# DRAFT MEETING SUMMARY

## CALIFORNIA DEPARTMENT OF WATER RESOURCES

Oroville Dam Safety Comprehensive Needs Assessment Ad Hoc Group Meeting #1

*July 18, 2018*
*8:00 a.m. to 11:00 a.m.*
*Oroville Field Division Conference Room*
*460 Glen Drive, Oroville*

This meeting summary provides an overview of the July 18, 2018 Ad Hoc Group meeting and focuses primarily on capturing the questions posed by Ad Hoc Group members about the Oroville Dam Safety Comprehensive Needs Assessment (CNA) and the Independent Review Board (IRB) Memorandum Number 1; it also summarizes responses to these questions provided by California Department of Water Resources (DWR) staff or IRB members. This document is not intended to serve as minutes of the meeting or a transcript of the discussion. A video of the July 18, 2018 meeting is available at the CNA website: https://water.ca.gov/Programs/State-Water-Project/Oroville-Dam-Safety-Comprehensive-Needs-Assessment.

## AGENDA

- Welcome and Introductions
- Ad Hoc Group Meeting Process
  - Desired Outcomes
  - Charter: Roles and Responsibilities, Operating Protocols
  - Map of Topics and Venues
- Community Perspective from Living Downstream
- Comprehensive Needs Assessment Presentation
- Summary of the First Independent Review Board Meeting
- Ad Hoc Group Comments on the Comprehensive Needs Assessment and Questions for DWR/IRB
- Open Item

## ATTENDEES

| Co-chairs & Ad Hoc Group Members | IRB Members | DWR Staff | Meeting Support Staff & Others |
|---|---|---|---|
| • Assemblyman James Gallagher, Co-Chair<br>• Senator Jim Nielsen, Co-Chair<br>• John Yarbrough, DWR, Co-Chair | • Betty Andrews, Environmental Sciences Associates<br>• Lelio Mejia, Geosyntec | • Ted Craddock<br>• David Duval<br>• Sergio Escobar<br>• Joel Ledesma<br>• Dave Sarkisian<br>• Eric See<br>• Liza Whitmore | • Derek Bell, Butte County Sheriff's Lieutenant<br>• Mary Beth Day, Kearns & West<br>• Sadie Foster, Senator Nielsen's Office |

- Supervisor Bill Connelly
- Sean Earley
- Curtis Grima
- Larry Grundmann
- Sheriff Kory Honea
- Mike Inamine
- Sandy Linville
- Matt Mentink
- Laura Page
- Rune Storesund
- Ron Stork
- Bruce Muller Jr., Independent Consultant
- Paul Schweiger, Gannett Fleming, Inc.
- Eric Poncelet, Kearns & West
- Steve Verigin, GEI

## ACTION ITEMS

- Kearns & West (meeting coordinators) will produce a draft meeting summary for review by the co-chairs, and distribute the revised version to the Ad Hoc Group by August 2.

## KEY AGREEMENTS & DECISIONS

- Ad Hoc Group members unanimously approved a motion to adopt the Ad Hoc Group Charter, with the caveat that the tasks covered by the CNA may be refined over time.

## QUESTIONS FOR DWR and IRB

During the meeting, the co-chairs outlined the purpose of the Ad Hoc Group and explained how the Ad Hoc Group fits into the overall CNA and IRB processes. DWR staff provided an overview of the Oroville Dam facilities and the six tasks proposed for the CNA. The IRB members presented an overview of their first meeting and the recommendations they made to DWR in their first memo. Following these presentations, Ad Hoc Group members posed a suite of questions to DWR staff and IRB members on two broad topics: the Ad Hoc Group process, and the CNA.

<u>Questions on the Ad Hoc Group process</u>

- Question (Q): Will subject matter experts be allowed to attend Ad Hoc Group meetings or supply written statements to provide additional information if needed?
    - Response (R): DWR is not opposed to guest speakers or experts as long as the co-chairs approve. DWR reminded the group that the co-chairs are responsible for setting meeting agendas.
- Q: How can the Ad Hoc Group engage with FERC (the Federal Energy Regulatory Commission) and the DSOD (Division of Safety of Dams)?
    - R: DWR has not explored or discussed this yet.
- Q: What is the process by which meeting summaries and press releases will be generated?

    - R: The co-chairs explained that Kearns & West will draft meeting summaries, which the co-chairs will review, and that press releases are jointly released by Senator Nielsen, Assemblyman Gallagher, and DWR.
- Q: Can the Ad Hoc Group be given a tour of the facilities?
    - R: Yes, DWR will look into arranging a tour for Ad Hoc Group members.

<u>Questions on the CNA</u>

- Q: Are all the recommendations in the IRB Technical Memo being accepted by DWR?
    - R: Yes.
- Q: Why is infrastructure being considered independently of operations and maintenance?
    - R: DWR agreed that operations and maintenance are important issues and noted they would be addressed as part of a separate process. The CNA is focused solely on infrastructure needs. The co-chairs noted IRB Memo 1 acknowledges that evaluating infrastructure requires consideration of human operations.
- Q: Is Task 4 of the CNA looking at the river valve outlet system, or it is looking at a third low level outlet, another spillway, or an expanded river valve outlet system?
    - R: Task 1 looks at adding another spillway. Task 4 looks at adding a new or larger low level outlet system (currently the river valve outlet and the powerhouse).
- Q: The CNA needs to address levee infrastructure in a comprehensive way. Can we look at risk assessment that is expanded further downstream?
- Q: One of the anticipated outcomes of the CNA is "recommendations evaluated by DWR Management." Can you clarify if those recommendations are the recommendations from the IRB, and who at DWR will review them?
    - R: The recommendations are the set of alternatives that will be developed at the end of the CNA process. These recommendations are produced by the CNA team, then they are reviewed by an internal DWR technical steering committee, and eventually considered by the DWR Executive. Once DWR makes its decision, the decision goes to the IRB. The IRB will make their recommendation and present this to DWR and the Ad Hoc Group.
- Q: In the spirit of transparency, can DWR report the full suite of alternatives considered, including the option they end up selecting, to the Ad Hoc Group?
    - R: Yes. The Ad Hoc Group is structured in such a way that DWR can receive input and share their process and the tasks develop, which will also contribute to transparency.
- Q: Is cost a consideration in this process, particularly when weighing different alternatives?
    - R: Cost is not a driver of DWR's decisions, but it is a part of the decision process. Cost will not take priority over public safety, but is used in the risk-informed decision process to reduce risks to as low as reasonably practicable.
- Q: Will the review of the flood control outlet include an examination of the headworks and the competency of the rock underneath the headworks?
    - R: Yes. The CNA will look at the overall stability of the headworks including the foundation.
- Q: Will vegetation management be considered in the CNA process?

    - R: Yes. A lot of vegetation has already been cleared as part of the spillway construction. The final operations and maintenance document will set limits on what clearing will need to occur in the future.
- Q: What are the inspection protocols? Will they include coring or other ways to examine what is happening underneath the spillway?
    - R: As part of the current spillway work, DWR excavated down to competent rock and did a geologic investigation of the site. DWR is also carrying out an investigation of the headworks structure. Beyond the completion of spillway construction in November 2018, Task 6 will likely cover all the actions that need to be taken in the future for the new spillway, including drains, visual inspections, non-destructive testing, etc. DWR is taking an approach of more robust detection with any new facilities the Department ends up designing and building.
- Q: Is forecast-based operations part of the CNA (specifically as part of Task 2)?
    - R: The US Army Corps of Engineers is the lead agency on this issue, so forecast-based operations will be addressed through a separate process. However, DWR will .consider forecast-based operations in the process
        - R: Ad Hoc Group members acknowledged that any updates or modifications to the flood control manual (including integration of forecast-based operations) are ultimately controlled by the US Army Corps of Engineers, but emphasized that the CNA should include both the decision to update or modify the flood control manual and the objectives for that process (including whether to move to forecast-based operations).
- Q: The CNA will look at infrastructure, design improvements, and flood control operations. Will the CNA include recommendations for updating the operations manual?
    - R: Work from the CNA will feed into the flood control manual process, but the actual updates of the manual will be through that process and outside of the CNA.
- Q: Can you clarify the order and timing of the four phases of planning study approach?
    - R: Phase 1 and 2 two are currently underway and being undertaken simultaneously. DWR is planning to complete this by the end of December 2019, but the work plan shown in the presentation is a work-in-progress, and the exact progression and timing of the phases are subject to change.
- Q: Will DWR clearly define concepts like “safety” and “reliability”? What metrics will be used? Is this being done as part of the development of evaluation criteria?
    - R: Those topics and criteria are critical for communicating with the public. DWR will use a combination of dam safety guidelines, engineering standards, and a risk-informed approach based on Federal Guidelines to evaluate dam safety issues under the CNA. All of these standards can be shared with the Ad Hoc Group so that the origin of safety and reliability goals/targets can be understood.
- Q: Is the end of 2019 a hard deadline for the CNA? What will happen if DWR is unable to meet that deadline?

    - R: Compromising quality is not acceptable to DWR, FERC, or the DSOD. DWR will try to stick to the proposed schedule, but The Department would seek an extension before compromising quality.
- Q: What happens if the IRB makes a suggestion and DWR does not have the internal knowledge or consultants to come up with a solution?
    - R: DWR has not considered this yet, but The Department has the ability to bring on appropriate expertise when needed and has sought additional expertise as needed throughout the spillway recovery process. DWR has already taken a similar approach for the CNA by bringing external expertise into the project team. IRB members emphasized that DWR brought on world experts and high-quality consultants for both the spillway recovery and the CNA, and they do not anticipate any problems with addressing the IRB's suggestions.
- Q: The IRB memo mentioned that DWR studied the option of adding a low level outlet. Can the Ad Hoc group also review that study?
    - R: DWR shared a summary of that study with the IRB, and is willing to share that summary as well as DWR's reasoning for not moving forward previously with the Ad Hoc Group.

## KEY PERSPECTIVES & COMMENTS SHARED

- Ad Hoc Group members shared comments reflecting the community perspectives that they represent. DWR responded to some of these. Comments included:
    - Ad Hoc Group members emphasized the importance of making the local community feel safe and reestablishing trust between the local community and DWR. Concerns about public safety exist within the context of multiple flooding events in the past, not only the 2017 incident.
    - Ad Hoc Group members observed that the notion of public safety extends well beyond the local community. Oroville Dam's role in the State Water Project is essential to the entire State of California and supplies water to farmers that produce food for the rest of the country and internationally.
    - An Ad Hoc Group member requested that the CNA consider downstream impacts and not limit its analysis to the dam complex itself.
    - An Ad Hoc Group member pointed out that a significant part of being able to sell the local and downstream communities as safe places to live, work, and play is having trust in the organization that operates the dam. The Ad Hoc Group and DWR agreed they would like trust to be an outcome of the CNA process.
    - An Ad Hoc Group member emphasized that the group will play an important role in communicating to the broader community what is happening in the CNA process, controlling rumors, and setting the record straight. Most Ad Hoc Group members understand that engineering design is a messy and iterative process and course corrections are a normal occurrence, but this is difficult to communicate with the public.

    - An Ad Hoc Group member urged DWR to communicate updates beyond just what The Department is doing as part of the CNA process and that DWR should not assume that the Ad Hoc Group understands all the accomplishments and changes that resulted from the spillway reconstruction effort. DWR agreed they want the Ad Hoc Group to be informed, but the group also needs to stay focused on the CNA process, which will move quickly. DWR will think about how to address this request.
- DWR noted that it will work with members of the Ad Hoc Group to develop a matrix of topics to help clarify which topics are within the scope of CNA and which are outside the scope of the CNA and will therefore need to be addressed within another existing process or for which a suitable forum needs to be identified. DWR emphasized that it is important to stay within the scope of the CNA so it can be finished in a timely manner.