

Meeting Summary
Oroville Dam Citizens Advisory Commission
Meeting #14: July 7, 2023
10:00 a.m. – 12:00 p.m.
Virtual Meeting

This meeting summary provides an overview of the July 7, 2023, Oroville Dam Citizens Advisory Commission (OCAC) 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. Related materials, including the slide deck and a video recording are available on the [Oroville Dam CAC website](#).

Meeting Agenda

- Welcome and Introductions
- Oroville Dam Site Visit Debrief
- Oroville Dam Facilities FY 2023–2024 Expected Expenditures Update
- Dam Safety Project Update
- Inundation Maps
- Public Comment & Questions

Action Items

Action Items from Meeting 14

- Commissioners will follow Bagley-Keene provisions in initiating any communications or meetings that may be separate from official Oroville Dam Citizens Advisory Commission (OCAC) meetings. This includes ensuring that any communications or meetings do not exceed quorum and/or constitute a serial meeting, and instead questions/concerns are sent through CNRA to add to the agenda for discussion by the entire OCAC in accordance with Bagley-Keene Act guidelines.
- CNRA to implement new processes for developing meeting agendas and tracking action items, as discussed at the meeting.
- Future agenda topics requested:
 - Presentation on how the California Department of Water Resources (DWR) adjusts its State Water Project (SWP) Asset Management Plan over time, with a focus on the Oroville facility and insight into the decision-making process and how safety is considered in SWP investment decisions.
 - Regular updates on Oroville capital expenditures and how they change over time as part of the SWP Asset Management Plan (i.e., explore the connection between risk analysis, selected projects, and available resources).
 - Status update on DWR's analysis of whether lower-level river outlets are needed (e.g., risk analysis, actual costs, cost/benefit analysis).

- Presentation on lessons learned from prior extreme weather events at Oroville and how those have informed current safety measures.
- Check-in on updated OCAC processes for transparency and Bagley-Keene compliance.
- November update on data from toe piezometers and subsequent update on data from other piezometers as it becomes available.
- November presentation on what is anticipated for the coming winter rain season (flows, operations, flood management decisions and El Niño-related preparation).

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 14 on July 7, 2023, is noted in the table below.

Agency or Public Body	Commissioner (or Alternate)	Attendance Status
California Natural Resources Agency	(Chair) Secretary Wade Crowfoot (represented by Assistant Secretary Bryan Cash)	Present
California State Senate	Senator Brian Dahle (represented by Bruce Ross)	Present
California State Assembly	(Vice Chair) Assemblymember James Gallagher	Present
Department of Parks and Recreation (DPR)	Director Armando Quintero (represented by Superintendent Matt Teague)	Not present
Department of Water Resources (DWR)	Director Karla Nemeth	Present
California Governor's Office of Emergency Services (Cal OES)	Chief Deputy Director Tina Curry (represented by Deputy Director Lori Nezhura)	Present
Oroville City Council	Mayor David Pittman	Present
Oroville City Council	Vice Mayor Eric Smith	Present
Butte County Board of Supervisors	Supervisor Tod Kimmelshue	Present
Butte County Board of Supervisors	Supervisor Bill Connelly	Present
Representative on behalf of Butte County Board of Supervisors	Robert Bateman	Present
Yuba County Board of Supervisors	Supervisor Seth Fuhrer	Present
Yuba Office of Emergency Services	Oscar Marin	Not present
Sutter County Board of Supervisors	Supervisor Mat Conant	Present
Sutter County Board of Supervisors	Supervisor Dan Flores	Not present
California Highway Patrol	Lieutenant Commander Marc Stokes	Not present

Butte County Sheriff's Office	Sergeant Brian Evans	Not present
Yuba County Sheriff's Office	Lieutenant Brandon Spear	Not present
Sutter County Sheriff's Office	Deputy Andre Licon	Not present

**Member present for majority of the official meeting but not present during roll call.*

Welcome and Introductions

Secretary Wade Crowfoot welcomed commissioners, presenters, and the public to the fourteenth meeting of the Oroville Dam Citizens Advisory Commission. He thanked Commission Vice Chair and Assemblymember James Gallagher for the Assemblymember's continued leadership in the OCAC forum and welcomed Jonathan Young from the California State Water Project Contractors. Secretary Crowfoot reviewed virtual meeting guidelines and reminded everyone that members of the public could join commissioners in person at their respective public agency offices in accordance with the State of California's Bagley-Keene Open Meetings Act (1967, Bagley, Keene).

Secretary Crowfoot discussed recent updates to the format of the Action Item Tracker, which serves as the Commission's accountability tracker. He noted that the Action Item Tracker is available on the Commission website and that no other commission he chairs has this same level of transparency.

The Secretary reviewed the process through which meeting agendas will be developed to ensure all commissioners can provide input and suggestions on upcoming agendas. Secretary Crowfoot noted that during Meeting 13 Commissioner Robert Bateman suggested convening a steering committee for agenda-setting purposes. The new Commission agenda setting process is designed to create agendas that reflect Commissioner interests, provide transparency, and comply with California State law.

Supervisor Bill Connelly explained how he thought a steering committee could be a useful method to provide contributions to the Commission by expressing concerns and asking questions and would not impede the progress of the Commission. Kearns & West Facilitator Terra Alpaugh and Secretary Crowfoot clarified that a steering committee could convene as long as quorum (50% attendance of the OCAC body) is not met and there are no subsequent serial email distributions which would violate Bagley-Keene guidelines. Secretary Crowfoot acknowledged Supervisor Connelly's awareness of these rules and his faith in commissioners to explore legal ways to convene in small groups while navigating open meeting laws.

Oroville Site Visit Debrief

Eva Spiegel of Kearns & West provided commissioners with a debrief of the site visit to the Oroville Dam facilities in May 2023. Six commissioners toured the Hyatt generating/pumping plant and the top of the dam and the spillway. Spiegel outlined the tour in chronological order and shared images.

Secretary Crowfoot acknowledged the importance of in-person site visits. He thanked commissioners who were able to join the tour. CalOES Deputy Director Lori Nezhura commented that she appreciated the opportunity to tour with commissioners. She remarked that it was interesting to hear from commissioners who had lived in Oroville and/or had family and acquaintances there during the historical development of the facilities.

Oroville Dam Facilities Update: Expected Expenditures

Hong Lin, Chief Financial Manager, SWP, DWR, provided a financial overview of the SWP, including the budget and process for annual planning. She explained that sources of the SWP's more than \$1 billion annual revenue include the payments from the 29 SWP contractors, power revenue from the project facilities, cost-sharing from other agencies such as the Bureau of Reclamation, and the State General Fund under the Davis-Dolwig Act (AB 261, 1961). This budget funds SWP operations, maintenance, debt service, and capital projects. The capital projects planning portion of the budget has averaged approximately \$300 million annually, for the past four or five years; Ms. Lin noted that this average does not include the cost of repairs related to the 2017 Oroville Spillways Incident.

Ms. Lin explained that the SWP is currently operating under a Contract Extension Amendment, which extends the term in each SWP Contractor's contract to December 31, 2085. The amendment implements new billing provisions, increases the SWP's operating reserves, establishes additional accounts for SWP management, and facilitates improved coordination among the various parties.

Ms. Lin reviewed the SWP Financial Management Enhancement initiative and progress, started in 2015, which included multiple phases:

1. Phase 1 (Completed) — The State Budgeting and Planning: DWR implemented a system to coordinate with the State budget process that is now used annually.
2. Phase 2 (Completed) — The Portfolio, Project, and Resource Management: DWR implemented a system serving as the central database of all the SWP programs and all planned resources in one system. Lin explained how this provides the opportunity to allocate resources efficiently through risk-informed project ranking.
3. Phase 3 (Completed) — The Cost Allocation and Billing (CAB): DWR implemented a system integrating the Contract Extension Amendment's new billing methodology along with the current methodology. The CAB system implemented during this phase allows for costs to be fairly and equitably allocated among all 29 SWP Contractors. Lin explained the SWP Contractors' bills for 2024 were prepared using the CAB system this year.
4. Phase 4 (Ongoing) — The Business Intelligence and Cross Modular Reporting: during this phase DWR will create an interactive dashboard that shows SWP costs and charges and is available to all parties involved in the SWP.

Ms. Lin provided an overview of the budget planning timeline for the current annual cycle, which is repeated each year:

- In December of 2022, the SWP planning was presented at DWR's SWP Financial Management Conference (FMC);
- Early in 2023, the annual SWP budget was approved;
- During the first half of 2023, cost data is processed, and statements of charges (bills) are sent to the SWP Contractors by the end of June;
- During the second half of 2023, DWR annual planning continues and will culminate once again in December 2023 FMC.

She discussed Oroville-specific expenditures since 2019 and noted that the costs reflected in the presentation do not include the spillway emergency costs. Capital expenditures are planned at approximately \$50 million in calendar year 2023 and approximately \$37 million in calendar year 2024.

Secretary Crowfoot asked Ms. Lin to explain this decrease in expenditure from this year to next year. She responded that these numbers represent planned costs, and that the "total" actual expenditures across all years since 2019 are relatively stable which encompass operations and maintenance, and capital projects costs.

Ms. Lin concluded by summarizing her key points: the Long-term water supply contracts have now been extended; the SWP continues to enhance its financial management through implementation of new systems, program management, and risk-informed prioritization; the SWP maintenance management and asset management programs will provide valuable data to improve SWP capital planning and financing; and that the SWP will continue communicating with the public (e.g. updates to California Water Commission) on SWP planning and financial management.

Commission Vice Chair and Assembly Member James Gallagher commented that Ms. Lin's information about the process and discussion of new decision-making systems based on risk analysis did not provide information on what specific projects have been identified or are planned for Oroville Dam, which is what this Commission is focused on. He requested information on projects at Oroville that have occurred in the past five years, timelines for currently planned projects, risk-based analysis details and what projects have been motivated by that analysis, and an assessment of whether there is sufficient funding to complete all the desired projects. Gallagher posed a specific request to DWR to share whether there are any big projects identified as necessary based on the risk analysis and what their status is in terms of budget and timeline. He is interested in whether the Commission members need to advocate for more resources for these projects.

Secretary Crowfoot explained that David Sarkisian, Principal Engineer of the DWR State Water Project Dam Safety Program, would provide a presentation next that would address some of the specific questions posed by Assembly Member Gallagher, including a list of specific capital improvement projects currently planned for Oroville Dam. Secretary Crowfoot re-emphasized the key takeaways of Ms. Lin's presentation, noting that a 50-year extension of the SWP

contracts will benefit the whole system and that the other process updates allow for a more modernized and transparent planning system for the SWP.

Secretary Crowfoot asked about other issues, such as subsidence and seismic concerns across the SWP system, and how much funding would be spent on Oroville versus other parts of the system.

DWR Deputy Director Ted Craddock explained that the SWP spans two-thirds of California, resulting in geographically based field divisions. Planning occurs in two ways: addressing the needs of regional facilities and analyzing the safety of dams across the whole system.

DWR Director Karla Nemeth mentioned the SWP Asset Management Plan, which assesses and prioritizes projects for the SWP system, and explained how new studies, more data and information are needed to inform updates of this Plan. She explained that this approach helps DWR provide transparency regarding public safety planning at Oroville Dam. She suggested providing an update on project expenditures for Oroville Dam now and in future years, as well as any other budget updates, at the next Commission meeting.

Mr. Sarkisian explained that there is annual funding within the Dam Safety Program, which is focused on the SWP dams, for annual programs like inspections and data analysis. There are also funds from the Extraordinary Fund Center for studies and the Capitalized Fund Center for larger infrastructure improvement-type projects. Deputy Director Craddock stated that the budget planning process is driven by immediate safety needs, and that when higher cost needs arise, SWP Contractors are notified about those upcoming projects that may result in increased bill costs.

Director Nemeth thanked the staff for the budget planning update. She emphasized that the recent updates to the budget planning process are important to ensure cost-effective safety improvements to the aging infrastructure of Oroville Dam and enable DWR to meet the needs described in the SWP Asset Management Plan.

Oroville Vice Mayor Eric Smith remarked that he appreciated the Oroville Dam site visit and tour and the perspective it provided on the enormity of the facilities and challenges of maintaining such a large and complex system. He identified the River Valve Replacement project as a good project on which to provide a cost breakdown. He added that downriver residents would be interested in knowing about types, cost, and timelines for Oroville Dam projects intended to maintain the system's integrity.

Commissioner Bateman expressed concern about the decision-making process among the different interest groups related to the SWP and questioned who ensures that dam safety is prioritized when that isn't necessarily the primary interest of all the groups involved. Bateman was unsure if the status quo arrangements are a viable long-term solution.

Secretary Crowfoot invited Director Nemeth to respond. She explained how DWR's Division for the Safety of Dams ensures state and federal laws are met, but that other DWR other staff such

as David Sarkisian review the safety and conditions of the entirety of the SWP, including Oroville Dam. She emphasized how seriously they take this work.

Secretary Crowfoot added that the Division for the Safety of Dam's jurisdiction contains 1,200 dams, and they regularly conduct risk assessments, which are available to the public if requested.

Director Nemeth explained that that after the 2017 Spillways Incident, legislation was enacted to modernize work around safety. It requires that the Division perform the evaluation and rating and publicize that rating. They do not put more detailed analysis of the ratings online due to security sensitivity.

Commissioner Bateman commented that Assembly Member Gallagher had suggested that the Division of Dam Safety should be moved out of DWR to provide more confidence after the Spillways Incident diminished public confidence [in DWR]. Commissioner Bateman requested that the Commission be provided with insight into DWR and the SWP's deliberations around risk and future investments to see how decisions are being made. Secretary Crowfoot said that this will be added to the OCAC Action Item Tracker, and DWR will respond to this request.

Sutter County Supervisor Conant requested an update on the quality of data coming from the piezometers in Oroville Dam, noting 13 were installed originally with plans for more in the future. He also requested an update on the study about the dam's capabilities under the probable maximum flood (PMF).

Mr. Sarkisian noted that the Oroville Dam is designed to withstand the PMF, however there is an outstanding question on the performance of the emergency spillway under the PMF scenario. Secretary Crowfoot stated that Mr. Sarkisian's presentation would help address Supervisor Conant's questions.

Oroville Dam Safety Project Updates

Mr. Sarkisian presented updates on dam safety projects at Oroville. He reviewed the 2023 spillway performance, including a few statistics: the maximum release of water this year occurred on March 18 and 19 at a rate of 36,000 cubic feet per second (CFS). As of June 12, for the year, more than 730,000 acre-feet of water had been conveyed through the spillway.

Mr. Sarkisian described the current conditions of the spillway: The piezometers have remained dry, indicating there are no leakages or areas of concern. The spillway had been performing well. He explained that while some piezometers indicate a modest reaction to precipitation and runoff, there is no elevated groundwater observed in the downstream portion of the dam despite a rising lake. The piezometers are a useful tool to verify seepage patterns and overall dam performance for dam managers.

Assembly Member Gallagher asked about the lines on the graphs in the presentation. Mr. Sarkisian clarified that the results from piezometers installed in the toe of the dam are impacted by precipitation because of runoff that falls on the face of the dam and down to the toe, but that

those readings dissipate under dry conditions and therefore, do not cause concern for spillway integrity. He explained that if the toe piezometers were to indicate elevated groundwater levels later in the year when lake levels remain high but precipitation is not occurring, then that would indicate unfavorable conditions and a need for action.

Assembly Member Gallagher asked to see graphs of the toe piezometers later in the year, and Secretary Crowfoot requested a future presentation about the toe piezometers, including a discussion about the correlation between precipitation and reservoir level effects on spillway performance.

Mr. Sarkisian discussed the River Valve Outlet System Rehabilitation, which consists of installation of two new 72-inch diameter spherical valves to improve system reliability and allow for safe, long-term maintenance of the dam's low-level outlet. He noted that hydrologic conditions were ideal this year for such a project because high water levels allowed construction to occur right away. The project is slated to be completed in 2024 if it stays on schedule. Although Sarkisian did not have the exact dollar amounts associated with the cost of this project, he noted the cost is more than \$50 million and is reflected in the 2023 and 2024 budget discussed earlier in the meeting.

Mr. Sarkisian also covered several other ongoing processes and projects, summarized below:

- Director's Safety Review Board, required by California Water Code, and Part 12D Inspection Process, required by the Federal Energy Regulatory Commission (FERC).
- Oroville Dam Coreblock and Grout Gallery Piezometers: There are eight additional piezometers planned for installation, as well as improvements to weir seepage instrumentation. Installation was intended for Fall 2022, but conditions were not right, so it will likely be pushed to Fall 2024.
- Palermo Canal Lining Improvements: intended to improve the canal lining to reduce leakage and potential for landslides/instability above the Hyatt Powerplant switchyard and other facilities. Final Drawings were submitted to FERC in March 2023 and construction is planned for late 2023 or early 2024, contingent on FERC approval.
- Oroville Dam Seismic Stability/Deformation Analysis: intended to improve risk assessments related to dam performance under a wide range of earthquake loading and reservoir conditions. The work plan is finalized, and the study is anticipated to be completed in 2026.
- Paleoflood Analysis: Led by the US Army Corps of Engineers (USACE), this analysis is utilizing a combination of historical data, hydraulic modeling, and geologic investigation to "reconstruct" and estimate the magnitude and frequency of past floods on the Feather River. The study is expected to be completed by the end of this year, 2023.
- Stochastic Flood Analysis: The analysis uses computer simulation of flood modeling to consider hydro-meteorological and watershed input parameters as variables rather than fixed values. This study fulfills a past FERC Part 12D Independent Consultant Board recommendation and will help inform and improve future risk analyses. It will be completed in 2026.

- Parish Camp Saddle Dam Raise: DWR intended to raise the dam to reduce the potential for future overtopping during extreme flood events, but FERC requires further justification for the “raise” of the dam, an assessment of potential of risk transfer, and justification of the reduction of uncertainty associated with the “greater than PMF.” To meet FERC’s requirements, the Paleoflood Analysis and Stochastic Flood Analysis need to be completed, as well as an investigation and evaluation of the erodibility of the dam and foundation.
- Flood Control Outlet (FCO) Projects: These include the Radial Gate Phase 3 Maintenance Repairs, FCO Monolith 25 & 26 Seismic Retrofit Alternatives Analysis, Post-Spill Radial Gate Inspection, and Spillway Maintenance Repairs.
- Emergency Spillway Erodibility Study: compilation of the geologic data collected in 2017 to 2019 to build a geologic model and determine if any further exploration is needed. The Scope of Work will be submitted to FERC by September 2023 and the anticipated completion date of the study is 2026.

Mr. Sarkisian explained the relationship between the Spillway Erodibility Study and ArkStorm historical and future scenarios. Sarkisian explained that ArkStorm 30-day events could result in different erosion patterns than the PMF outflow scenarios. He emphasized how it is important to understand ArkStorm in tandem with these new studies, because the combination allows for analysis of “worst case scenarios” given climate change and extreme weather. The PMF is the historical standard in the dam safety industry, but incorporating the ArkStorm modeling data in the Emergency Spillway Erodibility Study can help inform longer flood scenarios and how the Oroville Dam spillway would perform under these scenarios.

Butte County Supervisor Tod Kimmelshue asked if any modeling has been done in case of [Canyon Dam] failure at Lake Almanor, in which case the water would flow down towards Lake Oroville.

Mr. Sarkisian responded that PG&E, the owner of Canyon Dam, published its own inundation maps, which are publicly available online. That analysis suggests that if the water were to come down from Lake Almanor into Lake Oroville, even if Lake Oroville is already full, water levels would only reach peak elevation of 916 ft, which is below the top of the dam at 922 ft and would therefore, not overtop Oroville Dam. However, if this kind of event were to occur, there would be a significant spill over the emergency spillway and the Emergency Action Plan would be activated. The Division of Safety of Dams is in active communication with PG&E through formal and informal channels.

Secretary Crowfoot reminded commissioners that follow-up questions on today’s highly technical presentations can be routed through Nancy Vogel, Deputy Secretary for Water with the California Natural Resources Agency. He asked that regular dam updates be included in Commission meetings.

Assembly Member Gallagher highlighted the commissioners’ interest in evaluating the need for a low-level outlet. He said other dam operators are installing lower-level outlets, including Yuba Water Agency. DWR should provide regular updates on the status of their analysis of a low-

level outlet. He noted that streamlining the review of infrastructure projects is critical. He emphasized the importance of continued sustained investment for Oroville operations to continue safely. Assembly Member Gallagher emphasized the importance of understanding risks, what projects are planned to address those risks, and what work is being done to prepare for an uncertain future under climate extremes for the communities below Oroville.

Inundation Maps

Before the presentation began, Assembly Member Gallagher reminded commissioners of a question previously asked at OCAC meetings: Why is DWR not responsible for the Oroville Dam inundation maps? He stated his understanding that dam owners are responsible for completing their own inundation maps, and flood basins also do inundation maps based on levee breaks. He also asked about why the maps have not been updated.

Mr. Sarkisian responded that the types of inundation maps that are required from dam owners for the Oroville-Thermalito Complex have been completed and approved by the Division of Safety of Dams and are available online.

Butte County Supervisor Bill Connelly emphasized the progress made with Sutter-Basin Flood Control Agency (SBFCA) and along with the project, it will cause less surge flooding in the future. He thinks inundation maps may change, and inundation maps can be useful to understand possible impacts to Oroville from unexpected floods. As for the local community, they look at normal operations but with an unknown flood upstream, you could flood Oroville. He closed by complimenting staff on the progress made toward updating inundation maps.

Mike Mierzwa, State Floodplain Manager, DWR, Division of Flood Management, briefed commissioners about the May 18, 2023, meeting of SBFCA staff, DWR staff, and several commissioners on inundation mapping and modeling.

Mierzwa explained that after 2017, new legislation (SB 92, 2017) imposed specific requirements for inundation map creation for dam owners. PG&E and SWP dam owners produced maps to meet the requirements of this legislation. However, those maps will not answer all the questions about flooding that stakeholders might have, and for those questions, there are other kinds of maps.

Mr. Mierzwa mentioned the 20 different Federal Emergency Management Agency (FEMA) manuals that provide guidance on assumptions and data for inundation map creation, each of which applies to a different kind of feature (e.g., dams/reservoirs).

He explained that dams are an example of one of many different types of scenarios that are evaluated in flood mapping, and that flood mapping is one of many tools to understand where there is the highest risk of flooding for communities. Inundation maps can be used for land use planning, flood defense system designs, emergency response, and flood recovery. Because maps have different assumptions, it means that not all inundation maps can answer all the questions related to their various possible purposes.

Mr. Mierzwa explained how the DWR Division of Flood Management plans for flood events decades to months before disaster occurs by doing “mitigation state” inundation mapping. Maps are also developed during the response (disaster) phase, as well as during the recovery (post-disaster) phase. Some maps take longer to produce, depending on how many people are working on the development of that map. For example, mitigation maps are estimated to take five to seven years to prepare because of the engagement, input, and data needs. Emergency maps can sometimes be produced in a day if the right tools, data, and information are available. Recovery maps can take a year or two to produce.

Mr. Mierzwa showed examples shared during the May 2023 meeting with (SBFCA of three different types of inundation maps using the Kern River as a case study: land use, facility emergency response threshold, and riverine water surface elevation. Each of the maps provided a different solution to the issue at hand throughout the case study.

He cited multiple examples of out-of-date FEMA mitigation maps available to engineers through FEMA's website. He noted that FEMA maps do not provide information on flood sources that are less than one acre, which would be useful to better understand certain types of flood risk in local areas. Mr. Mierzwa then showed FEMA maps of Oroville, where a levee provides some but not complete protection of downtown Oroville. He stated that structures like this levee are included in DWR studies to better understand flood risk in the area.

Secretary Crowfoot reviewed his takeaways from the presentation: inundation mapping is used for different purposes at different times; some of the inundation mapping developed by FEMA for Oroville is outdated; and there is updated work with SBFCA to update inundation mapping. Secretary Crowfoot asked what the takeaway would be for an Oroville citizen from this summarized information.

Mr. Mierzwa responded that while some information from FEMA is outdated, it is a useful starting point to see where there is historical flood data. This provides an opportunity for an organized update process in which FEMA can reevaluate old maps, notify local leaders through a transparent communication process, sort through new and useful information developed by entities like SBFCA, and then develop new FEMA maps to become accessible to the public through the Map Service Center.

Michael Bessette, Executive Director for SBFCA, reiterated that the public was not satisfied with the existing inundation maps, leading SBFCA to start the process to update inundation maps. The agency is evaluating floods of 100,000 cubic feet per second (cfs) to 350,000 cfs. Bessette stated SBFCA would also be modeling the 1997 flood at 161,000 cfs and compare research and personal recollections of that flooding event to create an accurate inundation map for such a scenario.

Mr. Bessette updated the Commission about the City of Oroville levee integrity issue brought up at the October 2022 OCAC meeting. SBFCA and the City of Oroville are partnering to analyze the integrity of the levee and determine what improvements need to happen to improve that levee. He explained that the City of Oroville is severely economically impacted, so SBFCA will

partner with DWR to identify funding sources that could help serve the community on this levee improvement project.

Mr. Bessette concluded by discussing the concerns about upcoming flood impacts because of the full reservoirs and prediction of the upcoming El Nino. SBFCA will work closely with DWR to manage local flood operations in the face of uncertainty.

Supervisor Connelly informed SBFCA that Oroville Mayor Pittman also has knowledge of the historic 1997 flood and can contribute anecdotal information to the SBFCA team for the inundation map update.

Mayor Pittman then complimented Ted Craddock and his department on the active emergency communications that occurred with downstream residents during the operations of the spillway this year. He noted that the text messages were particularly helpful.

Public Comment

Secretary Crowfoot provided a brief overview of the OCAC Meeting 15 proposed agenda, which includes an overview of how weather forecast modeling is used at the State and an update on the Forecast-Informed Reservoir Operations (FIRO) process development.

Terra Alpaugh, Kearns & West Facilitator, then opened the floor to comments and questions from the public.

The first public commenter noted the success of today's meeting and acknowledged the greater transparency from the OCAC staff and DWR, which allows the community to put more trust in DWR. The commenter also thanked David Sarkisian for providing the kind of information that the public wants to hear, Karla Nemeth for clearly communicating her intent to make resource allocation more transparent, and Wade Crowfoot for finding ways to make sure public interests are represented in the agenda-setting process. The commenter noted that today's meeting fostered extensive conversation and was glad it will be available in the meeting recording. The commenter finished by stating that Hong Lin's presentation about Oroville expenditures has opened the door for more questions regarding topics such as budget, funding comprehensive needs-assessments, and other long-term funding needs.

Secretary Crowfoot thanked the speaker for the comment.

The second commenter asked a question about what lessons have been learned from past incidents involving the Oroville Dam, and how they have informed current safety measures.

Secretary Crowfoot noted this question would require a long and thought-out answer and could be addressed at the next OCAC meeting.

Commenter 3 asked about what current SWP water rates are per acre foot.

Director Nemeth responded that rates vary depending on how far the water being used has moved through the system. Ted Craddock and Hong Lin contributed, stating that it is challenging to define a rate because it depends on contract terms and a complex cost-recovery system. The cost allocated to public water agencies for delivery of water to certain locations, such as near the Delta, cannot be easily compared to local water agency rates. Rates for the SWP are based on a cost-recovery analysis that depends on the location and distance water has traveled. For example, public water agencies in Southern California typically have higher rates than agencies in the Central Valley. They reminded the commenter that DWR's public Bulletin 132 includes information on equivalent unit charge throughout the system.

Adjournment

Secretary Crowfoot thanked the public for their engagement at OCAC Meeting 14 and reminded them that the Action Item Tracker will continue to be updated. Director Nemeth and Bruce Ross on behalf of Senator Brian Dahle thanked everyone for their time.
