Delta Monitoring Workgroup

Meeting Record 01/10/2023

Working Group Members in Attendance

- USBR: Nick Bertrand, Kristin Arend, Randi Field, Brian Mahardja, Elissa Buttermore, Cat Pien
- USFWS: Leif Goude, Katherine Sun, Jana Affonso
- NMFS: Not in attendance
- CDFW: Crystal Rigby, April Hennessey, Erica Meyers, Brooke Jacobs, Taiga Yamaguchi, Kristal Davis-Fadtke
- DWR: Mike Ford, Brian Schreier, Farida Islam,
- SWRCB: Matt Holland
- Water Contractors: Shawn Acuña (MWD), Deanna Sereno (CCWD), Yuan Liu (CCWD), Chandra Chilmakuri (SWC), Darcy Austin (SWC), Jennifer Buckman (ARSC), Cindy Meyer (SLDMWA), Heidi Williams (Valley Water), Tom Boardman (WWD), David Vang (WWD), Ian Buck-Macleod (FWA)

Review Operations Outlook (USBR, DWR)

- Major storms occurred this week and will continue for the next few days with a break on Thursday; precipitation will continue through the weekend and into next week, favoring the North Coast and the Sierras.
- Currently releasing 200 cfs and spillway release from Whiskeytown Dam. As a result of a spill flow, greater than 3,000 cfs is currently flowing into Clear Creek; this will be variable as the weeks go on.
- Currently releasing 4,250 cfs downstream of Keswick Dam on the Sacramento River; change orders in place for 01/12/2023 and 01/13/2023 to lower releases to 3,850 cfs on 01/13/2023.
- Currently releasing 20,000 cfs down from 25,000 cfs the day prior from Nimbus Dam on the American River.
- In the San Joaquin system, flows from Goodwin Dam are at 2,000 cfs, managing for side flows into Tulloch; changes through today into tomorrow to 400 cfs as side flows reduce, to maintain Tulloch conditions.
- In the Delta, anticipating higher flows coming in from the Sacramento River and San Joaquin. The San Joaquin flood releases beyond the Stanislas River. As such, flows at Vernalis are now expected to be closer to the 20,000 cfs range.

- Freeport flows were at 79,500 cfs for the daily average yesterday 1/09/2023; expecting flows today within the range between 80,000 to 90,000 cfs;
- Flows at Vernalis are currently projected between 16,000 cfs and 20,000 cfs. Flows of approximately 19,000 cfs expected by Sunday, 1/15/2023.
- JPP is exporting 3,500 cfs and will increase to 4,000 cfs on Thursday, 01/12/2023. maintaining OMRI requirement of -2,000 cfs.
- DCC Gates are closed with no expectations for opening; side flows are freshening the salinity.
- Clifton Court exports at 2,700 cfs; scheduled to go to 4,800 to 5,000 cfs, and possibly higher, in a few days. OMRI requirements triggered after the first flush will continue through 1/16/2023.
- Oroville releases are at 950 cfs on the Feather River.
- See the Operations Outlook for more information.

Additional Questions or Comments

- **Question:** With the first flush action ending on Monday next week, will the OMR restriction of less negative or equal to -2,000 cfs expire and be replaced by OMR less negative or equal to -5,000 cfs?
 - Answer: As is noted in the assessment documents, the SMT discussed support for continuing OMR less negative than or equal to -2,000 cfs for an additional five days as a turbidity avoidance action after the first flush action expires. There has been no final decision made yet.
- Question: If OMRI requirements are extended for another five days, does that mean they would conclude on Saturday 1/21/2023? The Merced and Tuolumne Rivers are in flood control releases at this point.
 - Answer: Yes, continuation of OMR recommendations would mean ending on Saturday.
 - o **Answer** (from FWA): Releases from Friant Dam at 7,000 cfs right now and will probably be at that number for a while. The runoff forecast for this January is higher than last year and we expect this to mean high flows at Vernalis.

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:** What is meant by high dispersal? Are larvae present throughout the Delta to the San Francisco Bay?

- **Answer:** The conversations during the 1/10/23 SMT call highlight that, as a result of the hydrology and high turbidity, fish may be dispersed widely across the system and that net distribution is shifting downstream. However, we cannot confidently say that all fish are out of the upstream part of the Delta at this point in time, even if most detections are downstream of the confluence.
- **Question:** Would turbidity greater than 12 FNU trigger the turbidity bridge avoidance measure? Is there any other definition the SMT would be using?
 - Answer: The SMT is looking at turbidity at OBI, but generally seeing high turbidity throughout the OMR region.
 - o **Answer:** To clarify, 12 FNU is a daily average.
- Comment: The January 1 Sacramento Valley water year type was just posted on CDEC on 01/10/2023. It is barely into the Below Normal classification. ITP COA 8.12 North Bay Aqueduct conditions only go into effect in critical and dry years; therefore, this season is starting with 8.12 not being in effect [because it is not critical or dry]. This will be re-evaluated when the February 1 water year type forecast comes out.
- Question: Have any offramps been discussed given how high the flows are so far?
 - Answer: For LFS conditions, 8.4.1 and 8.4.2 have high flow offramps (detailed in ITP COA 8.4.3). We are tracking those flow triggers, but do not consider it relevant because first flush action is ultimately the controlling factor. We are looking to 8.4.2 and distribution and density triggers therein as well as 8.4.3 for high flow offramps. At this point, it is looking favorable that the San Joaquin River at Vernalis will be over the high flow threshold.
- Question: What about from the DS perspective, any high flow offramps?
 - **Answer:** No discussion about that today. This may be something that is discussed at LTO meetings rather than SMT.
- Question: From the DS salvage event last season, I believe it was concluded that experimental releases in the lower Sacramento River may have contributed to that event. How has the SMT interpreted similar information during salvage events this year?
 - Answer: Staff conducting experimental release events do not participate in SMT.
 SMT considers many factors; we are seeing a wide distribution of fish and want to continue to observe patterns.
 - O Answer: CDFW is working on planning an opportunity for people interested in understanding the thinking behind release locations and experimental release. If others on this call are interested in that opportunity and want to ask further questions, reach out to Nora De Cuir or Brooke Jacobs to get that information.

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