



Meeting Minutes

Meeting of the California Water Commission

Wednesday, September 20, 2023

Oroville Dam Spillway and Feather River Fish Hatchery

Beginning at 9:00 a.m.

1. Call to Order

Vice-chair Fern Steiner called the meeting to order at 9:00 a.m.

2. Roll Call

Commissioners Curtin, Gallagher, Matsumoto, Solorio, and Steiner were present, constituting a quorum.

3. Acknowledgement of California Native American Tribal Governments

This is an opportunity for elected Tribal leaders and formally designated Tribal representatives to identify themselves and to specify the agenda item(s) on which they will comment, as described in the Commission's California Native American Tribal Leadership Comment Policy. No Tribal leaders were identified.

4. Approval August 16, 2023, Meeting Minutes

Commissioner Solorio motioned to approve the August 16, 2023, meeting minutes.

Commissioner Curtin seconded motion. All Commissioners voted to approve the minutes.

5. Commission Member Report

There were no Commissioner reports.

6. Public Testimony

There was no public testimony.

7. Oroville Dam Spillways Tour

Staff from the Department of Water Resources (DWR) led the Commission on a tour of the Oroville Spillways, which were redesigned and reconstructed after they were damaged by erosion in February 2017. Tony Meyers, State Water Project (SWP) Operating Officer, and Scott Turnquist, Engineering Branch Manager with the Oroville Field Division, explained the history and function of the Oroville Dam.

Public comment from Douglas Goad, who said the discussion has him feeling better about the downstream community's safety, and thankful for DWR's attention to detail.

Commissioner Solorio asked what the cubic-foot-per-second (cfs) was for the main and emergency spillways. Mr. Turnquist said just under 300,000 cfs for the main, 300,000 cfs for the emergency. He then asked them to clarify that the probable maximum flood (PMF) return interval was 24,000 to 27,000 years. Mr. Turnquist said the return interval is a probabilistic estimate of a PMF event occurring, but it is a bit of a moving target. PMF and return intervals are updated frequently. He also asked about energy production and the amount of water released down the spillway annually. Mr. Turnquist said, on average, it generates enough energy for 700,000 homes, and 24 million acre-feet has been released so far this year.

Commissioner Gallagher asked if they have seen a dramatic difference when using Forecast Informed Reservoir Operations (FIRO). Mr. Meyers said DWR plans to go live with FIRO in 2024. In balancing storage and flood control, public safety comes first. There will always be a challenge in balancing the different goals of a multi-purpose facility.

Commissioner Curtin thanked DWR for their management of the 2017 spillway incident, saying DWR received a lot of criticism from different sides, but the effort and quality of the repair work done is commendable. He asked if groundwater recharge is part of the integrated plan, is there an opportunity that the water sent downstream could be recharged once FIRO is implemented, and are those partnerships and connections being made. Mr. Meyers said projects like the Willow Springs Water Bank will provide groundwater storage, but more relationships need to be developed.

Vice-chair Steiner suspended the meeting at 10:15 a.m. as the Commission relocated to the fish hatchery. The meeting reconvened at 10:30 a.m.

8. Feather River Hatchery Tour

Jason Kindopp, Environmental Program Manager with DWR's Division of Integrated Science and Engineering, and Sabrina Bell, Senior Environmental Scientist and Specialist with DWR's Oroville Field Division led the Commission on a tour of the Feather River Fish Hatchery, which was constructed as part of the Oroville Dam Complex and benefits Central Valley Steelhead and spring- and fall-run Chinook Salmon.

Commissioner Matsumoto asked what the salmon runs were before the dam was constructed. Mr. Kindopp said there were impacts to the fishery pre-dam from hydraulic mining and other upstream dams used for power generation. There was no mitigation for those impacts, and estimates that the early numbers were tens of thousands of salmon. In the past 20-25 years, there are 20,000 fish in the facility each year and more in the river. The facility is responsible for 25-65 percent of the commercial salmon fishery. The fact that salmon runs were still occurring given the pre-dam impacts is a testament to the species' tenacity.

Commissioner Gallagher asked if there is an opportunity in the Feather River area to spread water for rearing habitat like they do on the Sacramento River in the Yolo Bypass. Mr. Kindopp said water from the Feather River contributes to flows in the Yolo Bypass. There may be some additional opportunity in the Sutter Bypass.

Commissioner Matsumoto said it looks like the hatchery mitigation activity is doing well. What about spawning in the river? Mr. Kindopp said the spring run work is going well, but in the river, they monitor but do not have a solution for the thiamine deficiency that results from Central Valley Chinook Salmon feeding heavily on Northern Anchovy while in the ocean. Anchovy have an enzyme called thiaminase, which breaks down thiamine in the predator that consumes them, making the animal deficient in thiamine - a deficiency passed on to their offspring. A severe deficiency will likely result in death, while a moderate deficiency would result in neurologic deficiencies that would make survival to adulthood unlikely. While most salmon returning to hatcheries can be treated for thiamine deficiency, wild spawning salmon cannot, further increasing the imbalance between the success and survival of hatchery and naturally spawned salmon. There has been a lot of research, and there's some indication that microbes in the gravel may produce thiamine and be able to contribute it to the eggs. The real solution would be to have better diet diversity, such as prey species, in the ocean.

Commissioner Solorio asked what the original reason for this facility was. Mr. Kindopp said it was mitigation for blocking upstream migration of salmon.

9. Consideration of Items for Next California Water Commission Meeting

The October 18, 2023, Commission meeting will include an update on the Pacheco Reservoir Expansion Project, the third State Water Project briefing of 2023, and an update on legislation relevant to Commission work.

10. Adjourn

The Commission adjourned at 11:55 a.m.