://deltacouncil.ca.gov/event-detail/3877>

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."