BUREAU OF RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 12/12/23 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

- For the SaMT meeting held on 12/26/23, please coordinate with Mia if people are going to be absent and need coverage for various updates.

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.
- Sacramento River flows at Freeport are currently 10,000 cfs and may decrease slightly through the week.

- San Joaquin River flows are approximately 1,200 cfs and are expected to remain at this level.
- QWEST is approximately -3,000 cfs and is expected to remain stable.
- Rio Vista flows are ranging from 7,000 cfs to 7,500 cfs and are expected to remain stable.
- OMR Index is approximately -5,000 cfs and is expected to remain stable.
- 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 on 2/28/2023 and will determine operations for the remainder of calendar year 2023. 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 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) that have not been determined.
    - The ITP natural-origin Winter-run Single-year Loss Threshold for this year is loss of unclipped length-at-date winter-run Chinook salmon from the CVP and SWP greater than or equal to 1.17% of the winter-run Chinook salmon JPE (loss ≥ N/A). If 50% of the threshold is exceeded (loss ≥ N/A), the required response is to reduce SWP exports by its proportional share, according to the coordinated operations agreement (COA), that would be required to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss ≥ N/A), the required response is to reduce SWP exports by its proportional share, according to the COA, that would be required to reach a 14-day average OMR of -2,000 cfs.

- The ITP hatchery-origin Chinook salmon Single-year Loss Threshold for this year is loss of clipped length-at-date 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 ≥ N/A). If 50% of the threshold is exceeded (loss ≥ N/A), the required response is to reduce SWP exports by its proportional share, according to the coordinated operations agreement (COA), that would be required to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss ≥ N/A), the required response is to reduce SWP exports by its proportional share, according to the COA, that would be required to reach a 14-day average OMR of -2,000 cfs.

- **ITP Early-season Natural Winter-run Chinook Salmon Discrete Daily Loss Threshold (COA 8.6.2):** From 11/1/23 – 12/31/23, DWR will operate Banks Pumping Plan consistent with COA 8.6.2 of the ITP. The ITP Daily Loss Threshold for November is loss of older juvenile Chinook salmon from the CVP and SWP equal to or greater than 6 per day. The ITP Daily Loss Threshold for December is loss of older juvenile Chinook salmon from the CVP and SWP equal to or greater than 26 per day. If the threshold is exceeded (loss ≥6, loss ≥26), the required response is to reduce SWP exports by its proportional share, according to the COA, that would reach an OMR no more negative than -5,000 cfs for five consecutive days.

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) 12/13/23.

- SaMT discussed Fish Monitoring Gear Efficiency/Disruptions as addressed within the Operations Outlook and updated accordingly.

- American River Carcass Surveys are currently being conducted. During the previous week, approximately 4,000 carcasses had been observed with spawned female carcasses at 69% and prespawn mortalities at 23%. The season total is approximately 10,700 carcasses. The redd survey was also conducted last week and observed 109 new redds. Water temperatures are averaging 56.1°F. The power bypass is scheduled to conclude once water temperatures reach 56.0°F.

- Stanislaus carcass surveys showed that peak spawning seems to have occurred. 369 redds were observed. A total of approximately 2,248 adult fish have passed through the Stanislaus weir.

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: 95-99% Last week: 96-99%	Current: 1-5% Last week: 1-4%	Current: 0% Last week: 0%
YOY spring-run Chinook salmon	Current: 99-100% Last week: 99-100%	Current: 0-1% Last week: 0-1%	Current: 0% Last week: 0%
YOY hatchery winter-run Chinook salmon	Current: NA Last week: NA	Current: NA Last week: NA	Current: NA Last week: NA
Natural-origin steelhead	Current: 100% Last week: 100%	Current: 0% Last week: 0%	Current: 0% Last week: 0%

Agenda Item 4. Open Discussion on Species Status

Salvage Update for 12/4/23 – 12/10/23

- Salvage of n = 4 white sturgeon at the CVP facility and n = 8 white sturgeon at the SWP facility were collected during the reporting period.
- No salmonids were salvaged during the reporting period.
- The Skinner SWP facility experienced a missed count on 12/6/23 due to an unscheduled flow change.
- Questions
    - What causes an unscheduled flow change?
        - Unable to identify the ultimate cause. When the SWP needs to make a flow change, the SOP is to conduct a fish count at the top of the hour leading up to the flow change. When the change is unscheduled, the operators are not given enough notice to perform a full fish count.

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 12/13/23. 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 12/12/23 with comments due COB Thursday (12/14/23). Past ITP Risk Assessments can be found at CDFW's Water Project Operations webpage.

Agenda Item 6. Additional Considerations/Other Topics

Georgiana Slough Bioacoustic Fish Fence

- Kevin Reece, DWR, provided an update that the Georgiana Slough Bioacoustic Fish Fence (BAFF) is operational as of 12/1/23.
- Reece provided some background information on the project. Around 1994, DWR began experimenting with fish avoidance structures at Georgiana Slough with the objective of reducing fish routing into the interior and south Delta. The current structure being employed is a combination of three fish deterrent measures: a bubble curtain, strobe lights and sound. Effectiveness measures have rated the deterrent methods between approximately 50 – 70%. DWR hopes to reduce entrainment by approximately 50 – 75% and plans to conduct the Georgiana BAFF operations annually during the migration season through 2030.
- Reece will update SaMT on the progress of the acoustic tag studies once data is available.

Agenda Item 7. Next Meeting

- The next SaMT meeting will be held on Tuesday, 12/19/23 on Microsoft Teams.

Action Item

- Kevin Reece, DWR, to share the written study on effectiveness of the BAFF with SaMT members.