Delta Monitoring Workgroup

Meeting Record 11/01/2022

Working Group Members in Attendance

- USBR: Kristin Arend, Nick Bertrand, Randi Field, Brian Mahardja, Elissa Buttermore, Erika Kegel, Caterina Pien
- USFWS: Not in attendance
- NMFS: Not in attendance
- CDFW: Crystal Rigby, Taiga Yamaguchi, April Hennessey, Erica Meyers
- DWR: Nicole Kwan, Brian Schreier, Farida Islam
- SWRCB: Matt Holland
- Water Contractors: Jennifer Buckman (ARSC); Shawn Acuna (MWD), Darcy Austin (SWC), David Vang (WWD), Tom Boardman (WWD), Yuan Liu (CCWD)

Additional Notes on Discussion Items

For detailed information on the outlook or assessment document overviews presented during the meeting, please refer to those documents.

Review Operations Outlook (Randi Field, USBR)

- Weather patterns are changing, with significant cooling forecasted; some rain started today 11/01/2022 and there is a chance of precipitation this weekend. Although there is some change and flows will be monitored, especially over the weekend, today's precipitation does not impact current operations.
- Release from Clear Creek downstream from Whiskeytown Dam is 200 cfs.
- Release from Keswick Dam into the Sacramento River is 3,900 cfs.
- Release from Nimbus Dam into the American River system is 1,400 cfs; looking for potential storage conservation opportunities.
- Release from Goodwin Dam is 200 cfs into the Stanislaus River; the fall pulse has ended by 11/01/2022 as planned.
- In the Delta, Vernalis will fluctuate as the fall pulse makes its way through the system; expected decrease in cfs at Vernalis in the coming days.
- Flows at Freeport are also fluctuating, near the 7,100 to 7,200 range despite consistent flows upstream on the Sacramento River.
- Jones Pumping Plant is in a holding pattern of 900 cfs; an increase to 1,800 cfs would only occur if conditions permitted it, but not likely.

- The Delta Cross Channel (DCC) Gates continue to be open on weekends and closed on weekdays to support the Rio Vista flow regulatory requirement and help with salinity and water quality; this pattern of opening on the weekends and closing during the week will continue until weather patterns change more drastically than what is forecasted this week.
- Release from Oroville on the Feather River is 2,400 cfs.
- Release at Clifton Court is 500 cfs; there were recently some days where release was at 900 cfs to recover for the three days of 0 cfs release for herbicide treatment.
- Overall, water quality is good, but the breaching of the False River Barrier beginning today means there is a possibility of saltier water downstream of the barrier intruding into the interior Delta. Delta salinity will be monitored closely.
- Looking for opportunities to decrease reservoir releases from where they are right now if it starts raining in the Delta.

Additional Questions or Comments

• No additional questions.

Review PA Assessment (Brian Mahardja, USBR)

- Assessment is similar to last week.
- No salmon catch at Knights Landing or any of the Sacamento Seine and Trawl stations.
- For forecast distribution estimates, 100 percent salmon have yet to enter the Delta for Winter Run;
- Distribution estimates for Spring Run have begun but are also at 100 percent yet to enter the Delta.
- Plan to add Steelhead distribution estimates next week, 11/07/2022.
- The coming storm may cue salmon migration downstream.

Review ITP Risk Assessment (Brian Schreier, DWR)

- The Smelt Monitoring Team met for the first time of the season on 11/01/2022; no relevant action yet but will begin on 12/01/2022 for DS and LFS.
- Team discussed general approach to the season, recent monitoring detection for both species and highlighted the low risk of entrainment.
- For DS, the last detection was September 21st in EDSM in Grizzly Bay; the fish was unusually large for that time of year and the team is waiting for its genetic results.
- The other most recent detections were four subadults and one adult in August before the heat wave; two of them were in the lower Sacramento River and two in the Sacramento Deepwater Shipping Channel and one downstream.
- For LFS, one subadult was detected in October by the Chipps Island Trawl.
- During the October Bay Study, found a couple of subadults in the lower Sacramento River; evidence of younger, around age one, fish moving into the system.
- No adults upstream of the confluence yet but detected a couple of adults in Suisun Bay in EDSM; continuing to monitor detections.

- From a regulatory perspective, for adult LFS in the ITP, looking to the Fall Midwater Trawl index to set a salvage threshold for condition 8.3.1.
- So far, only have September Fall midwater Trawl Index, which was five individuals for a monthly index of seven.
- Will look at September through November index prior to December 1st, use that number until the full four-month index is complete later in December.
- No expected distributions for either smelt species in Central or South Delta.
- Low risk of entrainment for both species.

Additional Questions or Comments

- **Question:** There is new formatting, including color coding, in the ITP Risk Assessment. Is it still a qualitative assessment?
 - o **Answer:** Yes, we have been working with ICF to develop an entrainment risk model for LFS, which probably will not be used until next year. The current assessment is based on a qualitative assessment of distribution and hydrology and water quality and other factors.
- Question: Regarding behavior, there is a risk assessment for DS, but not for LFS is that not part of the assessment?
 - O Answer: We took the bulleted list from last year and put it in a tabular format. We are open to feedback on this format. Specifically in the Central Delta, the risk assessment is based on exposure risk. For LFS and DS, the risk assessment is also based on conditions, for example is there a turbidity bridge forming that might attract fish into the Central Delta from the Sacramento River and confluence area. For LFS, the exposure risk is not included because they are strong swimmers. This has never been included and is not necessary for LFS risk assessment.

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