

Delta Smelt Working Group Meeting/Conference Call Minutes

February 21, 2006

Participating: Mike Chotkowski (USBR), Kevin Fleming (CDFG), Sheila Greene (CDWR, guest), Lenny Grimaldo (CDWR), Bruce Herbold (USEPA), Ann Lubas-Williams (USBR), Alan Ng (CDWR, for Tracy Hinojosa), Ryan Olah (USFWS), Jim White (CDFG) and Victoria Poage (USFWS, convener and scribe)

For Discussion:

1. current conditions/current operations
2. current monitoring data
3. recommendation for VAMP

Recommendation for WOMT:

The Delta Smelt Working Group had no recommendations this week. The Working Group will continue to monitor Delta conditions, survey sampling results and any other relevant data. Based on particle tracking modeling, the preliminary recommendation for the VAMP period is for high San Joaquin River flows (7000 cfs) and low exports (1500 cfs), without the installation of the Head-of-Old-River Barrier.

1. Reservoir releases are declining, and San Joaquin River flow at Vernalis could go from about 6000 cfs today to about 4700 cfs by the end of the week. The Sacramento River could go from about 34,000 cfs today to below 30,000 cfs by the end of the week. The E/I ratio is expected to range from about 23-26% this week.
2. Kevin Fleming noted that the final results for Survey 2 of the Spring Kodiak Trawl Survey were posted to the web (<http://www.delta.dfg.ca.gov/data/skt/DisplayMaps.asp>). Eighty-four delta smelt were collected, fewer than last year (218). Thirteen smelt were collected from the Napa River, which may not contribute to the overall population unless conditions are favorable (e.g., temperatures and flows in the Napa River are adequate to maintain the smelt, and young are able to migrate to the Suisun area). A supplemental SKT (survey 12) will be conducted next week. One more delta smelt was officially recorded in salvage at Tracy on February 17, bringing the season total for both facilities to 96. The "concern level" is 143, so we are now more than halfway there. Delta water temperatures have cooled slightly since last week, and are probably around 11^o C but are likely to increase as air temperatures warm later in the week. Based on conditions as reported to date, delta smelt distribution (most are beyond the influence of the export pumps) and fish condition (most are not yet ready to spawn), the Working Group did not have a recommendation for WOMT for this week.

Some of the triggers in the DSRAM will be more important to the Working Group than others, potentially including changes in water temperature that indicate that the onset of spawning is imminent and changes in distribution that indicate that adults are spawning in significant numbers in the south Delta. In this instance, the Working Group could recommend that an action be implemented two weeks following these indicators, to

minimize entrainment of delta smelt larvae. More discussion is needed to identify the most important triggers and best strategies for minimizing entrainment.

3. This year it appears that successful recruitment will depend upon successful spawning in the Montezuma and Suisun areas, with potentially some help from the Napa River area. However, based upon overall numbers of delta smelt, the Working Group remains highly concerned. DWR staff completed additional particle tracking modeling in response to suggestions from the VAMP Technical Group. Particles were injected on April 15 and tracked for 31 days at varied flow and export rates, with and without the HORB with all culverts open (see attached summary). Review of this round of PTM revealed that the modeled difference between the HORB with three vs. the HORB with six culverts open was not significant. HORB vs. no HORB was significant (e.g., exhibited a difference in particle fate of $\geq 30\%$) in three out of five runs for Station 902, located just south of Franks Tract, indicating that significant protection may be gained for delta smelt larvae in the central Delta by failing to install the HORB. Flow remained the most significant factor in particle fate; 7000 cfs SJR flows allow the greatest percentage of particles to reach Chipps Island given the most likely VAMP scenarios, irrespective of barrier configuration. The Working Group therefore constructed the following interim recommendation for WOMT for the VAMP period, in order of highest preference to lowest:

- 7000 cfs SJR/1500 cfs exports/no barrier
- 7000 cfs SJR/1500 cfs exports/barrier
- 5700 cfs SJR/2250 exports/no barrier
- 5700 cfs SJR/2250 exports/barrier (assumed default)

Action Items:

1. Jim White and Victoria Poage will bring discussion of the VAMP recommendation to the WOMT and to the EWA Team.
2. All will give further thought to concern triggers and be prepared to discuss via e-mail.

Attachment:

1. PTM summary
2. Map of Kodiak Trawl stations

Next Scheduled Conference Call: Monday, February 27 at 3:00 pm.

Submitted,
VLP

Attachment 1. Summary of PTM results from runs completed by CDWR staff and distributed on February 15, 2006.

Scenario	Flows/Exports, cfs	Percent of particles arriving at Chipps Island		
		HORB W/ 3 Culverts (A, C, E, G, I)	HORB W/ 6 Culverts (A-6, C-6, G-6)	Without Barriers (B, D, F, H, J)
Insertion Point				
VNS	7000/7000, 50%	13.1	11.8	3.2
815	7000/7000, 50%	65	66.9	70.1
902	7000/7000, 50%	5.2	6.3	11.9
910	7000/7000, 50%	11.5	12.1	13.2
VNS	7000/1500, 50%	60	58.6	41.7
815	7000/1500, 50%	94.4	96.2	96.5
902	7000/1500, 50%	40.6	49.2	88.8*
910	7000/1500, 50%	60.1	63.5	79.5
VNS	3000/1500, 90%	1.4		0
815	3000/1500, 90%	47.4		47.9
902	3000/1500, 90%	19.1		35.3
910	3000/1500, 90%	7.6		3.7
VNS	7000/3000, 50%	45.7	43.1	24.6
815	7000/3000, 50%	88.7	89.4	94.2
902	7000/3000, 50%	23.2	25.6	79.9*
910	7000/3000, 50%	43.2	45.6	63.7
VNS	5700/2250, 90%	22.2		5
815	5700/2250, 90%	72.9		74.6
902	5700/2250, 90%	21.2		56.4*
910	5700/2250, 90%	26.5		24.2

*without-barrier run differs significantly (e.g., more than 30%) from runs with barriers

Attachment 2. Map of Spring Kodiak Trawl sampling stations.

Spring Kodiak Trawl Sampling Stations

