

Upper Sacramento Scheduling Team

Fall Flow Reduction Coordination

Tuesday, September 15, 2020 | 10:00 am – 11:30 am

MEETING SUMMARY

Participants

Reclamation	Tom Patton, Natalie Wolder, Josh Israel, Elissa Buttermore, Liz Kiteck, Ben Nelson
USFWS	Jim Earley, Don Ratcliff
NMFS	Flora Cordoleani, Stephen Maurano, Evan Sawyer, Garwin Yip
CDFW	Matt Johnson, Mike Harris, Ken Kundargi
DWR	Kevin Reece, Mike Ford
SWRCB	Diane Riddle, Craig Williams
SRSC	Thad Bettner, Roger Cornwell, Anne Williams
Kearns & West	Terra Alpaugh, Julie Leimbach, Alyson Scurlock

Action Items

- Reclamation – Schedule flow reduction to 6,600 cfs for Friday, Sept. 18 for 6,600 cfs.
- Thad Bettner, SRSC – Will collaborate with USBR on how to smooth flows and shift some demands from October to November, allowing Wilkins flows to be reduced to 3,100 – 3,400 the second two weeks of October.
- Matt Johnson, CDFW – Send online repository of redd distribution
- KW, CDFW, Reclamation – Discuss with CDFW and Reclamation a process for real-time monitoring and adaptation to flow reductions
- KW – Follow up with Reclamation re: cold water pool analysis information to inform USST

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

Meeting Objectives

1. Collaboratively develop flow reduction alternatives that enjoy broad support from USST members
2. Test of support for any immediate changes to flows
3. Test support for any proposed (as relevant) long-term flow Reclamation's changes to flow releases
4. Shared understanding of interests and external conditions for fall flow scheduling

Fisheries Monitoring Update

Matt Johnson, CDFW reported the following fisheries update, referring to the redd survey distributed on 9/10:

- Flows have been steady at 7,000 cfs since 9/8.
- Currently, there are 16 winter-run Chinook redds dewatered.

- Four shallow redds should have emerged this week and there are 20 redds that are estimated to emerge on 10/2.
- Oct. 2 – 20 Estimate for Redds Emergence and Flows
 - Six redds could emerge safely if flows are kept above 6,000 cfs
 - Three redds could emerge safely if flows are kept above 5,500 cfs
 - Two redds could emerge safely if flows are kept above 5,000 cfs.

Perspectives and questions shared by USST members included:

- Past estimates for dewatered redds at identified flows differ from the current estimates for redd dewatering at identified flows.
 - CDFW said that the estimates for redd dewatering will continue to get better resolution with every flow reduction and subsequent redd surveys. CDFW re-measures redds after a 500 cfs or greater flow drop. Re-measuring at 7,000 cfs gave a clear idea of the dewatering flow.

Operations Update

Tom Patton, Reclamation gave an update on operations, reviewed the changes to the Alternatives spreadsheet as follows:

- New Alternatives
 - Alternative 2 to hold flows at 7,000 cfs 9/16 - 10/3
 - Alternative 2a starting with reducing flows to 6,600 cfs the week of 9/16 – 10/3
- New reservoir volume comparison. The estimated volume difference metric is a general metric for how much volume is released and could be used to compare the alternatives and what effects each one might have on the cold water pool.
- New analysis of redd dewatering for winter-run and fall-run Chinook and associated graphs comparing the results of each Alternative.

Perspectives and questions shared by USST members included:

- NMFS asked the group if anyone had a perspective on previous fall-run Chinook dewatering percentages in previous years and if the 8-10% range seemed high or low from previous years.
 - Fall-run Chinook have been fairly low and thinks they've been under 10%.
 - CDFW does not conduct an empirical survey to validate model results due to time, money, and staffing required to get data to compare model results against actual redd dewatering.
 - NMFS said that would be important to look into, but they likely could still make decisions without it.
- CDFW asked if the survey crews look at a reference sample or if they count all the redds?
 - CDFW said it is a problem of geographic scope. CDFW believes field crews have gone all the way downstream to diversion dams to survey the redds.
 - Survey area for winter-run Chinook are in a much smaller area.

- Survey area for fall-run Chinook survey area is based on available staff funding to complete the work. CDFW is looking at doing the Upper Sacramento River where winter-run Chinook is focused.
 - USFWS said there is a redd dewatering project funded by CVPIA that is heavily invested in winter-run Chinook element of dewatering. It is another small, shortly staffed program so there is not an ability to do a whole lot, but there is a funded effort for it.
- SRWCB asked if there was any initial information on size of the run for fall-run Chinook this year.
 - CDFW said they did not think they had resolution on the fall-run Chinook size. They will send Kearns & West a link to an online repository to dewatered redds report to distribute to the USST.

Proposed Alternative

- Reclamation identified Alternatives 2a and 4a as the most favorable alternatives.
 - Alternative 2a
 - 10.4% redds dewatered
 - Almost twice the release volume compared to 4a
 - Alternative 4a –
 - Similar to 2a, increase of 1 more redd dewatered
 - Stays with the outlook for the Temperature Management Plan
- Reclamation proposed Alternative 4a schedule
 - Reduce flows to 6,600 cfs the week of 9/16 – 10/3.
 - Recommendation for CDFW to monitor three redds estimated to emerge 10/2 and if they are at risk of being dewatered at 6,600 cfs, so that Reclamation could fine tune its flow levels up in 100 cfs increments to cover the redds.
 - Monitoring and close communication will be needed to see how closely they can stick to only dewatering 24 redds following Alternative 4a.
 - Reclamation anticipates there will be differences in dewatering risk at 6,000 and 5,000 and will recalculate its analysis as they receive survey results and move forward with Alternative 4a.

Perspectives and questions shared by USST members included:

- NMFS asked about ramping rates
 - The proposed weekly flows are pretty reflective of ramping rates but daily flow rates for October have not been proposed yet.
 - A flow reduction of 1,000 cfs will take 4 days at a minimum at a rate of 200 cfs/night, not more than 100 cfs per hour.
- NMFS confirmed with CDFW that the identified flows dewater the redds; a 100 cfs increase above that flow might cover the redds.
- SWRCB asked for information on the volume of water less than 56°F.
 - The coldwater pool volume does not necessarily correlate to the temperature of the release.

- Kearns & West offered to work to see how the SRTTG coldwater pool analysis could be brought into the Alternatives spreadsheet or information packet for USST.
- CDFW and Reclamation both discussed the importance of fine tuning the flow by 100 cfs up or down in to cover targeted redds estimated to emerge. This could include:
 - Frequent communications between Josh Israel, Reclamation and Matt Johnson, CDFW
 - CDFW could make small modifications of tailspills to give the fry a way out of the shallow redd area.
 - Scheduling for incremental flow increases of 100 cfs to cover redds before emergence.
- SRSC stated that based on the proposed Keswick Release schedule and absent any SRSC flow smoothing, Wilkins flows could be reduced to 3,100 – 3,400 the second two weeks of October. Discussions are occurring with USBR to smooth flows and shift some demands from October to November.

Kearns & West tested for support for Reclamation to reduce Keswick releases to 6,600 cfs starting September 18 – October 2 following the Alternative 4a flow schedule. This reduction will be fine-tuned with 100 cfs flow increases if three redds estimated to emerge in the week of 10/2 are at risk of being uncovered at 6,600 cfs.

- SRSC – yes
- USFWS – yes
- NMFS – yes
- CDFW – yes
- SWRCB – yes
- DWR – yes
- Reclamation - yes

Participants discussed the following schedule:

- Sun, 9/20 - Flow reduction to 6,600 cfs
- Mon-Tues, 9/21-9/22 – CDFW survey
- Wed, 9/23 – distribution of survey, updated forecast at 6,600 cfs
- Fri, 9/25 – Rec add the analysis
- Tues, 9/29 – Next USST meeting
- Fri, 10/2 – proposed next flow reduction

The NMFS and State Board specifically thanked Reclamation for the new analyses of alternatives and their estimated effects on redds.

Next Meeting

The USST members decided to skip next week’s meeting and reconvene on Tuesday, September 29, 2020 at 10:00 am after the redd survey and analysis of estimated redd dewatering is complete. They will consider another flow reduction at that time.