



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 5/14/24 at 9:00 a.m.

Objective

Provide information to the Water Operations Management Team (WOMT), the U.S. Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR) on measures to reduce adverse effects from Delta operations of the Central Valley Project (CVP) and the State Water Project (SWP) on salmonids and green sturgeon. Final versions of the Proposed Action Assessment, and Fish and Water Operations Outlook will be posted to [Reclamation's Delta Monitoring Work Group](#) webpage, while final version of the Meeting Notes will be posted to Reclamation's [Salmon Monitoring Team](#) webpage. Meeting participants include representatives from: California Department of Fish and Wildlife (CDFW), DWR, National Marine Fisheries Service (NMFS), State Water Resources Control Board (SWRCB), Reclamation, and the U.S. Fish and Wildlife Service (USFWS).

Agenda Items

1. Introductions
2. Housekeeping
3. Updates on Water Operations and Biological Conditions
4. Open Discussion on Species Status
5. Live-edit Assessments (Proposed Action Assessment and ITP Risk Assessment)
6. Additional Considerations/Other Topics
7. Next Meeting

Agenda Item 2. Housekeeping

- N/A

Agenda Item 3. Updates on Water Operations and Biological Conditions

- The Fish and Water Operations Outlook document was reviewed. Please refer to the Operations Outlook, PA Assessment, and ITP Risk Assessment documents. All flows and releases, unless otherwise noted, are reported as approximated daily averages.
- An attraction pulse flow is scheduled for Clear Creek from 5/16 – 5/28/24.
- Sacramento River releases from Keswick Dam are 6,000 cfs. Discussions are underway for the possibility of a third pulse flow in late May.

- Sacramento River flows at Freeport were 28,400 cfs on 5/13/24 and will likely decrease through the week.
- San Joaquin River flows at Vernalis were 5,500 cfs and are anticipated to increase this week due to releases from the Tuolumne and Merced rivers.
- The Delta outflow index was 33,000 cfs and will likely decrease through the week as Freeport flows decrease.
- Rio Vista flows were at 24,000 cfs as of 5/14/24 and are expected to decrease through the week.
- QWEST flow values were +8,700 cfs on 5/13/24 and are expected to range this week within +9,500 cfs to +6,000 cfs.
- Maintenance activity at Clifton Court Forebay is scheduled to start on 5/19/24. Dive inspections are scheduled for 5/20/24. The fish facility will be offline from the 5/19 – 5/24/24.
- X2 was at 61 km as of 5/14/24.
- The CVP TFCF facility has maintenance work scheduled for the week of 5/19/24, requiring zero to 3,500 cfs exports from 5/20 – 5/23/24. There will be no salvage outage at the TFCF.
- Reclamation anticipates fulfilling the 2024 IOP obligation of 100 TAF of export curtailment at the end of today, 5/14/24.
- Reclamation will transition off the 2024 IOP obligation beginning on 5/15/24; change orders for exports at Jones Pumping Plant are scheduled to increase to 2,700 cfs on 5/15/24 and to 3,500 cfs on 5/16/24.
- Discussion Questions
 - CDFW asked about any updates on the temporary barriers.
 - DWR responded that Middle River was confirmed to have finished construction on 5/10/24. Currently, work is being conducted on Old River barrier at Tracy. Workers may need to pause construction due to elevated San Joaquin River flows, making the work schedule for Grant Line unclear at this time.
- CDFW asked for clarification on when the 100 TAF will be used up.
 - Reclamation responded that the obligation will be met today, and that there may be more information shared at the 5/15/24 WOMT meeting.
- USFWS asked about receiving updates on the WOMT meeting discussions for the purpose of keeping SaMT members up to date ahead of weekly meetings.
 - Reclamation recommended passing along this request to the agency representatives for WOMT.

- For details on salvage that occurred in the past week please refer to the Operations Outlook, PA Assessment, and ITP Risk Assessment documents. Additionally, all salvage information can be found online at <https://filelib.wildlife.ca.gov/Public/salvage/>.

Actions Currently in Effect

- The Interim Operations Plan (IOP) is currently in effect resulting from a court order issued on 4/1/2024 and in effect until 12/20/2024. Reclamation shall adopt the following provisions of the SWP ITP:
 - 8.5.2 Larval and Juvenile Delta Smelt Protection
 - 8.6.1 Winter-run Single-year Loss Threshold
 - 8.6.2 Early-season Natural Winter-run Chinook Salmon Discrete Daily Loss Threshold
 - 8.6.3 Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold
 - 8.6.4 Daily Spring-run Chinook Salmon Hatchery Surrogate Loss Threshold
 - 8.7 OMR Flexibility During Delta Excess Conditions
 - 8.8 End of OMR Management
- **Delta Cross Channel (DCC) Gate operations (PA 4.10.5.3):** See Outlook and Assessment for more information.
- **ITP Winter-run Single-year Loss Threshold (COA 8.6.1):** DWR and Reclamation will operate Banks Pumping Plant consistent with Condition of Approval 8.6.1 of the ITP. These values are based on the juvenile production estimate (JPE). The final JPE for brood year 2023 natural-origin winter-run Chinook salmon has been estimated at 234,896. The thresholds below are based on the final JPE.
 - The ITP natural-origin Winter-run Single-year Loss Threshold for this year is loss of unclipped length-at-date (LAD) winter-run Chinook salmon from the CVP and SWP greater than or equal to 1.17% of the winter-run Chinook salmon JPE (loss \geq 2,748.28). If 50% of the threshold is exceeded (loss \geq 1,374.14), the required response would be to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss \geq 2,061.21), the required response would be to reach a 14-day average OMR of -2,500 cfs. If 100% of this threshold is exceeded (loss \geq 2,748.28), the required response is to immediately convene SaMT to review recent fish distribution information and operations and provide advice regarding future planned Project operations to minimize subsequent loss during that year.
 - The ITP hatchery-origin Chinook salmon Single-year Loss Threshold for this year is loss of clipped LAD winter-run Chinook salmon from the CVP and SWP greater than or equal to 0.12% of the winter-run Chinook salmon hatchery-origin JPE (loss \geq 232.30). If 50% of the threshold is exceeded (loss \geq 116.15), the required response would be to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss \geq 174.23), the required response would be to reach a 14-day average OMR of -2,500 cfs.

- **ITP Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold (COA 8.6.3):** From 5/1/24 – 5/31/24, DWR and Reclamation will operate Banks Pumping Plant consistent with Condition of Approval 8.6.3 of the ITP. The ITP Daily Loss Threshold for May is loss of older juvenile Chinook salmon from CVP and SWP greater than 0% of the winter-run Chinook salmon JPE. If the threshold is exceeded (loss > 0), the required response would be to reach an OMR of no more negative than -3,500 cfs for five consecutive days. DWR and Reclamation shall restrict exports in response to the initial LAD identification of natural older juvenile Chinook salmon and the thresholds described above. If genetic analysis of an individual natural older juvenile Chinook salmon observed in salvage at the SWP or CVP indicates that it is not a winter-run, that individual shall not count toward the daily loss threshold and continued export restrictions under this COA are not required if the daily loss threshold has consequently not been met.

Weekly Fish and Water Operations Outlook, Current Operations

- SaMT reviewed and updated the Outlook document. The updated Outlook document will be distributed to the SaMT via email by close of business (COB) 5/15/23.
- SaMT discussed Fish Monitoring Gear Efficiency/Disruptions as addressed within the Operations Outlook and updated accordingly.

SaMT Estimates of Fish Distribution

- SaMT estimates of the current distribution of listed Chinook salmon and CCV steelhead, as a percentage of each population, are based on recent monitoring data and historical migration timing patterns. Estimates this week are based on YOY winter-run and YOY spring-run as well as natural origin steelhead at the real-time monitoring locations. These estimates are reported in the final Assessment document, available on the [Delta Monitoring Workgroup](#) webpage.

| Location | Yet to Enter Delta | In the Delta | Exited the Delta past Chipps Island |
|---|------------------------------------|--------------------------------------|--------------------------------------|
| Young-of-year (YOY) winter-run Chinook salmon | Current: 0-1% Last week: 0-1% | Current: 1-10% Last week: 4-20% | Current: 90-98% Last week: 80-95% |
| YOU spring-run Chinook salmon | Current: 5-10% Last week: 5-10% | Current: 20-35% Last week: 30-45% | Current: 60-70% Last week: 50-60% |
| YOY hatchery winter-run Chinook salmon | Current: 0% Last week: 0% | Current: 0% Last week: 0-1% | Current: 100% Last week: 99-100% |
| Natural origin steelhead | Current: 5-15% Last week: 5-15% | Current: 10-30% Last week: 15-35% | Current: 65-75% Last week: 60-70% |

Rationale for Distribution

- Wild winter-run Chinook Salmon
 - No winter-run were observed in the rotary screw traps (RSTs) or monitoring sites in the Delta. However, with water temperatures continuing to warm and seasonal outmigration timing likely to be low for the month of May SaMT members agreed that some winter-run are likely to have exited past Chipps Island. Some SaMT

members preferred a higher range of winter-run that have exited the Delta than others suggested. Some SaMT members thought it was possible that a sparse number of winter-run may still be upstream and have avoided the RSTs thus far due to the low numbers expected in the system at this time. The total in the Delta estimation was decreased to 1-10% and total exited the Delta increased to 90-98%.

- Wild spring-run Chinook Salmon
 - 29 spring-run Chinook salmon were seen at Chipps Island and 12 at the Sacramento Trawl. None were seen in RST's this week. However, due to a hatchery fall-run release from CNFH with only 25% marked from that release group, some of these LAD natural-origin spring-run caught in the Sacramento Trawl and Chipps Island trawl may actually be mistaken for non-clipped hatchery fall-run Chinook salmon. Therefore, SaMT assumed that a portion of the natural-origin spring-run observed at the real-time monitoring sites this week were non-clipped hatchery-origin fall-run. SaMT estimated that the range of fish exited the Delta increased by 10% this week to a total of 60-70% based on seasonal timing and real-time monitoring catch with caution due to the hatchery releases that occurred.
- Hatchery winter-run Chinook Salmon
 - CalFishTrack has not revealed any detections of hatchery winter-run Chinook salmon during the previous few weeks. SaMT estimates that all have exited the Delta at this point in the season.
- Natural-origin Steelhead
 - 1 natural-origin Steelhead was observed at 1 at Chipps Island, as well as some in salvage, however, their numbers tend to taper off at Chipps Island during May. SaMT estimates an additional 5% have migrated past Chipps Island for a total of 65-75% for fish that have exited the Delta.

Agenda Item 4. Open Discussion on Species Status

Salvage Update for 5/6 – 5/12/24

- Salvage and loss totals are detailed in the salvage update shared via email. Please refer to the email for specific figures.
- An older, juvenile length-at-date (LAD) winter-run Chinook salmon seen on 5/7/24 was genetically confirmed to be a late-fall-run Chinook salmon.
- No hatchery-origin Chinook salmon were observed during the reporting period.
- Continuing to see wild length-at-date (LAD) spring-run and fall-run Chinook salmon in salvage.
- Continuing to see wild and hatchery steelhead at both facilities, but numbers of hatchery fish were fewer this week.

Operations

- There were no operational variances or missed counts reported this week.

Agenda Item 5. Live-Edit Assessments

Proposed Action Assessment

- SaMT reviewed and updated the current week's Proposed Action Assessment document. The updated Proposed Action Assessment will be distributed to the SaMT via email by COB 5/15/24. The final assessment will be posted to Reclamation's [Delta Monitoring Workgroup](#) webpage.

ITP Risk Assessment

- The draft ITP Risk Assessment will be distributed on 5/14/24 with comments due COB Friday (5/17/24). A final version will be distributed Friday (5/17/24). Past ITP Risk Assessments can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 6. Additional Considerations/Other Topics

Discussion on Tillotson Model Results for Steelhead Loss

- NMFS asked if there is a Tillotson results table that shows the comparison of Steelhead loss for exports at 900 cfs, 2,700 cfs, and 3,500 cfs.
 - Reclamation confirmed that this is listed in the Natural Origin Steelhead table in the Proposed Action Assessment. That timing/time of year may be more of a factor than exports and OMRI when looking at loss figures. Model runs that alternated exports by facility provided little-to-no change in loss.
 - CDFW added that model outputs also depend on the previous weeks' results, which have been affected by the changes made to the OMRI.

Agenda Item 7. Next Meeting

- The next SaMT Meeting is scheduled for Tuesday, 5/21/24 on Microsoft Teams.