



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 5/21/24 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.
- Sacramento River releases from Keswick Dam increased to 12,000 cfs on 5/21/24. The third, and final, pulse-flow high releases last for four days and will decrease to 7,500 cfs by 5/27.

- Sacramento River flows at Freeport were 21,950 cfs on 5/20/24.
- American River releases from Nimbus Dam decreased to 4,000 cfs on 5/21/24 and are expected to decrease further to 3,500 cfs by 5/23/24 as a result of fill management at Folsom Lake.
- The Delta outflow index was 28,600 cfs and is expected to vary slightly through the week.
- Rio Vista flows were at 18,000 cfs as of 5/20/24 and are expected to decrease through the week.
- QWEST flow values were +10,700 cfs on 5/20/24 and are expected to range this week within that same level to +8,000 cfs.
- Clifton Court Forebay is offline for scheduled maintenance activity from 5/19 – 5/24/24.
- Jones Pumping Plant expects reduced exports partial days from 5/20 – 5/22/24 for scheduled maintenance activities.
- On 5/23/24, Reclamation plans to decrease releases on the American River to 3,500 cfs.
- 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 ≥ 232.30). If 50% of the threshold is exceeded (loss ≥ 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 ≥ 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) 5/22/23.
- 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% Last week: 0-1%	Current: 0-5% Last week: 1-10%	Current: 95-100% Last week: 90-98%
YOU spring-run Chinook salmon	Current: 5-10% Last week: 5-10%	Current: 10-25% Last week: 20-35%	Current: 70-80% Last week: 60-70%
YOY hatchery winter-run Chinook salmon	Current: 0% Last week: 0%	Current: 0% Last week: 0%	Current: 100% Last week: 100%
Natural origin steelhead	Current: 5-10% Last week: 5-15%	Current: 10-25% Last week: 10-30%	Current: 70-80% Last week: 65-75%

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. According to SacPAS historical estimates, SaMT normally sees 98-100% past Chipps Island by this time, including in wetter years. Few are expected to be seen in salvage or in real-time monitoring traps at this point in the year, especially since trap efficiency drops as fish numbers in the system decrease. There were different estimates among SaMT members of winter-run in the Delta: 0-5% versus 1-5%. CDFW mentioned that waiting until temperatures reach lethal limits before incorporating 0% in the Delta would be more appropriate given that it is very difficult to determine with certainty that all WR have exited the Delta with the real-time monitoring stations in the Delta that are used. Ultimately, the total in the Delta estimation was 0-5% to encompass all SaMT member estimations, and total exited the Delta increased to 95-100%.
- Wild spring-run Chinook Salmon
 - Spring-run Chinook salmon were seen at the Sacramento Trawl, Beach Seines and Chipps Island monitoring sites during the previous week. After viewing distribution estimates from prior years, a SaMT member noted that there's never been a year when less than 95% of the cumulative catch of spring-run at Chipps Island has occurred past this date [in May]. However, there are also years when catch occurred through August, which is probably an anomaly for the data calculated on SacPAS, and therefore suggested the group look at historical distributions with that caveat in mind. SaMT estimated that the range of natural-origin spring-run exited the Delta increased by 10% this week to a total of 70-80% based on seasonal timing, SacPAS historical estimates and real-time monitoring catch. The estimation of fish in the Delta was decreased to 10-25%.
- 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 Butte Creek, 1 at the Sacramento Trawl, and 2 at Chipps Island. SaMT estimates an additional 5% have migrated past Chipps Island for a total of 70-80% for fish that have exited the Delta.

Agenda Item 4. Open Discussion on Species Status

Salvage Update for 5/13 – 5/19/24

- Salvage and loss totals are detailed in the salvage update shared via email. Please refer to the email for specific figures.
- No LAD winter-run Chinook salmon were observed in salvage during the reporting period.
- 1 Merced Hatchery-origin fall-run Chinook salmon was collected at the CVP facility on 5/16/24. The salmon was tagged and appears to have swum up the river from Sherman Island.
- Continuing to see wild LAD spring-run and fall-run Chinook salmon in salvage.
- Continuing to see wild and hatchery steelhead in salvage.
- Discussion Questions
 - CDFW asked about the increase of CVP exports during the previous week and if the number of fish observed in salvage increased as a result.
 - CDFW responded that anecdotally, facility staff observed many more Chinook salmon with the increase in exports, but they are hesitant to draw a firm correlation between those data points.

Operations

- There were no operational variances or missed counts reported this week with the exception of the CVP facility that briefly dropped to zero salvage counts on 5/20/24 coinciding with zero exports for maintenance activities; this interruption was not considered to be a salvage outage.

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 5/22/24. 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 5/21/24 with comments due COB Thursday (5/23/24). A final version will be distributed Friday (5/24/24). Past ITP Risk Assessments can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 6. Additional Considerations/Other Topics

Discussion on Proposal of OMRI limitation to -3,500 cfs for Next Week

- CDFW noted that COA 8.6.1 is one of the limiting conditions for OMRI at the moment. Although winter-run are anticipated to be present in the Delta through May in low numbers, there is still a possibility that loss can occur for winter-run in May. Historically, neither LAD nor genetically-confirmed winter-run have been observed past June 1. Therefore, CDFW prefers to keep OMRI at -2,500 cfs through May but believes that an OMRI of -3,500 cfs beginning 6/1/24 would be protective enough for winter-run Chinook salmon.
 - Reclamation shared appreciation for this input as they are attempting to gather various perspectives on the OMRI, which was the reason for sharing this information with advance notice.
- NMFS shared a perspective that included the following points:
 - Agree with CDFW's request to delay the change in OMRI, and there are still a decent number of spring-run Chinook salmon and steelhead in the system, and fish are continually being seen in salvage and exiting Chipps Island at this time.
 - Keeping OMRI at a more positive target through May would be beneficial to all listed species.

Agenda Item 7. Next Meeting

- The next SaMT Meeting is scheduled for Tuesday, 5/28/24 on Microsoft Teams.