

Oroville Spillway Oversight and Investigation

APRIL 6, 2017

Oversight of Design and Construction

Oversight of the design and construction of the recovery of the Oroville spillway structures is being conducted by several entities with specialized dam design and construction expertise. Both the Federal Energy Regulatory Commission (FERC) and California Division of Safety of Dams (DSOD) must approve all designs and will oversee and approve construction. During the emergency response, DSOD, FERC and the U.S. Army Corps of Engineers (USACOE) worked closely with the Department of Water Resources (DWR) as critical decisions were being made.

FERC: Any water power project and the construction, operation, maintenance, use, repair, or modification of any project works are subject to the inspection and the supervision of the Regional Engineer or any other authorized Commission representative. Since Oroville Dam has a hydroelectric facility, it falls under the regulation of FERC's dam safety program. FERC staff review and comment on all aspects of the recovery work of the Oroville spillways.

DSOD: All dams within the jurisdiction of the state are subject to state supervision by the DSOD. DSOD reviews all aspects of the design and makes independent evaluations to ensure any alterations or repairs to dams result in a safe dam. Therefore, the recovery of the Oroville spillways is being reviewed and approved by DSOD.



BOC: A Board of Consultants (BOC) is required by California Water Code (Division 3, Part 1, Chapter 3, Section 6056) for modifications to any dam owned by DWR. In addition, FERC requires a Board of Consultants to review and comment on repairs to dams. Therefore, the recovery of the Oroville spillways is being reviewed by the BOC. As is typical for all repairs and new construction for dams regulated by FERC, a BOC is required and has been engaged for the emergency response and recovery of the Oroville Dam spillways.

The process for the Oroville BOC is the same as for any other dam project – except this Board of Consultants must work at an accelerated pace, in real time with repairs. DWR engineers have and will continue to present information to the BOC, then members of the BOC will comment on DWR preliminary considerations and offer direction prior to DWR making final decisions and furthering design details.

USACOE: The USACOE has a robust national dam safety program under which it operates and maintains approximately 700 dams nationwide and in Puerto Rico. USACE carries out its dam safety program to ensure projects deliver their intended benefits while reducing risks to the public. Through implementation of its dam safety program, USACE has built expertise and technical competencies across a broad range of disciplines for all aspects of dam safety projects. Given their strong technical capabilities and expertise, USACE and DWR have entered into an agreement which allows USACE to support recovery planning for the Oroville spillway structures. USACE engineers and geologists have provided advice and support of spillway operations, short term stabilization measures, direct support of drilling rigs for geology investigations, and expert review and advice on all design aspects.

Forensic Team Investigation: What Happened to the Gated Flood Control Spillway?

The BOC described above should not be confused with the forensic analysis team, which has been engaged to determine the cause of the Oroville spillway incident. To provide for an independent review, DWR contacted the Association of State Dams Safety Officials and the United States Society of Dams to propose a team that can conduct a forensic evaluation.

The forensic team has been named and has begun their investigation. They are expected to make a site visit on April 13.

The forensic team is charged with determining the root cause of the spillway incident, as well as any other contributing causes. Their findings will be shared with the BOC as it advises DWR on work to recover spillway function. The recovery project may benefit from the forensic team's analysis. Therefore, their findings may be incorporated into the recovery plans.