

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

### **Advice for week of January 17, 2017:**

The Smelt Working Group 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 predicted 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. As of January 16<sup>st</sup>, only one Longfin Smelt has 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 many more adults will be salvaged. Advice is not warranted based on this criterion.

2. No information yet from Bay Study Survey for January. 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. Sacramento River flow at Rio Vista appears about 194,000 cfs, well above 55,000 cfs off-ramp; San Joaquin River flow over 17,000 cfs has exceeded an off-ramp outlined in the Incidental Take Permit. X<sub>2</sub> remains downstream (about 64 km). At such levels, few adults will venture into the central Delta.

3&4. The first Smelt Larva Survey (SLS) of 2017 detected no Longfin Smelt larvae in the central or south Delta. Qwest has been positive since January 1, reaching about 64,000 cfs on January 13<sup>th</sup>, and currently continues in decline at about +50,000 cfs. OMR is limited to -5,000

cfs based on the Delta Smelt BO. Vernalis recently exceeded 17,000 cfs and remains 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 predictions place the water year as above normal, thus, Barker Slough export restrictions will not be implemented this water year.

**Current conditions:** As of January 16th, Sacramento River flow at Rio Vista was reported at 194,000 cfs (USGS); the San Joaquin at Vernalis reached about 17,000 cfs (USGS). Both remain well above the off-ramp thresholds for the Longfin Smelt Incidental Take Limit.

**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).