

Meeting Summary
Oroville Dam Citizens Advisory Commission
Meeting 3: February 21, 2020

9:30 am – Noon
Southside Oroville Community Center
2959 Lower Wyandotte Road, Oroville, CA 95966

This meeting summary provides an overview of the February 21, 2020 Oroville Dam Citizens Advisory Commission meeting and focuses primarily on capturing the comments and questions posed by Commissioners and members of the public. It is organized by agenda topic to assist readers in cross-referencing the meeting materials. This document is not intended to serve as minutes of the meeting or a transcript of the discussion. A transcript prepared by a court reporter and materials from the meeting are available on the [Oroville Dam Citizens Advisory Commission website](#)

Meeting Agenda

- Welcome and Introductions
- November Meeting Recap and Updates
- U.S. Army Corps of Engineers (USACE) Briefing
- Department of Water Resources Operations Communications Update
- Public Comment

Action Items

1. Meeting facilitation consultants, Kearns & West, to produce meeting summary. California Natural Resources Agency (CNRA), Asm. Gallagher, Sen. Nielsen, Sup. Flores (Sutter County), and Sup. Bradford (Yuba County)'s offices to review summary prior to posting on the Oroville Dam Citizens Advisory Commission website.
2. Kearns & West to support tours for Commissioners of the State-Federal Flood Operations Center in Sacramento.
3. Kearns & West/CNRA to confirm next Commission meeting for June 26, 2020 in Oroville.

Agenda Item 1: Welcome and Introductions

Secretary Wade Crowfoot welcomed attendees to the meeting and introduced the meeting's primary focus, a better understanding of the U.S. Army Corps of Engineers (USACE) role in flood control management. He noted that the Commission charter was finalized at the November 20, 2019 meeting. Senator Nielsen and Assemblyman Gallagher thanked the Commissioners and attendees for taking part in the Commission meeting and expressed their interest in working with USACE to modernize the region's approach to flood control and Oroville operations. Additionally, Congressman Doug LaMalfa attended the meeting and underscored the importance of the Commission as a forum for critical community conversations around dam management, public safety, and access to recreation.

Director Karla Nemeth updated attendees on the FEMA reimbursement for 2017 Spillway Incident recovery efforts. She explained that the entire gated spillway reconstruction has been approved as an

eligible expense for FEMA reimbursement, which means at least 75 percent of the gate spillway costs can be reimbursed. The monies provided by the FEMA reimbursement will enable DWR to continue to improve the safety of Oroville Dam and its appurtenances— and to invest more sooner. She thanked local leadership for impressing upon the federal government the importance of reimbursement.

As mandated by the requirements set forth in Senate Bill 955 (2018, Nielsen), the Commission consists of representatives from the following agencies and public bodies. Attendance at the February 21, 2020 meeting is noted in the table below.

Agency or Public Body	Commissioner or Alternate	Present
CA Natural Resources Agency	Chair: Secretary Wade Crowfoot	Yes
California State Senate	Vice Chair: Senator Jim Nielsen	Yes
Department of Water Resources	Director Karla Nemeth	Yes
Department of Parks and Recreation	Director Lisa Mangat (represented by Matt Teague)	Yes
Office of Emergency Services	Director Mark Ghilarducci (represented by Eric Lamoureux)	Yes
Department of California Highway Patrol, Butte County Division	Assistant Chief Steve Dowling	No
California State Assembly	Assemblyman James Gallagher	Yes
Oroville City Council	Councilmember David Pittman	Yes
Oroville City Council	Mayor Chuck Reynolds	Yes
Butte County Board of Supervisors	Supervisor Steve Lambert	Yes
Butte County Board of Supervisors	Supervisor Bill Connelly	No
Butte County Board of Supervisors	Genoa Widener	Yes
Yuba County Board of Supervisors	Supervisor Gary Bradford	No
Yuba County Board of Supervisors	Supervisor Doug Lofton	No
Sutter County Board of Supervisors	Supervisor Mat Conant	Yes
Sutter County Board of Supervisors	Supervisor Dan Flores	No
Butte County Sheriff's Office	Lieutenant Steve Collins	Yes
Yuba County Sheriff's Office	Lieutenant Joe Million	Yes

Sutter County Sheriff's Office	Deputy Andre Licon	Yes
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Agenda Item 2: November Meeting Recap and Updates

Secretary Crowfoot noted that a summary and presentations from the November meeting were posted online for those unable to attend in-person or interested in reviewing meeting documents in more detail. At that meeting, there was discussion of a pending \$5 million grant settlement on siltation issues in the Feather; Secretary Crowfoot updated attendees that the settlement with the Sutter Butte Flood Control Agency has now been signed. The Commission will be kept apprised of the work as it moves forward.

Agenda Item 3: U.S. Army Corps of Engineers (USACE) Briefing

Joe Forbis, USACE Sacramento District's Chief of Water Management, presented on the USACE Oroville Dam Reservoir Flood-Control Manual and manual update process. Topics included:

- USACE's authorities regarding prescribing flood control operations, including Oroville Dam's flood space allocation authorization
- Water control manuals, the update process, and how the process could be expedited
- California weather, hydrology, and atmospheric rivers
- Lessons learned from the Folsom Dam regarding flood history, auxiliary spillways, and their water control manual update
- Forecast-informed reservoir operations (FIRO), focusing on the Yuba-Feather FIRO as an example

Following the presentation, Commissioners asked for clarification or provided feedback on the presentation and related topics; input included:

- Senator Nielsen inquired as to whether or not the surcharge zone above the flood control space must consistently be kept empty. Joe Forbis responded that the amount of required vacant space in the reservoir varies throughout the year, depending on the season and watershed soil saturation.
- Councilmember Pittman asked whether USACE is responsible for flood control upstream of Oroville. Joe Forbis explained that they are not.
- Congressman LaMalfa asked if the maximum capacity of the levees from Oroville down to Yuba and Sutter Counties takes into account the dam outflow. Joe Forbis responded that the specific amount depends on the gauge location (i.e., confluence location), but currently 150,000 cubic feet per second (cfs) is considered the maximum flow. Coordination with DWR on real-time operations is critical to understand the exact releases and associated flow levels downstream to guide proper operations decisions. Director Nemeth added that DWR has a history of working with flood control districts and USACE to create an operations plan which accommodates flows from each watershed for enhanced public safety. Forbis noted that ideally they avoid releases that near the downstream system's capacity but at time conditions do not allow that flexibility.
- Secretary Crowfoot asked about conditions in the reservoir at the time of the 2017 Spillway Incident. Joe Forbis responded that the reservoir levels had just risen within the flood control

space, so the water control manual dictated the increased releases; there was no concern from a flood control standpoint at that time.

- Genoa Widener asked if the dam owner can increase the flood control pool. Joe Forbis responded that outside of the flood control space, the dam owner can operate as necessary (i.e., if they want to make a release at lower lake levels, they can do so).
- Secretary Crowfoot asked what USACE rules might be utilized in a dry year. Joe Forbis responded that the rules only are only applied when lake levels enter the flood control space; as long as lake level remain lower than the flood control zone, the owner can make decisions independently.
- Secretary Crowfoot asked about USACE's role in the FERC relicensing process. Joe Forbis responded that USACE's role is fairly minimal as they are primarily interested in dam operations not infrastructural safety.
- Councilman Pittman asked if USACE does its own data collection and analysis for the Water Control Manual update process. Joe Forbis replied that he is uncertain on specifics, but that Section 7 partners mostly rely upon their own data collection infrastructure.
- Congressman LaMalfa asked if \$4 million for the Oroville and New Bullards Bar water control manual update is adequate. Joe Forbis responded that it is likely not enough for the entire process, but the total cost will be heavily dependent upon how much DWR and the Yuba Water Agency take on the technical work. In addition, USACE can use the Folsom Water Control Manual update process as a case study to inform aspects of the Oroville update. USACE is pushing at a district-level to plan this process carefully, especially since the Forecast Informed Reservoir Operations (FIRO) effort is also underway and includes technical work that otherwise would occur within the Water Control Manual update process. As long as a plan is established, the money can be used beyond this fiscal year.
- Supervisor Conant asked if USACE has done work on how one dam affects another including an analysis of estimated inflows. Joe Forbis responded that coordination across reservoirs is managed as part of real-time operations. System-wide water management studies have been done but are rarely undertaken as part of water control manual updates due to the extensive resources necessary to integrate forecasts and operations across many dams simultaneously.
- Assemblyman Gallagher asked if the new Oroville and New Bullards Bar water control manual update could reasonably be completed in 5 years. Joe Forbis responded that this is a feasible timeframe assuming no FIRO pieces start late; completion of FIRO should expedite the manual update process. Director Nemeth added that DWR would like an additional \$4 million to achieve the desired pace of work, and legislators will be critical in this effort. Secretary Crowfoot added that a follow-up conversation in the form of quarterly meetings will be scheduled to continue dialogue on this process and obtaining necessary resources. Assemblyman Gallagher expressed support for getting the resources needed for a thorough and expedited process.
- Assemblyman Gallagher and Secretary Crowfoot asked how the FIRO and Water Control Update processes are being integrated and what the schedule looks like. Joe Forbis explained that the processes are related but have slightly different foci. The FIRO effort focuses on how forecasting can be improved and then how that can be used in operations, while the manual update establishes operational rules to best ensure flood protection. A Water Control Manual update planning meeting is scheduled for next month to discuss budget and schedule. Secretary

swim and camp. Additionally, although they have a license, I do not believe DWR own the dam and am not sure why they say they do.

- v Response: Commissioners can request to discuss recreation, so this type of agenda item is an option.
 - v Response, Director Nemeth, DWR: DWR owns the dam as they acquired the land, financed the dam and its appurtenances, own the water rights, and operate the dam. DWR also owns and operates 25 additional dams across the state. DWR is currently operating under a temporary license and waiting on FERC to reactivate the license. Many new recreation benefits are tied to this relicensing approval, but DWR is working to provide recreation opportunities to make up for what was lost in 2017.
- Comment: I find today's presentation convoluted and am concerned how operations are being handled. Does someone have algorithms to incorporate the many variables at play here? Who is ultimately in charge of making decisions and coordinating these matters?
 - v Response, Joe Forbis, USACE: The Joint Operations Center in Sacramento co-locates agencies while also housing the Flood Operations Center. NOAA data is incorporated at this location into associated work with the Weather Service. The involved state and federal agencies join a weekly call to discuss the weather forecast and coordinate upcoming releases. The Forecast Operations Group has quarterly meetings to discuss how a shared modeling tool informs project management.
 - v Response, Secretary Crowfoot, CNRA: Given that the Flood Operations Center is the hub of all this information gathering and analysis, I suggest prioritizing a tour of the Joint Ops Center for the Commissioners.
 - v Response, Director Nemeth, DWR: DWR is the decision-maker but USACE provides approval and oversight. We ensure all relevant inputs are incorporated into decision-making.
- Comment: I have grave concerns regarding the Palermo tunnel which exists underneath the Oroville Dam and have discussed these concerns with DWR engineers. This tunnel provides a small water benefit, but, ultimately, jeopardizes the entire dam's integrity. While it may not be an issue for the next few decades, eventually this must be addressed.
 - v Response, Ted Craddock, DWR: We are glad our Chief Water Engineer could connect with this citizen on their concerns. We are happy to present on this facility if requested. Currently, the CNA Independent Review Team is looking at this issue. Also, Congress had a Level 2 Risk Assessment Team look at it. The tunnel is currently in fine shape, but we are glad to connect with this citizen to address their concerns.
- Comment, Senator Nielsen: The homelessness issue is a real crisis, particularly along the river where it is exacerbating garbage and turbidity problems. We need to provide shelter for homeless individuals and provide assistance in helping them to become self-sufficient.
 - v Response, Secretary Crowfoot: The homelessness issue is of great concern to the community. We should consider how the CAC can support discussion to help state agencies and local partners address the concern.

Closing Comments

It was announced that the next meeting will be held on June 26, 2020¹, and that a summary of this meeting will be posted on the Commission page of the CNRA website.

The meeting adjourned at 12:00 p.m.

¹ In accordance with the directives provided by Governor Newsom (Executive Order N-25-20), this meeting has been moved to August 21, 2020 and will be conducted as a phone-in and web-based meeting.