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

Section 1: Overview Date: January 5, 2021

Life Stages Present:

Delta Smelt: Adult Longfin Smelt: Adult, Larvae

Advice to WOMT:

No advice is warranted for south Delta or Barker Slough operations.

Risk Assessment:

Risk of entrainment into the central and south Delta or into the export facilities in the south Delta is low for Delta Smelt and low to moderate for Longfin Smelt across the range of expected OMR Index levels.

Delta Smelt: Based on distribution patterns over the past decade and no recent detection data, Delta Smelt are unlikely to be prevalent in the South Delta. Limited detection data support Delta Smelt being present in Suisun Marsh and west of the Sacramento-San Joaquin confluence. High X2 position could mean the distribution of Delta Smelt extends further upstream of the confluence. Precipitation is anticipated but change to Freeport flows and turbidity are not expected to reach "First Flush" conditions within the next seven days. The likelihood of Delta Smelt adult entrainment is slightly elevated relative to the previous seven days due to the range of potential OMR values being more negative during the next seven days and seasonal timing. The overall probability of Delta Smelt moving into the south Delta is low. The projected OMR Index limits are at a level that is sufficiently protective and in conjunction with low turbidity levels creates an overall low likelihood of entrainment.

Longfin Smelt: Evaluation of recent catch data indicates that Longfin Smelt (LFS) larvae are present in the lower San Joaquin River near Jersey Point and that adults and age 1 individuals are present in Suisun Marsh and Bay. Particle Tracking Model (PTM) runs have been requested to inform risk of entrainment, however, an OMR more positive than -5000 cfs is generally considered sufficiently protective for larvae and older individuals in the lower San Joaquin River near Jersey Point under most conditions. December Smelt Larva Survey (SLS) collected 3 larval LFS (Total Length = 7 mm, yolk sac present) at station 809 near Jersey Point on the lower San Joaquin River on 12/28/2020. Chipps Island Survey collected one adult LFS (FL = 107 mm) during recent sampling. EDSM collected 6 LFS (FL = 59 - 82 mm) in Suisun Marsh on 1/4/2021, 16 LFS (FL = 65 - 115mm) in Suisun Marsh on 12/28/2020 and one LFS (FL = 74 mm) in Suisun Bay on

12/24/2020. The annual Fall Midwater Trawl index for LFS is 28. December FMWT reported four LFS with one collected in San Pablo Bay, one in Suisun Bay, one near Chipps Island and one in the lower Sacramento River. See section 4-B below for catch details.

Section 1-A: Sacramento River and Confluence

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

- Exposure Risk:
 - o Delta Smelt: Low
 - Longfin Smelt: Low
- Routing Risk:
 - o Delta Smelt: Low
 - \circ $\,$ Longfin Smelt: Low
- Overall Entrainment Risk
 - o Delta Smelt: Low
 - \circ $\,$ Longfin Smelt: Low

Section 1-B: Central Delta

Risk of entrainment into the export facilities for Delta Smelt and Longfin Smelt in the central Delta

- Exposure Risk:
 - Delta Smelt: Low
 - Longfin Smelt: Low
- Change in exposure from previous week:
 - Delta Smelt: No change
 - Longfin Smelt: Risk is similar to last week. Onset of hatching in the lower San Joaquin River exposes larvae to entrainment at OMR Index levels more negative than -5,000 cfs.
- Reporting Old and Middle River Index (OMRI) (Number and range of OMRI bins will vary based on anticipated hydrology and operations)
 - OMRI is approximately -2,500 cfs and projected to remain between -2,500 cfs and -5,000 cfs.
 - OMRI (Export Scenario OMRI = -2,500 cfs)
 - Delta Smelt: Low Risk
 - Longfin Smelt: Low Risk
 - OMRI (Export Scenario OMRI = -5,000 cfs)
 - Delta Smelt: Low Risk
 - Longfin Smelt: Moderate for fish in OMR corridor (for adults in proximity to Bacon Island, the risk is moderate. If larvae were present in the OMR corridor risk of entrainment is high, however, no larvae have been detected upstream of Jersey Point. For fish of all life stages in the mainstem San Joaquin River near Jersey Point, an OMRI of -5,000 cfs is considered protective)

Section 2: Basis for Advice

The 2020 <u>Incidental Take Permit for Long-Term Operation of the State Water Project in the</u> <u>Sacramento-San Joaquin Delta 2081-2019-066-00</u> (ITP) states that advice to Water Operations Management Team (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

8.3.1 Integrated Early Winter Pulse Protection.

Between December 1 and January 31 each year Permittee shall reduce south Delta exports for 14 consecutive days to maintain a 14-day average OMR index no more negative than -2,000 cfs, and convene the Smelt Monitoring Team within one day of triggering the following criteria:

• Three day running average daily flows at Freeport greater than, or equal to,

25,000 cfs, AND

- Three day running average of daily turbidity at Freeport is greater than, or equal to, 50 Nephelometric Turbidity Units (NTU), OR
- The Smelt Monitoring Team determines that real-time monitoring of abiotic and biotic factors indicates a high risk of DS migration and dispersal into areas at high risk of future entrainment.

After maintaining a 14-day average OMR index no more negative than -2,000 cfs for 14 days, Permittee shall maintain a 14-day average OMR index no more negative than -5,000 cfs, initiating the OMR Management season, until the OMR Management Season ends (Condition of Approval 8.8).

The Integrated Early Winter Pulse Protection Action may only be initiated once during the December 1 through January 31 time period each year.

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 OMR index 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 Smelt Monitoring Team shall evaluate catch of LFS with fork length \geq 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 Smelt Monitoring Team 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).

¹ The Fall Midwater Trawl (FMWT) Survey annual abundance index for LFS is calculated as the sum of September through December monthly abundance indices and is typically reported at about the same date as adult salvage begins in December. The FMWT Index available beginning on December 1 each year shall be used to establish this threshold.

8.4.1 OMR Management for Adult Longfin Smelt.

From the onset of OMR Management (Condition of Approval 8.3) through February 28, the Smelt Monitoring Team shall conduct weekly, or more often as needed, risk assessments (see Condition of Approval 8.1.5.2) and decide whether to recommend an OMR flow requirement between - 5,000 cfs and -1,250 cfs to minimize entrainment and take of adult LFS. The Smelt Monitoring Team may provide advice to restrict south Delta exports for seven consecutive days to achieve a seven-day average OMR index within three risk categories: Low risk: OMR between -4,000 cfs to -5,000 cfs Medium risk: OMR between -2,500 cfs to -4,000 cfs High risk: OMR between -1,250 cfs to -2,500 cfs

If a risk assessment conducted by the Smelt Monitoring Team determines that a more restrictive OMR flow requirement is needed to minimize take of adult LFS, the Smelt Monitoring Team shall provide its advice to WOMT (Condition of Approval 8.1.3) and operational decisions shall be made following the process described in Condition of Approval 8.1.4 (Collaborative Approach to Real-time Risk Assessment).

This Condition will terminate when a high-flow off-ramp occurs (Condition of Approval 8.4.3), or when LFS spawning has been detected in the system, as determined by the Smelt Monitoring Team, or, if there is disagreement and resolution is not reached within WOMT, as determined by CDFW. The Smelt Monitoring Team shall consider results from Additional LFS Larval Sampling (Condition of Approval 7.6.1) to inform its assessment of the start of LFS spawning. After LFS spawning has been observed, Permittee shall implement Condition of Approval 8.4.2 to minimize take of larval and juvenile LFS.

8.4.2 Larval and Juvenile Longfin Smelt Entrainment Protection.

From January 1 through June 30, when a single Smelt Larva Survey (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 OMR index no more negative than -5,000 cfs. Permittee shall also immediately convene the Smelt Monitoring Team 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 OMR flow restriction is warranted, and recommend an OMR flow limit between -1,250 and -5,000 cfs. The Smelt Monitoring Team 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 OMR flow target approved through Conditions of Approval 8.1.3 and 8.1.4. Each week the Smelt Monitoring Team 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 Smelt Monitoring Team 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 Smelt Monitoring Team shall provide advice on the appropriate OMR flow targets to minimize LFS entrainment or entrainment risk, or both. The Smelt Monitoring Team 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 OMR flow restriction is warranted and determine OMR flow limit between - 1,250 and -5,000 cfs. The OMR flow limit shall be in place until the next risk assessment conducted by the Smelt Monitoring Team 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).

8.5.2 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 OMR index no more negative than -5,000 cfs. Additionally, if the five-day cumulative salvage threshold is met or exceeded, Permittee shall immediately convene the Smelt Monitoring Team 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 OMR than -5,000 cfs. The Smelt Monitoring Team may provide advice for further restrictions within three risk categories:

- Low risk: Limit OMR between -4,000 cfs to -5,000 cfs
- Medium risk: Limit OMR between -2,500 cfs to -4,000 cfs
- High risk: Limit OMR 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 Smelt Monitoring Team 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 CDFWapproved life cycle model that links environmental conditions to recruitment, including

factors related to loss as a result of entrainment such as OMR 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 OMR index 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 OMR 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.Discussion of Conditions of approval

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 have not exceeded the thresholds identified in this condition. The SMT examined abiotic conditions and determined that risk is low for Delta Smelt.

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 1/4/2020. is The SMT examined abiotic conditions and determined that risk is low to moderate for 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 survey detected larval LFS in the lower San Joaquin River on 12/28/2020 which terminates this Condition of Approval.

8.4.2 This Condition of Approval began on January 1st.Data collected during the SLS survey 1, scheduled to start 1/11/2021, will inform this condition of approval. December SLS survey 13 detected 3 larval LFS at station 809 near Jersey Point in the lower San Joaquin River.

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

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 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) but may be opened to maintain water quality during drought conditions for up to 5 days and for up to 2 events as per the PA in December and January.
 - 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: Water quality
- 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 = 10.04°C
- Tidal Cycle: Currently in the neap cycle but will transition to spring cycle which peaks 1/11/2021 through 1/13/2021.
- Turbidity:
 - 8.3.1 Freeport 3-day average = 5.32 FNU
 - 8.5.1 Turbidity at OBI Feb 1 to April 1
- Salinity: X2 is upstream of Collinsville,
- Hydrologic Footprint:
 - CDFW requested PTM models to inform risk of entrainment for larval Longfin Smelt present in the lower San Joaquin River near Jersey Point. The request includes two additional insertion points, one at Prisoner's Point (station 815) and one south of Franks Tract (station 902), to inform potential entrainment risk if SLS 1 detects larvae at these stations. Larvae have only been detected at SLS station 809 (Jersey Point) and the inclusion of additional insertion points does not imply the presence of larvae. The PTM run was delayed last week due to logistical constraints, however, results are expected by the next SMT meeting. The two OMR scenarios requested were -2500 cfs and -5000 cfs to assess risk of entrainment at the lower and upper range of expected OMR flows this week.

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

- Outages
 - SWP: No export or salvage outages reported for the period of 12/29/2020 to 1/4/2021
 - CVP: No export or salvage outages reported for the period of 12/29/2020 to 1/4/2020
- Exports
 - CCF: 2000 cfs as of 1/5/2021
 - CVP: 800 cfs as of 1/5/2021
 - Barker Slough: Not reported. Will begin reporting when Condition of Approval 8.12, Barker Slough Pumping Plant Longfin and Delta Smelt Protections, goes into effect January 15th.
- Meteorological Forecast: Seven-day weather forecast for Antioch (sunny to mostly cloudy, NNW winds up to 5 mph, and a 20-30% chance of rain on Wednesday, Thursday, and Friday all less than 1/10 inch per day.
- Storm Event Projection: Long term forecast includes slight chance of precipitation (5-10%) later this week and becoming drier the following week.

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: 7,700 cfs and is expected to increase as runoff from a recent storm moves through the system
- San Joaquin River flow at Vernalis: 970 cfs
- Qwest: -100 to -400 cfs
- Old River at Bacon Island Turbidity: Not reported
- Freeport Turbidity (3-day average): 5.32 FNU.
- Expected changes in South Delta Exports: Exports may increase if water quality permits.
- NDOI: 5,400 cfs and is expected to increase to 5,600 cfs to 7,400 cfs as runoff from a recent storm moves through the system.

Table 1: Comparison of OMR and OMR Index (5-day and 14-day averages reported on <u>SacPAS</u> website, accessed 1/5/2021)

| Date | Averaging Period | USGS gauges (cfs) | Index (cfs) | | |
|------------|---------------------|-------------------|--------------|--|--|
| 1/5/2021 | Daily | Not Reported | -2,500 cfs | | |
| 1/3/2021 | 5-day | Not Reported | -2,010 cfs | | |
| 1/3/2021 | 14-day | Not Reported | -2,800 cfs | | |
| NA | Daily | Not Reported | Not Reported | | |
| 12/31/2021 | 5-day | -2,330 cfs | -2,680 cfs | | |
| 12/31/2021 | 14-day | -2,440 cfs | -2,720 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 Delta Smelt during recent sampling (12/28/2020 12/31/2020)
- The 2021 Annual FMWT Index for Delta Smelt is zero for the third consecutive year.
- Delta Smelt LCM discussion. Not Discussed.
- Biological Conditions: None reported.
- % in Delta zones: SMT did not discuss distribution in terms of percentage in Delta zones.
- Other Surveys: No Delta Smelt detections were reported in recent sampling including FMWT, Chipps Island Trawl and December SLS. FCCL Brood stock collection has not detected any Delta Smelt this season. Collections typically end before the onset of spawning in the wild. Two December SLS surveys were conducted on 12/14/2020 through 12/15/2020 (SLS 12) and on 12/28/2020 (SLS 13). They sampled 12 south and central Delta stations. No Delta Smelt were detected. The standard SLS survey is scheduled to begin 1/11/2021 and will sample the full set of stations. The last Delta Smelt detection occurred on 11/09/2020 in Suisun Marsh.
- Salvage: No Delta Smelt 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 Longfin Smelt is 28. Monthly indices for September and October are zero, the index for November is 22 and index for December is 6.
- Bay Study: The most recent Bay Study data was collected in early November and is not likely to reflect current distribution. During November sampling, 42 Longfin Smelt were collected. One was collected in Carquinez Strait. The rest were collected in San Pablo and San Francisco Bays. December Bay Study began 12/01/2020 but was interrupted after two days of sampling. No Longfin Smelt were detected by Bay Study in December.
- Other Surveys: Chipps Island Survey collected one adult LFS (FL = 107 mm) on last week. EDSM collected 6 LFS (FL = 59 – 82 mm) in Suisun Marsh on 1/4/2021, 16 LFS (FL = 65 – 115mm) in Suisun Marsh on 12/28/2020 and one LFS (FL = 74 mm) in Suisun Bay on 12/24/2020.
- Two December SLS surveys were conducted on 12/14/2020 through 12/15/2020 (SLS 12) and on 12/28/2020 (SLS 13). They sampled 12 south and central Delta stations. No Longfin Smelt were detected during SLS 12. SLS 13 collected 3 larvae (Total Length = 7 mm) with yolk sacks intact at station 809 near Jersey Point in the lower San Joaquin River. The standard SLS survey is scheduled to begin 1/11/2021 and will sample the full set of stations.
- Salvage: No Longfin Smelt have been detected at either salvage facility.

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

• SMT estimated X2 using a tool developed by DWR staff that applies the same methodology used to calculate X2 reported on CDEC. There is interest in validating the results of this tool.

Notes: The SMT ITP Risk Assessments can be accessed on the CDFW Water Branch website.

San Francisco Bay Study has delayed January sampling. Spring Kodiak Trawl is schedule to begin 1/5/2021.

Longfin Smelt collected by Chipps Island Trawl are not checked for expression to reduce handling stress prior to transfer to FCCL. The bulk of LFS detections in the upper estuary have occurred during EDSM sampling in Suisun Marsh. EDSM has not reported any LFS that are expressing gametes and many of these fish are near or below the 85 mm FL cutoff typically used to determine maturity. Ripe or post spawn LFS as small as 65 mm have been reported, though they are rare. The SMT will continue to monitor reproductive status to determine if the LFS in Suisun Marsh and Bay are staging pre-spawn or if they are immature fish that will out migrate without spawning this season.

Attachments:

Insert catch reports, PTM results, Salvage tables, etc.

| Study Year | Survey # | SLS Station | Turbidity | Sample Status | Species | Smelt Catch | MinOfL ength | MaxOfL ength | AvgOfLen gth | |
|---------------|----------|----------------|-----------|---------------|---------------|----------------|-----------------|-----------------|-----------------|--------------------------|
| 2020 | | 405 | | Not Sampled | | | | | | 1 |
| 2020 | | 411 | | Not Sampled | | | | | | 1 |
| 2020 | | 418 | | Not Sampled | | | | | | 1 |
| 2020 | | 501 | | Not Sampled | | | | | | 1 |
| 2020 | | 504 | | Not Sampled | | | | | | 1 |
| 2020 | | 508 | | Not Sampled | | | | | | 1 |
| 2020 | | 513 | | Not Sampled | | | | | | 1 |
| 2020 | | 519 | | Not Sampled | | | | | | 1 |
| 2020 | | 520 | | Not Sampled | | | | | | 1 |
| 2020 | | 602 | | Not Sampled | | | | | | 1 |
| 2020 | | 606 | | Not Sampled | | | | | | 1 |
| 2020 | | 609 | | Not Sampled | | | | | | 1 |
| 2020 | | 610 | | Not Sampled | | | | | | 1 |
| 2020 | | 703 | | Not Sampled | | | | | | 1 |
| 2020 | | 704 | | Not Sampled | | | | | | 1 |
| 2020 | | 705 | | Not Sampled | | | | | | 1 |
| 2020 | | 706 | | Not Sampled | | | | | | 1 |
| 2020 | | 707 | | Not Sampled | | | | | | 1 |
| 2020 | | 711 | | Not Sampled | | | | | | 1 |
| 2020 | | 716 | | Not Sampled | | | | | | Barker I |
| 2020 | | 723 | | Not Sampled | | | | | | 1 |
| 2020 | | 801 | | Not Sampled | | | | | | 1 |
| 2020 | | 804 | | Not Sampled | | | | | | 1 |
| 2020 | 13 | 809 | 7.3 | Processed | Longfin Smelt | 3 | 7 | 7 | 7.0 | |
| 2020 | 13 | 812 | 5 | Processed | | No Smelt Catch | | | | |
| 2020 | 13 | 815 | 3.5 | Processed | | No Smelt Catch | | | | ŝ |
| 2020 | 13 | 901 | 5.7 | Processed | | No Smelt Catch | | | | Ť |
| 2020 | 13 | 902 | 2.4 | Processed | | No Smelt Catch | | | | ŝ |
| 2020 | 13 | 906 | 2.4 | Processed | | No Smelt Catch | | | | te i |
| 2020 | 13 | 910 | 4.7 | Processed | | No Smelt Catch | | | | SWP ITP Otteria Stations |
| 2020 | 13 | 912 | 8.9 | Processed | | No Smelt Catch | | | | Ê |
| 2020 | 13 | 914 | 1.8 | Processed | | No Smelt Catch | | | | ₽ |
| 2020 | 13 | 915 | 2.3 | Processed | | No Smelt Catch | | | | S |
| 2020 | 13 | 918 | 2.1 | Processed | | No Smelt Catch | | | | |
| 2020 | 13 | 919 | 3.3 | Processed | | No Smelt Catch | | | | |

Table 1. Longfin Smelt catch per station from 2020 Smelt Larva Survey, Survey 13, which was in the field on 12/28/2020. Longfin Smelt incidental take permit criteria stations are highlighted in blue (Barker Slough Pumping Plant) and yellow (South Delta exports).

*Processing complete