

**Statement of Robert W. Johnson, Commissioner
Bureau of Reclamation
U.S. Department of the Interior
Before the
House Natural Resources Committee
Subcommittee on Water and Power**

January 29, 2008

Madam Chairwoman and members of the subcommittee, I am Robert Johnson, Commissioner of the Bureau of Reclamation. I am pleased to be here today to provide information on the Bureau of Reclamation's activities related to the state and federal water projects and the Delta smelt in the Sacramento-San Joaquin River Delta.

The Delta is the single most important link in California's water supply system providing water to 25 million Californians. It is critical to California's economy, supplying drinking water for two-thirds of Californians and irrigation water for over 7 million acres of the most highly productive agricultural land in the world. The Delta also is the largest estuary on the West Coast of the United States, providing habitat that supports over 750 plant and animal species.

The Delta smelt is one of several pelagic fish species in the Delta, and it was listed as threatened under the Endangered Species Act (ESA) in 1993. Anadromous fish in California's Central Valley also depend on Delta waters and habitat. These fish include spring, fall, late fall, and winter runs of Chinook salmon, steelhead, and both green and white sturgeon. Under ESA protection winter run Chinook are listed as endangered, and steelhead, spring run Chinook salmon, and the southern Distinct Population Segment of green sturgeon are listed as threatened. The Delta smelt is not well understood, and it is frequently confused with another non-native species of smelt. Its eggs, larvae, and juvenile stages basically float under water, transported by the tidally influenced flows within the Delta.

The effects of water project operations, among other factors, have affected smelt, salmon, steelhead, and sturgeon. Recent studies indicate that entrainment in the export pumps is less a factor for Delta smelt than previously thought. It is apparent that many factors play a role in limiting the potential for recovery, including competition and predation from exotic aquatic invasive species, contaminants, changes in habitat quality and availability, and changes in food supply. In fact, the State of California's Delta Smelt Action Plan describes a program to reduce water exports during a sensitive time period as follows:

The effects of actions on the populations of at risk species needs to be better understood. The agencies have dedicated 1.4 million acre-feet to actions targeted at providing habitat for fish, mostly targeted at delta smelt, at a cost of \$166 million, with no apparent effect on delta smelt abundance. Other factors beyond State Water Project and Central Valley Project export pumping may be having an effect on delta smelt, which appear to be making these fish actions less effective

than anticipated. Better estimates of the effects of these actions on the population levels of fish are needed.¹ (Emphasis added.)

Delta smelt, salmon and green sturgeon are a few of many indicators of the Delta ecosystem's health, and their current decline, especially delta smelt, reaffirms confirms the challenges confronting the Delta, as well as the complexity of environmental and physical conditions there.

Reclamation and the Fish and Wildlife Service are actively involved in efforts to protect the Delta smelt, identify environmental risks, and develop actions to recover the Delta smelt by:

- Changing the operations of the state and Federal Delta export facilities;
- Continuing to fund, support, and participate in scientific studies to better understand the species; and
- Reinitiating formal consultation on the effects of the coordinated operations of the state and federal water operations under the ESA.

Now I'll address these efforts in more detail.

In 2005, federal and state biologists and scientists sounded the alarm—results of annual surveys designed to indicate population levels of several pelagic organisms, including the delta smelt, were showing a precipitous decline. In May 2005, Reclamation, the U.S. Fish and Wildlife Service, Environmental Protection Agency, U.S. Geological Survey, San Francisco State University, University of California at Davis, California Bay Delta Authority, and California Departments of Water Resources and Fish and Game, formed the Pelagic Organism Decline (POD) work team to evaluate the potential causes of the decline.

Reclamation and the Department of Water Resources have funded the effort. The investigation has been conducted by dozens of agency, academic, and consulting biologists, physical scientists, and engineers, managed by the POD work team, at a total cost of approximately \$8.6 million through calendar year 2007. Reclamation and DWR expect to spend \$5.86 million in 2008 on a program that includes a detailed independent analysis by a panel of top scientists organized by the National Center for Ecological Analysis and Synthesis at University of California at Santa Barbara. Just this month, the POD work team issued an interim report synthesizing the information collected through 2007. A more complete analysis drawing conclusions about the causes of the POD is expected at the end of 2008 or early in 2009.

While the POD investigations were underway, Reclamation and the Fish and Wildlife Service re-initiated consultation based on new information regarding the delta smelt, including the apparent decline in the population. The consultation process is a scientifically-based analysis of the biological effects of a proposed project, in this case, the long-term operation of the state and federal water projects in the Sacramento and San Joaquin Valley. The consultation process requires the Fish and Wildlife Service to determine whether or not the operation of the projects would jeopardize the continued existence of the delta smelt, and to identify reasonable and prudent measures for the action agency to implement, thereby minimizing any adverse effects of the projects.

¹ State of California, The Resources Agency, Department of Water Resources, Department of Fish and Game. October 2005. Delta Smelt Action Plan. Page 44.

In the interim, and until the consultation process is complete, Reclamation is implementing the remedial actions required by a December court order (Federal District Court, Eastern District of California, in NRDC v. Kempthorne). However, the Court's remedial actions have limitations. They affect the operation of the pumps, which, as I've discussed, are only one of the factors affecting the Delta smelt. And because they were developed in litigation, they have not been subject to a careful scientific peer review. They were also devised before the POD work team issued its interim report. Therefore, while Reclamation will implement those remedial actions, it is uncertain whether they will be effective in protecting the smelt.

Delta issues affecting salmon, steelhead, and sturgeon are likely to come to the fore front in the coming months based on a parallel lawsuit against the National Marine Fisheries Service and the Bureau of Reclamation.

Even before the final District Court order was issued in December 2007, Delta smelt were observed in the Sacramento Deep Water Ship Channel in mid-December. Within days of the final order, monitoring intensity for delta smelt was increased by 150% when the Jones Pumping Plant is operating. By December 25, 2007, the first flow-related actions in the court order were triggered. To date, the federal and state water projects reduced Delta exports by approximately 65 thousand acre-feet to manage flows in Old and Middle Rivers. This action will continue until such time there are indications that delta smelt have begun to spawn—generally in late February.

Once the smelt have begun to spawn, the court's order requires the Fish and Wildlife Service to identify a target flow for Old and Middle Rivers on a weekly basis, so as to minimize the adverse effects of export operations on the smelt. The Fish and Wildlife Service's analysis to identify this target will be based on input from Reclamation and the California Departments of Water Resources and Fish and Game, as well as other agencies with information concerning the current status of the smelt. Reclamation and DWR will coordinate their operations to achieve the target flow.

These operational changes are made in response to the distribution of smelt or observed conditions related to their sensitive life-stages. The "cost" of these additional actions, in terms of water deliveries, is currently unquantified. However, this year's water allocation will be lower than other years with similar hydrology. The state and Federal water projects are sharing available export capacity equally, but the effect on water supply varies.

In concluding my remarks, I would just like to assure you that Reclamation and the Fish and Wildlife Service are taking immediate short-term actions to protect the Delta smelt and, at the same time, we are taking a thorough, methodical, and well thought-out approach to develop the actions that will more assuredly address the needs of the species in a justifiable manner.

This concludes my prepared remarks. I would be pleased to answer any questions.