

Upper Sacramento Scheduling Team

Fall Flow Reduction Coordination

Tuesday, September 8, 2020 | 2:00 pm – 3:00 pm

MEETING SUMMARY

Participants

Reclamation	Tom Patton, Natalie Wolder, Randi Field, Josh Israel, Elissa Buttermore
USFWS	Matt Brown, Jim Earley
NMFS	Flora Cordoleani, Stephen Maurano, Evan Sawyer
CDFW	Matt Johnson, Duane Linander
DWR	Kevin Reece, Brett Harvey
SWRCB	Diane Riddle, Matt Holland, Erik Ekdahl, Craig Williams
SRSC	Thad Bettner, Marc VanCamp
Kearns & West	Terra Alpaugh, Julie Leimbach, Alyson Scurlock

Action Items

- USBR to work on developing Alternative 6.
- CDFW to send out updated shallow redd survey data on 9/10.

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

Meeting Objectives

1. Collaboratively developed flow reduction alternatives that enjoy broad support from USST members
2. Weekly test of support for Reclamation's changes to flow releases
3. Shared understanding of interests and external conditions for fall flow scheduling

Fisheries Monitoring Update

CDFW stated that there was a flow reduction to 7,000 cfs in the middle of the night on 9/7. There will be updated data shared in a few days for redds in 6 inches of water or less. CDFW shared that there were 10 dewatered redds during the August 31 – September 2 period when flows were at 7,500 cfs or above. They estimate that 5 additional redds will dewater when flows drop to 7,250 cfs and 3 additional redds will dewater at 7,000 cfs.

CDFW also proposed new timing for when the scheduling team meets to align better with when fisheries data is available after flow changes. CDFW explained that the field crew needs one day to measure the shallowest redds in 6 inches of water or less, and three days to measure all 55 redds still underwater. This three day period will shorten as there are fewer remaining redds. Following field measurements, one day in the office is needed for data entry and validation, and one additional day is needed for the USST to digest the new spreadsheet once they receive it. CDFW stated that the ideal flow change would be scheduled between Friday and Sunday evening, since it takes about 24 hours for the new flow to travel to where the field crew is taking measurements. CDFW suggested that the scheduling team could meet on Thursday or Friday if this schedule is taken into

account.

Perspectives and questions shared by USST members included:

- USBR noted that there is a designated power scheduling that conflicts with CDFW's proposed schedule: CVO schedules Friday and Saturday flow changes on Wednesdays; Sunday and Monday flow changes on Thursday; and Tuesday flow changes on Fridays. They will need to come up with a compromise for trying to get a change order for scheduling power and accommodating monitoring in the field.
- USBR also shared that they have been discouraged from making flow changes on the weekend to avoid field crews working overtime. They encourage trying to find ways to avoid flow changes on the weekends.
- USBR said there is more flexibility in the process now where the timing of flow reductions and magnitude can be planned out, as compared to earlier in the process where more rapid reductions were being made.

Operations Update

USBR provided an overview of the different alternatives for flow reductions at Keswick to minimize dewatering of redds (Alternatives 1, 2, 3, 4, 4a, 5, and the SRSC proposal). The projected flow at Keswick for the first week of September was 7,500 cfs and a cutback was made on 9/7 to 7,000 cfs. USBR stated that flows would be held at 7,000 cfs this week. USBR calculated the cumulative redds dewatered for each alternative over time and added column for that information in the spreadsheet, which is also displayed in a color-coded graph. USBR noted that there are tradeoffs with each alternative. Alternative 4a has the lowest predicted cumulative redds dewatered through October but also has the highest flows.

Perspectives and questions shared by USST members included:

- USBR stated that Alternatives 4, 4a, and 5 have tradeoffs for Chinook Salmon spawning. If flows were maintained at 6,750 cfs or 7,000 cfs in the second week of October, fall-run redd dewatering would increase, and if there were higher flows, temperature management in October could be affected.
 - USFWS asked if the graphs of dewatered redds accounted for the fact that some of those redds would have already emerged prior to the point when they would be dewatered according to these schedules.
 - USBR said the cumulative redds dewatered column includes only the redds that have not emerged because redds that have emerged cannot be dewatered.
- USFWS asked if USBR would be modeling cold water pool impacts for the next season.
 - USBR suggested the modeling impacts exercise was originally going to be done in cases where there was smoothing, but they could revisit it if there is interest.

Kearns & West asked the group for their opinions on the proposed alternatives and flow reductions for the coming weeks. Perspectives and questions shared by USST members included:

- USBR said it is difficult to offer an opinion without knowing how many redds there are and that the lowest number of winter-run Chinook Salmon should be targeted. USBR stated that they are not comfortable with a flow reduction to 6,250 cfs or 6,000 cfs at the end of the week.
- DWR said Alternative 4a has its next flow reduction set at 6,600 cfs with 23 cumulative redds dewatered. The next drop after that to 6,500 cfs reduces to 22 cumulative redds dewatered. DWR is not sure if there is a benefit to dropping flows to 6,500 cfs to provide a little more water for the first couple of weeks in October. They would like to keep conditions as good as they can for as long as they can.

- NMFS said protecting winter-run redds is one of their primary objectives; they are particularly interest in ensuring that the cohort of redds anticipated to emerge on October 2nd is protected. They request that USBR analyze the impacts to cold water pool and carryover storage or other considerations. NMFS reiterated that the cost of dewatering to the winter run population is problematic and that there is a possibility there will be a much higher dewatering percentage this year. NMFS does not think it is a good time to drop below 7,000 cfs.
- NMFS suggested that the group evaluate maintaining flows at 7,000 cfs until October 2nd. Thereafter, they suggested that USBR consider shifting flows as quickly as possibly down to winter base flows to protect the fall run spawning, which would echo the SRSC proposal. NMFS acknowledged that there are other needs that USBR will need to balance. They also shared the following, very general, relationship: in dry years, lack of carryover storage can be very impactful, but in wet years, carryover storage is less important because water is being spilled for flood control ops.
- Kearns & West asked the group if it would be more useful to have the scheduling team meeting after receiving updated survey information.
 - USBR said that it would be helpful for the entire scheduling teams list to have updated survey information at the same time. The question of reducing flow to 6,600 cfs at the end of next week should be talked about early next week. Staying at 7,000 cfs should take into consideration the effects on the cold water pool for the rest of October and the fall-run Chinook Salmon spawning. A lot of these concerns hinge on how close 30 dewatered redds is to 1%. The sooner they can get the estimate of total winter-run redds in order to clarify how many redds constitute 1%, the better.
 - NMFS noted that based on what they know now, the number of dewatered redds could reasonably fall on either side of the 1% of total winter-run redds threshold.
- CDFW will share updated survey information by 9/10. The newly proposed alternative for flows to stay at 7,000 cfs until October 2 can be evaluated in tandem with more with incoming survey data.
 - USBR will work on developing Alternative 6 and adding it to the spreadsheet.
- NMFS asked how depletion amounts in the SRSC proposal were chosen and suggested integrating them into Alternatives 4, 4a, and 5 if they are still under consideration.
- SRSC urged the USST to establish a schedule as soon as possible. The contractors can deal with flows of 5000 cfs but that will necessitate shifting flows into November, which requires permission from USBR and communication with the farmers.

Next Meeting

Tuesday, September 15, 2020 at 10:00 am.