EMERGENCY ACTION PLAN (EAP) REVIEW TOOL | NO. XX

The Cal OES EAP Review Tool will be used to determine how an EAP meets the statutory requirements for <u>California Government Code Section 8589.5</u>, <u>California Water Code Sections 6160</u> and <u>6161</u> and the <u>Federal Guidelines for Dam Safety:</u> <u>Emergency Action Planning for Dams (FEMA 64)</u>.

The review tool provides Cal OES the opportunity to evaluate whether the EAP has addressed and identified all statutory requirements and provide feedback to the owner of the dam. The EAP Review Tool can also be used by dam owners during the development of their EAPs as an additional reference and resource. It is the responsibility of the dam owner to meet the statutory requirements as noted above.

County/City:	Name of Dam:				Date of P	lan:
DSOD Dam ID #:		FERC Project #:				
DSOD Hazard Classification:		Owner:				
Lead State Reviewe	er:	Management Reviewer: Report Date: Review No. XX Month XX, 20XX		Management Rev		lo. XX
Internal Cal OES Workgroup						
Fire and Rescue	Law Enforcement Branch	Inforn	olic nation ice	Warning Center		Regional Operations
Name, Title	Name, Title	Name, T	itle	Name,	Title	Name, Title
Date Plan Received Month XX, 20XX	d by Cal OES:					
Plan Approved: Month XX, 20XX			Plan Not Month XX		ed:	

FRONT MATTER	Location in Plan (section and/or page number)	Met	Not Met
A. Are relevant identifiers listed clearly on the front page of the EAP, to include, but not limited to: dam name; NID, DSOD, and FERC ID numbers; hazard classification; date of revision/preparation; physical address; latitude/longitude; county; dam owner; and an image of the dam? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-3)			
B. Are the name and contact information clearly identified for the Dam Owner, Dam Operator, EAP Coordinator, and Emergency Contact? (required towards the front of document) (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-3)			
C. Is there a table of contents? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-3 to II-5, C-1)			

FRONT MATTER: REVISIONS

SECTION 1: INTRODUCTION	Location in Plan (section and/or page number)	Met	Not Met
1.1. Does the purpose statement generally address identification/detection, notification, mitigating actions, responsibilities, and life/property safety? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-5)			
1.2(a). Are local public safety agencies part of the development process? Agencies should include, but are not limited to: OES, law, and fire for each impacted jurisdiction (cities and counties); California Department of Water Resources Division of Safety of Dams (DWR DSOD); California Department of Water Resources Flood Operations Center (DWR FOC); and National Weather Service (NWS). (Government Code Section 8589.5)			
1.2(b). Is the outreach to, and participation of, the affected local public agencies (including but not limited to cities and counties) documented or summarized in the EAP? (Government Code Section 8589.5)			

SECTION 1: REVISIONS

SECTION 2: SUMMARY OF EAP RESPONSIBILITIES	Location in Plan (section and/or page number)	Met	Not Met
2.1. Are the dam owner's critical responsibilities for responding to an incident and implementing the plan clearly documented? Responsibilities should include, but are not limited to: verifying and assessing emergency conditions, notifying emergency management agencies, taking corrective action, declaring termination of the emergency, and updating the EAP on an annual basis. Responsibilities should be broken down by role for dam staff where applicable. (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-3, II-10 to II-11, B-1, B-2)			
2.2. Are the impacted communities/jurisdictions identified (including all cities and counties within the inundation zone)? Are the critical roles and responsibilities for impacted public safety agencies identified in the EAP? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-3, B-1)			

SECTION 2: REVISIONS

SECTION 3: NOTIFICATION FLOWCHARTS	Location in Plan (section and/or page number)	Met	Not Met
3.1. Do the notification flowcharts include contacts for timely notification of local emergency management and public safety agencies for all four emergency levels (Non-Failure, High Flow, Potential Failure, Imminent Failure)? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-3 to II-5, C-1)			
3.2. Are the following contacts included in the flowchart: DWR DSOD, DWR FOC, NWS, California State Warning Center, local public safety agencies (OES, law, fire for all impacted cities and counties)? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-3 to II-5, C-1)			
3.3. For each notification flowchart entity, is there a 24-hr phone number (marked as such) or a backup phone number provided? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. Il-3 to Il-5, C-1)			

SECTION 3: NOTIFICATION FLOWCHARTS	Location in Plan (section and/or page number)	Met	Not Met
3.4. Do the notification flowcharts minimize the number of calls made by the Dam Owner to four or fewer per caller? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-3 to II-5, C-1)			

SECTION 3: REVISIONS

SECTION 4: PROJECT DESCRIPTION	Location in Plan (section and/or page number)	Met	Not Met
4.1. Is there a project description? The project description should include, but is not limited to: purpose of dam, key facts/figures of dam, hazard classification, consequences of dam failure, jurisdictions affected by flooding/response, incident history, CAS/no CAS, storage capacity curves, spillway description/curves, description of other outlets, downstream channel capacity at first population/infrastructure impact, upstream/downstream dams and impacts to them. (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-5 to II-6)			
4.2. Is a vicinity map <u>and</u> simple drawing showing the dam's features included? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-5)			
4.3(a). Are the Critical Appurtenant Structures (CAS) as identified by DSOD included? Must state whether DSOD has identified or has not identified CAS. (Government Code Section 8589.5; Water Code Section 6161; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-5 to II-6)			
4.3(b). Are the impacts of a CAS failure described? (Government Code Section 8589.5; Water Code Section 6161; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-5 to II-6)			

SECTION 4: REVISIONS

SECTION 5: EAP RESPONSE PROCESS	Location in Plan (section and/or page number)	Met	Not Met
5.1(a). Are detection and/or early warning systems at the dam clearly described (e.g., dam operators' observations, instrumentation systems, observations by the general public, etc.)? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-6 to II-7) 5.1(b). Are all four of the emergency levels clearly described and defined in accordance with FEMA Federal Guidelines for Dam Safety, Emergency Action Plans for Dams?			
(FEMA Federal Guidelines for Dam Safety, Emergency Action Planning for Dams, pgs. II-7 to II-8)			
5.1(c). Are there clear guidelines and decision criteria to help the dam owner determine the appropriate emergency level for potential, unusual, and emergency conditions that could occur at the dam? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-7, D-1)			
5.2(a). Are there procedures on how to use the notification flowcharts and alternate contact table(s)? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-9)			
5.2(b). Are there emergency notification information and message templates for all emergency levels? (Messages should be clear, use nontechnical terms, identify the emergency level, and specify which actions to take.) (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-9, F-1 to F-3)			
5.3. Are there emergency actions listed that the Dam Owner can take to protect the dam and minimize impacts to life, property, and the environment? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-9, G-1 to G-4)			
5.4. Are there steps listed to terminate the plan? Steps should include, but are not limited to: notifying all flowchart entities of the termination. (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-10, I-2 (Appendix I))			

SECTION 5: EAP RESPONSE PROCESS	Location in Plan (section and/or page number)	Met	Not Met
5.5. Is there a process for follow-up on how the plan was used or what lessons were learned from the incident and EAP implementation? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-10)			

SECTION 5: REVISIONS

SECTION 6: GENERAL RESPONSIBILITIES	Location in Plan (section and/or page number)	Met	Not Met
6.1. Are Dam Owner responsibilities included in the plan? Responsibilities include but are not limited to: detecting and evaluating dam safety incidents, classifying the incident, notifying emergency management authorities, taking appropriate actions, and terminating the EAP. (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-10 to II-11, B-1, B-2)			
6.2. Are the notification and communication responsibilities included? Responsibilities should include, but are not limited to, notification of the National Weather Service (for flash flood watches and warnings), communication with the Emergency Operations Center, and interaction with the media. (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-11 to II-12)			
6.3. Are the agencies responsible for evacuation listed? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-12)			
6.4. Are the monitoring, security, termination, and follow-up responsibilities described in the EAP? (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-12 to II-13)			
6.5. Are the EAP Coordinator responsibilities listed? Responsibilities should include, but are not limited to, conducting annual reviews of the EAP, preparing revisions to the EAP, establishing training seminars, coordinating EAP exercises, and serving as the point of contact for questions about the plan. (FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-13)			

SECTION 6: REVISIONS

SECTION 7: PREPAREDNESS	Location in Plan (section and/or page number)	Met	Not Met
7.1. Does the EAP document surveillance and monitoring activities? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-14 to II-15)	,		
7.2. Is there an evaluation plan for detection and response timing in the EAP with specific timing information (from initiation of incident to emergency level determination and notification)? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-15)			
7.3. Does the EAP provide a route to obtain access to the site? The description should identify locked gates and a secondary access route if the primary route is in the inundation zone. (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-16)			
7.4. Does the EAP provide information regarding response during periods of darkness? Are changes in response time included? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety; Emergency Action Planning for Dams, pg. II-16)			
7.5. Does the EAP provide information regarding response during weekends and holidays? Are changes in response time included? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-16)			
7.6. Does the EAP provide information regarding response during periods of adverse weather? Will the access route to the dam be impacted during adverse weather? Are changes in response time included? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-16)			
7.7. Are alternative sources of power identified? Are emergency actions that require power (such as operation of valves, outlets, gates) identified? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety; Emergency Action Planning for Dams, pg. II-17)			

SECTION 7: PREPAREDNESS	Location in Plan (section and/or page number)	Met	Not Met
7.8. Is the contact information for organizations or personnel regarding emergency supplies and information included in the EAP? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-17)			
7.9. Is there a list of materials and equipment resources stockpiled on-site or nearby that can be used in an emergency? If not warranted, is justification of decision not to stockpile materials and equipment included? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-17)			
7.10. Is there information provided on how to coordinate information regarding flows? This should include, but is not limited to, coordination with the NWS, actions to lower the reservoir, actions to reduce inflow to the reservoir (from upstream dams or control structures), and actions to reduce downstream flows (from downstream dams or control structures). Coordination with other dams/control structures should include instructions for contacting the operators and how these actions should be taken. (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-17 to II-18)			
7.11. Is there a proposed schedule or plan for exercising the EAP annually? (Annual exercise required per California Government Code 8589.5 (c)) (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. II-18 to II-19, H-3)			
7.12. Are the alternative communication systems at the dam identified? This may include, but are not limited, to sirens, cellular phones, couriers, radios, etc. (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-19)			
7.13. Are public awareness measures documented (e.g. public outreach to help prepare before an incident, how the public will be informed, etc.)? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pg. II-19)			
SECTION 7: REVISIONS	1	<u> </u>	

SECTION 8: PLAN MAINTENANCE	Location in Plan (section and/or page number)	Met	Not Met
8.1. Are there plans on how the EAP will be updated/revised (e.g., person responsible, frequency, etc.)? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. 1-7, II-24, I-2 (Appendix I))			
8.2. Are there plans for EAP distribution to all notification flowchart entities? (Government Code Section 8589.5; FEMA Federal Guidelines for Dam Safety: Emergency Action Planning for Dams, pgs. I-7, II-24, I-2 (Appendix I))			

SECTION 8: REVISIONS

SECTION 9: INUNDATION MAPS	Location in Plan (section and/or page number)	Met	Not Met
9.1. Are the DSOD-approved maps for the main dam included in the EAP? (Government Code Section 8589.5, Water Code Section 6161)			
9.2. Are the DSOD-approved maps for the critical appurtenant structure(s) included in the EAP? (Government Code Section 8589.5, Water Code Section 6161)			

SECTION 9: REVISIONS