Meeting Summary Oroville Dam Citizens Advisory Commission Meeting #19: March 7, 2025 10:30 a.m.– 12:30 p.m. Virtual Meeting

This summary provides an overview of the March 7, 2025, Oroville Dam Citizens Advisory Commission (OCAC) meeting. It 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. Related meeting materials, including the slide deck and a video recording, are available on the <u>OCAC Website</u>.

Meeting Agenda

- Welcome and Introductions
- OCAC Legislative Report Update
- City of Oroville Levee
- Water Control Manual 101
- Public Comments & Questions
- Adjournment

Action Items

Discrete action items:

- DWR to ask FERC whether they would like to receive the second Oroville Dam Citizens Advisory Commission report; Commission to also explore other ways to strengthen FERC participation and engagement in Oroville facility-related discussions.
- DWR to add the district manager of the Feather River Recreation and Park District to relevant Oroville Dam operations notification lists to ensure they receive timely updates. [Completed by DWR]

To add as future agenda topics:

- Provide an update on evaluation of the City of Oroville's levee, including any identified vulnerabilities, specific needs, and funding pathways.
- Status of FERC's relicensing of Oroville facilities, including FERC 101

To be marked as resolved in the action item tracker:

 (#46) Status of the City of Oroville's levee and next steps including City of Oroville-Sutter Butte Flood Control Agency (SBFCA) coordination

Rollcall

As mandated by the requirements set forth in Senate Bill 955 (2018, Nielsen), the Commission comprises representatives from the following agencies and public bodies. Attendance at Meeting 19 on March 7, 2025, is noted on the table below.

Agency or Public Body	Commissioner (or Alternate)	Attendance
California Natural	(Chair) Secretary Wade Crowfoot	Yes
Resources Agency		
California State Senate	Senator Brian Dahle (represented by Bruce	No
	Ross)	
California State Assembly	(Vice Chair) Assemblymember James Gallagher	Yes
	(represented by Braden Pisani)	
Department of Parks and	Director Armando Quintero (represented by	Yes
Recreation (DPR)	Superintendent Matt Teague)	
Department of Water	Director Karla Nemeth (represented by Lead	Yes
Resources (DWR)	Deputy Director Tom Gibson)	
California Governor's	Chief Deputy Director Nancy Ward (represented	Yes
Office of Emergency	by Deputy Director Lori Nezhura)	
Services (Cal OES)		
Oroville City Council	Mayor David Pittman	Yes
Oroville City Council	Vice Mayor Eric Smith	Yes
Butte County Board of	Supervisor Tod Kimmelshue	No
Supervisors		
Butte County Board of	Supervisor Bill Connelly	Yes
Supervisors		
Representative on behalf of	Robert Bateman	No ¹
Butte County Board of		
Supervisors		
Yuba County Board of	Supervisor Seth Fuhrer	No
Supervisors		
Yuba Office of Emergency	OES Manager Oscar Marin	No
Services		
Sutter County Board of	Supervisor Jeff Boone	Yes
Supervisors		
Sutter County Board of	Supervisor Jeff Stevens	Yes
Supervisors		
California Highway Patrol	Lieutenant Patrick Leach	Yes
Butte County Division		
Butte County Sheriff's	Lieutenant James Beller	Yes
Office		
Yuba County Sheriff's	Operations Captain Nathan Lybarger	Yes
Office		
Sutter County Sheriff's	Deputy Andre Licon	No
Office		

¹ Commissioner Bateman joined later in the meeting and therefore, was not counted toward quorum during the initial roll call.

Welcome and Opening Remarks

Commission Chair California Natural Resources Agency (CNRA) Secretary Wade Crowfoot welcomed commissioners, presenters, and members of the public to the 19th meeting of the Oroville Dam Citizens Advisory Commission (OCAC). Secretary Crowfoot acknowledged new commissioners to their first meeting: Lieutenant Patrick Leach from the California Highway Patrol of the Butte County Division, Jeff Stevens and Jeff Boone from Sutter County Board of Supervisors, and Captain Nathan Lybarger from the Yuba County Sheriff's Office.

Secretary Crowfoot emphasized the importance of the Commission, which was established by State Law through the efforts of former Senator Nielsen and Assembly Member Gallagher. The primary purpose of the Commission is to ensure that state agencies, including the Department of Water Resources (DWR), focus on the safety of the Oroville Dam and Reservoir, while maintaining a transparent dialogue with community and public safety leaders in the region. This ongoing focus stems from the 2017 emergency spillway operation, and Secretary Crowfoot acknowledged the Commission for its role as a clear and transparent forum to address concerns and foster discussion about these critical safety issues and thanked legislative colleagues for supporting their continued work.

Secretary Crowfoot explained that today's agenda topics are focused on topics of interest raised by commission members and the public at the last meeting. Secretary Crowfoot emphasized the importance of addressing relevant issues and highlighted the Action Item Tracker, urging commissioners to provide feedback on it as a tool for accountability.

The agenda for the meeting included three key topics: first, an update on the Commission's upcoming second tri-annual legislative report, which will be submitted as the Commission concludes its sixth year; second, an update and discussion on the City of Oroville's levee; and third, an introduction to the standard contents of a United States Army Corps' (Army Corps) Water Control Manual and an update on the Army Corps' ongoing efforts to update the manual governing operations of the Oroville facility, including the upcoming public scoping period for community input. The meeting will conclude with a public comment period.

Secretary Crowfoot invited Tom Gibson, Lead Deputy Director at DWR, to make introductory remarks. Deputy Director Gibson thanked external partners involved in the meeting, including the Sutter Butte Flood Control Agency (SBFCA), the City of Oroville, and the Army Corps. He then introduced John Yarbrough, Deputy Director of the State Water Project at DWR, to provide an update on Oroville operations.

Mr. Yarbrough stated that there were fluctuating weather patterns observed this year, with dry months in October and January, and wet months in November and February. In February, the storms caused significant inflows into Lake Oroville, which reached over 100,000 cubic feet per second (cfs). Near the end of January, Lake Oroville was at around 75% of its capacity, which was not within the flood control space dictating flood releases. However, the February storms increased the amount of storage and therefore DWR began coordinating with the Army Corps and began flood releases into the Feather River to maintain space for incoming flows into Lake Oroville. The flood releases during this time peaked out at 35,000 cfs. Currently, the lake is at 85% capacity, and DWR continues to manage and coordinate releases to ensure adequate space for future inflows into the lake.

Mr. Yarbrough also discussed the update to the Army Corps'Water Control Manual for Oroville Dam, emphasizing the importance of using advanced forecasting to guide reservoir operations and improve safety for downstream communities.

Lead Deputy Director Gibson highlighted DWR's commitment to using the best available science and data in Oroville water operations. He noted relevant upcoming presentations at the next commission meeting: one from Dr. Marty Ralph of the Scripps Institution of Oceanography on the Yuba Feather Forecast-Informed Reservoir Operations (FIRO) effort and another from the National Weather Service on storm forecasts and inflow projections.

Lieutenant Jim Beller, Butte County Sheriff's Office, expressed appreciation for DWR's communication during the storms, particularly the updates on water releases, which helped notify downstream communities and agencies. This communication was critical in keeping people safe and preventing potential hazards.

Deputy Director Lori Nezhura of the California Office of Emergency Services (CalOES) reminded the Commission about the Oroville Emergency Action Plan (EAP), which was recently re-approved after review. She explained the Plan's role in ensuring preparedness for dam emergencies and coordinating with local agencies.

Mayor David Pittman and Supervisor Bill Connelly shared feedback on communication improvements and local flood preparedness efforts. Mayor Pittman emphasized the importance of receiving early notifications about water releases, which helped manage flood risks. Supervisor Connelly explained how Butte County is investing in a flood plan for Oroville, and he suggested DWR's potential involvement in strengthening it considering ongoing challenges with levee improvements.

Terra Alpaugh, commission support staff, reminded the commissioners about the action item tracker, which is updated after every meeting as an accountability tool to ensure there is followup on commitments discussed during meetings. The tracker is shared with commissioners to verify that it accurately reflects what was discussed and agreed upon.

Legislative Report Process

Terra Alpaugh reminded the commissioners that a Legislative Report on commission activities is mandated by Senate Bill (SB) 955 once every three years. The Report must provide:

- 1. An overview of ongoing maintenance and improvements made at the dam and its site.
- 2. A register of communications received from the department and other parties to the Commission.
- 3. Notice of upcoming plans made by the department for the dam and its site.
- 4. An overview of flood management projects on the Feather River affecting public safety and flood risk reduction.

The first Legislative Report covers meetings from September 2019 to July 2022 and can be accessed by anyone online through the Commission's main webpage. The second Legislative Report will cover ten meetings from October 2022 to Fall 2025, including Commission meeting presentations and summaries.

Ms. Alpaugh explained the drafting timeline for the second Legislative Report, which includes opportunities for feedback from commissioners throughout various stages of the process before the final report. These include:

- [This meeting] Q1 2025: Reviewing the timeline for the report development and establishing a Commissioner Input Subgroup.
- Q2: Presenting the report outline to and receiving feedback from the OCAC.

- Q3: Drafting and circulating section examples, and later on the Draft Report version #1 for feedback.
- Q4: Providing Draft Report version #2 which includes a Public Comment Period.

Secretary Crowfoot emphasized the importance of making the Commission's work meaningful and impactful, rather than just a box-checking exercise. He encouraged commissioners to review the report drafts to ensure they accurately reflect the Commission's discussions and actions.

Supervisor Connelly asked about including the Federal Energy Regulatory Commission (FERC) in the Commission's process, which led to a suggestion to share the report with FERC and ensure they understand and recognize the Commission's work. This was added to the action items tracker.

City of Oroville Levee

Secretary Crowfoot introduced Mike Bessette from the SBFCA to present on the City of Orovilleowned Levee, a topic requested in previous Commission meetings. Mr. Bessette explained that he would cover concerns about the levee's integrity, potential impacts, and a planned Army Corps Levee Safety Inspection. Brian Ring, the Oroville City Administrator, was also present for questions.

The levee in question is approximately 1.1 miles long, and while most of the land beneath it is owned by the city, some portions are owned by the County or private entities. Mr. Bessette emphasized that the city is responsible for the levee; it is not part of the State Plan of Flood Control or the Army Corps program, making the levee an isolated concern within the broader flood management system.

Mr. Bessette described the efforts over the past two years to address the levee's integrity issues. He described the levee's history of seepage and boils, especially during high water events, and how it does not perform well under these conditions. An upcoming Army Corps levee safety inspection will provide a more detailed assessment of the levee's condition.

Mr. Bessette referenced Federal Emergency Management Agency's (FEMA) floodplain map, which shows areas at risk of inundation during a 100-year flood event. Recent modeling indicates that the floodplain may increase when FEMA remaps the area. He also highlighted the City's interior drainage problems, which increase flooding risks when the river's water level rises and impacts the drainage system. The City is working on an interior drainage study and seeking grant funding for improvements in addition to the levee repairs.

Mr. Bessette discussed the potential impacts if no action on the levee is taken. Public safety is the primary concern, especially given the proximity of Highway 70 and the Feather River. He explained that if FEMA remaps the city, properties within the newly designated floodplain would be required to have mandatory flood insurance, and any new development would need to be built above the base flood elevation. He also stated that the City's levee protects fewer than 10,000 people, which could affect the applicability of SB 5, California's state flood protection program.

To address these concerns, Mr. Bessette discussed various steps taken over the past year including:

• Identifying local funding sources for advancing improvements, considering cost-share arrangements and coordinating with DWR for potential funding.

- Identifying a City lead representative, such as an appointed staff member, to work with private consultants or enter a services agreement with entities with expertise in levee improvements (for example SBFCA).
- Reviewing recommendations in the 2015 HDR Engineering study, which has been shared with the Army Corps to inform the upcoming levee inspection.

In addition, the City of Oroville has been selected to participate in the Army Corps' National Levee Safety Program (NLSP), in which the Army Corps conducts a one-time levee safety inspection that helps evaluate a levee's performance under various hydraulic conditions and determines necessary remediation actions. The inspection process will include a two-day site review, both physical and in-office, to assess flood loading, hydrology, and the potential consequences of levee breaches or overtopping. The inspection should result in a report with recommendations and cost estimates within three months, providing essential data to help make informed decisions about improving safety and performance.

The Oroville levee NLSP is scheduled for May 78, 2025 and final recommendations from the technical screening should be complete in fall 2025, at which point results will be shared with the Commission. Mr. Bessette stated there is a possibility of applying for additional funding through the Army Corps' Section 165 Continuing Authorities Program (CAP), which could fund a more comprehensive feasibility study for the levee. However, this depends on the federal budget, and the City will need matching funds.

Mayor Pittman provided additional context about the levee's history. The levee was built in 1913 with a four-inch concrete slab, which has since deteriorated due to flooding. He also highlighted the City's unique situation with its critical infrastructure, like fiber optic cables running through the levee. Mayor Pittman emphasized the importance of improving the levee not just for flood control but also to preserve essential infrastructure and ensure its proper functioning during flood control releases from Oroville Dam.

Supervisor Boone asked who owns the levee systems in the NLSP database. Mr. Bessette explained that while the national database houses information on all the levees and the Army Corps can access information on them, the levees themselves are owned by various entities such as local or state agencies. Erik James, Chief of Levee Safety for the U.S. Army Corps of Engineers, provided the example that levees within the Mississippi River are primarily owned and operated by the Army Corps, whereas the maintenance and operation of many levees in California's Central Valley are overseen by the Central Valley Flood Protection Board.

Supervisor Boone asked about the funding and responsibilities of a levee system in Sutter County. He explained that a barrier was recently installed down the center of the levees and asked whether the federal government had contributed two-thirds of the cost, as he understood from prior discussions.

In response, Mr. Bessette explained how capital improvements, like the ones in Sutter County, are typically cost-shared by USACE, with the federal government covering 65% of the costs and the remaining 35% covered by non-federal sources. While maintenance costs are typically handled by the local entities benefiting from the levees, the situation in Sutter County was a bit more complicated. Mr. Bessette stated that the project in the region was unique because the Sutter Butte Flood Control Agency (SBFCA) and the State advanced the project before the Army Corps completed its feasibility study and before it was officially appropriated. Bessette offered to provide further details on this specific case offline, acknowledging the complexity of the situation.

Secretary Crowfoot invited Erik James to discuss the critical role of collaboration and coordinated support between state, federal, and local agencies in levee maintenance. Mr. James acknowledged Mr. Bessette's earlier points, particularly regarding the Continuing Authorities Program (CAP), which helps fund feasibility studies and potential construction projects in rural communities. He also highlighted another key avenue for federal support: the Army Corps' ability to provide technical assistance through floodplain mapping.

Secretary Crowfoot invited Deputy Director of Flood Management and Dam Safety at DWR, Laura Hollander, to share the state's perspective on the role of state and federal collaboration in levee maintenance. Ms. Hollander highlighted the state's active involvement in identifying funding pathways and providing technical assistance. She noted that DWR has significant expertise and would continue to support levee safety efforts, including assisting with flood planning and the NLSP.

Supervisor Boone asked about jurisdictional authority over the water that flows through the California aqueducts that run through the San Joaquin Valley. Mr. Yarbrough from DWR explained that the Department of Water Resources is responsible for operating and maintaining the aqueduct infrastructure, funded through long-term contracts with water users, including growers and cities. Supervisor Boone sought clarification, asking if the state was directly funding and maintaining the aqueducts, to which Yarbrough explained that while the DWR operates the State Water Project (SWP), the funding comes from the water users benefiting from the project. Secretary Crowfoot added that federal water projects are funded by federal contractors including irrigation districts.

Supervisor Connelly stated how much progress has been made since the first Commission meeting. He expressed concern that the levee, originally built for flood protection, is now used in support of water transportation and if not properly maintained, it could lead to reduced water delivery and larger flood pools. Supervisor Connelly suggested that the state should take on more responsibility for its repair and maintenance, emphasizing the shared priority of ensuring safety for the region and water users. Secretary Crowfoot clarified with Supervisory Connelly that his argument is that the levee needs to be maintained and improved for the sake of both flood protection and water distribution.

Lastly, Secretary Crowfoot emphasized the need to assess the levee's vulnerabilities and work toward finding the necessary solutions, mentioning that DWR and the Army Corps would continue supporting the planning and technical expertise needed.

Water Control Manual 101

Jennifer Fromm, Chief of the Water Management Section for the U.S. Army Corps of Engineers Sacramento District, gave a presentation on the Army Corps' authority for flood control operations, which is granted through Section 7 of the Flood Control Act of 1944. Section 7 mandates the Army Corps' role in managing flood releases, while the project owner is responsible for implementing the water control plan in real time. Ms. Fromm clarified that the Army Corps oversees water management for both its own projects and those owned by others, such as Oroville Dam, which is a Section 7 project.

Ms. Fromm provided an overview of the Army Corps' water management objectives, which include:

- Operating to authorized purposes and laws
- Maintaining the structural and operational integrity of dams
- Ensuring public health and safety, life, and property

- Water control management at Army Corps-owned projects
- Prescribing flood control and navigation regulations and guidance for non-Army Corps projects (e.g. special acts of Congress)

Ms. Fromm defined a water control manual (WCM) as a guiding document that outlines how the Army Corps operates a reservoir for flood control. It includes emergency procedures, water control plans (WCP), and diagrams to help dam operators make decisions. WCMs also promote transparency in operations and prevent loss of institutional knowledge. Ms. Fromm discussed the process for updating WCMs, noting that updates follow Army Corps regulations. WCMs are comprehensive, with chapters covering everything from project history to hydrologic forecasting and communication. Fromm explained that Water Control Manuals (WCMs) are updated in two ways: administrative and comprehensive. Administrative updates involve changes to elements like hydrology data, project information, or formatting templates. In contrast, comprehensive updates also revise the Water Control Plan (WCP) itself. Since Oroville and New Bullards Bar are undergoing comprehensive updates, their WCPs will be revised as part of the process. Chapter 7 of the WCM details daily flood control operations. Ms. Fromm emphasized key elements of the Chapter, including:

- The importance of the water control diagram—or "rule curve"—which visually represents how water is managed in the reservoir. She described how this diagram aligns with physical reservoir structures, including the water conservation space, flood control pool, and maximum surcharge pool and depicts how that physical space of flood control reservation (in acre-feet and elevation) varies from September to June.
- The trapezoidal shape of Oroville's water control diagram, which is typical of California diagrams where the flood control space varies throughout the year, with a drawdown period in the fall, maximum flood control space in the winter, and refill in the spring. She highlighted Oroville's flood control space of 750,000 acre-feet and the role of the emergency spillway release diagram in managing spillway gates. She noted that for Oroville, gates can be operated before reaching gross pool levels, unlike some other projects.
- The "wetness parameter," which adjusts the flood control space based on rainfall and watershed saturation: the wetter the watershed, the more flood space is needed; and conversely, when the ground is dry, less flood space is required. This calculation is performed daily by the Army Corps to ensure adequate flood control measures are in place. To calculate the wetness parameter, data is used from eight gauges around the watershed, and each day, the previous day's wetness value is multiplied by 0.97 to account for losses, then the current day's precipitation (in inches) is added. This calculation is crucial for determining how much flood space is needed for the reservoir on any given day.
- The specific rules for reservoir releases during flood control operations include a release schedule and limits on the maximum allowable flow in the Feather River at different points. For example, releases above the Yuba River are limited to 180,000 cubic feet per second (cfs), while coordinated releases of Oroville and New Bullards Bar reservoirs below the Bear River can reach up to 320,000 cfs. Additionally, the rate at which releases can be increased or decreased is restricted, meaning releases cannot be increased by more than 10,000 cfs or decreased by more than 5,000 cfs within a two-hour period to ensure controlled, safe water management.

The Water Control Manual update process typically takes one to five years. Ms. Fromm presented a flowchart outlining the steps involved in updating a WCM, emphasizing how the process can include compliance with a range of policies, including the National Environmental

Policy Act (NEPA), regulatory or permit actions, and possibly Endangered Species Act (ESA) consultations. Steps of the WCM process include:

- Creating a project management plan, which includes outlining necessary engineering analyses, establishing schedules, roles, and responsibilities;
- Public and stakeholder outreach, resulting in a stakeholder assessment report that provides avenues for questions and feedback throughout the process;
- Revising hydrology;
- Modeling to establish existing conditions and new baseline environmental conditions;
- Identifying potential changes to reservoir operations ("alternatives"), including evaluation
 of impacts to the reservoir itself and downstream resources like recreation, erosion, and
 fisheries;
- Modeling and assessing the environmental effects of the proposed operational alternatives;
- Reviewing and updating critical documents, such as the water control diagram and NEPA documents; and finally,
- Undergoing policy and legal reviews before final approval by the Army Corps' Division Commander.

Secretary Crowfoot asked Ms. Fromm to clarify the public scoping plan period and how members of the public can engage. Ms. Fromm confirmed that the scoping process would begin in late spring, with at least 30 days' notice before any public meetings, and the Commission would be kept informed of the meeting dates.

Supervisor Boone asked about the management and operational responsibilities of Oroville Dam. Ms. Fromm explained that DWR owns and operates the dam, making decisions on operational changes and flood control releases. She highlighted the coordination efforts between DWR, the Army Corps, and the Yuba Water Agency through the Forecast Coordinated Operations Program, which was established after the 1997 event to improve communication and manage system operations.

Supervisor Boone then asked about FERC's role in permitting DWR's operations of Oroville Dam. John Yarbrough with DWR clarified that FERC issues a hydropower license for Oroville's electricity generation, which is separate from the dam's flood control responsibilities. He explained that Oroville has been operating under a temporary annual license since its original 50-year license expired in 2009. This situation arose because FERC has not yet issued a new license despite years of negotiations and a settlement agreement involving multiple agencies. Mr. Yarbrough added that the spillway incident of 2017 was a potential factor for the temporary license, but delays in FERC's licensing process are a common issue for dams nationwide.

Deputy Director Tom Gibson contributed to the answer, explaining that delays in issuing new licenses are common for large projects like Oroville Dam. He noted that the lengthy process is typical for decadal permits, where the new license could last 40 or 50 years. Agencies involved in the process, including FERC, must incorporate input from various regulatory bodies, which can prolong the timeline. Deputy Director Gibson emphasized that this issue is not unique to Oroville, citing other dams, such as those in the Klamath system, experiencing similar delays. Supervisor Boone raised concerns about the length of the process, noting that it can take decades to secure a new license.

Secretary Wade Crowfoot added that despite the long process, FERC's relicensing is crucial for securing local benefits, such as improvements to recreational areas.

Vice Mayor Eric Smith expressed concerns about potential flood impacts to Riverbend Park, which is managed by the Feather River Recreation & Park District (FRRPD) and was heavily damaged during the 2017 spillway incident. Mr. Smith stated that the ongoing Gravel Restoration Project designed to enhance salmon spawning habitat, by modifying the riverbed along the 1.1-mile levee, could increase events of further damage the park's infrastructure and drainage systems with higher releases. Vice Mayor Smith also highlighted communication issues, noting that the District Manager of the FRRPD and others were not notified about the recent releases, causing frustration among staff who feel unprepared for potential emergency situations. He requested that the district be included in future release notifications and that this issue be addressed in upcoming discussions on flood control and its impacts.

Secretary Crowfoot acknowledged the concerns and informed Vice Mayor Smith that the request would be added to the action tracker.

Commissioner Robert Bateman discussed the Oroville Dam relicensing process, stating that unresolved issues remain from concerns submitted to FERC following the 2017 spillway incident, including the withdrawal of community members from the settlement agreement. He questioned the validity of using the existing settlement agreement for the new license given the lack of active participation from original signatories.

Commissioner Bateman also acknowledged ongoing discussions with DWR and the Army Corps regarding the WCM and reservoir management. He emphasized the differing views of downstream communities regarding approaches to reservoir management and suggested that Supervisor Connelly help facilitate their involvement to ensure a unified approach to the issue.

Supervisor Bill Connelly emphasized that Butte County and Tribes are not signatories to the relicensing agreement and expressed frustration over unmet promises related to the socioeconomic impacts of the dam, including unfulfilled recreational commitments. He stated his opinion that the relicensing process primarily benefited water contractors, particularly DWR, rather than the local community. Supervisor Connelly called for the relicensing to be reopened, noting that Butte County is far from agreeing to any settlement and highlighting the County's significant financial burdens. He suggested that FERC should issue licenses only when all parties are in agreement and when local communities benefit from the power generated.

Levees of Butte County and Oroville

Erik James, Chief of Levee Safety for the U.S. Army Corps of Engineers, provided a presentation discussing risk to the City of Oroville's levee that is downstream of Oroville Dam. Mr. James explained how the inundation map seen in the National Levee Database (NLD) — referenced earlier in Mr. Bessette's presentation—is different from FEMA's inundation maps. Mr. James noted that this NLD inundation map will be updated in the Army Corps upcoming feasibility study and risk assessment to more accurately match the topography and embankment information. He noted the publicly available NLD website will be updated by the Army Corps once the feasibility study is completed.

Mr. James described the next steps in the risk assessment process, explaining that a team of experts from various fields, including hydraulic engineering, geotechnical engineering, and economics, would conduct a site visit to the levee to gather visual and technical data. This data would be combined with information from local stakeholders and aerial imagery to assess the levee's risk of failure. He clarified that the risk assessment would focus on determining the likelihood of the levee being overtopped or breached, factoring in flood frequencies, geotechnical conditions, and other relevant variables. Mr. James highlighted the importance of including both national experts and local professionals to ensure a comprehensive evaluation,

noting that local input would be invaluable in understanding the specific soil conditions and history of the levees in the Oroville area.

Mr. James announced the launch of another risk assessment in the west Feather River system, which will build upon evaluation work done by SBFCA and the Army Corps in 2015 as well as new lessons learned from the Oroville incident, which had not been part of the earlier risk analysis. Specifically, the previous assessment did not account for the emergency evacuation or issues like geotechnical concerns, embankment erosion, and problems with sewage and piping within the embankment.

Mr. James reiterated how subject matter experts from the Central Valley Flood Protection Board, SBFCA, and other local agencies and sponsors are invited to contribute to the upcoming risk assessment for the City of Oroville's levee to ensure that all lessons learned from the Oroville event are considered. Mr. James stated that public input would be sought for both the current and upcoming risk assessments, although he acknowledged potential delays due to a recent federal travel ban affecting the Army Corps' ability to conduct site visits. However, exceptions could be made if life safety risks are identified. Despite this uncertainty, Mr. James expressed optimism about moving forward with the project and emphasized the importance of collaboration with local stakeholders.

Meeting 19 Agenda

Deputy Director Gibson discussed proposed topics for Commission Meeting 20, including a discussion of the contents of the final FIRO report, updates on the California Nevada River Forecast Center's inflow forecasting for California reservoirs, state investments in snow runoff forecasting, and the second Legislative Report Update. He invited other commissioners to propose additional topics for the summer meeting, but there were no further suggestions.

Public Comment

Deputy Director Gibson thanked everyone for their active participation and opened the meeting to public comments.

Comment One:

Ron Stork, representing Friends of the River and who was a member of DWR's Oroville Dam Comprehensive Needs Assessment Ad Hoc Committee, provided a few clarifications:

- FERC licenses apply not only to hydroelectric facilities but also to all project work, including spillways and hoists, once jurisdiction is invoked. He stated that it is not uncommon for projects to experience significant delays in obtaining a new license after the original one expires, with some projects operating on annual licenses for extended periods up to multiple decades.
- While he appreciated the Army Corps presentation summarizing WCMs, it omitted the detail that DWR is working within the Corps' operating minimums to enhance flood control operations, with the goal of avoiding the use of the emergency spillway during the Standard Project Flood, which was the original performance standard for Oroville Dam. Therefore, DWR's rule curve is more conservative than the Army Corps' rule curve, which is beneficial in terms of flood control. This approach might be revisited during the WCM update, as decisions will be made regarding how conservative the flood control operations should be moving forward.

Comment Two:

Matt Mentink thanked everyone for the comprehensive discussion and acknowledged the time constraints for public comment, reserving the right to submit additional questions to Ms. Fromm from the Army Corps and DWR later.

Mr. Mentink asked Erik James of the Army Corps about the ongoing risk reassessments of locally-owned levees downstream of Oroville Dam. He highlighted that the engineering regulation on levee design involves complex assessments of pore pressure, water pressure, and shear strength under varying conditions, emphasizing that each situation should be evaluated for its uniqueness. He discussed how downstream levees are subject to fluctuating loading conditions, particularly the effect of rapid flow changes where maximum flows need to be reduced to manage release capacity and then raised again, sometimes holding these levels for extended periods. Mr. Mentink noted the importance of evaluating the risks associated with these fluctuations in relation to how those risks should be communicated to local agencies responsible for declaring evacuation notices and referred to the costly 2017 evacuation.

Mr. Mentink asked Mr. James whether it would be possible to provide local agencies with clearer guidelines on when evacuations should be declared based on specific flow levels, as current guidelines in the WCM primarily focus on downstream constraints. He suggested that evacuations might need to be triggered at lower thresholds due to fluctuating conditions.

Mr. James addressed the first question about fluctuating water levels, stating that the risk assessment teams for both the Oroville Levee and the West Feather River levee would consider these issues in their analysis. They were aware of the challenges posed by the fluctuating water levels and would incorporate them into the risk assessment.

Regarding the second question about emergency evacuations, Mr. James clarified that the Army Corps are not regulatory and do not provide direct guidance on county emergency action plans (EAPs). Instead, they would assess the effectiveness of these plans in evacuating people from the floodplain. However, economists with expertise in emergency evacuations would analyze aspects like traffic and evacuation procedures as part of the broader risk analysis.

Adjournment

Deputy Director Gibson adjourned the meeting by thanking the public, the presenters, and commissioners for their engagement at the Commission Meeting 19.

The next Commission meeting is tentatively scheduled for Friday, June 13, 2025, from 10 a.m. to noon. The agenda will be available to preview online in advance of the meeting.