Delta Monitoring Workgroup

Meeting Record 01/17/2023

Working Group Members in Attendance

- USBR: Nick Bertrand, Kristin Arend, Randi Field, Brian Mahardja, Elissa Buttermore, Cat Pien, Erika Kegel
- USFWS: Leif Goude
- NMFS: Not in attendance
- CDFW: Crystal Rigby, April Hennessey, Erica Meyers
- DWR: Mike Ford, Brian Schreier, Farida Islam
- SWRCB: Matt Holland
- Water Contractors: Shawn Acuña (MWD), Michelle Banonis (RWA), Deanna Sereno (CCWD), Yuan Liu (CCWD), Chandra Chilmakuri (SWC), Darcy Austin (SWC), Cindy Meyer (SLDMWA), Heidi Williams (Valley Water), Tom Boardman (WWD), David Vang (WWD), Jose Rangel (WWD) Ian Buck-Macleod (FWA)

Review Operations Outlook (USBR, DWR)

- Persistent wet patterns are shifting; this week will see minimal precipitation, with a probability of more rainfall tomorrow and Wednesday favoring the far North Coast and Northern Sierras with lesser amounts of rain further south.
- Whiskeytown Dam is currently releasing 200 cfs with a spill condition; flows downstream are in excess of 2,000 cfs ; anticipated to continue with elevation over the Glory Hole spilling into Clear Creek and eventually into the Sacramento River.
- Currently releasing 4,050 cfs downstream of Keswick Dam on the Sacramento River; a series of change orders is in place to eventually reach 3,250 cfs and anticipate holding there into the near future.
- Currently releasing 10,000 cfs from Nimbus Dam on the American River with side flow management; some room for possible adjustments, but no change orders in place yet.
- In the San Joaquin system, flows from Goodwin Dam are at 1,950 cfs; adjustments were made for side flows over the weekend with further adjustments anticipated to curb outflows; a series of change orders are out to bring releases down to 400 cfs.
- In the Delta, anticipating higher flows coming in from the Sacramento River and San Joaquin. Currently expecting the Delta Outflow Index in the 170,000 cfs range.
- Freeport flows are at 74,000 cfs; expecting flows to range between 60,000 to 80,000 cfs.

- Flows at Vernalis are currently at 18,000 cfs today; flows are forecasted to peak on Friday at 24,000 cfs with a slow decline after that.
- JPP exports are currently at 3,500 cfs; expecting some variability there while managing side flow.
- DCC Gates are closed with no expectations for opening.
- Clifton Court exports at 8,300 cfs and approaching system capacity with 9,500 cfs tomorrow 01/18/2023; looking at holding that level for the next several days.
- Oroville releases are at 950 cfs on the Feather River; Oroville storage is over 2 million acre feet today.
- See the Operations Outlook for more information.

Additional Questions or Comments

- **Question:** Is the turbidity bridge avoidance measure in place this week?
    - **Answer:** Vernalis flows are in the 18,000 to 20,000 cfs range. Clifton Court was able to export 8,300 cfs today and can export 9,500 cfs tomorrow and still meet the OMR constraints of -2,000 cfs. The first flush ended. We have entered five days of OMRI requirements called the turbidity bridge avoidance action. The last day of this action will be Saturday, but there is some discussion about what OMR constraints would be in place after that. At this point in time, it remains to be determined.

Review PA Assessment (USBR)

Reclamation provided the PA Assessment update. For more information, please refer to the PA Assessment document.

Review ITP Risk Assessment (DWR)

DWR provided the LFS update. For more information, please refer to the ITP Risk Assessment document.

Additional Questions or Comments

- **Question:** Is there any flexibility in the 5-day requirement for the turbidity bridge avoidance measure? Does the risk assessment allow for -5,000 cfs and was this discussed in the working group or WOMT?
    - **Answer**: There does not appear to be flexibility. However, this was discussed, and some language was added that did not specify the measure had to be five days.
    - **Answer**: As long as turbidity remains over 12 FNU at OBI, both the PA and the ITP are clear about the -2,000 cfs OMR requirement. At the end of two days comes questioning about variability and when OMR requirements are applied. But the 5-day requirement is predicated on the turbidity trigger through the entire period.
- **Question**: Regarding DS, the risk assessment outside the OMR corridor was moderate as well. Can you explain the rationale?

    - **Answer**: LFS distributions are tied to outflows, whereas DS distribution is tied to turbidity. Last week we had a moderate risk assessment for DS in response to a salvage event, but also due to existence of the turbidity bridge and widespread turbidity. This week we have maintained moderate risk and then high risk in the OMR corridor due to the fish detected by EDSM.
- **Question**: Is it confirmed that the detection was DS?
    - **Answer**: It should not say "confirmed; there is high confidence that the detection was DS. FCCL has expressed confidence it was DS and those I have spoken with who have seen the fish think so. However, we are working with FCCL to try and get genetic tests run on it. All the information we have right now indicates it is DS.
- **Question**: Was it salvaged at the south end of Franks Tract? What is the geographic location?
    - **Answer**: In the channel south of Roosevelt Cut; in Franks Tract on the south end.
- **Question**: Regarding the ad hoc SMT meeting coming up this Thursday morning, can the risk assessment and notes be circulated after that meeting?
    - **Answer**: The meeting is at 8:00 am and we will need to confirm internally when information can be shared. While these items will not be made available immediately after the meeting, there is a possibility they can be shared later in the day.
        - ***Follow Up Action:*** *Facilitation team will circle back with DWR and USBR on Thursday to get an update on timing for the DMW to receive the ad hoc meeting risk assessment and meeting notes or other relevant information.*
- **Question**: Looking at the conditions, are we close to triggering larval and juvenile DS action? Or are conditions still adult actions?
    - **Answer**: We are primarily only operating within adult actions currently due to temperatures being too low for spawning. Larval and juvenile actions usually begin in March.
- **Comment**: The nature of this action was meant to be to avoid a turbidity bridge, but it has already formed due to recent precipitation events. I would like to suggest that discussions during the SMT meeting this Thursday keep this in mind and that there are measures considered that would result in an offramp from –2,000 cfs before January 21st.

Acronyms

- DCC – Delta Cross Channel
- DWR – California Department of Water Resources
- DS – Delta Smelt
- FNU -- Formazin Nephelometric Unit
- GCID – Glenn-Colusa Irrigation District
- ITP – Incidental Take Permit
- JPE – Juvenile Production Estimate
- LFS – Longfin Smelt

- NTU – Nephelometric Turbidity Unit
- OBI – Old River Bacon Island Station
- OMR – Old and Middle River Tidally Averaged Flow
- PTM – Particle Tracking Model
- SaMT – Salmon Monitoring Team
- SLS – Smelt Larval Survey
- SMT – Smelt Monitoring Team
- SWRCB – State Water Resources Control Board
- TFCF – Tracy Fish Collection Facility
- TUCP – Temporary Urgency Change Petition
- WCS – Winter Run Chinook Salmon
- WQ – Water Quality
- YOY – Young of Year