



Water Operations Management Team Notes

March 6, 2024

Members Attending

- Reclamation: Elizabeth Kiteck, Levi Johnson
- USFWS: Jana Affonso, Matt Nobriga
- CDFW: Kristal Davis-Fadtke
- NMFS: Howard Brown, Garwin Yip
- DWR: Molly White, Lenny Grimaldo
- SWRCB: Craig Williams (acting)

Topics/Actions

- Approval of meeting notes from last meeting: 2/27/24
- Upcoming Meetings:
 - Salmon Monitoring Team (SaMT) (weekly on Tuesday): 3/12/24
 - Smelt Monitoring Team (SMT) (weekly on Tuesday): 3/12/24
 - Feather River Operations (monthly first and third Thursdays): 3/21/24
 - American River Group (monthly on third Thursday, and as needed): 3/21/24
 - Stanislaus Watershed Team (monthly on third Wednesday): 3/20/24
 - Clear Creek Technical Team (quarterly on third Thursday): 3/21/24
 - Sacramento River Temperature Task Group (SRTTG) (monthly on fourth Thursday): 3/28/24
- Relevant Assessments:
 - Salmon Monitoring Team (SaMT) (weekly on Tuesday): 3/12/24
 - Weekly Fish and Water Operations Outlook 3/5/24 – 3/12/24
 - Proposed Action Assessment 3/5/24
 - SaMT ITP Risk Assessment Summary 3/5/24

- SMT ITP Risk Assessment Summary 3/5/24
- Operational Updates:
 - CVP: Trinity River release is 300 cfs. Sacramento River (Keswick) release is 15,000 cfs. Clear Creek (Whiskeytown) managed release is 200 cfs. American River (Nimbus) release is 6,000 cfs. Stanislaus River (Goodwin) release is 1,500 cfs. Reclamation's Delta Pumping is at 5 units targeting 4,200 cfs. Federal share of San Luis Reservoir is 933 TAF.
 - SWP: Feather River (Oroville-Thermalito Complex) release is 14,000 cfs. Clifton Court Forebay exports are 3,700 cfs. The SWP and CVP are jointly managing to a -2,500 OMR limit. State share of San Luis Reservoir is at 498 TAF.
- Hydrology Updates (DWR and Reclamation):
 - Currently experiencing dry conditions but expecting storms this weekend in the northern mountain ranges. No precipitation expected elsewhere in the state.

Upcoming Actions, Updates, and Discussion Items

- Reclamation:
 - No actions or updates.
 - Discussion: Steelhead measures
- FWS:
 - No actions, updates, or discussion items.
- CDFW:
 - No actions, updates, or discussion items.
- NMFS:
 - No actions or updates.
 - Discussion: Steelhead measures
- DWR:
 - No actions, updates, or discussion items.
- SWRCB:
 - No actions, updates, or discussion items.

Discussion Items

- Steelhead Measures

- Reclamation noted that the proposal from SaMT is -500 cfs OMRI then 0 cfs OMRI. Proposing a counter option of holding at current operations of -2,500 cfs OMRI and continue to evaluate. Reclamation noted that if further reductions are proposed then the issue will likely need to be elevated to Directors.
- Reclamation walked through various steelhead salvage summary data that was used to inform the above proposal including: Salvage data from December 2023 to today (3-6-24), Tillotson Table model results, Cumulative steelhead losses from 1999 – 2019, STARS Survival model information, Predicted probability of steelhead survival from Buchannan et al. (2021), and Hydrologic Footprint information.
- Inferences and trends from these models were described. Reclamation concluded from their evaluation of the data that (1) overall conditions are good (i.e., flows are high) and this is likely resulting in higher numbers of fish surviving in the Delta, and (2) higher fish abundance is the likely reason elevated salvage.
- Regarding hatchery fish, there is an estimated error of 2 - 2.6% in the adipose fin-clipping rate. In addition, there were 75,000 fish released by East Bay Municipal District with this same marking error rate.
- Reclamation stated that despite the take statement and the directive within the PA to stay within a specific loss range, it appears that regardless of what action is taken it is expected that the incidental take limit will be exceeded.
- Following presentation of this information Reclamation requested a discussion considering operations and actions in regard to the incidental take limit outlined within the Biological Opinion.
 - DWR and NMFS both agreed that conditions are favorable, that survival is high, and expressed curiosity as to what's going on with the increased salvage. DWR opined that a large number of fish may be sloshing within the interior Delta and entrainment losses are due to number of fish near the pumps that moved in before the storms and associated high flows. Under high flows, the rate at which Sacramento-origin steelhead move into the interior Delta was opined to be lower. Based on this, DWR stated that they were in support of Reclamations proposal to hold operations at -2,500 cfs OMRI.
 - NMFS noted that while the models and data presented are useful it might not be appropriate to rely on them so heavily. Some of the model data does show a path forward to avoiding the incidental take limit, and it might not make sense to hold at current operations and let salvage numbers continue to increase. Additionally, despite the potential to exceed the incidental take limit, it still makes sense to implement a modification to current operations to see if a short-term adjustment would result in reductions to the loss numbers.
 - NMFS stated that if the take limit is exceeded, that does not necessarily mean that a jeopardy determination would be made. If the take limit is exceeded that requires reinitiation, which is already occurring. In dry years it makes sense to just hang on, but with how good conditions are this year we should be trying to recover the species. Holding at -2,500 cfs OMRI, and/or decreasing to -1,500 cfs

OMRI is likely not a big enough hydrodynamic change for steelhead to respond to. NMFS proposed operating to Health and Safety levels, as soon as possible, for a minimum of 5 days, and then reassessing. A change in operation (making OMRI more positive) should not be characterized as a test or experiment. Rather, this proposal should be characterized like validation monitoring and would slow down the progression of fish and reduce take.

- Reclamation agreed with NMFS' proposed approach when considering the species and trying to implement maximum effort to affect change, but inquired if saving 200-300 fish would result in population level changes for steelhead. NMFS responded that it cannot be said for certain if it would help with recovery, and that there are tools in development to help better answer this question (e.g., JPE). NMFS noted again the importance of wanting to work together to stay away from the incidental take limit by implementing an action that would minimize losses.
- NMFS noted that the PA describes a peer review process for operations if a 100% single year loss threshold is met. The unexplained high steelhead loss and speculations about why it is occurring are issues that should be brought to the peer review panel. If/when a peer review is conducted on operations this year, and depending on what happens with steelhead, this information could also be helpful for winter-run.
- Following the above discussion that mostly focused on species benefits, NMFS looped in operations and inquired about the rationale for keeping federal exports at full capacity for the San Luis Reservoir given that it is almost full.
 - Reclamation responded that while the reservoir is close to being full, there is water that is owed to the state that will have to be paid back. This is currently the only opportunity to fill the reservoir given that on April 1, 2024, the spring outflow action will come into play and exports will be severely reduced.
 - DWR noted that "full" is more representative of federal share of San Luis. The State share is at approximately 50% of capacity and are adjusting water with joint operations with Reclamation.
 - NMFS asked if there is an opportunity to shift some exports over to CVP to help minimize loss because pre-screen loss is believed to be lower in front of the Tracy Fish Facility. DWR did not have an answer to this question right now but said discussions could be had with Reclamation to explore.
 - There was agreement that the two proposals discussed above would be elevated to directors for discussion.
 - FWS requested to be kept apprised on the future discussions that might occur, how the information will be communicated to WOMT and to brief respective agency directors. [Facilitator note: this question was not responded to before the meeting adjourned.]

Elevation Items

- Two proposals will be elevated to the Directors for discussion:

- As soon as possible operate to Health and Safety levels for a minimum of 5 days and then reassess; and
- Stay at -2,500 OMRI and continue to evaluate.

Action Items

- No action items

Next Meeting

- Wednesday, March 13, 1-1:50 pm