MAY 16 1994

Second Workshop in a Series
to Review Standards for the
San Francisco Bay/Sacramento-San Joaquin Delta
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STATEMENT OF JAMES H. LECKY

Mr. Chairman and members of the Board. My name is James H. Lecky. I am Division Chief of the Protected Species Management Division, National Marine Fisheries Service (NMFS), Southwest Region. Today, I am also representing the Federal Ecosystem Directorate which is composed of the Bureau of Reclamation (Reclamation), the Fish and Wildlife Service (FWS), the Environmental Protection Agency (EPA), and the NMFS. These Federal agencies have organized to integrate, in so far as possible, their respective Federal activities related to the Sacramento-San Joaquin River Delta Estuary and its watershed, with the goal of improving water quality and habitat with the least possible impact on the delta and upstream water users.

We are committed to working closely with all involved agencies of the State of California so that our implementation of Federal law in the Bay/Delta estuary complements the State's role in allocating water resources equitably and the State's continuing efforts to preserve, protect, and enhance the natural resources of the estuary.

On behalf of the Federal team, we look forward to working closely with the Board to develop standards that will protect the health of the Bay/Delta ecosystem and the economic health of the State of California.

Relative to today's workshop, I will comment on the three areas for which the Board sought input in its announcement for this workshop.

1. What are the principal ESA issues the SWRCB should consider during this review?

To begin, I would like to present the most recent information regarding the status of both endangered species and species being considered for protection.

SALMON:

- NMFS has been monitoring the status of the Sacramento River winter-run chinook salmon since it was proposed for listing in 1985 and we have gained considerable knowledge regarding its life history. Although significant efforts have been made to recover the species, it has continued to decline and in January this year, NMFS reclassified winter-run chinook salmon as an endangered species. Approximately 340 winter-run adults returned to the upper Sacramento River in 1993 and the 1994 escapement is expected to be low as well.

Critical habitat for winter-run chinook was designated in June 1993 and includes the Sacramento River, the northern Delta, Suisun Bay, San Pablo Bay, and San Francisco Bay north of the Bay Bridge. We believe that our continuing efforts to protect winter-run chinook salmon combined with new Bay/Delta standards will contribute to a reversal in the downward trend during the next decade.

- The spring-run chinook salmon runs in the Sacramento and San Joaquin Rivers were historically the largest salmon runs in California. Spring-run chinook salmon have been extirpated in the San Joaquin River; and a petition to list those remaining in the Sacramento Basin may be forthcoming, because of their decline since the 1960's and persistent low numbers in recent years.

- The Sacramento River late-fall run chinook salmon production has declined by approximately two-thirds since the 1960's.

- The San Joaquin fall-run chinook stocks have been at critically low levels for many years and a petition for listing may be expected for this population as well.

DELTA SMELT:

- The FWS proposed listing Delta smelt as a threatened species on October 3, 1991. Critical habitat was also proposed at that time. Final designation as a threatened species occurred on March 5, 1993.

- Critical habitat for Delta smelt was re-proposed on January 6, 1994, after new scientific information was presented to FWS. The comment period closed March 11, 1994.

- As part of a settlement agreement, the FWS agreed to finalize the Delta smelt critical habitat designation concurrently with EPA's final rule on water quality standards, December 15, 1994.

OTHER RESIDENT DELTA SPECIES:

- The Sacramento splittail was proposed as a threatened species on January 6, 1994. The comment period closed March 11, 1994 and comments are currently being considered. A final rule is due by January 6, 1995.

- A petition to list the longfin smelt was received on November 15, 1992. Although longfin smelt have declined to low numbers in the estuary and bay, FWS determined the population in the San Francisco Bay and Estuary did not constitute a species in the context of the ESA and, on January 6, 1994, published its determination that the

petition was not warranted. However, longfin smelt remain as a candidate for listing.

- The Delta native fishes recovery plan is being developed and should be completed in late 1994. This document is being designed to serve as a planning tool for local, State, and Federal agencies to protect and recover listed species and prevent further listings under the ESA.

In general, there is evidence that the abundance and distribution of estuarine species has been adversely affected by Delta water exports. Without limits on exports and criteria to establish suitable flow regimes, fisheries habitat in the Delta will not be protected and additional listings under the ESA are likely.

Regarding specific standards for listed species: both the NMFS and FWS have been working closely with Reclamation and the California Department of Water Resources (DWR) to provide protection for winter-run chinook salmon and Delta smelt. Biological opinions have been issued to the water projects and operations have been modified to reduce the adverse effects of the Projects' Delta water export on these species. A biological opinion regarding the effects of the long-term operation of the Central Valley Project (CVP) and the State Water Project (SWP) on winter-run chinook salmon was issued by NMFS in February 1993. FWS consultations for Delta smelt and splittail are ongoing with Reclamation and DWR to address the long-term operation of the CVP and SWP.

Section 7 of the ESA requires NMFS and FWS to develop specific terms and conditions to protect listed species. However, the State Board has a broader mandate to protect all beneficial uses of the Delta. It is the position of the Federal agencies that water quality standards for the Delta should be fully protective of the health of the Delta ecosystem as a whole. Biological opinions are limited in scope and timing, because they are species specific. With proper coordination, the adopted standards can be designed to create suitable estuarine habitat conditions that will also halt the decline and allow for the recovery of the listed species. Creation of general protective standards for the Delta should benefit listed species, species of concern, and non-listed species. The Federal agencies recommends the Board focus their efforts towards development of standards to restore late 1960's, early 1970's habitat conditions in the estuary.

The new standards should also embody the principle of all beneficial water users sharing the benefits and risks of water abundance and shortage. At present, the biological opinions for winter-run chinook salmon and Delta smelt obligate the State and Federal water projects to modify project operations for creation of suitable habitat conditions in the Delta. New standards

should be designed for a balanced reduction of water supply to all water users in times of shortage. Special management practices may be required to protect fish populations through prolonged droughts.

The NMFS biological opinion for winter-run chinook adopted several components of draft D-1630 including the Q-WEST criteria, closure of the Delta Cross channel gates, and the use of a conservative water supply forecast in the setting of water delivery allocations. However, the winter-run biological opinion differs from draft D-1630 in that there are no exceptions to the Q-WEST criteria and closure of the Delta Cross Channel gates is not based on fisheries monitoring. NMFS requires the gates to remain closed continuously during February, March, and April, the most probable winter-run emigration period. At the currently low levels of abundance, monitoring programs are not effective at detecting the presence of juvenile winter-run chinook salmon. Relying on monitoring programs to trigger implementation of protective measures may result in exposure of a large portion of the population to adverse conditions before the first fish is detected, or conversely, it could result in unnecessarily early implementation of a protective measure with coincident costs to the projects if an aberrant stray is caught early.

Draft D-1630 contained several positive steps towards addressing the impacts of Delta water exports that are not included in the winter-run or Delta smelt biological opinions. The pulse flow requirements of draft D-1630 would encourage the safe emigration of juvenile salmonids through the Delta. The proposed user fees could greatly benefit long-term planning by funding fisheries monitoring and mitigation programs. The urban and agricultural conservation requirements would improve water use efficiency throughout the State.

2. What are the effects of diversions throughout the Bay-Delta Estuary on beneficial uses?

Water diversions in the Sacramento River and Delta adversely effect listed species through reduced Delta outflow, direct loss to entrainment, and modification of local hydrological conditions. Unscreened and inadequately screened diversions are causing losses of juvenile winter-run chinook salmon and Delta smelt. According to a 1987 report to the California Advisory Committee on Salmon and Steelhead, there are more than 300 separate irrigation, industrial, and municipal water supply diversions along the Sacramento River between Redding and Sacramento. An unpublished examination of the possible impacts of local agricultural diversions in the Delta by DWR found that there were about 1,800 small diversions. The Resources Agency of the State of California estimates more than 10 million juvenile salmonids may be lost to unscreened diversions annually. The magnitude of these diversions, and the extent to which these

diversions cause significant losses of winter-run chinook salmon and Delta smelt has not been adequately studied. However, NMFS has taken preliminary steps to address the loss of winter-run chinook salmon to unscreened diversions in the Sacramento River and Delta with the publication of an advance notice of proposed rule-making in October 1993. The comment period for this notice closed on March 28, 1994. NMFS is currently reviewing the comments and developing a strategy for promulgation of a proposed rule to require screens on unscreened diversions. Studies are also underway to determine appropriate screening requirements for Delta smelt.

Delta diversions also influence local hydrologic conditions within the Delta and lower survival rates for species dependent on the Delta for spawning and rearing of juveniles. The cumulative effect of within Delta withdrawals contributes to lower Delta outflows and higher reverse flows in the lower San Joaquin River.

3. What methods should the SWRCB use to analyze the water supply and environmental effects of alternative standards?

The Federal agencies think that the Board should primarily rely on the extensive hearing record regarding impacts to the Delta environment and water supply. In Addition the Bureau and EPA have completed substantial analysis of water supply impacts associated with EPA's promulgation of standards and other activities of the Federal agencies.

The current operational and biological models for the Delta are useful tools for evaluation of the relative water supply impacts and environmental benefits associated with alternative standards. As part of the Programmatic Environment Impact Statement for the Central Valley Project Improvement Act, Reclamation has prepared an "Analytical Tools Report" (April 1, 1994) to review and critique models available for analyzing alternative water management scenarios. The DWRSIM operation model and FWS salmon smolt survival model have been peer reviewed and calibrated under the current structural and operational scenarios. However, these models should be used in the decision making process as indices of the relative impacts and benefits of proposed alternatives. Rather than relying solely on these models, we believe that the Board should explicitly define the goals of standards and the habitat conditions necessary to achieve them.