

Upper Sacramento Scheduling Team

Fall Flow Reduction Coordination

Tuesday, October 13, 2020 | 10:00 am – 11:00 am

MEETING SUMMARY

Participants

Reclamation	Tom Patton, Josh Israel, Elissa Buttermore, Liz Kiteck, Natalie Wolder, Janice Pinero, Ben Nelson
USFWS	Jim Earley
NMFS	Flora Cordoleani, Stephen Maurano, Evan Sawyer
CDFW	Doug Killam, Duane Linander
DWR	Kevin Reece, Mike Ford, Brett Harvey
SWRCB	Diane Riddle, Matt Holland, Michael Macon
SRSC	Thad Bettner, Anne Williams, Roger Cornwell
Kearns & West	Terra Alpaugh, Julie Leimbach, Alyson Scurlock

Action Items

- Reclamation to evaluate whether an additional 200 cfs flow cut (from 5,000 to 4,800 cfs) after 10/20 is feasible, given downstream needs, including flows at Rio Vista and SRSC's 4,000 cfs threshold.
- CDFW to report back to the USST if they are in support of the cutting flows to 5,000 cfs on 10/20 and making an additional 200 cfs cut if conditions allow.
- Reclamation/SRSC to finalize their contracting process and report back to the USST if any depletion estimates change from the current spreadsheet.

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 long-term changes to flow releases
4. Shared understanding of interests and external conditions for fall flow scheduling

Spring Flows and Schedule Update

Kearns & West will schedule the first meeting for the Spring Flows subgroup on 10/20 during the USST meeting time. The Spring Flows subgroup is a smaller group of the USST that will focus on drafting the Spring Flows Study Plan, which includes a Fish Monitoring Plan. Draft materials will be brought back for USST members to review and provide input. Kearns & West and Reclamation are proposing that the USST meets every other week going forward as the group has established a fairly set path and a biweekly USST meeting aligns with the schedule for flow reductions.

Fisheries Monitoring Update

Doug Killam, CDFW, said this is a period of peak migration. Tributaries can hold thousands of fish, and peak migration into tributaries has occurred around 10/10 in past years. Fish are entering Battle Creek, Clear Creek, and some of the tributaries, but there is not much activity this year. He explained that there are very low flows this year in the tributaries, which is likely hindering migration into those reaches. Fish may spawn in the mainstem if there are continued high temperatures and no rainfall, which could lead to high mortality. The fish will try to hold off spawning for weeks if water temperatures are really warm.

Killam provided the following fisheries monitoring update as of 10/9:

- 65 shallow redds are being tracked in 2020
 - 32 out of 65 redds have emerged successfully
 - 23 out of 65 redds were deemed dewatered
 - 10 out of 65 redds remain active
 - 7 of the 10 active redds are in six inches of water or less
 - If Alternative 6a is followed, 3 redds that are estimated to emerge on 10/30 would dewater when flows start to drop to 5,000 cfs on 10/16.

Perspectives and questions shared by USST members included:

- Reclamation thanked CDFW for the updated information and pointed out the yellow highlighted box in the spreadsheet that says “There is opportunity to increase survival by modifying some of these current top dewatered redds. Projected future flow drops and the short length of time remaining to emergence may aid fry emergence from redds recently top dewatered.” Reclamation asked if this was still the case.
 - CDFW said that they started making modifications on 10/9. They modified six dewatered redds that had water running over them and saw live fry on one of the redds. They have seen live fry coming out of dewatered redds in previous years, so they are giving it a shot this year. They are not modifying redds that are threatened to be dewatered currently.
 - Reclamation asked if there was a way to indicate which redds were modified in the spreadsheet, such as by using an asterisk, or if modified redds were being recorded in a separate spreadsheet.
 - CDFW said that the crew is taking good notes and has specific redd numbers for which ones are being dewatered.
 - Kearns & West asked CDFW if that they wanted to share their findings on modified redds with the USST.
 - CDFW said that they are not doing any focused research on the modified redds as their field staff is only two people. They can describe the process and resulting flow over redds and any observations that they see during the 5-10 minute process where they are kneeling next to the top dewatered part of the redd. When they move a couple inches of rocks out of the way, they are able to see fry coming up and moving out.

- NMFS asked if the redds that they were concerned about when the flow dropped to 6,000 cfs on 10/9 (#9143 and #9144) emerged okay.
 - CDFW said that they were dewatered upon measuring but were at their expiration date. This was the first time this calculation had been done on this close of a basis, so CDFW had to make a judgement call if the dewatered date referred to 12:00 p.m. on 10/9 or midnight on 10/10. CDFW called them expired and stated that they essentially emerged okay at the time of measuring on 10/9.

Operations Update

Reclamation provided the following operations update:

- Flows were dropped to 6,000 cfs on 10/9 and are currently being held there.
- Following Alternative 6a, flows are planned to start ramping down to 5,000 cfs by 10/20.
 - The first cuts would be to 5,800 cfs on 10/16 and 5,600 cfs on 10/17.
 - Since we are in the 6,000 cfs flow range and below, flow cuts will not exceed 200 cfs per day and 100 cfs per hour. There is room for adjustments in the daily flow schedule.
 - The flow drops on 10/16 and 10/17 would both be scheduled on 10/14.
- They are keeping an eye on downstream conditions in the Delta and Rio Vista where the flows are very low and are dependent on depletions and accretions.
 - Updated flow estimates from SRSC are slightly lower than before.
 - Flows at Wilkins Slough are holding around 4,500 cfs.
- Winter-run dewatering estimates have been updated in the spreadsheet and there have been no changes in fall-run dewatering estimates.

Perspectives and questions shared by USST members included:

- NMFS asked Reclamation how much the flows at Keswick can be dialed in to still allow for SRSC flows to stay above 4,000 cfs. NMFS suggested that there may be an opportunity to decrease flows further by a couple of hundred cfs after 10/16 to get flows stabilized for fall-run. Dropping flows to 4,800 cfs or 4,500 cfs seem to be safe for dewatering.
 - Reclamation said that there is a downstream flow requirement at Rio Vista of 4,000 cfs and an outflow requirement in the Delta of 4,000 cfs in October and 4,500 cfs in November this year. They can use pumping to help with outflow in the Delta, but they do not have that option for Rio Vista. Reclamation noted that they are closing the cross channel gates from 10/13-10/17 to help with a Mokelumne pulse flow and to help keep flows in the main channel and boost Rio Vista flows. They will reevaluate the effect on water quality from closing the gates and potentially close them again the week of 10/19. If water quality and the modeling look good, Reclamation can look at the potential for cutting flows an additional 200 cfs down to 4,800 cfs at Keswick. Reclamation can evaluate all of the factors and submit a change order on 10/19 for a 200 cfs flow drop on 10/21.
 - NMFS highlighted that we are in a period for fall-run where time is of the essence.

- Reclamation offered to correspond over email for changing the flow schedule outside of the USST meetings since they would need to make changes before the group met again.
- NMFS said that they appreciate understanding the dynamics at Rio Vista better going forward. NMFS was unsure if decreasing Wilkins Slough flows down to 4,000 cfs was already stressing the intakes and wanted to know if 4,000 cfs was the minimum for flows.
- SRSC said that 4,000 cfs is generally okay for diversions but any lower than that usually causes problems during this time of year. Their demand has been lower due to smoke delaying harvests. SRSC initially planned for contractors to take more water in October, but that did not happen in the first couple of weeks. Currently, demands with depletions are starting to ramp up a little bit and then hold through the end of the month. SRSC thinks the depletion estimates in the spreadsheet are relatively accurate and that 200 cfs is noise, but it depends on the natural accretions in the system and other depletions.
- NMFS said that they appreciate Reclamation's offer to evaluate water quality and see if there are options for further cuts.

Kearns & West tested for support for dropping flows to 5,000 cfs by 10/20 (following the Alternative 6a schedule) and evaluating if a further cut can 4,800 cfs can be made on 10/21.

- NMFS is supportive of the flow schedule and Reclamation's evaluation if further cuts can be made to stabilize flows for fall-run.
- USFWS said that they think it sounds like a good idea if it helps to reduce impacts to fall-run.
- CDFW said that they do not see a problem with this but would need to defer to their Region 1 staff. CDFW asked Reclamation if they expect the limiting flow to be at Wilkins Slough or Rio Vista when they reevaluate.
 - Reclamation said it is hard to say, but they think it will be the flows at Rio Vista that will be limiting.
 - CDFW voiced concern that reduced flows in the Sacramento would increase demand out of Folsom and asked if that option would be considered.
 - Reclamation said that any issues in the Delta would be handled with export cuts and operation of cross channel gates. They do not want to increase flows during this time of year, so increasing flows out of Folsom would be the very last option.
 - CDFW will talk internally and report back to the USST.
- DWR is supportive of the flow schedule and understands the balance of Wilkins Slough needs. Closing the cross channel gates could have an effect on water quality in the South Delta, even if there is a benefit to Rio Vista, so they hope to not run into that.
- SRSC said that they are tentative because they have not finished their contracting process with Reclamation regarding letters and scheduling for water in October and November. They can decide if they are in support if their contracting process with Reclamation is finalized this week.

- Kearns & West clarified that a flow drop on 10/16 would need to be scheduled on 10/14.
- SRSC said that they have sent their proposal and depletion numbers over to Reclamation and they are just waiting for everything to be finalized.
- Reclamation said that if the numbers are the same ones in the spreadsheet, they should be good. Reclamation can schedule the flow drop and cancel it as a worst case scenario.
- SRSC and Reclamation will work offline to finalize their contracting process.
- SWRCB said that they were not clear if the depletion estimates were up to date in the new spreadsheet. They do not see any concerns with the proposed path forward.
 - Reclamation said that the depletion estimates in the spreadsheet were received on 10/9, so they should be the latest numbers. If the numbers do change while SRSC and Reclamation finalizes their contracting process, Reclamation will update the spreadsheet and inform the USST.

Next Meeting

The Spring Flows subgroup will meet from 10:00-11:00 a.m. on 10/20 and the USST will meet from 11:00-11:30 a.m.

Post Meeting Follow Up

After the USST on 10/13, CDFW stated their support for the additional flow reduction to 4,800 cfs versus the 5,000 cfs previously agreed upon for the purpose of minimizing potential fall-run Chinook salmon redd dewatering that may be a result of winter Shasta and Keswick operations. Additionally, Reclamation shared that water quality in the Delta indicates that the cross channel gates can be closed again the week of 10/19 to support another Mokelumne River pulse flow and Rio Vista flows. Reclamation stated that it looks promising to make an additional cut to 4,800 cfs.