

Oroville Spillways Community Meetings Chico, California on May 11, 2017, 5:30 pm Meeting Summary

The meeting in Chico was the sixth meeting of seven community meetings convened by the California Department of Water Resources (DWR) in April and May 2017, with the following focus:

- Response: What happened to the main and emergency Lake Oroville spillways (spillways) in February and March and what was the response?
- Recovery: What is happening today and in the future to repair the main and emergency spillways?
- Community Topics: What are likely community impacts of the recovery and how can they be addressed?

This document summarizes the presentation and opening remarks. The full presentation is available online at: http://www.water.ca.gov/oroville-spillway/pdf/2017/OER%20Community%20Meetings%20Presentation%2020170504_v8.pdf. A complete video of the meeting is available online at: <https://youtu.be/6WJyehWrbY>

This summary also captures public comments and clarifying questions, and DWR staff responses. It is not intended to serve as a detailed transcript of the meeting.¹

This document is organized into the following main sections:

1. Introduction
2. Presentation
3. Questions and Comments
4. Action Items

Introduction

Mike Harty, facilitator with Kearns & West, opened the meeting, reviewed logistics, and discussed the meeting purpose and agenda.

Cindy Messer, Chief Deputy Director for DWR, provided opening remarks. Ms. Messer said she was sorry on behalf of DWR for the spillways failure and subsequent evacuation, and affirmed the Department's commitment to:

- Public Safety
- Security
- Transparency in communications related to the spillways recovery effort

After Chief Deputy Messer's opening remarks, key local elected officials were invited to provide comments in advance of the public question and answer period, and Chief Deputy Messer thanked Congressman Doug LaMalfa, Oroville Mayor Linda Dahlmeier, and Butte County District Attorney Ramsey for attending.

¹ Where appropriate DWR has added a "NOTE" that reflects subsequent investigation to ensure factual accuracy.

Congressman Doug LaMalfa thanked DWR for hosting the discussion and thanked the City of Chico for its role in housing evacuees during the spillways incident and evacuation. He commended Butte County Sheriff Honea for his efforts, and provided the following speaking points:

- The reasons for the spillways failure must be investigated and repaired as soon as possible.
- The US House of Representatives Energy and Commerce and Infrastructure Committees will be investigating the spillways incident and reviewing inspection results.
- The US Army Corps of Engineers (USACE) will be engaged to revise flood control manuals for Lake Oroville.
- President Trump allocated up to \$274 million for emergency response related to the incident including channel capacity cleanup.
- The dam itself is safe, and while the gated main spillway is functional, it must be repaired in time for next winter.
- Agencies involved in response and recovery activities have worked well in parallel to expedite repairs.

Oroville Mayor Linda Dahlmeier also thanked Chico residents for their assistance during the evacuation, and acknowledged that the evacuation would have been more difficult without their help.

Presentation

Joel Ledesma, DWR, delivered a brief presentation on the Oroville Emergency Response and Recovery process and the current status of operations. He emphasized that the dam itself was not impacted by the event. He reviewed the structure of the spillways and the timeline over which the primary spillway failed in early and mid-February. Mr. Ledesma noted the unprecedented meteorological conditions that required the controlled but rapid release of water from the reservoir onto the damaged spillway. He reviewed the proposed approach to repairs and mitigation of impacts. The priority is repairing the upper chute of the spillway and installing a cutoff wall on the emergency spillway in 2017 to avoid any further erosion. The next phase would involve construction of a new lower chute of the main spillway and additional improvements to the emergency spillway as quickly as possible.

Public Comment and Question Session:

The summary below provides a detailed overview of the questions (Q) and comments (C) provided by meeting participants, as well as responses (R) provided by DWR staff. Specific items for follow up are identified in the “action items” section below.

- C: The cause of the spillways incident should be determined in terms of structural failures and management decisions. The physical and managerial aspects of the Federal Energy Regulatory Commission (FERC) settlement may have changed since the settlement agreement was signed.
 - R: Regarding the FERC settlement and impacts on recreation, DWR is aware that the spillway boat ramp will be closed throughout the recovery process. DWR is working to make additional parking available at Lime Saddle and Bidwell Canyon, and will evaluate the impacts, if any, of the spillways incident on the relicensing/settlement process.
 - R: The forensics analysis will look at physical issues *and* management issues.
- Q: What is the contract for recovery construction, and will it increase due to cost overruns?

- R: The Kiewit construction contract for recovery is \$274 million. This number does not represent the final amount, and activities will be funded by the State Water Project contractors and through Federal Emergency Management Agency (FEMA) reimbursements.
- C: DWR has not released all of the Board of Consultants (BOC) reports, and has not shown complete transparency. Why are Public Records Act (PRA) requests taking so long?
 - R: Less than 8% of the BOC reports have been redacted. The information redacted is specific to federally-defined “critical energy infrastructure information” (CEII) that can’t be publicly released for public safety reasons.
 - R: PRAs are being processed as quickly as possible; DWR has received over 100 PRAs related to the spillways incident.
- Q: Was there an asbestos release as part of the spillways incident?
 - R: A small amount of naturally occurring asbestos was found after the initial damage to the spillways occurred. DWR immediately reached out to the Butte County Air Quality Management District to monitor and manage potential airborne releases of asbestos. DWR also has a dust management plan in place to limit any potential asbestos releases during construction.
- Q: What was the cause of the recent fish kill at the Feather River Hatchery that resulted in the loss of 300,000 salmon smolts?
 - R: The fish kill was caused by an electrical short in one of the pumps at the hatchery and is unrelated to the spillways incident. The 300,000 smolts represent roughly 3% of total Feather River smolts, and approximately 1% of total statewide smolt production.
 - R: The California Department of Fish & Wildlife (CDFW) will work with the National Oceanic and Atmospheric Administration (NOAA) to get revised permits for 2017/2018 to replace the 300,000 smolts lost (**see Action Item #1**).
- Q: How much has been spent on recovery and response efforts so far?
 - R: \$133 million has been spent, including all staff, materials, equipment, and first responder activities associated with the spillways incident.
- Q: The final forensics report won’t be released until fall 2017. How does that impact the design and construction of repairs, since the contractor won’t have the final forensics recommendations?
 - R: DWR has asked the forensics team for a list of *all* potential causes of the spillways failure in advance of the final report. These 24 potential causes are outlined in a memo available online [here](#). All repair/construction designs will address *all* of the potential causes outlined in the memo.
- Q: How long would flood flows from an emergency spillway failure take to get to Yuba City?
 - R: The inundation maps available online [here](#) describe how long flows take to get downstream in the event of a total failure of the dam, depending on location.
- Q: Why was traffic from Oroville not allowed to move north in both the northbound and southbound lanes to expedite evacuation [i.e., “contraflow traffic”]?
 - R: [Lt. James Bell, Butte County Sheriff’s Department, responded to this question.] It was, but the contraflow required some coordination. Initially, traffic was only allowed to use standard flow patterns, but a contraflow plan was implemented as quickly as possible.

- Q: Early pictures of the incident do not show rebar in the main gated spillways. Should there be rebar reinforcement?
 - R: The spillway slabs did have rebar in them. The repairs will require thicker slabs and more reinforcement to meet 2017 standards.
- Q: Why was CDFW involved in the spillways emergency response?
 - R: CDFW was only active at the Feather River hatchery.
- C: Prior to the large rim dams being built, the rivers routinely dried up in summer months. There is too large of a concern for fish, and the hatchery is not necessary.
- C: It would be useful to have regular live updates on YouTube or television to provide real time information.
 - R: Good suggestion. DWR is also exploring a viewing platform, cameras, livestream, and a number of other venues to provide the public with constant updates of construction activities.
- Q: How close can the public get to the river right now?
 - R: DWR is working to find an exact location for the viewing platform. Right now, heavy equipment movement and construction activities restrict public access for safety reasons.
- Q: Are plans in place to make all of the turbines at the Hyatt Power Plant operational?
 - R: There is currently one unit out of commission. Prior to the spillways incident, there were plans in place to refurbish or replace it. Currently, we have a 10 year, \$230 million plan to repair everything in the Power Plant.
- Q: What is being done to preserve cultural heritage sites at/near the construction area?
 - R: DWR has plans in place to continuously monitor cultural heritage sites. There have been no impacts to what was identified as “contributing to the historic district.” DWR has a team doing cultural resources monitoring every day, and also has the State Historic Preservation Office engaged.
- Q: What impact will construction activities have on local traffic?
 - R: Haul routes have been identified and are available. All trucks will be strictly limited to those routes. DWR anticipates a maximum of 142 trucks per day (or one truck every four minutes). Community members are encouraged to contact DWR or CHP if *any* construction traffic is observed outside of designated haul routes.
- Q: Has an act of terrorism been considered as a potential cause of the spillways failure? Are there plans in place to protect the facility against future acts of terrorism?
 - R: Acting Director Croyle is working with local law enforcement on this issue and has plans in place. The specific details of those plans can't be publicly discussed for public safety reasons.
- Q: How often is the dam inspected?
 - R: Formal inspections are carried out by DWR, the Division of Safety of Dams (DSOD) and FERC twice per year. There are also quarterly inspections by DWR, and 24/7 security teams are on site to provide constant visual inspections.
- Q: Are divers used to inspect the water-side face of the dam itself?
 - R: Divers are used at shallower depths. DWR also uses remotely operated vehicles to conduct condition assessments. Finally, DWR uses computer assisted bathymetry and

side-scan sonar to compare the underwater topography of the dam with original designs to identify potential variances.

- Q: Can DWR implement a citizen's oversight committee for Oroville operations?
 - R: DWR anticipates additional extensive community engagement related to recovery efforts, including community meetings and small, topic-specific work groups. There is also a desire to remain engaged with community members beyond recovery activities. Other possible engagement activities include:
 - Public meetings with USACE on flood control manual updates
 - The Oroville Recreational Advisory Committee (ORAC).
- Q: Is DWR planning on conducting gravel augmentation below the dam for spawning habitat?
 - R: DWR is aware that there were impacts to the low-flow channel, including potential impacts to spawning habitat. Once water levels drop after the final use of the gated main spillway for the year, DWR will conduct a condition assessment. Gravel augmentation will be conducted as part of the recovery process, and is included in the Lower Feather River Habitat Improvement Program (Program). The Program will be implemented once the FERC license is issued.
- Q: In the Lower Feather River, will dredging be conducted to restore habitat and channel capacity?
 - R: DWR is investigating potential actions on the Lower Feather River, and has plans to address sedimentation issues. The specifics of the plan are still under development.

Closing

Deputy Director Messer closed the meeting and thanked participants for attending.

Action Items

The following action items were recorded:

1. CDFW will work with staff from the National Marine Fisheries Service (NMFS) to receive modified permits for additional smolts to make up for the 300,000 smolts lost in the recent electrical shortage at the Feather River Hatchery.