



Upper Sacramento Scheduling Team Flow Smoothing Coordination

Tuesday, October 17, 2023, 10–11 a.m.

Meeting Summary

Members Attending

- CDFW: Doug Killam, Erica Meyers, Crystal Rigby
- DWR: John Ford, Kevin Reece
- Kearns & West: Terra Alpaugh, Eva Spiegel
- Reclamation: Elissa Buttermore, Lisa Elliott, Tom Patton,
- NMFS: Stephen Maurano, Garwin Yip, Evan Sawyer
- SWRCB: Claudia Bucheli, Jeff Laird, Craig Williams, Matt Holland
- USFWS: Matt Brown, Jim Earley, Craig Fleming, Bill Poytress

Action Items

- Reclamation (Tom Patton) will manage releases to maintain flows at Wilkins Slough between 4,500 and 5,000 cfs and to protect the remaining winter-run Chinook salmon redds through their emergence after which he will begin to ramp down to winter base flows. He will keep in close contact with Doug Killam to gauge any threats to the remaining winter-run Chinook salmon redds.
- CDFW (Erica Meyers) will convene a subgroup to discuss updating the Gard (2006) fall-run Chinook salmon redd dewatering estimates. NMFS, USFWS, and SWRCB staff have volunteered to participate. Meeting to be scheduled in the next 2-3 weeks. If you would like to join and didn't identify yourself in today's meeting, reach out to Erica or Terra.
- In mid- November, CDFW (Doug Killam) will provide an update on the condition of shallow fall-run Chinook salmon redds and their likelihood of dewatering (i.e., what is a rough % dewatering estimate?)
- Reclamation (Elissa Buttermore) to share the details and registration link for the December 6 SacPAS workshop.

- Reclamation (Elissa Buttermore) to check in with the lead of the draft WY 23 Shasta Storage Rebuilding and Spring Pulse Seasonal Report (recently circulated to LTO Management) to see if it can be shared with the group. [UPDATE: Reclamation has confirmed that the WY 23 Shasta Storage Rebuilding and Spring Pulse Seasonal Report has been approved for sharing internally within each respective agency; each agency's LTO Coordination Team representative should have access to the report.]
- KW to cancel weekly calls with the expectation that information will be shared via email and ad hoc meetings convened as needed. KW to schedule a mid-November meeting to discuss lessons learned from this year and identify processes or tools that could improve USST recommendation-making in future years. [DONE -- scheduled for 11/28]

Operations Update

- Reclamation reported it maintained Keswick reservoir outflows at the KES gauge at 6,100 cfs since 10/6. Wilkins Slough is now at 5,300 cfs and decreasing. In order to maintain Wilkins Slough flows between 4,500 and 5,000 cfs even as diversions increase, flows out of Keswick Dam may need to be increased before they go down to base flows for the winter season.
- Reclamation reported that water temperatures (as measured at CCR) have been moderate with no major fluctuations.
- Reclamation noted that Shasta storage is at 3.24-million-acre feet, which is just below what is needed for flood control on December 1. Shasta Reservoir volume will decrease a bit more because inflow is on the lower side and releases will continue to be made.
- Reclamation will adjust releases based on the target flows of 4,500-5,000 cfs at Wilkins Slough and will coordinate with CDFW on monitoring of winter-run Chinook salmon redds.
- Reclamation plans to ramp down Keswick releases to 5,000 cfs once the last winter-run Chinook salmon redd emerges (estimated 11/1) to minimize dewatering of fall-run Chinook salmon redds later in the year.

Fishery Monitoring Update

- CDFW reported that there were no changes in winter-run Chinook salmon redd dewatering with the same flows being maintained.
- CDFW reported that on October 16, several winter-run Chinook salmon redds emerged. 10 of the 26 shallow winter-run Chinook salmon redds identified at the beginning of the season still have fry in the gravel. While one remaining redd is at 3 inches, it is only in harm's way if flows are under 5,800 cfs. The other remaining redds will be protected unless flows go under 5,000 cfs. These last winter-run Chinook salmon redds are expected to emerge from October 29 to November 1.
- CDFW noted that there is one spring-run Chinook salmon redd at 10 inches that will not emerge for another three months.
- CDFW crews are in the field looking for shallow fall-run Chinook salmon redds.

Flow Scheduling Adaptive Management

- Reclamation reviewed the scenarios and analysis, which is based on October 10 numbers.
- Scenarios 1c and 2e are provided to show the upper and lower bounds of possible flows.
- The group last week discussed that Scenario 3m will likely be the proposed flow schedule: maintain at least 6,100 cfs Keswick release through early November until the last shallow winter-run Chinook salmon redd emerges, and then ramping down in early November to 5,000 cfs.
- Scenario 3r is a refined version of 3m with a more realistic, slightly quicker ramp down projected in November. Scenario 3s shows what would happen if releases need to go above 6,500 cfs in October, closer to 7,000 cfs before ramping down in November.
- Scenario 3m would expect to have 7.4% of fall-run Chinook salmon redds dewatered. Scenario 3r is marginally better and 3s is marginally worse.
- Reclamation confirmed that there are no storms in the forecast that are likely to significantly change flow conditions.
- CDFW proposed and USFWS, NMFS, and Reclamation agreed to continue coordination via email instead of meetings unless conditions change.
- CDFW reached out to Mark Gard to request that he update his fall-run Chinook salmon redd dewatering estimates from his 2006 study to reflect current river conditions. The estimates would provide a useful planning tool for the future. The group decided to form a subgroup to consider an update to Gard (2006); CDFW will schedule a meeting in the coming weeks.
- NMFS voiced interest in having a better estimate of how many fall-run Chinook salmon redds are likely to be dewatered this year. The Gard update will be helpful next year, but there is considerable interest in how fall-run Chinook salmon are being managed and their survival this year.
- CDFW committed to providing an update on how much dewatering is likely based on their best professional judgement by mid-November. At this point, CDFW does not expect a lot of fall-run Chinook salmon redd dewatering given the expected low overall numbers of fall-run Chinook salmon redds this year and the fact that the overall decrease in flows between the beginning of spawning and emergence of the fall-run Chinook salmon redds will be much smaller than other years (e.g., when it can decrease from 7,000 cfs to 3,250 cfs).
- The group agreed to hold a wrap up meeting in November to discuss lessons learned this year and potential process improvements and/or supportive tools they should explore for next season.
- Reclamation informed the group about a SacPAS workshop on December 6. Participants expressed interest; more information and registration details will be sent out to the group in the near future.