

State Water Project Incidental Take Permit Risk Assessment for Delta Smelt and Longfin Smelt

Section 1: Overview

Date: February 16, 2021

Life Stages Present:

Delta Smelt: Adult, Juvenile [Enhanced Delta Smelt Monitoring (EDSM) has collected two Delta Smelt in the juvenile size bin]

Longfin Smelt: Adult, Larvae

Advice to WOMT:

No advice to the Water Operations Management Team (WOMT) was provided for the protection of Delta Smelt (DS) or Longfin Smelt (LFS). The most recent Smelt Larva Survey (SLS) results did not meet the criteria for the previously triggered Condition of Approval 8.4.2, Larval and Juvenile Longfin Smelt Entrainment Protections, or Condition of Approval 8.12, Barker Slough Pumping Plant Longfin and Delta Smelt Protection. The Smelt Monitoring Team (SMT) reviewed all available data and determined that an OMR Index (OMRI) of -3,500 cfs posed moderate risk of entrainment for LFS larva in the lower San Joaquin River, and that an OMRI of -5,000 cfs would result in high risk of entrainment for LFS larva in the lower San Joaquin River.

Risk Assessment:

Risk of entrainment into the central and south Delta or into the export facilities in the south Delta is low for DS and moderate to high for LFS across the range of expected OMRI levels.

Delta Smelt: Based on distribution patterns over the past decade and recent detections, DS are unlikely to be prevalent in the South Delta. Limited detection data supports DS being present in Suisun Marsh, west of the Sacramento-San Joaquin confluence, and within the Sacramento Deep Water Ship Channel. The distribution of DS is expected to extend upstream of the confluence which is supported by historical Spring Kodiak Trawl (SKT) data analysis. The amount of precipitation this week and in-stream flow conditions may influence turbidity at the Old River at Bacon Island location (OBI), but it is unlikely to reach 12 Formazin Nephelometric Units (FNU) in the next 7 days. The likelihood of DS adult entrainment is slightly elevated relative to the previous seven days due to seasonal timing. The more negative limits of the OMRI increase the potential for entrainment of DS in the central Delta, which includes the lower San Joaquin River, into the south Delta.

Longfin Smelt: SLS 3 detected LFS larvae at two of the stations listed in Condition of Approval 8.4.2, which is not sufficient to automatically trigger an OMRI restriction. The SMT determined that advice was not warranted for the protection of larval LFS based on current distribution and hydrology. The SMT downgraded the -3,500 cfs OMRI bin to moderate risk due to recent hydrology being more favorable to downstream transport of larvae than was forecasted at the previous meeting. Exports are projected to increase to target an OMRI of -5,000 cfs for the next

three days before becoming less negative. The SMT determined that an OMRI of -5,000 cfs would create a high risk of entrainment for LFS larvae in the lower San Joaquin River given the projected decrease in Qwest, continued presence of LFS larvae in the lower San Joaquin River, and the potential for continued hatching of LFS eggs in the region. However, the SMT did not recommend any further restrictions due to the downstream shift in larval distribution observed following the most recent precipitation events.

Section 1-A: Sacramento River and Confluence

Risk of entrainment into central Delta and export facilities for DS and LFS in Sacramento River (8.1.5.2 C ii, iii, iv)

- Exposure Risk (Hydrology):
 - Delta Smelt: Low
 - Longfin Smelt: Low
- Routing Risk (Behavior and life history):
 - Delta Smelt: Low
 - Longfin Smelt: Moderate risk of LFS adults moving from the confluence into the Central Delta of their own volition. Two LFS adults were detected in the lower San Joaquin River, downstream of Prisoners Point, during EDSM sampling conducted from 2/1/2021 through 2/4/2021. One fish was a ripe female which suggests that spawning is ongoing in the area.
- Overall Entrainment Risk
 - Delta Smelt: Low
 - Longfin Smelt: Low

Section 1-B: Central Delta

Risk of entrainment into the export facilities for DS and LFS in the central Delta

- Exposure Risk:
 - Delta Smelt: Low
 - Longfin Smelt: Moderate
- Change in exposure from previous week:
 - Delta Smelt: Slightly elevated due to seasonal timing and previously elevated turbidity in the central Delta.
 - Longfin Smelt: Risk has decreased compared to last week due to decreased larval density in the lower San Joaquin River. Continued LFS larval presence in the lower San Joaquin River exposes LFS larvae to entrainment, however, hydrology observed over the past week was more favorable to downstream transport than previously predicted.
- Reporting OMRI (*Number and range of OMRI bins will vary based on anticipated hydrology and operations*)
 - OMRI is projected to reach -5,000 cfs for the next three days and then is projected to become less negative as inflow at Freeport decreases and exports adjust to the reduced inflow conditions.
 - OMRI = -3,500 cfs
 - Delta Smelt: Low
 - Longfin Smelt: Moderate
 - Qwest, observed over the past seven days, was more positive than modeled in the prior Particle Tracking Model (PTM) run and more positive than forecasted at the previous meeting. This resulted in hydrology being more conducive to downstream transport of LFS larvae in the lower San Joaquin River than expected.
 - The flushing effect of a substantially positive Qwest, following the most recent precipitation event, appears to have reduced larval density in the lower San Joaquin River. However, Qwest is no longer positive and is projected to remain negative into the foreseeable future.
 - Sample processing for south and central Delta stations sampled during SLS 3 has been completed. Results showed that larval density in the south and central Delta had declined compared to SLS 2.
 - OMRI = -5,000 cfs
 - Delta Smelt: Low
 - Longfin Smelt: High
 - The presence of a ripe female LFS in the lower San Joaquin on 2/4/2021 indicates that spawning is on-going and that newly hatched LFS larvae will not benefit from the flushing effect unless Qwest becomes substantially positive.

- Qwest is projected to remain negative for the foreseeable future. This change in hydrology reduces the likelihood of LFS larvae in the lower San Joaquin River being transported downstream. When paired with a more negative OMRI moving forward, the likelihood of entrainment of larval LFS into less favorable habitat within the zone of entrainment is increased.
- SMT discussed interpolating between PTM scenarios and determined that it was appropriate. However, extrapolating beyond the bookend scenarios is more challenging and, thus, less informative.
- SLS 3 sample collection and processing is ongoing for the remaining survey locations. The SMT will have a better understanding of the extent of larval distribution and entrainment risk in the south and central Delta once all data is available.

Section 2: Basis for Advice

The 2020 [Incidental Take Permit for Long-Term Operation of the State Water Project in the Sacramento-San Joaquin Delta 2081-2019-066-00](#) (ITP) states that advice to WOMT shall be based the following Conditions of Approval:

List relevant Condition of Approval number and title based on species/life stage, time of year, etc.

8.1.5.2 Smelt Monitoring Team Risk Assessment

8.3.3 Adult Longfin Smelt Entrainment Protection.

After December 1, if an Integrated Early Winter Pulse Protection (Condition of Approval 8.3.1) has not yet been initiated, Permittee shall reduce south Delta exports to maintain a 14-day average OMRI no more negative than -5,000 cfs and initiate OMR Management (Condition of Approval 8.3) if:

- Cumulative combined LFS expanded salvage (total estimated LFS counts at the CVP and SWP salvage facilities beginning December 1 through February 28 exceeds the most recent Fall Midwater Trawl (FMWT) LFS index¹ divided by 10, OR
- Real-time monitoring of abiotic and biotic factors indicates a high risk of LFS movement into areas at high risk of future entrainment, as determined by DWR and CDFW Smelt Monitoring Team staff.

When evaluating the possibility of LFS movement into areas that may be subject to an elevated risk of entrainment, the SMT shall evaluate catch of LFS with fork length ≥ 60 mm by the Chipps

Island Trawl (conducted by USFWS) as an early warning indicator for LFS migration movement into the Delta, in addition to other available survey and abiotic data. The SMT shall communicate the results of these risk assessments and advice to the WOMT (Condition of Approval 8.1.3), and operational decisions shall be made as described in Condition of Approval 8.1.4 (Collaborative Approach to Real-Time Risk Assessment).

8.4.2 Larval and Juvenile Longfin Smelt Entrainment Protection.

From January 1 through June 30, when a single SLS or 20 mm Survey (20 mm) sampling period exceeds one of the following thresholds:

- LFS larvae or juveniles found in four or more of the 12 SLS or 20 mm stations in the central Delta and south Delta (Stations 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, 919), or
- LFS catch per tow exceeds five LFS larvae or juveniles in two or more of the 12 stations in the central Delta and south Delta (Stations 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, 919).

Permittee shall restrict south Delta exports for seven consecutive days to maintain a seven-day average OMRI no more negative than -5,000 cfs. Permittee shall also immediately convene the SMT to conduct a risk assessment (see Condition of Approval 8.5.1.2) to assess the risk of larval and juvenile LFS entrainment into the South Delta Export Facilities, determine if an OMRI flow restriction is warranted, and recommend an OMRI flow limit between -1,250 cfs and -5,000 cfs. The SMT risk assessment and operational advice shall be reviewed by the WOMT (Condition of Approval 8.1.3) via the Collaborative Real-time Decision-making process (Condition of Approval 8.1.4). Permittee shall operate to the export restriction and OMRI flow target approved through Conditions of Approval 8.1.3 and 8.1.4. Each week the SMT shall convene to conduct a new risk assessment and determine whether to maintain, or off ramp from, export restrictions based on the risk to LFS, or until the DS and LFS off-ramp has been met as described in Condition of Approval 8.8 (End of OMR Management).

From January 1 through June 30, DWR and CDFW SMT staff shall conduct weekly, or more often as needed, risk assessments (see Condition of Approval 8.5.1.2) to assess the risk of larval and juvenile LFS entrainment into the South Delta Export Facilities. As a part of the risk assessment, the SMT shall provide advice on the appropriate OMRI flow targets to minimize LFS entrainment or entrainment risk, or both. The SMT shall provide its advice to WOMT (Condition of Approval 8.1.3) and use the Collaborative Approach to Real-time Risk Assessment process described in Condition of Approval 8.1.4 to determine if an OMRI flow restriction is warranted and determine an OMRI flow limit between -1,250 cfs and -5,000 cfs. The OMRI flow limit shall be in place until the next risk assessment conducted by the SMT determines that it is no longer necessary to minimize take or related impacts to LFS, or until the DS and LFS off-ramp has been met as described in Condition of Approval 8.8 (End of OMR Management).

8.5.1 Turbidity Bridge Avoidance.

The purpose of this Condition is to minimize the risk of entrainment of adult DS in the corridors of the Old and Middle rivers into the south Delta export facilities. This Condition is intended to avoid the formation of a turbidity bridge from the San Joaquin River shipping channel to the south Delta export facilities, which historically has been associated with elevated salvage of pre-spawning adult DS.

After the Integrated Early Winter Pulse Protection (Condition of Approval 8.1.3) or February 1 (whichever comes first), until April 1, Permittee shall manage exports to maintain daily average turbidity at OBI to a level less than 12 NTU. If the daily average turbidity at OBI is greater than 12 NTU, Permittee shall restrict south Delta exports to achieve an OMRI flow that is no more negative than -2,000 cfs until the daily average turbidity at OBI is less than 12 NTU.

If, after five consecutive days of OMRI flow that is less negative than -2,000 cfs, the daily average turbidity at OBI is not less than 12 NTU the SMT may convene to assess the risk of entrainment of DS (Condition of Approval 8.1.5.2). The SMT may provide advice to WOMT regarding changes in operations that could be conducted to minimize the risk of entrainment of DS (Condition of Approval 8.1.3). The SMT may also determine that OMRI restrictions to manage turbidity are infeasible and may instead provide advice for a different OMRI flow target that is between -2,000 cfs and -5,000 cfs and is protective based on turbidity and adult DS distribution and salvage to the WOMT for consideration (Condition of Approval 8.1.3). Operational decisions shall be made following the process described in Condition of Approval 8.1.4 (Collaborative Real Time Risk Assessment).

Turbidity readings at individual sensors can generate spurious results in real time. Spurious results could be incorrectly interpreted as a turbidity bridge, when in fact the cause is a result of local conditions or sensor error. To assess whether turbidity readings at OBI are attributable to a sensor error or a localized turbidity spike, Permittee, in coordination with Reclamation, may consider and review data from other nearby locations and sources. Additional information that will be reviewed include regional visualizations of turbidity, alternative sensors, and boat-based turbidity mapping, particularly if there was evidence of a local sensor error. Permittee may bring data from these additional sources to the Smelt Monitoring Team for consideration during the development of a risk assessment to be provided to the WOMT for evaluation (Condition of Approval 8.1.3).

Permittee shall use the decision-making process described Condition of Approval 8.1.4 (Collaborative Real-time Risk Assessment) to determine if south Delta exports may increase after five-days of OMRI no more negative than -2,000 cfs, or to determine that this action is not warranted due to a sensor error or localized turbidity event. Permittee shall implement this action until CDFW is in agreement that the action may be ended or modified.

8.5.2 Larval and Juvenile Delta Smelt Protection.

If the five-day cumulative salvage of juvenile DS at the CVP and SWP facilities is greater than or equal to one plus the average prior three years' FMWT index (rounded down), Permittee shall restrict south Delta exports for seven consecutive days to maintain a seven-day average OMRI no more negative than -5,000 cfs. Additionally, if the five-day cumulative salvage threshold is met or exceeded, Permittee shall immediately convene the SMT to conduct a risk assessment (Condition of Approval 8.1.5.2) and determine the future risk of entrainment and take of larval and juvenile DS. The Smelt Monitoring Team may provide advice to further restrict south Delta exports to maintain a more positive OMRI than -5,000 cfs. The SMT may provide advice for further restrictions within three risk categories:

- Low risk: Limit OMRI between -4,000 cfs to -5,000 cfs
- Medium risk: Limit OMRI between -2,500 cfs to -4,000 cfs
- High risk: Limit OMRI between -1,250 cfs to -2,500 cfs

The duration and magnitude of operational advice shall be provided to the WOMT (Condition of Approval 8.1.3) and decisions shall be made following the process described in Condition of Approval 8.1.4 (Collaborative Real Time Risk Assessment). When conducting risk assessments to evaluate the risk of entrainment and take of juvenile DS, the SMT shall evaluate the following information sources, in addition to any other models or surveys they deem appropriate and those listed in Condition of Approval 8.1.5.2:

- Results from a CDFW approved DS life cycle model.
- DS recruitment levels identified by the Smelt Monitoring Team using the CDFW-approved life cycle model that links environmental conditions to recruitment, including factors related to loss as a result of entrainment such as OMRI flows. In this context, recruitment is defined as the estimated number of post-larval DS in June per number of spawning adults in the prior February-March period.
- Hydrodynamic models and forecasts of entrainment informed by the EDSM or other relevant survey data to estimate the percentage of larval and juvenile DS that could be entrained.

If expanded salvage at the CVP and SWP facilities of juvenile DS exceeds 11 within a three-day period under this condition, Permittee shall restrict south Delta exports for seven consecutive days to maintain a seven-day average OMRI no more negative than -3,500 cfs. If juvenile DS continue to be salvaged at the CVP and SWP facilities during the seven days of OMRI restrictions, then Permittee shall continue restrictions and request a risk assessment by the Smelt Monitoring Team to determine if additional advice and subsequent restrictions are warranted and provide advice to WOMT (see Condition of Approval 8.1.3) and follow the decision-making process described in Condition of Approval 8.1.4.

8.12 Barker Slough Pumping Plant Longfin and Delta Smelt Protection.

Permittee shall operate the Barker Slough Pumping Plant (BSPP) to protect larval LFS from January 15 through March 31 of dry and critical water years. Permittee shall operate to protect larval DS from March 1 through June 30 of dry and critical years. If the water year type changes after January 1 to below normal, above normal or wet, this action will be suspended. If the water year type changes after January to dry or critical, Permittee shall operate according to this Condition of Approval.

From January 15 through March 31 of dry and critical water years, Permittee shall reduce the maximum seven-day average diversion rate at BSPP to less than 60 cfs when larval LFS are detected at station 716. In addition, in its weekly meetings from January 15 through March 31, the Smelt Monitoring Team shall review LFS abundance and distribution survey data and other pertinent abiotic and biotic factors that influence the entrainment risk of larval LFS at the BSPP. When recommended by the SMT, and as approved through the decision-making processes described in Conditions of Approval 8.1.3 and 8.1.4, Permittee shall reduce the maximum seven-day average diversion rate at BSPP according to the advice provided by the Smelt Monitoring Team.

From March 1 through June 30 of dry and critical water years, Permittee shall reduce the maximum seven-day average diversion rate at BSPP to less than 60 cfs when larval DS are detected at station 716. In addition, in its weekly meetings from March 1 through June 30, the SMT shall review DS abundance and distribution survey data and other pertinent abiotic and biotic factors that influence the entrainment risk of larval DS at the BSPP (including temperature and turbidity). When recommended by the SMT, and as approved through the decision-making processes described in Conditions of Approval 8.1.3 and 8.1.4, Permittee shall reduce the maximum seven-day average diversion rate at BSPP to less than 60 cfs. The DS requirements described in this condition may be adjusted to align with USFWS requirements to minimize take of DS through an amendment to this ITP.

8.13 Water Year Type Definition.

All references to water year type in this ITP shall be defined based on the Sacramento Valley Index unless otherwise noted.

Discussion of Conditions of Approval

Provide sentence or two addressing criteria for each Condition of Approval listed in “Basis for Advice” section. Refer to data below where appropriate.

SMT will conduct weekly risk assessments as described in Condition of Approval 8.1.5.2.

8.3.1 Environmental conditions did not exceed the thresholds identified in this condition during Water Year 2021. This Condition of Approval terminated on 1/31/2021.

8.3.3 No LFS have been salvaged this water year. The cumulative expanded salvage threshold is 3 based on the most recently available FMWT Index. The annual index for 2020 is 28 and was reported to the SMT via email on 1/4/2021. The SMT examined abiotic conditions and determined that risk is low to moderate for adult Longfin Smelt. See section 4-B for the discussion of the FMWT Index.

8.4.1 This Condition of Approval begins with the onset of OMR management and terminates when spawning is detected in the system. The second December SLS detected larval LFS in the lower San Joaquin River on 12/28/2020, which terminated this Condition of Approval.

8.4.2 Larvae were detected at two of the 12 stations reported and catch per tow exceeded 5 fish at one of these stations. Catch was insufficient to trigger this condition of approval and the SMT determined that additional OMR restriction was not warranted.

8.5.1 This Condition of Approval has not been triggered. Turbidity at OBI was below 12 FNU on 2/1/2021 and remains low. Turbidity exceeded 14 FNU on 1/27/2021 before decreasing.

8.5.2 The three-year average FMWT Index for DS is zero, resulting in a salvage threshold of one for juvenile DS. Young of year DS are not expected to be present at this time of year.

8.12 The restriction associated with this Condition of Approval is no longer in effect. No LFS larva were collected at station 716 during the most recent SLS survey and the SMT determined that further restriction was not necessary.

Section 3: Hydrology and Operations

Assessment of hydrologic, operational, and meteorological information. 8.1.5.2 A.

Section 3-A: Water operations conditions. 8.1.5.2.A. i

- Antecedent Actions: (e.g. DCC gate closure and actions such as integrated early winter pulse protection, etc.)
 - ITP Condition of Approval 8.3.2 Salmonid Presence limits exports to maintain a 14-day running OMRI average no more negative than -5,000 cfs as of 1/1/2021.
 - DCC gates will remain closed for the remainder of the season (through May 20, 2021 per the PA description for DCC gate operations).
 - Grantline Canal agricultural barrier was breached on 11/11/2020. The OMRI equation was adjusted accordingly to accommodate the change in barrier status.
- Controlling Factors:
 - Currently OMRI of -5,000 cfs, potential for Delta outflow to become controlling if Delta outflow falls below 7,100 cfs as Delta inflow decreases.
- Water Temperature:
 - CCF = Not discussed (*Condition of Approval 8.8: Daily average temperature at CCF exceeds 25°C for 3 consecutive days*)
 - 3 Station Average = 12.1°C
- Tidal Cycle: Not discussed
- Turbidity:
 - 8.3.1 Freeport 3-day average = Not reported. 8.3.1 terminated without being triggered.
 - 8.5.1 OBI Turbidity = 3.47 FNU
 - Reached a peak of 14.19 FNU on 1/27/2021 before decreasing below the 12 FNU threshold before 2/1/2021
- Salinity: X2 = 80 km
- Hydrologic Footprint:
 - The SMT requested a PTM run with two scenarios. OMRI = -5,000 cfs and OMRI = -3,500 cfs with particles injected at 809, 812 and 901.

Section 3-B: Water operations outlook. 8.1.5.2.A. ii

- Outages
 - SWP: No export or salvage outages reported for the period of 2/9/2021 to 2/15/2021
 - CVP: No export or salvage outages reported for the period of 2/9/2021 to 2/15/2021
- Exports
 - CCF: Targeting OMRI no more negative than -5,000 cfs as conditions allow.
 - Jones: 2,580 cfs. Targeting OMRI no more negative than -5,000 cfs as conditions allow.

- Meteorological Forecast: 60% chance of rain Thursday decreasing through the weekend.
- Storm Event Projection: Minor precipitation event is forecast for Thursday.

Section 3-C: Projected conditions. 8.1.5.2.A. iii

- DCC Gates position: Closed for season (through May 20, 2021)
- Sacramento River flow at Freeport: 12,700 cfs and is expected to decrease as storm pulse recedes.
- San Joaquin River flow at Vernalis: 1,350 cfs and is projected to be around 1,400 cfs for the next several days.
- Qwest: -700 cfs today and is projected to approach -2,000 cfs. Exceeded 11,000 cfs for four days, from 1/29/2021 to 2/1/2021, and remained above 1,000 cfs through 2/7/2021.
- Old River at Bacon Island Turbidity: 3.47 FNU.
- Expected changes in South Delta Exports: Exports are projected to remain stable and result in an OMR of -5,000 cfs for the next three days. Exports will decrease as Sacramento River flow at Freeport decreases.
- NDOI: 10,170 cfs. Will decrease and reach 7,400 cfs.

Table 1: Comparison of OMR and OMR Index (5-day and 14-day averages OMR Index and USGS gauge reported on [SacPAS website](#), accessed 2/16/2021)

Date	Averaging Period	USGS gauges (cfs)	Index (cfs)
2/16/2021	Daily	Not Reported	-5,000 cfs
2/12/2021	5-day	-3,350 cfs	-3,420 cfs
2/12/2021	14-day	-2,650 cfs	-2,740 cfs

Section 4: Distribution and Biology.

8.1.5.2.B. Assessment of biological information for Delta Smelt and Longfin Smelt

Section 4-A: Delta Smelt population status 8.1.5.2.B. i

- EDSM did not collect any DS during sampling conducted from 2/8/2021 through 2/12/2021. No abundance estimate was calculated
- The 2020 Annual FMWT Index for DS is zero for the third consecutive year.
- Delta Smelt LCM discussion. Not Discussed.
- Biological Conditions: Not Discussed
- % of population in Delta zones: SMT did not discuss distribution in terms of percentage in Delta zones.
- Other Surveys: The last DS detection was on 1/21/2021 by Fish Conservation and Culture Laboratory (FCCL) broodstock collections.
- Salvage: No DS have been detected at either salvage facility this season.

Section 4-B: Longfin Smelt population status 8.1.5.2.B. ii.

- FMWT Index: The FMWT Annual Index for LFS is 28. Monthly indices for September and October are zero, the index for November is 22 and index for December is 6.
- Bay Study: Bay Study has resumed sampling and is scheduled to complete the February survey on 2/15/2021.
- Other Surveys:
 - Chipps Island Trawl collected 3 LFS [Fork Length (FL) = 76 – 90 mm] on 2/12/2021 and two LFS (FL = 92 – 95) on 2/8/2021.
 - EDSM collected 15 LFS in Suisun Marsh (FL = 64 – 100 mm) and one fish was expressing eggs
 - SLS 3 sample collection is complete and processing is 60% complete. For stations relevant to 8.4.2; all stations have been processed. Eleven LFS larvae were collected at station 809 and one was collected at station 812. No LFS larvae were collected at station 716 which informs Condition of Approval 8.12. Two LFS larvae were collected at the next nearest station, 723. Both larvae had yolk sacs present and total lengths were 5 and 6 mm. LFS larvae were detected at eight out of 10 stations in the Sacramento River. Thirty-three LFS larvae were collected at station 801 in Broad Slough near the confluence.
- February Spring Kodak Trawl sampled from 2/1/2021 through 2/5/2021 and collected 1 LFS at station 501. January Spring Kodiak Trawl (SKT) collected 11 LFS in Suisun Bay and Marsh and the Sacramento Deep Water Ship Channel. See previous week's Risk Assessment for catch details.
- Salvage: No LFS have been detected at either salvage facility for this water year.

Section 4-C: Additional data sources to assess sensitivity to entrainment Delta. 8.1.5.2.C & D. i

Notes: The SMT ITP Risk Assessments can be accessed on the CDFW [Water Branch website](#).

EDSM is no longer assisting FCCL Broodstock collection. Broodstock Collection will continue.

No update was provided for Bay Study.