### Upper Sacramento Scheduling Team

Fall Flow Reduction Coordination

Tuesday, September 1, 2020 | 10:00 am - 11:00 am

#### **MEETING SUMMARY**

#### **Participants**

Reclamation	Ben Nelson, Tom Patton, Natalie Wolder, Randi Field, Liz Kiteck, Josh Israel
USFWS	Matt Brown, Jim Earley
NMFS	Flora Cordoleani, Stephen Maurano, Cyril Michel
CDFW	Matt Johnson, Ken Kundargi,
DWR	Kevin Reece
SWRCB	Diane Riddle
SRSC	Roger Cornwell, Thad Bettner, Marc VanCamp
Kearns & West	Terra Alpaugh, Julie Leimbach

#### **Action Items**

- USBR will superimpose redd data on the flow proposals for easier assessment.
- USBR will explore alternatives that would reduce flows over the next week and shift them to late Sept/early Oct, OR that would prioritize redds emerging by mid-September and then reduce flows to save water afterward.
- CDFW will try to provide fisheries information further in advance of the meeting (ideally by Friday COB before each meeting).
- USBR will update the USST regarding if or when they plan to allow for rice decomp smoothing this
  year.

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

## Meeting Objectives

- 1. Provide update on fishery conditions and current operations
- 2. Outline a range of flow proposals for discussion
- 3. Agree on next steps and key information needed to inform preferred alternative

# Fisheries Monitoring Update

CDFW provided three documents to meeting participants:

- A summary of winter-run Chinook carcass counts; CDFW will continue to track the 65 shallow redds identified in the last flight (8/18) but do not expect to need additional flights for winter-run.
- A summary of total dewatered redds annually since 2013, which is intended to provide some historical perspective on how operations have changed under the new proposed action.
- A summary of shallow water redds in 2020, which shows that 9 redds have been dewatered as of 8/31 and then lists the remaining redds from the most shallow to least shallow. In the "Forecast at 7500" tab, the spreadsheet also estimates at what flow each of the remaining redds will likely be dewatered.

Based on these estimates, the current proposed flow schedule from Reclamation would result in a total of 48 dewatered redds.

CDFW cautioned that the estimates of dewatering flows are rough since it is difficult to predict exactly how flows manifest as water stage on the landscape, but also noted that this year's redds tend to be perched on gravel bars, so they will be increasingly disconnected from the surrounding river as flows are reduced.

CDFW management feels the best metric to estimate the total number of winter-run Chinook salmon redds will be the estimate of in-river female spawners; CDFW will be able to provide that number by the end of September. NMFS agreed that total in-river female spawners is the appropriate metric against which to measure take but noted that USBR will want to be tracking and evaluating their take even before they have that estimate available. USFWS shared that the carcass survey will continue through 9/9 or possibly 9/12 depending on fish presence.

## Operations Update

USBR stated that Keswick is currently releasing 7,500 cfs (actual releases were measured as 8,100 cfs over the last seven days), which they will hold until the group has discussed the impacts of further cuts since they are entering the critical dewatering flow range. USBR noted that their decisions about whether and how much to ramp down will need to balance the need to preserve the cold water pool with the risk of dewatering downstream redds. The spreadsheet currently reflects an initial proposal (Alternative 1) and an SRSC proposal; it also reflects the various stakeholder (e.g. fisheries, agriculture) concerns that may arise at different periods of the season.

The SRSC explained their proposal as an effort to highlight what the SRSC could do in terms of smoothing their water demands, i.e. shifting diversions from October to November to maintain Wilkins Slough flows at 4000 cfs or above. The SRSC representatives reached out to the individual contractors to confirm that these changes would be feasible. This proposal would require USBR action since the contract period formally ends in October. USBR will update the group regarding if or when they plan to take this action to allow the smoothing.

Perspectives and questions shared by USST members included:

- NMFS staff thanked the SRSC for their effort to make their operations more transparent. Based on the estimated emergence points of the existing redds, NMFS staff noted that there are several distinct clusters: some redds will not emerge until the very end of the season, so there is likely no way to save them, but there is also a cluster of redds that will emerge between September 11<sup>th</sup> and 14<sup>th</sup>. He was not sure what flows would be needed to protect those particular redds, but if USBR was able to maintain flow at whatever that level is until Sept 15<sup>th</sup>, that might be enough to protect at least that first cluster. He acknowledged the margin of error could be very small given that some redds are estimated to be dewatered at 7,000 cfs.
- CDFW staff agreed that the group should consider if maintaining flow above 7,000 cfs for early September would save some redds. He also noted that fall-run Chinook will start spawning soon, so another proposal would be to shift flow to benefit them. He made a general observation that redd dewatering is easier to manage at the beginning of the season when redds are being laid, rather than now at the end.
- Other CDFW staff stated that there is a limit to what can be done now: it has been a good year with high production but the September-October temperature management season could be a bottleneck. Opportunities to shift flows to enable better temperature management over the next two months (and even further if possible) are as important a consideration as redd dewatering.
- USBR noted that the flow information in both current alternatives is based on the current forecast

- model and temperature models and then broken down into weekly timesteps. USBR believes the Sacramento system is currently tracking or potentially slightly cooler than the forecasts' temperature projections.
- SRSC stated that if the USST wants to reduce flows even further (e.g. below 6000 cfs) in September to benefit fall-run, the contractors could likely accommodate that; the fires have slowed crop maturity in the valley, so the farmers will likely not need water until October.
- KW asked whether there is any need to maintain flows for the refuges or bird habitat in September. USBR reported that the latest refuge schedule for September states that 5,250 acre-feet (AF) are needed at Sacramento, 3,400 AF at Delevan, and 3,500 AF at Colusa. SRSC said that as long as the total refuge needs were below 20 TAF, the SRSC have the flexibility needed to get them their water.
- USBR pointed out that they had not seen the shallow redds information until this meeting, so they have not had time to develop a flow proposal to reflect current fish conditions. Based on this brief examination, USBR observed that there is also a cluster of redds with projected emergence around October 2<sup>nd</sup> that may need protection. Given this, it could be advantageous to reduce Keswick flows over the next week, sacrificing some redds but enabling that flow to be shifted into late September or early October to protect others. USBR will assess alternatives now that they have this information and determine if near-term changes need to be made. They also asked CDFW to provide the fisheries data further in advance to allow USBR to prepare.

### Next Meeting

Tuesday, September 8, 2019 at 2:00 pm.