

Upper Sacramento Scheduling Team

Flow Smoothing Coordination

Wednesday, November 10, 2021 | 9:00 – 10:00 a.m.

MEETING SUMMARY

Participants

Agency	Attendees
CDFW	Crystal Rigby, Doug Killam, Erica Meyers, Lauren McNabb, Sheena Holley, Vanessa Kollmar
DWR	Kevin Reece, Mike Ford
Kearns & West	Alyson Scurlock, Julie Leimbach
NMFS	Garwin Yip, Stephen Maurano
Reclamation	John Hannon, Mario Manzo, Mike Wright, Raymond Bark, Robin Graber, Suzanne Manugian, Tom Patton
SWRCB	Craig Williams, Matt Holland
SRSC	Mike Deas, Thad Bettner, Wes Walker
USFWS	Bill Poytress, Matt Brown

Action Items

- Doug Killam, CDFW, to provide an update on spring-run and fall-run redd dewatering results after crews remeasure once flows drop to 3,250 cfs.
- Stephen Maurano, NMFS, to consider convening a subgroup of the USST to discuss the potential for updating the 2006 USFWS report by Mark Gard.
- Suzanne Manugian, Reclamation, to reach out to contacts at SacPAS to talk about the potential for streamlining future redd dewatering calculations.
- Reclamation to keep the group updated about any changes to the flow schedule or any other circumstances that arise; convene an ad-hoc USST meeting if anything changes.

Key Discussion Topics with Summary of Perspectives, Outcomes, and Agreements

Meeting Objectives

1. Shared understanding and learning of operations schedule and fish monitoring

Fishery Update on Redds Dewatered

CDFW provided the fishery monitoring update on redds dewatered.

- CDFW is tracking spring-run and fall-run shallow redds primarily located in the upper portion of the Sacramento River.
- Keswick releases are very turbid due to recent rain events which makes marking new shallow redds challenging.

- CDFW crews will remeasure spring-run and fall-run redd dewatering after flows drop to 3,250 cfs on 11/13/21 and will provide an update to the USST on the redd dewatering results.
- CDFW tracked about 60 shallow winter-run Chinook redds this season. All fish from shallow winter-run Chinook redds have had time to emerge; two out of the 60 were top dewatered.

Reclamation recalculated fall-run Chinook dewatering estimates for Alternative J based on the actual flows that occurred since the USST last met on 9/22/21. Alternative J still resulted in an estimated 15% dewatered using actual flows.

Operations Update

Reclamation presented the operations update.

- Reclamation started ramping down flows around 10/20/21 in accordance with the Alternative J flow schedule. Flows slightly deviated from the flow schedule in mid- to late-October; Reclamation held flows at 6,000 cfs for about a week due to an incoming storm. Reclamation has ramped down flows as quickly as possible since 10/27/21. Keswick flows are currently at 3,500 cfs and are scheduled to drop to 3,250 cfs on 11/13/21.
- Shasta Reservoir is gaining storage, the Trinity River is down to minimum flows of 300 cfs, and Clear Creek is releasing 200 cfs.
- The drawdown of Whiskeytown Lake has been normal and is on track to get down to the minimum elevation.

Discussion

2021 Temperature Management Season

- Timing for targeting fall base flows of 3,250 cfs
 - Why is the target for base flows in December? Seems like we would want to drop down to 3,250 cfs as soon as fisheries and agricultural demands have been met to maximize storage going into the next calendar year.
 - Conditions are typically drier in the fall. The Delta usually requires higher flows in October. This year, several big storms helped flush out the Delta, which allowed Reclamation to decrease flow releases from Keswick sooner.
 - In most other years, there is more demand for fall rice decomposition water and water for refuges. Essentially no rice decomposition water was used this fall.
 - Every year is unique. SRSC's contract for fall water ends October 31 so water for rice decomposition is typically used by then. In some years, diversions decrease and then increase again for rice decomposition. Part of the reason for smoothing flows in the fall period is to work with fisheries agencies to target flows that minimize redd dewatering. Some years flows are high due to fishery decisions. Suggestion to dive into these details going forward to understand tradeoffs.

- In year types that are not extremely dry, fisheries agencies prefer higher flows in the fall to support fisheries by creating more spawning habitat and decreasing redd dewatering.
- Stranding issues
 - There has been a lot of stranding this year. CDFW has relocated various species out of high-flow stranding sites and is now focusing on low-flow stranding sites as river flows descend. Fish are being pushed into high-flow stranding sites downstream. There are few tributary inputs upstream of Cow Creek, so adult fish are moving into the tributaries near Redding.

Planning for 2022 Temperature Management Season

- Consider update to the 2006 USFWS Report by Mark Gard
 - Need
 - The report is foundational for stranding, dewatering, and flow ramping rates.
 - The report does not account for the biology of the current river.
 - A lot of the spawning sites identified in the report have migrated to different areas.
 - Updating areas where shallow redds exist could be beneficial for forecasting.
 - Could be helpful to compare the report with actual stranding observations.
 - Proposals
 - Subgroup to revisit the report.
 - Desktop analysis to identify field work necessary for updating the report.
 - Resources
 - Mark Gard works for CDFW now and could potentially serve as a resource for updating.
 - Action Item: Stephen Maurano, NMFS, will discuss internally and potentially convene a subgroup of the USST to discuss updating the report.
- Automate future redd dewatering calculations
 - Need
 - Currently there is a lot of room for error since multiple tools are being operated by different users and data is entered manually.
 - The system is inefficient due to multiple operators' sequential tasks and lack of automation.
 - Objectives
 - Instantaneous dewatering estimates when a flow scenario is entered in one tool.
 - Options
 - Automated open-access solution connected to SacPas.
 - Current flow spreadsheet could be set up to better input data using shiny tool.
 - Action Item: Suzanne Manugian, Reclamation, will reach out to contacts at SacPAS to see if an open-access tool could be developed or if a feature could be added to the SacPAS website.

Constraints on Shasta Reservoir Operations

- Thad Bettner (Bettner) SRSC requested the group consider the constraints of the Coordinated Operating Agreement (COA) on Shasta Reservoir operations for 2021 and future years.
 - Under COA, the State Water Project (SWP) and Central Valley Project (CVP) are operated in conjunction to meet downstream water demands. At the end of the 2021 Temperature Management Season, the SWP owes the CVP around 400 TAF of water. There is uncertainty around how COA will affect the 2022 Temperature Management Season.
 - Bettner suggested broadening the SRTTG conversation to understand the constraints for Shasta operations as a part of the CVP and SWP system and their regulatory agreements. He did not propose any technical analysis for this technical group's development at this time.

Schedule

- Additional USST meetings
 - No additional meetings scheduled for 2021.
 - Flows are anticipated to remain at 3,250 cfs through the winter. Any actions that would require additional flow in the Delta would likely be covered by the Feather River system.
 - Reclamation will keep the group updated if there are any changes.

Next Meeting: For the remainder of 2021, USST meetings will be held on an ad-hoc, as-needed basis. Otherwise, Reclamation will provide updates via email.