



# Dam Safety Planning Unit

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Senate Bill 92 created the California Governor's Office of Emergency Services (Cal OES) Dam Safety Planning Unit. The Unit is responsible for reviewing and approving dam owners' Emergency Action Plans (EAP). This process includes division outreach and technical assistance to dam owners and local emergency management personnel. The Cal OES Dam Safety Planning Unit may also provide guidance to local public safety agencies with regard to incorporating EAPs into their existing all-hazards key response and mitigation plans.

## **What is an EAP and why is it important?**

An EAP is a written document that identifies potential emergency conditions at a dam and specifies preplanned actions to help minimize property damage and loss of life should those conditions occur.

EAPs contain procedures and information that instruct dam owners to issue early warning and notification messages to downstream emergency management authorities. The document must also contain inundation map(s) demonstrating critical areas for evacuation-related actions. Additionally, EAPs:

- Provide assistance and guidance to local jurisdictions on their emergency planning for dam failure events; and
- Aid local, state, and federal agencies with activities to ensure effective dam incident emergency response procedures and planning.

More information about EAPs can be found on the Cal OES Dam Safety Planning Unit webpage at: <http://www.caloes.ca.gov/dams>

## **Who is required to have an EAP?**

Sections 6160 and 6161 of the California Water Code and Government Code Section 8589.5 require owners of state regulated dams to submit EAPs to Cal OES and the Department of Water Resources (DWR) Division of Safety of Dams (DSOD), unless the dam has been classified as low hazard by DSOD.

## **What are dam hazard classifications?**

The downstream hazard classifications are based solely on potential downstream impacts to life and property should the dam fail when operating with a full reservoir. These classifications are not related to the condition of the dam or its appurtenant structures. The definitions for downstream hazard

classifications are based on FEMA's *Federal Guidelines for Inundation Mapping of Flood Risks Associated with Dam Incidents and Failures* (FEMA P-946, July 2013). FEMA categorizes the downstream hazard potential into three categories in increasing severity: Low, Significant, and High. DSOD adds a fourth category of "Extremely High" to identify dams that may impact highly populated areas or critical infrastructure, or have short evacuation warning times.

<b>Downstream Hazard Classification</b>	<b>Loss of Human Life</b>	<b>Economic, Environmental, and Lifeline Losses</b>
Low	None expected	Low and generally limited to owner's property
Significant	None expected	Yes
High	Probable (one or more expected)	Yes, but not necessary for this classification
<i>Extremely High</i>	Considerable	Yes, major impacts to critical infrastructure or property

### **What are the requirements if my dam is co-regulated by FERC?**

An owner of a dam that is jointly regulated by the state and the Federal Energy Regulatory Commission (FERC) shall prepare an EAP in accordance with FERC guidelines.

### **How often is a dam owner required to maintain, update, and revise an EAP?**

Dam owners shall update their EAP, including inundation map(s), at least every ten (10) years. Updates are also required when there is:

- a significant modification to the dam or a critical appurtenant structure, as determined by DSOD;
- a significant change to downstream development that involves people and property.

### **Are there any other statutory requirements for jurisdictional dam owners?**

Yes. At least once annually, the dam owner shall conduct an EAP notification or tabletop exercise with local public safety agencies.

Please see the [DSOD webpage](#) for statutory requirements related to inundation mapping.

### **When is my EAP due?**

Deadlines for dam EAP submissions are:

- On or before January 1, 2018, if the hazard classification is extremely high.

- On or before January 1, 2019, if the hazard classification is high.
- On or before January 1, 2021, if the hazard classification is significant.

### **Where should I submit my EAP?**

Per legislation, the development of an EAP should be based on and include an inundation map approved by DSOD. After development, dam owners must submit the EAP to both Cal OES and DSOD. Please submit the Cal OES copy of the EAP to the Dam Safety Planning Unit, to:

<b>Hard Copy to:</b>	Dam Safety Planning Unit, Chief California Governor's Office of Emergency Services 3650 Schriever Avenue Mather, CA 95655
<b>Digital Copy to:</b>	<a href="mailto:eap@caloes.ca.gov">eap@caloes.ca.gov</a>

At this time, Cal OES requests that dam owners submit one paper copy of the EAP and one digital copy (email, cd, or thumb drive).

### **How should I develop my EAP?**

California statute requires that EAPs be developed in accordance with FEMA's [\*Federal Guidelines for Dam Safety: Emergency Action Planning for Dams\*](#).

Government Code Section 8589.5 also requires that the EAP must include at a minimum:

- Notification flowcharts and contact information
- The response process
- The roles and responsibilities of the dam owner and impacted jurisdictions following an incident involving the dam
- Preparedness activities and exercise schedules
- Inundation maps approved by DWR
- Any additional information that may impact life or property

As needed, Cal OES will develop additional tools and information to aid in the EAP process.

California law also requires that EAPs be developed in consultation with any local public safety agency that may be impacted by an incident involving the dam, to the extent a local agency wishes to consult. This process/outreach needs to be documented within the EAP.

**When does the 60 day review period begin?**

The 60 day review period begins when the Cal OES Dam Safety Planning Unit receives the EAP with the approved inundation map included. If an EAP is submitted to Cal OES without an approved inundation map, the review period will begin when the Dam Safety Planning Unit receives the letter from DSOD that the applicable inundation map has been approved.

**I currently have an EAP. Can that be re-submitted for approval under the new requirements?**

If a dam owner has an existing EAP as of March 1, 2017, the owner can submit the inundation map within that plan to DSOD for approval. DSOD will review and may approve the inundation map if it is deemed sufficient. If DSOD approves the map, the dam owner may submit the EAP to Cal OES for review.

## **Additional Information**

For any other information on dam EAPs, please email the Cal OES Dam Safety Planning Unit at [eap@caloes.ca.gov](mailto:eap@caloes.ca.gov).

More information regarding EAPs and the legal responsibilities of dam owners is available at the following website: [www.caloes.ca.gov/dams](http://www.caloes.ca.gov/dams). Additionally, the full text of the new law (SB 92, Committee on Budget and Fiscal Review, Statutes of 2017) can be found here: <http://leginfo.legislature.ca.gov/>.

For information on dam inundation mapping, please refer to the [DSOD webpage: http://www.water.ca.gov/damsafety/](http://www.water.ca.gov/damsafety/).

## **Authorities and References**

Cal OES Dam Safety Planning Unit website:  
<http://www.caloes.ca.gov/dams>

Department of Water Resources, Division of Safety of Dams website:  
<http://www.water.ca.gov/damsafety/index.cfm>

FEMA's website on Dam Safety:  
<https://www.fema.gov/dam-safety>