This meeting summary provides an overview of the August 27, 2021 Oroville Dam Citizens Advisory Commission (CAC) 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 and materials from the meeting are available on the Oroville Dam CAC website: https://resources.ca.gov/Initiatives/Oroville-Dam-Citizens-Advisory-Commission

MEETING AGENDA

- Welcome and Introductions
- Action Items, Meetings Roadmap and Reporting
- Spillway Cameras
- State water contracting agency: Utilization of state water project in California
- Oroville Facilities: Asset Management
- Oroville Facilities: Annual Maintenance Plan
- Public Comment
- Adjournment

ACTION ITEMS

- Provide greater visibility on actions being taken to prevent water piracy.
- Add future topic on resources available for more sediment removal.
- Arrange Joint Operations Center tour for fall 2021.
- Contact State Water Contractors to inquire if the group would like to participate in future OCAC meetings.
- Secretary Crowfoot requested further discussion of Capital Improvement Projects.
- Provide expenditure chart for 2010-2017 on operations and maintenance and capital improvement projects.
- A member of the public suggested adding additional time to future meetings to accommodate a packed agenda.
- Provide follow up to Oroville resident regarding recreation expansion projects during drought with an eye to public safety impacts and capital outlay, especially the Bidwell Ramp extension.

WELCOME & INTRODUCTIONS

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 8 on August 27, 2021 is noted in the table below.

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<tr>
<th>Agency or Public Body</th>
<th>Commissioner (or Alternate)</th>
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<td>California Natural Resources Agency</td>
<td>(Chair) Secretary Wade Crowfoot</td>
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Secretary Wade Crowfoot welcomed the commissioners, presenters and members of the public to the eighth meeting of the Oroville Dam Citizens Advisory Commission, which is being held virtually in accordance with the State COVID-19 orders. He noted that with rising COVID-19 cases and the Delta variant, it is unclear if it will be possible to meet in person for Meeting 9 on December 3, 2021. The secretary provided an overview of the meeting agenda and structure. He also reflected on the fact that the meeting was occurring as terrible wildfires rage, with Northern California particularly affected with the Dixie and Caldor fires. He expressed that his thoughts are with the communities and residents, and he thanked first responders on the front lines, who are represented by some of the agencies on the Oroville Dam Citizens’ Advisory Commission.

DWR Director Karla Nemeth focused her remarks related to drought on conditions of Oroville. The dam reached its historic low on August 1, which was around 643 feet. The previous historic low was set in 1977. She cautioned that lake levels will continue to drop but at a more modest rate. Feather River Settlement Contractors are finishing their irrigation year soon. The year began with 1.6-million-acre feet in the dam, which includes a 20 percent increase in carryover storage resulting from knowledge gained during the last drought. This water year’s unique conditions mean that the typical 60‒80 percent snowpack runoff was just 20 percent. Even under these circumstances, DWR and the State Water Project continued to have obligations on how the existing water was managed to serve the Feather River Settlement Contractors, the Delta, temperature needs for Feather River system fisheries and pumping to South Bay Aqueduct Water Contractors. For the most part, Oroville was not used to make deliveries for State Water Contractors south of the Delta, she reported.
She stressed that DWR takes water rights seriously and issues have emerged by water piracy, which impact everyone including senior water right holders. Oroville’s low levels resulted in DWR shutting down the Hyatt Powerplant for the first time. This has caused water temperatures from released water to be colder and that has a potential public safety impact. The drought has enabled the department to work on recreational amenities at the dam. These include the Loafer Point Stage 2 boat ramp project. It would take 200 percent of normal rainfall in the next water year to replenish Lake Oroville and 140 percent of normal snowpack and precipitation to allow for normal runoff into the lake.

Secretary Crowfoot highlighted images taken at an event in Yuba City celebrating sediment removal from the river. A $5 million grant from Proposition 68 funding enabled the removal of sediment and invasive species to restore habitat, preserve water quality and improve recreation access. He thanked Senator Nielsen and Assembly Gallagher for their leadership and acknowledged Gary Lippner, deputy director, flood management and dam safety, at DWR, for facilitating the project as a partnership with the Sutter/Butte Flood Control Agency.

Senator Nielsen remarked about the project’s significance, noting that the sediment had built up over years. He commended members of the Oroville Dam Citizens Advisory Commission for their participation as well as Secretary Crowfoot and Director Nemeth. He asked for comment on the impacts of wildfires and any impact on Oroville and expressed concern about water piracy, particularly by illegal marijuana growers. He requested that the topic be discussed at a later point. Senator Nielsen concluded by noting the Sites Reservoir project.

Director Nemeth reported that to date, DWR had not seen wildfire impacts at Oroville. However, rain will ultimately fall over burn scars. DWR will be ready and mobilized when it rains to track flood potential into waterways and communities. The department partners with the State Water Resources Control Board to address water quality issues resulting from fire-caused runoff conditions. She said the DWR has a fuel reduction program in the watershed and works on forest management issues where there is a nexus with water quality and supply.

Secretary Crowfoot thanked Deputy Director Nezhura from the Governor’s Office of Emergency Services for representing the department at the meeting.

Deputy Director Nezhura commented that her agency has activated its Watershed Task Force due to concern about sediment from ash and debris that impacts the watershed following wildfires.

Supervisor Conant remarked that more sediment removal is needed, and he asked if more funding would be available.

Assembly Member Gallagher stressed the connection between forestry management, drought and water management and said that dense canopy prevents precipitation from reaching the soil, which is essential for water storage and to prevent evaporation. A healthier forest means healthier ecosystem and water storage. He said that climate change is real and happening and we need greater forest management to help avoid catastrophic wildfires. He also expressed concern about water rights holders being told that they are unable to access water through rights they’ve held for generations. He noted that drought affects people differently. Feather River Settlement Contractors had a 50 percent loss and some other areas had 75 percent. He is concerned that some groups take the larger brunt of drought and water restrictions than others and believes there is a better way so that everyone can get through drought together.
Secretary Crowfoot shared there needs to be an accelerated approach on forest and water management including forecast-informed reservoir operations and voluntary agreements. He thanked the Legislature for its leadership and bipartisan support for increasing funding for forest management.

**ACTION ITEMS, MEETING ROADMAP & REPORTING**

Kearns & West reviewed the Oroville Dam Citizens Advisory Commission Action Tracker. This section provided a brief status update on several items including:

- Joint Operations Tour
- Invitation to the State Water Contractors
- FIRO and the Water Control Manual process
- FERC relicensing
- OGAC contact email
- FEMA reimbursements
- Homelessness around Feather River, etc.
- Status of CalTrans post-fire mitigation on county highways
- Debris and storm inflow update from DWR
- Hyatt Powerplant
- New commissioner orientation
- Lessons from 1986
- Fuel growth management adjacent to Oroville
- Tracking log for future and ongoing projects
- Risk assessment discussion

Director Nemeth and Secretary Crowfoot discussed moving up the Joint Operation Center tour to fall 2021 and requested that it focus on both state and federal operations.

Kearns & West gave an overview of agenda topics that will be covered during the final meeting of 2021 and the four meetings that will be scheduled for 2022. These are included in the meeting roadmap. The upcoming Oroville Dam Citizens Advisory Commission meeting will become a topic with greater emphasis in 2022 because the report is due to the Legislature by the end of that year.

The next meeting, scheduled for Friday, December 3, 2021, will cover:

- **Oroville Topics:**
  - Winter Operations Plan
  - Downstream flood management and preparedness
  - U.S. Army Corps of Engineers on the Water Control Manual update
- **Status Updates:**
  - Commission Report
  - Wildfire Season Update

Kearns & West outlined the reporting requirements of SB 955 (Nielsen) and what it needs to include. The materials presented a timeline showing the report development from a detailed outline by the last meeting in 2021 with drafting beginning in early 2022 and with a goal of having a final draft by late 2022.
Two members of the Commission volunteered to participate in the development of the Commission report along with Senator Nielsen’s Chief of Staff, Rob Olmstead. They are:

- Lt. Steve Collins; and
- Supervisor Bill Connelly

**SPILLWAY CAMERAS**

John Yarbrough, Assistant Deputy Director, DWR, provided a brief update on the status of the spillway cameras at the facility. After the spillway incident, DWR installed two temporary web cameras for the public because during reconstruction, DWR had to restrict public access. The cameras allowed the public to see the facility. Four years after the incident, in early 2021, DWR began to decommission the cameras. However, DWR was notified by staff in Senator Nielsen and Assembly Member Gallagher’s offices that members of the public noticed when the cameras were removed. DWR then reinstalled the top temporary camera to maintain the public’s ability to see the spillway. The bottom one will not be reinstalled due to vandalism issues. DWR will keep the top temporary camera operational until a permanent solution is implemented.

**STATE WATER CONTRACTORS**

Secretary Crowfoot introduced Valerie Pryor, who serves as General Manager for Zone 7, for the State Water Contractors discussion about how they interact with the Oroville Dam and their role in the facility. The Oroville Reservoir is the cornerstone of the State Water Project (SWP), which serves approximately 25 million Californians. There are 27 public water agencies that are contractors on the project. They help fund the construction and get water from the facility. It became apparent that the State Water Contractors are not always part of Oroville discussions regarding community concerns. The Oroville Dam Citizens Advisory Commission invited Pryor to the meeting for this purpose.

Pryor began by giving an overview of the Zone 7 Water Agency and how it uses the State Water Project. This Bay Area agency is located on eastern Alameda County, serving a population of 265,000. It is a crossroads between the Central Valley and Silicon Valley and San Francisco with agriculture focused on vineyards. This area is one of the fastest growing in the Bay Area. It has a seven-member board of directors and operates independently from Alameda County with three roles: water supply, flood protection and is the groundwater sustainability agency. The State Water Project provides 70 percent of the water with the other 30 percent coming from local water rights, local ground water and recycled water.

Because the SWP is so critical to the area Zone 7 serves, the agency is very invested in maintenance, repairs and replacement. There is support for DWR’s efforts and the need for additional investments. In addition, the service area is home to four SWP dams and reservoirs.

Secretary Crowfoot asked Director Nemeth and Ms. Pryor to comment on the role of the SWP contractors in decisions regarding Oroville, which is California’s second largest reservoir and the cornerstone of the SWP.

Pryor explained that Zone 7 is a member of the State Water Contractors Inc, which is a nonprofit that represents 27 of the contractors. The organization provides recommendations to DWR and gets updates from that state agency.
Director Nemeth noted that she is focused on improving how DWR communicates to the State Water Contractors financial decisions being made about the SWP to address the aging infrastructure. This is crucial to getting their support on decisions that maintain public safety as the top priority. She explained that the selling of bonds is important to fiscal stability and amortizing the costs over time.

Supervisor Connelly communicated how he feels like Butte County and Oroville are viewed as nonexistent. The Supervisor stated that the area does not receive tax benefits from the facility and recreation was not fully constructed. He believes that DWR should compensate the area for the cost and impact of hosting this facility, which he said amounts to $7 million annually of out-of-pocket expenses to Butte County. He said that they get 27,500-acre feet of water.

Council Member Pittman also reiterated his assessment of the financial impacts that the Oroville facility has on the community. He said that the dam put the area into a depression because the recreation facilities were not complete.

Secretary Crowfoot responded that FERC relicensing will provide more investment for recreation. He also said that the facility provides significant downstream flood benefits to those communities. In conclusion, he emphasized that the Oroville Dam Citizens Advisory Commission was created to serve as a forum for leaders to listen to those in the community.

Council Member Pittman asked Pryor about long-term forecasting for future water needs for the service area and if water would limit development and growth in the area.

Pryor responded that they anticipate a 20 percent population increase and are looking at the Delta Conveyance Project, the Los Vaqueros Reservoir Expansion Project, the Sites Reservoir and the East Bay Regional Desal Project.

Assembly Member Gallagher inquired about Zone 7’s cost per acre foot, flooding issues that caused the creation of the Zone in 1955 and noted that the Oroville facility was built not to prevent flooding in Oroville but to protect downstream communities such as Yuba and Sutter Counties and Lower Butte County and asked about the river that connects Zone 7. He also asked about water banking.

Pryor responded that the amount is calculated in different ways. Zone 7 is a flood control agency with 40 miles of flood control channels and the agency is working still to repair damage from flooding in 2027. Pleasanton was the primary original flood area. She reported that Zone 7 stores water in Kern County through exchanges with agencies in Southern California. In addition, Zone 7 has a local ground water basin that produces a small amount of native water. In years when the Zone gets a higher SWP allocation, the Zone sends excess to Kern and then accesses water from Kern in dry years such as this one. The Delta water goes into the California aqueduct, then the South Bay aqueduct.

Supervisor Connelly expressed his agreement about including the State Water Contractors in future discussions. Senator Nielsen supported inviting the State Water Contractors to participate and asked that this be discussed further.

Director Nemeth also agreed and said that there is an opportunity to make the system work even better through more collaborative discussions.

Commissioners agreed to explore inviting the State Water Contractors to participate.
Dave Duval, Division Manager, Department of Operations and Maintenance, DWR, provided the presentation. He focused his remarks on how his department examines and evaluates assets and prioritizes projects to address aging infrastructure.

He explained that DWR bases the Asset Management program on an international standard (ISO 55001) that considers mandatory requirements, benefits, risk and resources that meet the balance between performance, cost and risk. This is called Risk-Informed Prioritization or Risk Informed Decision and includes:

- Risk identification
- Risk assessment
- Financial management and resource planning

This process assesses risk for the facilities and the residents in the surrounding community and examines the severity of the result of a failure, etc. This information is used to inform decisions for financial management and resource planning. DWR reviews necessary resources for each potential project, both in terms of money as well as technical expertise. This information is used for the following year’s budget, but the department also creates a multi-year capital plan to project out State Water Project needs.

The State Water Project Capital Prioritization Process includes:

- Condition assessment, monitoring, studies
- Identify projects
- Evaluate risks
- Estimate resources
- Prioritize projects

Duval also provided the presentation on expenditures on annual operations and maintenance and capital projects. He showed expenditures for Calendar Years 2018, 2019 and 2020 for comparison, as well as 2021 and 2022. Each year the amount being allocated for these has increased. For 2018 through 2020, the annual O&M projects were approximately $50 million and capital projects between $40-50 million, not including the cost of the spillway reconstruction. The projected expenditures are over $100 million for 2021 and 2022.

He gave an overview of the following operation and maintenance activities for:

- Hyatt Powerplant
- Thermalito Powerplant
- Thermalito Diversion Dam Powerplant
- Oroville Dam/Lake, Thermalito FB/AB and other locations
- Upper Feather River dams and lake

His presentation included a review of some of the Capital Improvement Projects DWR has identified and is making progress towards completion, many with a focus on dam safety.

Secretary Crowfoot requested that in a follow up email to commissioners that the information on these slides is highlighted. He said that if commissioners have additional questions the
Commission can either facilitate a direct discussion on these or address them at a future meeting.

Assembly Member Gallagher asked for context on historical operations and maintenance and capital costs between 2010 and 2010.

Duval responded that he does not have an exact number in front of him but knows that the budget has been growing from 3 to 6 percent annually.

Assembly Member Gallagher requested a graph that goes back to 2010. He then asked if spillway review is part of the annual O&M costs and asked if the radial is also inspected annually and about vegetation management.

Duval responded that the spillway review is part of the annual process when they do FERC or DSOD inspections or their own ones. The radials are inspected, some parts monthly and some parts annually depending. Vegetation management costs are included, some are fuel reduction related and some are about reducing growth to ensure access to the facility. They will be creating a barrier that will help allow inspections and address fire risk.

Senator Nielsen asked if boring was occurring as part of the inspections to determine what is going on underneath. He also asked about habitat restoration and tree removal.

Duval responded that during and following the incident, the department has done extensive coring to analyze the conditions. On habitat and trees, he reported that they are working with the Federal Energy Regulatory Commission and other regulators to determine next steps.

Council Member Pittman asked if low water conditions are making it possible to accomplish inspection or maintenance that cannot be done under normal water conditions.

Duval said the department is penstock inspections, refurbishment on the penstock screens and other inspections that are made possible by the low lake levels.

PUBLIC COMMENT

Public Commenter One inquired whether future meeting agendas could be strengthened. He also asked for the annual budget of the State Water Contractors Inc.

Pryor responded that she estimates the organization’s annual budget is between $5–10 million and offered to follow up on this.

Secretary Crowfoot recommended that public commenters put their questions in an email to keep the public comment period efficient. [See appendix]

Following the meeting, Public Commenter One submitted a follow-up communication covering:

- Requested tracking log
- Addition of State Water Contractors member to the Commission
- Input on legislatively required Commission report to the Legislature

Public Commenter Two began his comments by noting that he worked for DWR for 34 years before retiring a year ago and he lives less than a mile from Lake Oroville. He has a background in recreation and safety and asked why the department has not scheduled a Bidwell Canyon
Stage III boat ramp expansion this year. He said that this is a recreation safety issue and there is a hardship with the low lake level that also has public safety implications. Emergency response is limited to State Park boats that are already on the water. He thinks that extending Loafer Ramp this fall is important, as well as other projects. However, Bidwell provides the easiest access and is the most popular place for boaters.

Secretary Crowfoot asked if Matt Teague or Director Nemeth would comment on reservoir access and this project or follow up. He then asked that this be registered in the meeting summary with a request on how this project ties into the capital outlay.

**ADJOURN**

Secretary Crowfoot closed the meeting by saying that he would be open to extending future meetings if needed to have sufficient time. He noted that the Delta variant may change the ability to meet in person in December, but the Commission has operated well over Zoom. Meeting 9 is scheduled for Friday, December 3, 2021.

He said that staff will work on arranging a tour of the state and federal flood operations center in the fall.

Supervisor Connelly thanked the commissioners. He said that the discussion raised forest management issues, which affect the watersheds and stressed that he believes tort reform is necessary. He also remarked that he appreciates fuel reduction efforts.

Senator Nielsen concluded by thanking the Commission.

Secretary Crowfoot adjourned the meeting.
APPENDIX

Follow up e-mail from public commenter received on September 3, 2021.

Recommendations following the August 27th 2021 CAC meeting

Recommendation # 16 - Public Asset Management (regulatory) Tracking Log

(reference page 90-91 of the transcripts from 5/28/2021 CAC Meeting)

SB 955 was enacted to ensure the downstream communities obtain the much needed cooperation from DWR regarding the asset management of the Oroville facilities. This intent is clearly stated in the CAC charter;

G. Cooperation from California State Agencies

2. Provide all information reasonably requested by the commission regarding the construction, rehabilitation or reconstruction, operation, maintenance, and management of the dam, including:

A) Asset management plans regarding facilities and equipment of the dam,
B) Scheduled or anticipated repairs, restoration, or replacement of facilities or major equipment;
C) Changes in flood management rules; and
D) Provide updates of Feather River flood management activities;

The creation and implementation of a suggested public Tracking Log seems the most reasonable approach to satisfy the CAC charter. Easily designed and maintained, it can simplify enormous amounts of requests, from various sources into a single document for both CAC participants and internal leadership to monitor. The sources of recommended studies, and projects should include;

FERC Part 12 inspections, 2014 and later, (plus other relevant correspondence)
DSOS recommendations and concerns that are still open
Level 2 independent consultants recommendations (following the 2021 Spillway Event)
CNA task team recommendations (remedies for resilience and redundancy next 50 years)
Internal finding from the Oroville Dam Safety Division (self discovery)
2016 extraordinary fund / current 5 year capitalization projects (pre 2017 urgency)

Aside from the need for transparency regarding the above mentioned projects is the ongoing concern for the length of time it has taken to complete safety recommendations, in comparison to delivery projects. To help remedy these concerns, DWR’s Asset Management now assigns risk metric scores to all SWP work for the purpose of prioritizing their budget and schedule. By having both the public tracking log and the Two year budget list: 1) the date project was first requested, 2) who made the request, and 3) the risk metric score / value assigned, all parties can compare the information on both documents to ensure that equalable scheduling is being done.

As a former CNA Ad Hoc member, I see the selection and quick completion of one of the ten alternative CNA plans as the utmost importance to the downstream communities. Therefor I suggest that all items within the public tracking log be categorized by the six tasks in the CNA, regardless of who made the request:

1) Spillway Capacity / PMF
2) Operations, New water control manual
3) FCO enhancement / reliability
4) Low Level Outlet, River Valve, Hyat
5) Embankment reliability and improvements
6) Instrumentation and Monitoring
7) Other

With three major flood events occurring within the 31 year period: 1986 1997, 2017, the long standing concerns, distrust and feeling of inequality by those living downstream are very real. Given historical weather patterns there is the potential for significant events every ten years. The length of time it takes to choose and complete the facility improvements contained in the CNA alternative plans will be an ongoing debate between the CAC, DWR and presumably the SWC’s. The recommended public tracking log can be the foundation of those future conversations.
1) **Recommendation: High Level SWC member at future CAC asset management meetings**

Having an open discussion with a regional general manager of the SWC at the last meeting was insightful to the workings within a particular geographic area, and a good place to start. Going forward it would be helpful to have a high level representative, or member of the finance committee present, when asset management is the lead item on the agenda.

Under the original state water contract, the DWR leadership Team had the authority to manage the assets of the SWP as they saw fit. Studies, repair or replacement projects were completed as needed, and SWC reserved the right to protest any such financial charges they didn’t see fit.

Under the new water contract extension, the SWC enjoys a 50/50 membership in a newly created Financial Committee, where recommendations are made for any project that would require the approval of the Director of DWR. This equal power sharing within a committee that makes project recommendations, by the very party responsible to pay for those projects could create undue influence towards prioritizing delivery projects over safety when there is limited funding or human resources.

The minutes of the financial committee meeting, where decisions are made regarding the safety and reliability of the SWP should be public record and therefore provided as advance material to the CAC prior to future asset management meetings. For the CAC participants to better understand the justification for the recommendations coming out of the finance committee, it would be helpful to invite a SWC member of the committee to present their explanation and take questions at future CAC meetings, when asset management is the lead topic on the agenda.

2) **Citizen Advisory Commission Report to the Legislators**

A lot of great information has been provided to the Citizen Advisory Commission during the first two years of its existence, and the DWR team should be commended for this effort. The downstream communities that once only knew of the problems at the Oroville Facility, are quickly learning all the work to ensure its resilience and redundancy for the next 50 Years of operation. With this transparency, trust and respect is beginning to develop.

The CAC report to the Legislators should reflect this groundbreaking accomplishment, and serve as evidence that similar citizen commissions should be used within the state. With the help of the CAC meeting facilitator, DWR should take the lead in writing this report, but not without caution.

The success of the commission should not blind us to any shortcoming the process might have had, and those opportunities should be equally represented within the report. The inclusion of shortcoming should include an explanation and possible resolution that would inform further commissioner and staff on the need for such continuous improvement. It’s this part of the report that DWR may not be the best qualified lead author. Thus we will need to rely on accurate records of the CAC meetings to recall areas of disappointment or needed improvement, so commissioner co-authors can include as they see fit.

It's recommended that such records as the transcripts, presentations, and recommendation log be preserved and used when writing the report. Were presentations geared towards high level concerns as requested, were questions answered fully and directly, and were the recommendations provided to DWR completed to the satisfaction of the CAC participants.