

Upper Sacramento Scheduling Team

Flow Smoothing Coordination

Wednesday, September 22, 2021 | 9:00 – 10:00 a.m.

MEETING SUMMARY

Participants

Agency	Attendees
CDFW	Crystal Rigby, Doug Killam, Erica Meyers, Ken Kundargi
DWR	Kevin Reece
Kearns & West	Alyson Scurlock, Julie Leimbach
NMFS	James Gilbert, Miles Daniels, Stephen Maurano
Reclamation	Elissa Buttermore, Jo Anna Beck, Liz Kiteck, Raymond Bark, Tom Patton
SWRCB	Craig Williams, Jeff Laird, Matt Holland, Michael Macon
SRSC	Mike Deas, Thad Bettner, Wes Walker
USFWS	Bill Poytress, Matt Brown
WAPA	Mike Prowatzke

Action Items

- Reclamation to keep the group updated about any changes to the flow schedule or assumptions.
- Kearns & West to schedule a USST meeting in November when flows drop to 3,250 cfs; adjust as needed based on when water temperatures increase above the 60° F threshold.
- Kearns & West to organize a conversation about this year's operations with Reclamation and DWR as presenters.

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.

- More than half of shallow winter-run redds have emerged; the next big group of redds are expected to emerge in early October.
- A lot of new redds are currently being constructed; CDFW observed a school of spring-run Chinook salmon by Keswick Dam in May/June and believes they are the group of fish starting to spawn in the river. Carcasses are increasing as spring-run Chinook start to spawn.

Reclamation presented updated fall-run Chinook dewatering estimates for Alternative J.

- Alternative J = 15%

Modeling

SWFSC presented temperature dependent mortality (TDM) modeling for Alternative J and noted that the mean annual TDM for Alternative J is estimated at 79%, which is similar to TDM estimates for earlier flow Alternatives.

Objectives and Preferred Flow Alternatives

The group discussed the following objectives and preferences for the flow Alternatives.

Objectives

The following outlines objectives stated in the meeting. In some cases, the objectives reflect independent institutional mandates and do not reflect shared objectives.

1. Protect winter-run and fall-run Chinook eggs and fry emergence.
 - Maintain instream coldwater temperatures for as long as possible.
 - Avoid dewatering redds.
2. Preserve Shasta Reservoir carryover storage for the next water year.
3. Meet transfer water regulatory requirements.

Alternatives

- Alternative J
 - Maintain Shasta Reservoir flows at 6,800 cfs until 10/19/21 then drop flows to 3,250 cfs by 11/8/21. Allows for 200 TAF of water transfers.
 - Discussion:
 - Water temperatures are predicted to exceed 61 °F until the beginning of November for fall-run Chinook spawning. The majority of fall-run eggs will likely die in these warm water temperatures. Redd dewatering will likely have less of an impact because the eggs likely would have already died.
 - Flows may potentially deviate from the flow schedule. Reclamation will keep the group updated if flows can be decreased sooner or if the flow schedule needs to be slightly delayed due to downstream conditions.
 - Suggestion to reconvene once transfer water releases are complete and when water temperatures pass the 60 °F threshold. The SRTTG can then evaluate options; there will be a very small window to shape flows for fall-run Chinook in late November, if at all.

Recommendations

- USFWS – USFWS supports Alternative J as it is the best of bad Alternatives.
- NMFS –
 - Last week, NMFS floated the idea of increasing the flow now to move transfer water through the system faster and reduce to lower wintertime base flows earlier. The goal was to finish the transfers and stabilize flows for fall-run Chinook salmon spawning. That option does not seem relevant given the volume of transfer water Reclamation is still intending to move.

- With that option off the table, Alternative J is defaulting to be the path forward.
- There will still be information to consider in the future. There has been a fairly linear increase in warming to this point. NMFS would like to continue to monitor water temperatures for when they increase above 60° F which is roughly the acute threshold for egg mortality.
- CDFW – This is a Reclamation decision according to the Proposed Action; fisheries agencies will only provide input and feedback. CDFW feels that we have provided Reclamation with that feedback. From a technical point of view, CDFW is not going to object to Alternative J.
- DWR – DWR supports Alternative J.
- SWRCB – Subject to the constraints we are working with, the SWRCB is not raising any further objections to Alternative J. Getting down to lower flow levels and conserving storage is the best thing to be doing at this time of year.
- SRSC – Nothing else to add.
- WAPA – No comments at this time.

Additional Discussion

- Suggestion to have future technical-level discussion about the results of this year’s operations. There were extreme concerns about flow releases this year in response to demands on Shasta.
 - This conversation could happen with the larger SRTTG. Reclamation develops several annual reports that are brought to the SRTTG that will include these items.

Next Meeting: Wednesday, November 10, 9:00-10:00 a.m.