

**CALIFORNIA DEPARTMENT OF FISH AND GAME**  
**CONSISTENCY DETERMINATION**  
**Fish and Game Code Section 2080.1**  
**Tracking Number 2080-2009-011-00**

**PROJECT:** California State Water Project Delta Facilities

**LOCATION:** The California Delta and Central Valley

**NOTIFIER:** California Department of Water Resources

**BACKGROUND**

The proposed project (Project) by the Department of Water Resources (DWR) is the continued operation of the State Water Project (SWP) and other water diversion, storage, and transport related actions that are described below and included in the federal *Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project* (Ref. No. 2008/09022)(BO) issued by the National Marine Fisheries Service (NMFS) for the protection of marine species, including Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*) (Chinook salmon). Chinook salmon are listed species under both the federal Endangered Species Act (ESA) (16 U.S.C. § 1531 *et seq.*) and the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 *et seq.*). Winter-run Chinook salmon is listed as endangered and spring-run Chinook salmon is listed as threatened under CESA. Flow changes, loss of habitat, and entrainment and impingement caused by Project-related water export and management activities are all known to result in incidental take of Chinook salmon. On August 5, 2009, Donald Koch, the Director of the Department of Fish and Game (DFG), received correspondence from Lester A. Snow, Director of DWR, requesting a determination pursuant to Fish and Game Code Section 2080.1. that the BO, including its incidental take statement, is consistent with CESA such that no further authorization is necessary for the Project to take Chinook salmon.

The Project consists of the following existing facilities in the Delta: Clifton Court Forebay, John E. Skinner Fish Facility, Harvey O. Banks Pumping Plant (collectively referred to as the Banks Pumping Plant Complex), and the North Bay Aqueduct at Barker Slough (NBA). The Project also includes the following facilities which are run in coordination with the federal Central Valley Project (CVP): Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, Goodyear Slough Outfall, and the South Delta Temporary Barriers Project (TBP). TBP has four rock barriers across south Delta channels (at Middle River near Victoria Canal, Old River near Tracy, Grant Line Canal near Tracy Boulevard Bridge, and the head of Old River near the confluence of Old River and San Joaquin River) which can be installed and removed during spring and fall.

The Oroville Complex (Oroville Dam and related facilities, including the Feather River Fish Hatchery) is part of the SWP but not part of the Project. DWR's Federal Energy Regulatory Commission (FERC) license for the Oroville Complex expired in 2007. Until a FERC license is issued, DWR will operate the Oroville Complex to the existing FERC license. FERC is currently in consultation with NMFS regarding the effects of relicensing the Oroville Complex for 50 years. Because the effects of the Oroville Complex are considered in a separate and ongoing NMFS consultation, the effects of operation of Oroville Dam on listed fish within the Feather River were not considered as part of the BO consultation and thus are not part of the Project. However, the effects of the flows from the Oroville Complex on all listed fish under NMFS jurisdiction in the Sacramento River and Delta were considered in the BO.

The SWP is operated to provide flood control and water for agricultural, municipal, industrial, recreational, and environmental purposes. Water conserved in, and released from, Oroville Reservoir, together with Sacramento-San Joaquin flows, serves three contractors in the Feather River area, two contractors via the NBA, and the remaining 24 contractors in the SWP service areas south of the Delta with deliveries from the Harvey O. Banks Pumping Plant in the south Delta. California State Water Resources Control Board (SWRCB) permits allow SWP facilities to divert water in the Delta and re-divert water that is stored in upstream reservoirs. The U.S Bureau of Reclamation (USBR) and DWR coordinate the operations of the CVP and SWP to meet water quality, quantity, and operational criteria in the Delta set by the SWRCB and to meet ESA requirements for delta smelt, winter and spring-run Chinook salmon, steelhead and green sturgeon.

Because the proposed action has the potential to take ESA-listed species, the USBR, on behalf of itself and DWR, entered into a consultation with NMFS pursuant to ESA Section 7. On June 4, 2009, NMFS transmitted the BO to USBR. The BO describes CVP/SWP operations, including the Project, and sets forth conservation measures to minimize impacts to Chinook salmon and their habitat and mitigate the impacts which remain after minimization. The BO includes a "Reasonable and Prudent Alternative" (RPA) which must be implemented and adhered to. BO section 11.2 details the RPA actions by Central Valley geographic areas. Those areas are the Sacramento River, American River, East Side (Stanislaus River), and the Delta. BO section 11.3 provides a species-by-species explanation of: (1) how each measure contributes to avoiding jeopardy or adverse modification of designated critical habitat for that species; and (2) the basis for NMFS' conclusion that the RPA measures as a whole are likely to avoid jeopardizing the species or adversely modifying its critical habitat. A detailed description of the adaptive process, its framework, and the rationale for each of the RPA components are presented in the context of the full BO.

## **DETERMINATION**

DFG has determined that the BO, including all RPA requirements and related incidental take statement, is consistent with CESA because the mitigation measures therein meet the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c), for DFG to authorize incidental take of CESA listed species. This determination is limited to only those actions specifically identified and analyzed in the June 4, 2009 BO.

Specifically, DFG finds that Project take of Chinook salmon will be incidental to an otherwise lawful activity (i.e., SWP operations) and that the measures and RPA actions identified in the BO to modify flow requirements, control water temperatures, improve passage and access to spawning areas, and restore habitat will minimize and fully mitigate the impacts of the authorized take of Chinook salmon. Furthermore, DFG finds that the Project, with the prescribed measures and RPA in place, will not jeopardize the continued existence of the species. The avoidance, minimization, and mitigation measures in the BO include, but are not limited to, the following:

### **Avoidance, Minimization and Mitigation Measures**

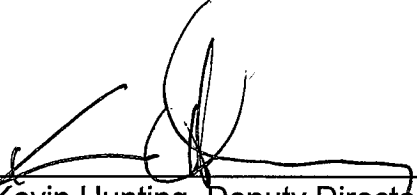
- **Near-term Actions:**

- To ensure cooler water temperatures that will improve productivity and survival of Chinook salmon, DWR and USBR shall implement new flow management programs in the upper Sacramento River, Clear Creek, American River, Stanislaus River and the reservoirs that control the river.
- To improve passage to upstream habitat areas, DWR shall coordinate with USBR on the Red Bluff Diversion Dam gate operations, construction and operation of an alternative pumping plant to supply water to existing users, and by 2012, have the gates open year-round,
- To improve spawning and rearing habitat for Chinook salmon in the Sacramento River basin and Delta, DWR in conjunction with USBR and other agencies shall implement habitat enhancement actions. These actions specifically include ongoing DWR restoration activities in the Yolo Bypass including Liberty Island and the Cache Slough Complex.
- To benefit existing Central Valley spring-run Chinook salmon and to establish a second population of Sacramento River winter-run Chinook salmon, DWR and USBR shall provide for restoration of habitat on Battle Creek.
- To improve juvenile and adult survival for Chinook salmon passing through the Delta and provide for increased aquatic habitat during critical times, DWR and USBR shall:
  - Implement water control gate closures during key times when Chinook salmon are likely to be migrating through the area and implement pumping flow modifications to reduce the number of juveniles vulnerable to entrainment at the water export facilities.
  - Facilitate improvements to the fish screening and salvage operations at the Harvey O. Banks Water Pumping Facility to reduce mortality from entrainment and salvage.
  - Initiate operational changes to reduce negative flows toward the export pumps in Old and Middle rivers to reduce likelihood that Chinook salmon will be diverted from the San Joaquin or Sacramento River into the southern or central Delta.
  - Support activities to increase San Joaquin River flows.

- Curtail water export based on technical team recommendations.
  - To ensure preservation of important habitat areas for Chinook salmon, DWR shall not implement the South Delta Barrier Improvement Program.
- **Long-term Actions:**
  - DWR and USBR shall implement long-term passage evaluations at Shasta, Folsom, and New Melones Dams to allow re-introduction of Chinook salmon to desirable habitat above the rim-dams. These actions may include increased flow requirements, fixes to control structures, pulse flows for fish attraction or channel maintenance, or changes in the operation of those control structures.
  - DWR and USBR shall implement monitoring actions and new studies of juvenile fish in the San Joaquin and Sacramento Basins to evaluate the effectiveness of the RPA and adaptively manage/refine actions over the life of the project.
  - DWR and USBR shall establish a technical review group to assist in: determining necessary “real-time” operational measures, evaluating effectiveness of actions, and modifying measures when necessary.
- **Reporting and Monitoring Actions:** Conditions of the BO and RPA require DWR to develop and follow specific monitoring programs to achieve the RPA objectives. Participation, including by DFG, in review and reporting requirements for these processes are all a condition of, and detailed within, the BO and RPA. The BO describes a monitoring and reporting process for specific actions set forth within RPA “Action Suites” for the design, monitoring, and adaptive management of those actions required to improve Chinook salmon survival and habitat. Monitoring and reporting requirements are described in detail in Section 11.2.1.3 of the BO.
- **Ensured Funding:** All SWP operational actions are a conditional requirement of the BO RPA. Funding for certain required actions has been allocated through bonds or has been identified in allocations from the American Recovery and Reinvestment Act of 2009. Additionally, DWR has the statutory authority to require reimbursement in the SWP contracts for water and power for any costs DWR incurs for SWP-related fish and wildlife preservation (See Water Code §§ 11912, 12937, 12938).

Based on this consistency determination, DWR does not need to obtain authorization from DFG under CESA for incidental take of Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon that occurs in carrying out the Project, provided DWR implements the Project as described in the BO, and complies with the measures, RPA and other conditions described in the BO. However, if the Project as described in the BO, including the mitigation measures therein, changes after the date of the BO, or if NMFS amends or replaces the BO, including any of the RPA, DWR will need to obtain from DFG a new consistency determination (in accordance

with Fish and Game Code section 2080.1) or a separate incidental take permit (in accordance with Fish and Game Code section 2081).

By:   
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Date: 9-3-09

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