

Smelt Working Group  
March 6, 2017

**Meeting Hiatus**

The Smelt Working Group is on hiatus while Old and Middle River flow rates are more positive than those prescribed under RPA Component 2, Action 3 of the 2008 biological opinion. During this time, Action 3 is still in place (see link to determination below). There was no Delta Smelt salvage observed at either facility during the period of February 25 to March 3. The working group will resume weekly meetings when an assessment of risk and advice for Delta Smelt or Longfin Smelt may be necessary.

[https://www.fws.gov/sfbaydelta/cvp-swp/documents/Determination\\_Feb212017\\_signed.pdf](https://www.fws.gov/sfbaydelta/cvp-swp/documents/Determination_Feb212017_signed.pdf)

## WEEKLY ADVICE FOR THE DEPARTMENT OF FISH AND WILDLIFE FOR LONGFIN SMELT

### **Advice for week of March 6, 2017:**

The Smelt Working Group is on hiatus due to exceptionally high river flows and has no advice for Longfin Smelt: Advice is not warranted at this time given current flow conditions above the off-ramp thresholds at Rio Vista and Vernalis.

No Barker Slough operations advice. Water year runoff is listed to be above normal, eliminating the need for Barker Slough restrictions this water year.

### **Basis for advice:**

The 2009 State Water Project 2081 for Longfin Smelt states that advice to WOMT and the DFW Director shall be based on:

1. Adult Salvage – total adult ( $\geq 80$ mm) Longfin Smelt salvage (SWP+CVP) for December through February  $> 5$  times the Fall Midwater Trawl Longfin Smelt annual abundance index.
2. Adult abundance, distribution or other information indicates that OMR flow advice is warranted.
3. Larva distribution in the Smelt Larva Survey or the 20mm Survey finds Longfin Smelt larvae present at 8 of 12 central and south Delta sampling stations in 1 survey (809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, 919; see Figure 1).
4. Larva catch per tow exceeds 15 Longfin Smelt larvae or juveniles in 4 or more of the 12 survey stations listed.
5. During the period January 15 through March 31 of a dry or critically dry water year only, advice for Barker Slough pumping plant operations may be warranted if larval Longfin Smelt are detected at station 716 and other information indicates risk of entrainment.

### **Discussion of Criteria**

1. No age-1 or adult Longfin Smelt have been salvaged this water year. Based on a genetic analysis, the Longfin Smelt identification in salvage January 6<sup>th</sup> was revised to Wakasagi, no Longfin Smelt have been salvaged during the current water year. The 2016 Fall Midwater Trawl annual abundance index for Longfin Smelt is 7, so the incidental take limit for adult Longfin Smelt is 35. Given the current water conditions, it is unlikely that any more adults will be salvaged. Advice is not warranted based on this criterion.

2. No new proximity information for age-1 and adult fish for late February or early March. Bay Study Survey completed sampling for February and collected only two Longfin Smelt, one in San Pablo Bay and one in central San Francisco Bay. In January, the Bay Study Survey collected four Longfin Smelt; one was collected in the San Joaquin River just upstream of the Antioch Bridge; all others were caught farther downstream. Chipps Island Trawl continues to collect low numbers of Longfin Smelt weekly. No additional survey data are available that would indicate the presence of adult Longfin Smelt in the San Joaquin River or south Delta. River flows at both the Sacramento River flow at Rio Vista and, San Joaquin River at Vernalis

continue to exceeded flow off-ramps outlined in the Incidental Take Permit (see Current Conditions below).

3&4. The fifth Smelt Larva Survey (SLS) of 2017 detected no Longfin Smelt larvae in the central or south Delta during the week of February 27; processing is incomplete for other regions (Table 1). As of March 5, Qwest was 46,157 cfs. High Vernalis flows (32,550 cfs on March 6) remain well above the 8,000 cfs off-ramp for the Incidental Take Permit; thus, no need for OMR restrictions for protecting larvae. Any larvae recently hatched in the San Joaquin River have a low risk of entrainment into the south Delta in the near future so long as Vernalis flows remain above 5,000 cfs and Qwest remains positive.

5. Current measurements place the water year as above normal, thus, Barker Slough export restrictions will not be implemented this water year.

**Current conditions:** As of March 6<sup>th</sup>, Sacramento River flow at Rio Vista was reported at 115,189 cfs and on the San Joaquin at Vernalis at 32,550 cfs. Both remain well above the off-ramp thresholds for the Longfin Smelt Incidental Take Permit and will remain so as outflow peaks later this week.

**Summary of Risk:** Risk of entrainment is very low due to high outflow surpassing off-ramp triggers (i.e., no OMR restrictions based on Longfin Smelt ITP).

Table 1. Longfin Smelt catch by station in the 20-mm Survey, #5. Sample processing is incomplete.

Year	Survey #	SLS Station	Turbidity	Sample Status	Species	Smelt Catch	Min Length	Max Length	Mean Length
2017	5	340		Not yet processed					
2017	5	342		Not yet processed					
2017	5	343		Not yet processed					
2017	5	344		Not yet processed					
2017	5	345		Not yet processed					
2017	5	346		Not yet processed					
2017	5	347		Not yet processed					
2017	5	348		Not yet processed					
2017	5	349		Not yet processed					
2017	5	405		Not yet processed					
2017	5	411		Not yet processed					
2017	5	418		Not yet processed					
2017	5	501		Not yet processed					
2017	5	504		Not yet processed					
2017	5	508	46.7	Processed		No Smelt Catch			
2017	5	513		Not yet processed					
2017	5	519		Not yet processed					
2017	5	520		Not yet processed					
2017	5	602		Not yet processed					
2017	5	606		Not yet processed					
2017	5	609		Not yet processed					
2017	5	610		Not yet processed					
2017	5	703	59.6	Processed		No Smelt Catch			
2017	5	704	115	Processed		No Smelt Catch			
2017	5	705		Not yet processed					
2017	5	706	111	Processed	Longfin Smelt	1	5	5	5
2017	5	707	99.4	Processed		No Smelt Catch			
2017	5	711	44.9	Processed		No Smelt Catch			
2017	5	716	106	Processed		No Smelt Catch			
2017	5	723	40.8	Processed		No Smelt Catch			
2017	5	801		Not yet processed					
2017	5	804	27.8	Processed		No Smelt Catch			
2017	5	809	34.8	Processed		No Smelt Catch			
2017	5	812	33.3	Processed		No Smelt Catch			
2017	5	815	29.1	Processed		No Smelt Catch			
2017	5	901	33.6	Processed		No Smelt Catch			
2017	5	902	24.3	Processed		No Smelt Catch			
2017	5	906	31.1	Processed		No Smelt Catch			
2017	5	910	32.5	Processed		No Smelt Catch			
2017	5	912	30.8	Processed		No Smelt Catch			
2017	5	914*		No Sample					
2017	5	915*		No Sample					
2017	5	918*		No Sample					
2017	5	919	23.4	Processed		No Smelt Catch			

Barker ITP

SWP ITP Criteria Stations

Processing is complete through 3/6/2017  
 \*No sample taken due to river closures

Figure 1. CDFW's 2017 Smelt Larva Survey station locations.

