



Upper Sacramento Scheduling Team, Flow Smoothing Coordination

Thursday, August 8, 2023, 10–11 a.m.

Meeting Summary

Members Attending

- CDFW: Erica Meyers, Tracy Grimes
- DWR: Kevin Reece, Mike Ford
- Kearns & West: Eva Spiegel, Terra Alpaugh
- Reclamation: Elissa Buttermore, Emelia Barnum, Lisa Elliot, Tom Patton
- NMFS: Evan Sawyer, Garwin Yip
- NMFS, SWFSC: Eric Danner
- SWRCB: Craig Williams, Jeff Laird, Michael Macon
- SRSC: Anne Williams, Lewis Bair, Mike Deas, Thad Bettner, Yuen Lenh
- USFWS: Bill Poytress, Craig Flemming, Jeff Beauchamp, Jim Earley, Matt Brown, Michael Derrico, Patricia Bratcher
- Yurok Tribe: Chris Laskodi

Action Items

- Kearns & West will update the Interests & Constraints Spreadsheet
- Reclamation (Tom Patton) will extend the Alternative Spreadsheet through February to reflect flows and fish.
- Reclamation (Tom Patton) will provide the August forecast at the August 22, 2023 meeting.
- Reclamation (Tom Patton) will contact ACID to request information regarding the timing of diversion dam removal.
- SRSC (Anne Williams and Thad Bettner) will secure additional information regarding diversion numbers and timing for both agricultural needs and refuges.

Fishery Monitoring Update

The fishery monitoring update included information provided by Doug Killam from CDFW (reported to the group by Terra Alpaugh of Kearns & West) and Reclamation.

CDFW provided the following information and referred to the spreadsheet titled “WR INTERNET CARCASS-REDDS count 8-1-23,” distributed as part of the meeting materials.

- To date, there are 26 shallow winter-run Chinook salmon redds are being tracked. Relevant data are in the spreadsheet under the “Shallow Redd” tab. The expected date of emergence for redds is provided in column D of that tab.
- CDFW has also posted the spreadsheet online at CDFW Upper Sacramento River Basin Salmonid Monitoring

Reclamation provided information for the fishery update:

- Higher flows during the summer this year means redds were laid at higher elevations, which may result in more redd dewatering than has occurred in the past few years. Higher flows could result in redd dewatering at 8,250 cfs.
- The last emergence from the shallow winter-run Chinook salmon redds is projected to be October 31.

July Forecast & Anticipated Fall Flow Transitions

Tom Patton, Reclamation, reported on current conditions, including:

- There is more water in the system than is needed at present; releases are being planned to lower reservoir levels for flood control in the upcoming season.
- Current flows out of Keswick Dam are 10,500 cfs.
- Storage at Shasta Reservoir is high; releases are being planned to target 5,000 cfs at Wilkins Slough to meet Delta standards and maximize pumping. Plans are to base ongoing releases on downstream conditions, making sure there is enough flow for all diversions and needs in the Delta.
- Diversion from Trinity side is 1,000-acre feet per day, which is enough to keep Lewiston cool and Whiskeytown at the maximum summer level.

Tom reviewed a spreadsheet titled “Alternatives,” in which he used the July forecast to illustrate two possible flow alternatives, one based on the 50% forecast and one on the 90%. These numbers will be refined in future USST meetings; existing redds data have not yet been added to the spreadsheet. Tom anticipates that flows will be higher than recent years given precipitation last season and the high Shasta storage.

Keswick estimates, which are currently represented as monthly averages in the spreadsheet, are:

- August releases may be higher than 9,000 cfs.
- September releases may be 6,500–7,000 cfs.
- October releases will drop to 5,250–6,000 cfs.

- November releases in the 50% exceedance forecast call for flows at 5,000 cfs.
- Winter flows into January could be more than 5,000 cfs, but reductions could be a concern for the potential fall-run Chinook salmon redds.

Participant questions and responses included:

- USFWS: Do the alternatives' flows reflect ramping rates?
 - Reclamation: No, the flow volumes are monthly estimates, designed to incorporate downstream needs, and do not include ramping rates yet. They will also need to be refined based on water users' needs, including volumes for rice decomp.
- USFWS: Will the release rates at the end of October be sustained through January? For fall-run Chinook salmon, the fisheries agencies would like to avoid unnecessary increases or decreases in flow.
 - Reclamation: Through November, flows will be relatively stable, but the releases needed in December and January will depend on precipitation and runoff. The 50% (wetter) forecast anticipates flood releases in December. In the 90% (drier) forecast, flows are maintained at 5,000 cfs in November and December and then forecasted to be reduced to 4,500 cfs in January because of lack of precipitation.
 - [ACTION ITEM] Tom to extend the spreadsheet timeline through February since fall run redds may not emerge until February in a wet year.
- SRSC: What do you expect as the Sacramento contribution to the Delta through the winter?
 - Reclamation: There is a lot of variability in the fall depending on when rains begin. They are projecting approximately 5,000 to 6,000 cfs at Wilkins Slough throughout the fall and into early winter.
 - SRSC: Contractors haven't diverted significant fall/winter water through their winter water rights (which extend from the fall until the contract season starts in March) since 2019, and there are wetlands that have not had water in recent years, so there is a lot of interest in diversions from landowners. [ACTION ITEM] SRSC will try to determine amounts and desired timing.

Interests, Objectives and Constraints

The group reviewed a spreadsheet titled "SmoothingInterests&Constraints_update for 2023," which contained data compiled in 2021. The document served as the basis for the discussion regarding interests and constraints that will be relevant for 2023-2024. The spreadsheet lists weeks of the season with columns for the relevant interests and constraints.

Additions and adjustments to the spreadsheet included:

- Fisheries interests and timing:
 - Late spawning winter-run Chinook salmon redds need protection from now through late October.

- Many fall-run Chinook salmon fry do not emerge until January or February, especially during wet years, and it is critical to protect the redds.
- Late fall-run Chinook salmon and Steelhead spawning starts in December with emergence into March and April.
- Agriculture and Refuge Interests:
 - Winter water rights, which generally extend from the end of October until the contract season starts in April, have not been significantly exercised since 2019. Demands this fall/winter are expected to be similar to 2019, much higher than in the recent drier years.
 - Harvest will begin in the next few weeks through mid-September with water demands through October.
 - Refuge water demands will be concentrated in September through November, with reductions in December.
 - ACID needs to remove the diversion dam; Reclamation coordinates releases with them so that they can remove the dam. The timing and maximum flow at which the work can be done need to be confirmed; Reclamation will reach out shortly to better understand their needs and parameters [ACTION ITEM]. USFWS noted that decreasing flows for ACID's removal will be an issue for fall-run Chinook salmon redds.
 - Releases will be higher this year for flood control purposes; temperature management concerns are not controlling.
 - The Wilkins Slough target minimum to meet Delta needs this year is 5,000 cfs, and USBR will continue to reduce releases to maintain flows around that level through the winter; 4,000 cfs is the minimum to maintain SRSC diversions.

Meeting Schedule

- USST will meet every other week through mid-November.
- The next meeting is August 22, 2023, 10 to 11 a.m.