



American River Group Notes

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Webinar: Join Microsoft Teams Meeting

Thursday, October 17, 2024

Action Items

Kearns & West

1. Kleinschmidt Group, Water Forum, and CDFW – coordinate on temperature and egg mortality modeling to be presented at the 10/24/2024 ad hoc meeting.
2. Water Forum – download DO data to share at the 10/24/2024 meeting.

Introductions

1. USBR: Brian Mahardja, Liz Kiteck, Spencer Marshall, Thomas Patton Thuy Washburn, Todd Plain, Travis Apgar, Zarela Guerrero
2. NMFS: Barb Byrne, Rachael Alcala, Robert Sheffer, Sam Pyros
3. USFWS: Craig Anderson
4. CDFW: Crystal Rigby, Emily Fisher, Jason Julianne, Molly Shea, Nick Bauer, Tracy Grimes
5. SWRCB: Nathalie Niepagen
6. BKS Law Firm: n/a
7. California State Parks: n/a
8. CBEC Engineering: Chris Hammersmark
9. City of Folsom: n/a
10. City of Roseville: n/a
11. City of Sacramento: n/a
12. Cramer Fish Sciences: Jamie Sweeney, Mollie Ogaz
13. CSUS: Dede Birch
14. DWR: John Ford

15. EBMUD: I-Pei Hsiu
16. Environmental Council of Sacramento: n/a
17. PCWA: n/a
18. PSMFC: Hunter Morris, Logan Day
19. Regional Water Authority (RWA): n/a
20. Shingle Springs Band of Miwok Indians: n/a
21. SMUD: Megan Peers
22. USACE: n/a
23. WAPA: n/a
24. Water Districts: Greg Zlotnick
25. Water Forum: Ashlee Casey, Erica Bishop, Jessica Law
26. Other: Paul Helliker, Rod Hall

Announcements

- N/A

Housekeeping

- N/A

Fisheries Update

CDFW Updates

1. Carcass Surveys
 - a. CDFW reported seeing 16 carcasses.
 - b. Locations surveyed include Nimbus Basin and Reaches 1 and 3 (Section 2 will be completed by 10/17/2024).
2. Chinook spawning
 - a. N/A
3. Redd surveys
 - a. N/A
4. Nimbus Hatchery Operations Update
 - a. CDFW is still observing low DO levels in the hatchery from the water coming in from Lake Natoma. Levels have been between 4+ to 5+ mg/L.

- b. CDFW is still incorporating aerators to increase oxygen in the raceways.
- c. The fish ladder will open at the end of the month to allow Chinook Salmon into the hatchery and begin spawning if females are ripe.

Questions and Comments

- 1. N/A

Cramer Fish Sciences Updates

- 1. Cramer Fish Sciences (Cramer) submitted all steelhead spawning and stranding data to the EDI portal. Links to the portal are included in the October meeting handout.
- 2. Chinook salmon ground redd surveys are scheduled to begin near the end of October and will likely occur through mid-January.
 - a. Monitoring will take place at Nimbus Basin, Lower Sailor Bar, Upper Riverbend, and Lower Riverbend.
 - b. Monitoring activities will be coordinated with CDFW so as to not duplicate efforts.
- 3. Dissolved Oxygen (DO)
 - a. Cramer shared DO levels downloaded on 10/14/2024.
 - b. DO levels are suboptimal in the area of the basin where powerhouse discharge is greater than the spill over the gates.

Questions and Comments

- 1. N/A

PSMFC Updates

- 1. N/A

Operations Forecast

SMUD

- 1. October 2024 precipitation totals 0.3 inches through 10/16/2024. Average October precipitation is 3.3 inches.
- 2. Total reservoir storage is nearly 68% full at approximately 256 TAF.
- 3. Chili Bar daily average releases are forecasted at the following flow rates:
 - a. October: 550 cfs
 - b. November: 370 cfs

- c. December: 650 cfs

Questions and Comments

1. N/A

PCWA

1. Storage at French Meadows is currently 72 TAF, or 53% capacity.
2. Storage at Hell Hole is currently 81 TAF, or 39% capacity.
3. Combined storage totals 153 TAF, or 45% capacity. This represents 89% of the 15-year average.
4. Middle Fork American River (MFAR) daily average releases are approximately 230 cfs.
5. North Fork American River (NFAR) daily average releases are approximately 300 cfs.
6. There is an annual maintenance outage happening for the Middle Fork powerhouses from 10/1/24 – 11/15/24. FERC minimums below the Oxbow powerhouse will be maintained at or above 165 cfs during the outage.
7. Total precipitation for Lake Spaulding during WY24 through 9/29/2024 was 60.18 inches, or 86% of average.

Central Valley Operations

USBR

1. Folsom Reservoir releases are at 1,500 cfs to meet the Minimum Release Requirements (MRR) for October. Releases are scheduled to increase to 2,000 cfs in November.
2. Folsom storage levels are approximately 435 TAF.
3. Water temperatures at Watt Ave. reached as high as 67.8°F during September. The September monthly average was 66.2°F. October water temperatures at Watt Ave. have averaged 65.9°F through 10/15/2024.
4. As of 9/18/2024, the shutters are in the following positions:
 - a. Top shutters: Units 1-3 are raised;
 - b. Middle shutters: Units 1 – 3 are raised;
 - c. Bottom shutters: Units 1 – 3 are raised.
5. At both the 50% and 90% exceedance operations forecasts, the monthly American River release levels are anticipated to be 1,500 cfs for October, 2,000 cfs for November, and 2,000 cfs for December.

6. Power Bypass Update

- a. Reclamation's Bay Delta Office (BDO) reviewed the power bypass proposal and submitted a recommendation to the Regional Director. The bypass of 100 cfs is scheduled to begin on 10/18/2024, increasing to 250 cfs on 10/19/2024.
- b. USBR anticipates that the power bypass should improve DO levels at Folsom and at the Nimbus Fish Hatchery within roughly 3-4 days.
- c. USBR's review and perception of the proposed bypass did not show significant difference in overall egg survival between the 250 cfs bypass and the 500 cfs option.
- d. The bypass will continue through the first week of November, and after that USBR will monitor water temperatures through the duration.

Questions/Comments

1. CDFW noted that during the 2023 bypass, DO improvements were not observed at the hatchery until 10-14 days after the bypass started.
 - a. USBR clarified that DO improvements should be seen below the dam immediately after beginning the bypass, and acknowledged that it took approximately 10 days last year for improvements to be seen at the hatchery.
 - i. CDFW noted that current river temperatures flowing into the hatchery are not sufficient to support cold-water fish.
 - ii. CDFW expressed concern about the length of the power bypass and asked if there is the possibility of amending the volume of bypassed water between 10/19 and the first week of November based on observed water temperatures.
 - iii. USBR noted that in making their decision they reviewed the studies that were included in the bypass proposal. No additional studies or modeling were conducted for the modified power bypass scenario that will be implemented.
 - b. CDFW proposed modeling the anticipated outcomes of USBR's power bypass plan.
2. USBR expressed surprise that a power bypass was being considered (much less enacted) given precipitation and inflow levels.
 - a. CDFW stated that Reclamation is obligated to at least consider power bypass operations to respond to emergency or unexpected events. Since the 2024 fall-run fishery was subject to an emergency closure due to the 2023 fall-run Chinook Salmon population showing low returns and low abundance, that is considered an emergency or unexpected event.

3. K&W asked if there is the possibility of revisiting the bypass plan if temperature conditions are not as good as anticipated.
 - a. USBR responded that they will continue to take DO and temperature readings throughout the time period of the bypass as well as monitor water levels in the dam.
4. CDFW has guidance to not bring adult fish into Nimbus Hatchery until DO reaches 7 mg/L. CDFW has aerators in the ponds at the raceways but no way to artificially increase oxygen at the head of the fish ladder.
 - a. USBR asked about pushing spawning back later into November.
 - b. CDFW noted that delaying spawning has a trickle-down effect. If they cannot grow fish from the collected eggs to an appropriate size so that they can be released into the lower American River, then the juveniles will have to be transported via truck to the Bay. The later fish are released the warmer water temperatures are and could lead to less favorable outmigration conditions and also lead to lower survival.
5. Water Forum shared that they have data from the last two years that showed a DO improvement in Lake Natoma. However, the data was recorded during a 500 cfs bypass. The Water Forum also noted that the 100 cfs to 250 cfs transition was not modeled for the group. The outcome is uncertain due to the lower water volume that was bypassed during the last two seasons. Water Forum is able to model the modified scenario adopted by USBR using the 10/17 temperature profile.
6. Water Forum asked if there's a chance that the bypass would be continued after 11/9 if conditions are not suitable?
 - a. USBR confirmed that a provision was included in the bypass plan to consider revising the bypass if it becomes unusually warm. BDO biologists will determine this temperature threshold and what would be suitable for ending the bypass.
 - i. CDFW recommended including fisheries input on this threshold.
7. CDFW asked if temperature goals are not achieved in the lower American River after implementation of the bypass, is there a possibility of increasing the bypass to 500 cfs? If yes, how quickly could this be implemented?
 - a. USBR responded that daily monitoring will help determine if the bypass is having the intended effect.
8. USBR proposed holding an ad hoc meeting before 11/1 to review temperature and egg mortality modeling of the bypass plan and get a status update. CDFW expressed support for this suggestion.
 - a. Kleinschmidt Group agreed to model the modified bypass plan and present results to the group at the ad hoc meeting.

Discussion

Annual Report

USBR will share the draft annual report on 10/21/2024.

Next Meeting

The ARG will hold an ad hoc meeting on Thursday, October 24 at 10 a.m. The meeting will be virtual.

The next regularly scheduled ARG meeting is on Thursday, November 21. The meeting will be virtual.