

## Upper Sacramento Scheduling Team

Flow Smoothing Coordination

Wednesday, August 18, 2021 | 9:00 – 10:00 a.m.

### MEETING SUMMARY

#### Participants

<b>Agency</b>	<b>Attendees</b>
CDFW	Crystal Rigby, Doug Killam, Jason Roberts, Ken Kundargi, Lauren McNabb, Mike Harris, Vanessa Kollmar
DWR	Kevin Reece, Mike Ford
Kearns & West	Alyson Scurlock, Julie Leimbach
NMFS	Cyril Michel, Eric Danner, Evan Sawyer, Flora Cordoleani, James Gilbert, Stephen Maurano
Reclamation	Elissa Buttermore, Liz Kiteck, Mario Manzo, Mike Wright, Raymond Bark, Suzanne Manugian, Tom Patton
SWRCB	Craig Williams, Diane Riddle, Jeff Laird, Michael Macon
SRSC	Lewis Bair, Mike Deas, Thad Bettner, Wes Walker
USFWS	Bill Poytress, Curtis McCasland, Craig Isola, Jim Early, Matt Brown
Whiskeytown NRA	Josh Hoines
Yurok Tribe	Chris Laskodi

#### Action Items

- CDFW to share analysis of water temperatures and redd distributions when ready.
- Reclamation to provide more clarity on why water transfers in December are not allowed.

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

##### *Meeting Objectives*

1. Shared understanding of interests and external conditions for scheduling flow transitions
2. Collaboratively develop flow smoothing and reduction Alternatives as a means to support salmon recovery
3. Strive for Alternatives that enjoy broad support from USST members
4. Test of support for real-time and planned flow schedules

##### *Fishery Update on Redds Dewatered*

CDFW provided the fishery monitoring update on redds dewatered.

- CDFW generated average emergence timing estimates for spring-run and fall-run Chinook salmon based on 2014 water temperatures from the Clear Creek gauge; average emergence timing is estimated at 77 days.
- Warmer water temperatures decrease the number of days until eggs emerge; survival impacts to fry are experienced once water temperatures increase above a certain threshold.

- Fall-run Chinook salmon traditionally spawn across 140 miles of the river (downstream to river mile 65). CDFW is working on analysis that combines water temperatures and redd distributions.

### ***Objectives, Constraints, and Preferred Flow Alternatives/Rationale***

The group discussed the following objectives, constraints, and preferences for the flow Alternatives. In addition, recommendations were solicited.

#### Objectives

1. Decrease flows to conserve Shasta storage and improve water temperatures.
  - Lower flows in November could provide an atmospheric cooling benefit.
2. Minimize winter-run Chinook salmon redd dewatering in September/October.
3. Stabilize flows for peak fall-run Chinook salmon spawning in mid-October.

#### Constraints

1. Water transfers
  - Water transfers are not allowed in December due to removal of the agricultural and salinity barriers in the Delta by November 30. Absence of the barriers leads to water level issues in the Delta which hinders water transfers to occur.
  - Likely fishery impacts associated with water transfers in December.
2. Flow Alternatives need to be volume neutral relative to the requirements stated by Reclamation.
3. Warm water temperatures increasing TDM
  - Water temperatures above 60° F will lead to nearly 100% TDM. This should be considered when discussing moving water to protect fall-run Chinook salmon redd dewatering in December.

#### Flow Alternatives and Rationale

- Alternative D
  - Shifts water transfers from October to November.
  - Rationale:
    - Slightly better temperatures at SAC and Shasta.
  - Discussion:
    - Could be tweaked to protect winter-run Chinook salmon redds emerging at 6,000 cfs.
- Proposed Alternative D1
  - Drop flows to 6,200 cfs as soon as possible to conserve Shasta storage and improve downstream water temperatures.
  - Rationale:
    - Protect shallow winter-run redds in October.
    - Minimize releases as close to 3,250 cfs as possible to conserve water for Water Year 2022.
  - Discussion:
    - If Alternative D1 is not possible, fall back is Alternative D.

### Recommendations

Julie Leimbach, Kearns & West facilitator, acknowledged that a specific flow Alternative was not ready to be recommended at this time. She asked the group if there was consensus to make a first recommendation to reduce flows to 6,200 cfs as soon as possible to conserve Shasta storage and downstream water temperatures.

- NMFS, USFWS, CDFW, and SWRCB supported the recommendation.
- SRSC supported the recommendation as long as there was the ability to complete the full volume of water transfers.

Specific flow Alternatives will continue to be discussed at the next USST meeting.

***Next Meeting:*** Wednesday, August 25, 9:00-10:00 a.m.