

WORKSHOP COMMENTS

**Consideration of Potential Amendments or Revisions of the
Water Quality Control Plan for the
San Francisco Bay/Sacramento-San Joaquin Delta Estuary**

Salmon Narrative Objective

**State Water Resources Control Board
October 28, 2004**

**Comments of the
California Department of Fish and Game**

In the 1995 Water Quality Control Plan (WQCP), the State Water Resources Control Board (SWRCB) recognized that numerous actions can be taken, in addition to establishing and implementing water quality objectives for the Bay-Delta Estuary, to improve fish and wildlife beneficial uses in the Estuary. Since 1995, several new or expanded Central Valley fish and wildlife restoration programs have provided significant funding for the improvement of habitat conditions for Chinook salmon. The 1988 California Salmon, Steelhead Trout, and Anadromous Fisheries Program Act (Fish and Game Code Sections 6900-6924) declares that it is the policy of the state to significantly increase the natural production of salmon and steelhead trout by the end of the century.

The Central Valley Project Improvement Act (CVPIA), enacted in 1992, amended the authority of the Central Valley Project (CVP) to include fish and wildlife protection, restoration, and mitigation as having equal priority with other CVP purposes. Section 3406 (b) of the CVPIA directs the Secretary of the Interior to develop and implement programs and actions to ensure that by 2002, the natural production of anadromous fish in Central Valley streams will be sustainable, on a long-term basis, at levels at least twice the average levels of natural production in the 1967 through 1991 baseline period. This objective is consistent with the SWRCB's narrative objective for doubling salmon production. Numerous actions to improve the natural production of anadromous fish, including winter-run Chinook, have been funded by the CVPIA program since 1992. In each of fiscal years 2002 and 2003, the AFRP program provided \$2.8 million in funding for restoration projects.

The CALFED Bay-Delta Program, formally established in 2000, has the ambitious goal of achieving recovery of at-risk native species dependent on the Delta and Suisun Bay as the first step toward establishing large, self-sustaining populations of these species; supporting similar recovery of at-risk native species in San Francisco Bay and the watershed above the estuary; and minimizing the need for future endangered species listings by reversing downward population trends of native species that are not listed. The CALFED Program consists of several key program elements that will help achieve ecosystem restoration and species recovery. One of these elements, the Ecosystem Restoration Program (ERP), was developed to guide restoration actions and ensure attainment of ecosystem health (also called ecological integrity). To date, the CALFED ERP has awarded more than \$476 million to date for more than 400 projects. The majority of these projects benefited Central Valley salmon, either directly or indirectly.

Through the efforts of many state and federal agencies and water districts in the Central Valley, we are monitoring the progress toward meeting the doubling goals in the state act, CVPIA, and the SWRCB narrative salmon objective. Population trends observed since the initiation of major restoration programs tell a mixed story. In some streams, such as the Mokelumne River, Butte Creek, Clear Creek, and Battle Creek, the benefits of restoration efforts are clearly reflected in increasing populations of some Chinook runs. However, for many populations of listed spring-run Chinook and the listed winter-run Chinook population, estimates of natural production are far below the production targets established under CVPIA programs.

In summary, we are attacking the many problems that have adversely affected salmon populations. We recognize that the changes in salmon production that we see are the result of the collective effects of our various salmon restoration and protection actions combined with the effects of factors that we cannot control, such as environmental conditions in the ocean. Furthermore, because we are simultaneously manipulating multiple factors potentially affecting salmon production, it is very difficult to determine how much success to attribute to individual actions. We believe that we must see the response of more generations of salmon before we can determine whether the multifaceted restoration and protection program and the improved conditions provided by the 1995 WQCP will be sufficient to achieve and sustain target levels of natural production of salmon.

As we go forward with the restoration work, parties will come to the SWRCB seeking approval for their proposals to use water. In dealing with such proposals, an important action under the SWRCB's authority is to insure full implementation of the Basin Plan Objectives described in the plan for the Central Valley streams where salmon and steelhead spawning, rearing and migration are identified as beneficial uses of water. To assure that our collective efforts have the best chance of attaining the narrative salmon objective the SWRCB should implement its anti-degradation policy in these waters when it considers applications for permits to divert water. Temperature, dissolved oxygen, and metals are examples of water quality objectives that are vital to increasing and then sustaining salmon production.

We also recognize that instream flow improvements will be needed in tributaries to the Bay-Delta to meet the salmon narrative objective. As information becomes available, we will bring flow issues in the upstream areas to the attention of the SWRCB, in accordance with state water rights authority.

Regarding the conversion of the narrative salmon objective to a numeric objective, our view is that more information is needed prior to this action. In addition to monitoring the effects of restoration actions, scientific investigations of factors controlling salmon production and survival in rivers and the Delta should continue where cause and effect relationships need clarification. The CALFED Science Program and other program resources should be focused on this need in order to eventually provide information to help the issue of converting the narrative objective to a numeric objective. The technical component of the on-going NOAA Fisheries recovery planning process in the Central Valley may also provide clarification on issues related to population viability that could contribute to the development of a numeric objective.