Upper Sacramento Scheduling Team

Flow Smoothing Coordination

Tuesday, October 3, 2023, 3-4 p.m.

Meeting Summary

Members Attending

- CDFW: Tracy Grimes, Doug Killam, Erica Meyers
- DWR: Kevin Reece
- Kearns & West: Terra Alpaugh, Victoria Pebbles
- Reclamation: Elissa Buttermore, Lisa Elliott, Tom Patton, Elizabeth Kiteck, Derek Rupert, Emily Van Seeters, Mario Manzo
- NMFS: Stephen Maurano
- SWRCB: Jeff Laird, Craig Williams
- SRSC: Anne Williams
- USFWS: Matt Brown, Jim Earley, Bill Poytress

Action Items

- Reclamation will reduce flows starting Friday October 6, from 6,400 cfs to 6,100 cfs, keeping a close eye on downstream effects.
- Reclamation will develop an additional scenario that reflects the shifting of 400 to 500 cfs of rice decomp demand to November and analyze the impacts of that scenario with specific focus on impacts to fall-run Chinook salmon redd dewatering.
- Reclamation will consult internally to get more information about contract timing and process that would be needed to accommodate a delay in diversions for rice decomposition.
- The USST group decided to return to the 10-11 am timeslot on Tuesdays as the regular schedule for these meetings.

Fisheries Update

Doug Killam reported out on behalf of CDFW. Key points follow:

- The recent flow reduction resulted in the shallow water winter-run Chinook redd under Market Street Bridge being dewatered just below 6,400 cfs. The other three redds in 4 inches of water discussed last week are not expected to be dewatered above 6,000 cfs. Those redds are anticipated to emerge October 9th, 16th, and 29th.
- Three redds total have been dewatered this season so far.
- An additional three redds emerged last week. No additional redds are anticipated to emerge until mid-month.
- The updated shallow redds Excel file will be distributed tomorrow.
- Fall-run Chinook salmon are showing up in Mill Creek and the Sacramento River.
- Preliminary winter-run Chinook salmon analysis shows 1,000 female spawners in the Sacramento River this year. Previous projections of this year's expansion factor were a 3-fold increase over the 340 spawning females counted, so the current analysis is very close to those estimates. Based on the 1,000 female spawner calculation, a loss of 1% of the population would be 10 redds.

Reclamation Operations Update

Tom Patton of Reclamation provided an operations update. Key points follow:

- The Sacramento River flow at Keswick is 6,400 cfs; at Wilkins Slough is at 6,200 cfs and fairly steady.
- SRSC diversions for rice decomposition usage are starting and will peak later in October. Peak usage around 2,000 cfs is expected.
- No big storms are predicted in the near term. The weather looks to be dry and warm for the next couple weeks with some cooling, but no big precipitation events expected.
- Continuing to operate for fall X2 in October, so there are no big changes in Delta needs.

Adaptive Management of Alternatives

- The group discussed possible modifications to the flow schedule with an emphasis on what changes could be made to benefit fall-run Chinook salmon.
- Reclamation noted that they could reduce flows now from Keswick, but with anticipated water user needs for rice decomposition rising shortly, that reduced flow could be brief. Flows needed to support rice decomposition needs and leave enough water in the river for downstream users and the Delta are anticipated to be about 6,400 to 6,500 cfs at Keswick—close to current flows – which would result in flows of about 4,400 cfs at Wilkins Slough.
- There is a possibility that some diversions for rice decomposition could be delayed into November (up to 700 cfs, but more likely 400-500 cfs) which could reduce the peak

demand in October. Water user contracts would need to be adjusted to allow that delay. The reduction in withdrawals in October would reduce the overall peak diversion of 2,000 cfs by 400 or 500 cfs so that peak October diversions would be 1,500 or 1,600 cfs. However, that withheld amount would then be added to November diversions, increasing flows during that period; flows would likely need to remain around 5,500 cfs during the first half of the November, rather than falling more quickly to baseflows of 5,000 cfs. This could result in greater fall-run Chinook salmon redd dewatering during that time.

- Reclamation stressed that weather, specifically precipitation, is a large unknown: if precipitation is low this fall and winter, it could require dropping baseflows from 5,000 cfs to 4,000 cfs or even 3,250 cfs (worse case) to conserve water in the spring. This would have a big impact on fall-run Chinook salmon redds.

- The group outlined the three basic options: keeping flows the same through October (~6,400 cfs); reducing flows to ~6,100 cfs and then increasing them back up to meet diverters needs in mid-October and then reducing them in November; or shifting 400 to 500 cfs of decomp demand into November, thereby allowing a reduction of flows in October but necessitating higher flows than normal in November.

- CDFW asked to better understand the tradeoffs for these different scenarios on fall-run Chinook salmon scenarios. They pointed out that the first two scenarios as represented by Alternatives 3l and 3m in Reclamation's spreadsheet result in similar dewatering of fall-run Chinook salmon redds (7.5% and 7.4% respectively), but that there is not yet a scenario that reflects the third option shifting flows and analyzing its impacts.

- CDFW emphasized that there isn't enough information to show whether delaying rice decomposition diversions to November would have a benefit for fall-run Chinook salmon redds.

- The group requested additional scenario analysis to provide greater insight into the impacts of delaying some diversions for rice decomposition into November on overall fall-run Chinook salmon dewatering.

- SRCS indicated their interest and desire to help by delaying diversions if there are resulting improvements to fish but also noted that Reclamation may need to develop an EA or similar environmental analysis for the flow modification and that timing is tight since it is already October. A decision is needed soon because significant coordination would be required with Reclamation, including modification of water user contracts. No one from Reclamation was present to advise on contracting timing or process.

- Reclamation agreed to a) run additional analysis that simulates the changes in flows discussed today with specific focus on impacts to fall-run Chinook salmon redds, and; b) consult internally to get more information about contract timing and process that would be needed if some flows were shifted into November and to bring this information back to the team next week for further discussion.

- Additional discussion ensued on whether to reduce flows now to 6,100 cfs. Friday (October 6, 2023) is the soonest Reclamation could initiate the flow reduction. Discussion focused on whether and how flow reductions now might impact winter- and

fall-run Chinook salmon redds, the importance of minimizing those impacts, and tradeoffs between the two. The elevated river flows projected for the coming weeks are anticipated to reduce winter-run Chinook salmon redd dewatering and increase fall-run Chinook salmon redd dewatering, but they are a result of other demands in the systems, not requested increases for fisheries purposes.

- Reclamation biologists suggested they reduce to 6,100 or 6,200 cfs now: staying above 6,000 cfs would provide a buffer against dewatering additional winter-run Chinook salmon redds, but the reduction in flows might help induce the 19% of fall-run anticipated to spawn in the next two weeks to do so at lower elevations less likely to be dewatered later. It would also represent a modest water savings in terms of overall releases from Shasta.
- CDFW noted that the change in stage from that small of a flow change is unlikely to provide much protection to fall-run Chinook salmon redds against future dewatering.
- NMFS supported pursuing water savings if reductions will not hurt winter-run Chinook salmon redds and could provide a minor benefit to fall-run Chinook salmon redds.
- Ultimately, Reclamation, NMFS, USFWS, DWR, and CDFW voiced support for reducing flows to 6,100 cfs with the intent of ensuring that as few fall-run Chinook salmon redds are built at higher flows as possible.
- SRSC asked Reclamation if they have any concerns about being able to increase flows in time to meet diverters' demand in the middle of the month. Reclamation did not have significant concerns and reassured SRSC that they will be monitoring conditions in real time and will ramp back up as needed (even if it is out of step with USST meetings).

Timing of Meeting

- This group used to meet from 10-11 am on Tuesdays. The group considered whether to move to 3-4 pm or to revert to the original 10-11 am time. After considering potential conflicts and whether adequate agency representation could be ensured, the group decided to return to the 10-11 am timeslot on Tuesdays.