

## Delta Smelt Working Group Meeting Notes

June 25, 2007

Participating: Julio Adib-Samii (CDFG), Gonzalo Castillo (USFWS), Mike Chotkowski (USBR), Kevin Fleming (CDFG), Fred Feyrer (CDWR), Erin Gleason (CDFG), Lenny Grimaldo (CDWR), Bruce Herbold (USEPA), Tracy Hinojosa (CDWR), Ann Lubas-Williams (USBR), Jim White (CDFG) and Victoria Poage (USFWS, convener and scribe)

### For Discussion:

1. Update on current conditions and survey data
2. Discrepancy in salvage between CVP and SWP

Recommendation for WOMT: The Delta Smelt Working Group was not able to arrive at a consensus recommendation. Members of the Working Group will clarify their positions in writing for WOMT as soon as possible.

1. Fish and Game staff are in the process of sorting samples from survey 8 of the 20-mm Survey. Thus far they have collected no delta smelt at south or central Delta stations, and the total sample number is 53 (51 at station 706 near Decker Island and one each at stations 513 and 716). It seems likely that crews sampled a small school. This brings the grand total for the 2007 survey season to 90, still very low compared to other years. From 1995 through 2006, survey 8 collected an average of 134.9 delta smelt (range=42-218) and for surveys 1 through 8 collected an average of 1309.4 (range=587-3407).

Survey 2 of the summer Tow-Net Survey began today; no data was available at the time of the call. Delta water temperatures are slowly warming; Clifton Court Forebay was at 24.2<sup>0</sup>C yesterday (June 24) and the three-station Delta average was 23.3<sup>0</sup>C. It is worth noting that DFG netted outside the CCF radial gates in 1994 at 25.6<sup>0</sup>C and collected delta smelt.

2. Recent salvage of delta smelt is summarized in the following table:

Date	Exp. SWP Salvage	SWP Salvage Density	Exp. CVP Salvage	CVP Salvage Density	Combined Salvage	Cumulative Salvage	Daily Net OMR Flow
6/14/07	9	50.5618	0	0	9	620	-2623
6/15/07	18	94.24084	0	0	18	638	-2634
6/16/07	9	46.875	0	0	9	647	-2420
6/17/07	168	171.2538	12	2.24341	180	827	-2597
6/18/07	90	113.4931	0	0	90	917	-3509
6/19/07	90	54.02161	0	0	90	1007	-3510
6/20/07	9	6.329114	0	0	9	1016	-2138
6/21/07	30	16.23377	0	0	30	1046	-1895
6/22/07	57	30.77754	0	0	57	1103	-3360
6/23/07	15	8.004269	0	0	15	1118	
6/24/07	24	20.61856	0	0	24	1142	

There is a notable disparity between salvage at the State and Federal facilities, both in terms of numbers and in terms of density. The State is not opening the radial gates completely, taking water into CCF at a much lower instantaneous rate to minimize the impacts of radial gate operations, while the CVP has been at capacity since June 19. Recent flows in Old and Middle Rivers have ranged approximately from -2000 cfs to -3500 cfs. According to particle tracking modeling run earlier, the Working Group would expect to see little or no salvage, given smelt distributions suggested by survey sampling results, as the Projects would not be taking much water from the Sacramento River.

It is unlikely that the SWP is drawing water that is not accessible to the CVP; the three South Delta agricultural barriers are all operating tidally, a condition of which many on the Working Group were unaware, and requested that in the future, DWR keep them better informed of changes in barrier operations. There has been an overall declining trend in delta smelt densities at the SWP, which may be an indicator that recent salvage has consisted largely of fish resident in Clifton Court Forebay. Surface temperatures reached 26°C in CCF, but the irregular bathymetry of the Forebay may create thermal refugia sufficient for juvenile delta smelt to survive, although probably not in large numbers. There are operations-related actions that could be taken by DWR to support inferences on the origin of the salvaged delta smelt, including:

1. drawing a large volume of water into CCF on a high tide, allowing it to mix, and then releasing it back through the radial gates on a low tide, creating a flushing action; if delta smelt were released into Delta channels, then they should be salvaged at the CVP
2. continue export pumping but with the radial gates closed, drawing CCF down to dead pool to remove as many smelt as possible, then resume normal radial gate operations and monitor salvage numbers and densities

Both of these potential activities may be problematic; they would very likely produce ambiguous results, and they may constitute violations of the SWP's diversion permit, and therefore not be workable. Both ideas were, however, submitted to DWR for further consideration.

During the course of discussion, the Working Group attempted to reach a consensus as to the meaning of the observed salvage, whether a recommendation was warranted, and what the recommendation, if any, might be. The Working Group was not able to achieve a consensus on any of these three points. Some believed that the salvage observed at the CVP was an indicator that delta smelt were not present in Delta channels, and that the present level of exports did not constitute a concern. Others believed that the uncertainty created by the disparity in salvage between the two Projects was sufficient cause for continued high concern. As consensus could not be reached, the various viewpoints must be written up and submitted individually as addenda to these notes.

Next meeting: July 2, 2007 at 3:00 pm, via conference call

Submitted,  
VLP