

Upper Sacramento Scheduling Team

Fall Flow Reduction Coordination

Wednesday, September 23, 2020 | 11:00 am – 12:00 pm

MEETING SUMMARY

Participants

Reclamation	Natalie Wolder, Josh Israel, Elissa Buttermore, Randi Field
USFWS	Jim Earley, Matt Brown
NMFS	Stephen Maurano, Evan Sawyer, Garwin Yip
CDFW	Matt Johnson, Mike Harris, Ken Kundargi
DWR	Mike Ford
SWRCB	Diane Riddle, Craig Williams, Michael Macon
SRSC	Thad Bettner, Roger Cornwell
Kearns & West	Terra Alpaugh, Julie Leimbach, Alyson Scurlock

Action Items

- USBR to update spreadsheet and send out on 9/25.
- USBR to discuss Alternative 6 internally.
- CDFW to check with Doug Killam on preliminary estimates.
- USBR and CDFW to continue discussion with Pacific State on monitoring and modification of redds and contracting for next season.

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

General Updates

USBR presented recent survey updates from Pacific States' field crews, collected after the decision was made to proceed with the Alternative 4a schedule at the last USST meeting on 9/15. Alternative 4a was scheduled to reduce flows at Keswick to 6,600 cfs to preserve two redds estimated to dewater at 6,500 cfs. USBR shared that the two redds estimated to dewater at 6,500 cfs were actually dewatered at 6,800 cfs, which is 300 cfs higher than what was estimated. Surveys were not as efficient as they needed to be, and Pacific States' field crews were not working Friday. USBR, CDFW, and Pacific States met to discuss how to have more efficient communication and how to modify Pacific States' schedule. They also discussed ensuring that good geographic records of redds are maintained in case another field crew needed to support in the future to avoid this from happening again.

USBR explained that they were notified of mechanical issues at their facility with the flow metering system shortly following the change order to reduce flows to 6,600 cfs at Keswick starting on 9/18. USBR was very aware of the risks and concerns with dewatering redds and consciously buffered their flows to ensure they did not drop too low. The resulting flows were 6,800 cfs and a change order has been made to hold flows there.

Perspectives and questions shared by USST members included:

- USFWS asked if USBR's understanding of the uncertainty around the estimated dewater flows in the spreadsheet have changed given the most recent data.
 - USBR displayed three new columns added to the spreadsheet to try to analyze this. These columns analyze consistency in redd dewatering by comparing previous forecasts and actual depths reduced during the most recent flow change. For a change of 500 cfs, they calculated an average depth change of 2.5 inches for the redds at risk of dewatering. USBR is concerned with any redds currently in one inch of water.
 - CDFW noted that any redds in two inches of water or less when flows changes are implemented are potentially in jeopardy. Each flow drop and subsequent remeasuring is demonstrating that their ability to forecast the impacts of incremental flow changes is limited. The drop to 6,800 cfs was about a three percent reduction of flows across a large river.
- NMFS clarified that if any part of a redd is exposed to air, it is considered dewatered and suggested that it will be a challenge to identify the extent of dewatering within partially exposed redds. Even if part of a redd has been dewatered, the eggs might not be dead and might still have a chance to emerge safely.
- USFWS said that Doug talked about the potential for some of the redds to benefit from slight modification and asked the USST's opinions on taking that action.
 - USBR noted that the purpose of meeting with Pacific States was to ensure everyone is on the same page. It was an opportunity for Pacific States to learn how the USST is using their information and they want to provide useful information. USBR suggested that it does not hurt to have modification of redds that have their top out of the water but is not sure if there is a permitting issue.
 - CDFW said they have take coverage for redd modification and the field crews operate under that permit. Pacific States can go out and do modification under guidance from CDFW.
 - NMFS suggested that redd modification should be viewed as more of a band aid than a tool.
 - SWRCB said that they defer to the fish agencies and have no concerns.
 - USFWS concurs with SWRCB, NMFS, and CDFW.
- NMFS asked if any excavation takes place or if the modification of the redds is purely to allow the eggs to emerge, i.e., initial mitigation.
 - CDFW said it does mitigation; excavation is only done in the case where the egg pot has become dewatered to look at the loss. CDFW thinks both will be done this year.
 - CDFW stressed that they do not want to modify redds in order to justify a flow drop but will implement modifications to better support their survival in real time.
- SWRCB asked if Pacific States conducts this work on a normal basis.
 - USFWS said that Pacific States have been contracted over the last 10 years to do investigations into USBR operations. They have been the sole contract holders under guidance from CDFW.

- SWRCB asked if there is additional data they could be collecting while doing the surveys that could help develop better tools for future years to predict dewatering. SWRCB would be interested in helping support that contractually; they are currently working on contractual issues with CDFW.
- USFWS indicated that they talked with USBR about that. If the study is expanded to meet more needs, the budget and staffing requirements will need to be evaluated. This year is limited with what the field crews can do now. The expanded budget and scope would be for next season or beyond as the current funding goes through next year.
- USFWS said that this started out as a pilot-study with Pacific States to look at impacts of flow actions that were causing fish stranding and now it has expanded to support USBR's need to identify impacts on a real-time basis. USFWS is trying to figure out who the responsible party should be for this project. If requests are coming from CVO operations, maybe the funding should come from somewhere else than CVPIA.

Alternatives Spreadsheet

SRSC shared concerns about Alternatives 1-5 in the spreadsheet, all of which have flows lower than 4,000 cfs for at least part of October. SRSC explained that Wilkins Slough flows should be at 4,000 cfs or higher and that their facilities were actually designed at 5,000 cfs. SRSC pointed to Alternative 4a, the focus of recent USST discussions, explaining that the depletion numbers assume water is not being moved into November; the alternative does not implement smoothing of Wilkins Slough flows. The final proposal either needs to fix the issue of too low of flows at Wilkins Slough, or needs to shift diversions into November. Alternative 6 includes flow smoothing and moving water and is the product of significant coordination with districts and landowners to coordinate diversion. SRSC needs to know if Alternative 6 is not the chosen schedule as they need to communicate with their boards, landowners, and habitat lands about when they will get their water/whether smoothing will occur.

USBR explained that the alternatives spreadsheet has been growing and some housekeeping is needed to keep the spreadsheet in a useable and efficient format. Alternatives that are no longer being used should be hidden in the spreadsheet to streamline the process. USBR noted that Alternative 6 has been modified with the recent addition of SRSC's schedule and that there will likely be a revision or addition of a new alternative due to the new information presented. USBR asked the group for input on which alternatives should be kept in the spreadsheet.

Perspectives and questions shared by USST members included:

- USFWS noted that Alternative 6 looks the same as Alternative 4a in terms of releases out of Keswick until November.
 - SRSC said the difference is in the depletion numbers.
 - USFWS asked what it takes to implement smoothing in that schedule.
 - SRSC said that they are working with USBR and have everything in place to make that happen. The schedule just needs to be finalized so they can notify the landowners accordingly.

- USFWS suggested Alternatives 4a and 6 as the front runners. USFWS asked if there were any objections about implementing smoothing. If there are no objections, Alternative 6 should only be considered.
 - NMFS said that Alternative 2a should be off the table and that they support smoothing.
 - CDFW said they are a proponent of smoothing and shared that crews are already seeing a new run starting to spawn in the river. CDFW is trying to schedule aerial red flights next week.
 - USBR stated that they have not been briefed on Alternative 6 and cannot speak to it. USBR will discuss Alternative 6 with their team.
 - SWRCB stated that they support the fisheries agencies perspective on smoothing.
 - DWR said smoothing is fine.
 - SRSC is in support.
- NMFS asked for analysis on whether the down ramping rates need to implement Alternative 6 will be feasible. NMFS would like to see the proposal at daily intervals to better assess where the USST can avoid dewatering of further winter run. They are also interested in analysis of how to best avoid dewatering fall run in the late October. They are eager to see optimization as USBR looks at the proposal more closely.
 - Kearns & West noted that down ramping rates, weekly intervals vs. daily, and fall run dewatering in October period in terms of Wilkins slough flow and the 4000 cfs boundary for diversions will be on the agenda for the next meeting.
- USBR said that they are still waiting on preliminary estimates for number of redds and that it is getting hard to make decisions. The group had previously discussed receiving these estimates in September.
 - CDFW will check with Doug. They are shooting for the end of September to have the data available.
- USFWS asked if there are additional alternatives that further reduce winter run redd dewatering.
 - USBR suggested Alternative 4b in the spreadsheet.
- USBR will send out an updated spreadsheet on 9/25 and will preserve Alternatives 4a, 4b, and 6.

Next Meeting

Tuesday, September 29 at 10:00 am.