

Agenda Item: 3B
Meeting Date: June 20, 2007

BAY-DELTA PUBLIC ADVISORY COMMITTEE

PELAGIC ORGANISM DECLINE UPDATE

Summary: For the last several years Interagency Ecological Program (IEP) scientists have been investigating a serious decline in the pelagic organisms that inhabit the Delta. Recently, they have documented a serious and unexpected decline (approximately 90%) in young Delta smelt. Delta smelt are threatened under the State and Federal endangered species acts and recently State and Federal agencies have taken immediate and significant actions to protect the species.

Recommended Action: This is an information item only.

There has been a serious decline in certain fish species including the threatened Delta smelt and their associated food organisms, commonly referred to as the Pelagic Organism Decline (POD). As part of the POD studies, IEP scientists have recently documented a serious and unexpected decline (approximately 90 percent) in young Delta smelt produced this season. As alarming as the reduced numbers are, the location of the young fish is an even greater concern. Specifically, they were found in the channels that are within the influence of South Delta diversions, including the State and Federal pumping plants. Further cause for alarm stems from several observed incidents of toxic waters in the nursery area of the young smelt.

For the first time this year, there was direct take (estimated salvage of 208 individuals) of Delta smelt at the State Water Project's John F. Skinner Fish Protection Facility. This occurred during significantly reduced pumping operations (320 cubic feet per second) between May 25 and May 31. During the same period, the Federal Central Valley Project had an estimated take of 84 Delta smelt while pumping at 850 cfs. Impacts on Delta smelt are in the context of a significantly reduced juvenile population as assessed during ongoing annual surveys. Collections of Delta smelt juveniles in the estuary are the lowest on record.

In response to this situation, the Department of Fish and Game (DFG) took the following actions on May 31: Director Brodrick asked Department of Water Resources (DWR) Director Lester Snow in a memo to "cease pumping water at the Harvey O. Banks facility, to the maximum feasible extent consistent with health and safety and maintain agricultural barriers in the South Delta in an open position. DWR was asked to work with the U.S. Bureau of Reclamation to accomplish the same goals for the Central Valley Project. DFG also notified other Delta diverters, including agricultural users, Contra Costa intake facilities and energy diverters to "voluntarily cease or substantially

reduce your diversions from the south Delta channels, as your operations allow". IEP also directed that all "non-essential" projects must cease fish sampling upstream of the Carquinez Bridge and downstream of Sacramento on the Sacramento River and downstream of Vernalis on the San Joaquin River". DFG also is working with the Regional Water Quality Control Board, the Department of Pesticide Regulation and the Department of Food and Agriculture to determine the source, impacts, and potential remedies for observed toxicity in the system.

At the time of making these recommendations, DFG anticipated actions would be necessary until smelt are no longer in the South Delta or until water temperatures reach 25 degrees centigrade (77 degrees Fahrenheit). Monitoring of smelt abundance and distribution will continue on a near real-time basis (bi-weekly).

List of Attachments

None

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