

SMELT WORKING GROUP Monday, June 25, 2012

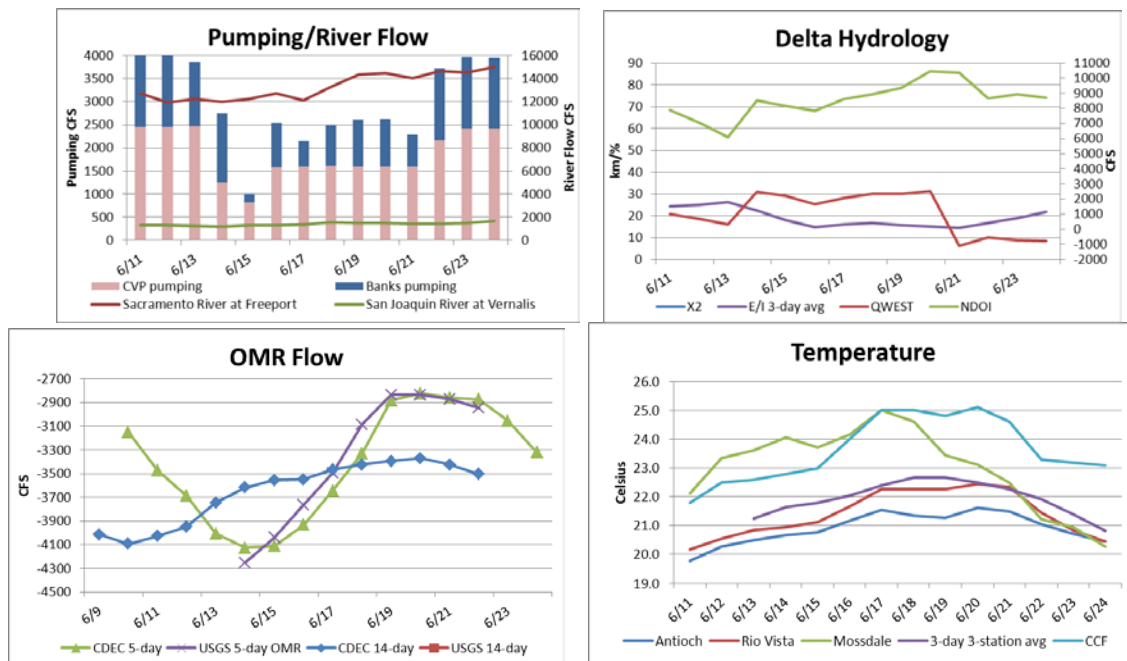
Meeting Summary:

The Working Group recommended no change in projected operations based on a review of delta smelt distribution and salvage data, current Delta conditions and projected operations. The Working Group also agreed that given their present distribution, existing constraining conditions was sufficient to protect longfin smelt. The Working Group will continue to monitor smelt salvage, larval smelt survey data, and delta hydrological conditions through June 30 and reconvene during that time as necessary. After June 30, the Working Group will not reconvene until November 2012.

Reported Data:

1) Current environmental data:

- **Water temperature** for the 3 station average as of June 24 is 20.8°C.
- **OMR:** USGS tidally-averaged OMR 5-day average as of June 22 is -2,945 cfs. The USGS 14-day average is unavailable. CDEC 5-day average and 14-day averages as of June 24 are -3,320 cfs and -3,504 cfs, respectively.
- **Flow:** Sacramento River inflow is 15,009 cfs and San Joaquin River is 1,631 cfs. X₂ calculation from CDEC has been east of Collinsville (81km) since June 11. The graphs below show the most recent trends in Delta hydrology and water quality that were evaluated by the Working Group.



2) Delta Fish Monitoring:

20-mm Survey #8 was in the field last week (June 18-June 22). Processing is ongoing and 57 of 141 tows have been processed. 16 delta smelt have been collected so far, one from the central Delta. Sizes range from 12 to 43mm. 20-mm Survey #7 was in the field the week of June 4. Processing is ongoing. The greatest delta smelt densities for survey #7 were from the Sacramento Deepwater Shipping Channel and the confluence. Longfin smelt are concentrated at or downstream of the confluence, with only 3 detected upstream of the confluence. Summer Towner Survey #1 was in the field the week of June 11. Processing is ongoing.

The annual FMWT Delta Smelt Index for 2011 is 343 (sum of all four months). The 2011 Delta Smelt Recovery Index (based on September and October) is 55. More information on the Recovery Index can be found on the Bay-Delta Office's web site at <http://www.fws.gov/sfbaydelta/> under "hot topics." Results from CDFG surveys are available online at: <http://www.dfg.ca.gov/delta/>.

3) Salvage:

The cumulative total for adult delta smelt for WY 2012 is 203. The table below details estimated juvenile delta smelt and longfin smelt salvage for the season:

Table 1: Estimated monthly juvenile delta smelt and longfin smelt salvage (≥ 20 mm) for WY2012

Month	Delta Smelt (YOY ≥ 20 mm)			Longfin Smelt (YOY ≥ 20 mm)		
	CVP	SWP	Combined	CVP	SWP	Combined
February	0	0	0	8	0	8
March	0	0	0	220	1568	1788
April	18	0	18	635	1154	1789
May	187	1751	1938	35	120	155
June	39	146	185	0	0	0
TOTAL	244	1897	2141	898	2842	3740

Table 2: Estimated daily juvenile delta smelt and longfin smelt salvage (≥ 20 mm), June 2012

Date	Delta Smelt (YOY ≥ 20 mm)		
	CVP	SWP	Combined
June 1	0	2	2
June 2	3	38	41
June 3	0	8	8
June 4	0	6	6
June 5	4	12	16
June 9	4	0	4
June 11	0	27	27
June 12	0	43	43
June 13	8	0	8
June 16	4	0	4
June 18	12	10	22
June 23	4	0	4
TOTAL	39	146	185

Preliminary results indicate that the occurrence and daily salvage of juvenile delta smelt decreased during the period from June 18 to 24 compared the previous period. Juvenile delta smelt were salvaged 2 out of the 7 days and daily combined salvages ranged from 0 to 22 fish per day. Larval or prejuvenile (< 20 mm) delta smelt were observed in daily larval fish samples on 2 days at the CVP and 1 day at the SWP. Season total of salvaged juvenile delta smelt is 2141 as of June 24. No larval or juvenile longfin smelt have been observed in salvage or larval fish samples during this same period. Season total of salvaged juvenile longfin smelt is 3,740.

Current delta and longfin smelt salvage information can be downloaded from DFG’s salvage FTP site at <ftp://ftp.dfg.ca.gov/salvage/Daily%20Smelt%20Summary/> or queried from DFG’s salvage web page at <http://www.dfg.ca.gov/delta/apps/salvage/SalvageExportCalendar.aspx>

4) Expected Project Operations:

Combined CVP/SWP exports are approximately 4700 cfs as of June 18. Combined exports are presently curtailed to comply with Delta water quality standards. Operators anticipate an OMR flow no more negative than -5,000 cfs this week.

5) Particle Tracking Modeling:

No PTM runs were requested for this week.

6) Assessment of Risk:

Background:

The collection of a spent female in the SKT Survey #2 on February 15 indicates that delta smelt spawning has begun. The temperature criterion of 12°C was confirmed on February 28. The Working Group discussed the risk of entrainment for larval delta smelt and any discussion of a recommendation was intended to protect larval delta smelt (B.O., p 282). The Working Group will follow the guidance for Action 3 of the B.O. (pp. 357-368).

Combined incidental take levels for State and federal fish facilities are based on the most recent FMWT abundance index. The 2011 FMWT index for delta smelt is 343. This means that the authorized incidental take of adults is 2,487 (estimated) and the concern level is 1,862 (estimated), cumulative for the December through March period.

Table 2: Incidental Take Levels for the larval/juvenile life stage (cumulative)

	Concern Level	Take Limit
April	101	151
May	4,471	6,705
June	11,327	16,991
July	12,851	19,276

Discussion: The Working Group reviewed and discussed all relevant data from fish surveys, Delta monitoring, salvage, and planned Project operations. The first larval delta smelt were salvaged at the CVP on April 26 and the SWP on April 24. The seasonal cumulative total of salvaged juvenile delta smelt as of June 24 is 2,141. X2 is eastward of Collinsville (81 km), NDOI is at 8,600 cfs and the 5-day OMR flow is at -3,644 cfs. The data from the 20-mm Survey #8 indicate low levels of detection in the central and southern Delta and similarly indicated by the results of #7.

Following the adaptive process parameters in the RPA for Action 3, the SWG agreed that current numbers of salvaged juvenile delta smelt do not reach the level of concern requiring a change in operations, for the following reasons: total cumulative salvage has not reached the total concern level for June of 11,327, as outlined in the OCAP BiOp and the center of delta smelt distribution appears to be out of the south and central Delta. Combined exports are curtailed to comply with the RPA Action 3 OMR flow range and are anticipated to operate to no more negative than -5,000 cfs OMR.

The Working Group discussed briefly the off-ramps for RPA Action 3 of 25°C and June 30. The Service standard for the temperature offramp is linked with the Clifton Court Forebay station, which reports daily mean water temperatures to the 1/10th of a degree Celsius. The Service clarified that the temperature reported by this station is not rounded, but taken as reported. Working Group members requested an additional, separate meeting to further discuss water temperatures for Action 3, which will also include projections for climate change.

7) Longfin Smelt:

Longfin smelt larval distribution (Smelt Larva Survey 1, January 9-10) exceeded the criteria for advice from the SWG under the SWP's 2081 permit; CDFG therefore requested that the Working Group discuss entrainment risk for longfin smelt. The 2081 identifies OMR flow between -1,250 and -5,000 cfs as the range to select from in determining a level adequately protective of longfin larvae. With nearly all detections at or downstream of the confluence for 20-mm Survey #7 and no salvage reported since May 19, the risk is currently very low.