

Effective July 1, 2017, the Division of Safety of Dams (DSOD) updated the hazard potential classifications for all State jurisdictional dams in accordance with newly enacted state law in Sections 6160 and 6161 of the California Water Code. This classification is being used, in part, to prioritize the development of inundation maps and emergency action plans.

The classifications are based solely on downstream hazard potential, not the actual condition of the dam or its major appurtenances. DSOD considered the number of persons within the inundation area, expected flood wave characteristics, and warning times in order to evaluate the potential for loss of human life. The downstream land usage, impacted infrastructure, incremental flood risk, and environmental impacts were all considered for the economic, environmental, and lifeline losses.

As shown below, DSOD’s hazard potential classifications are based on Federal guidelines published by the Federal Emergency Management Agency (FEMA). FEMA recommends a three-step rating system that defines low-, significant-, and high-hazard potential classifications, which are determined from the potential for loss of life, economic loss, and environmental damage resulting from a hypothetical dam failure. DSOD further subdivides FEMA’s “High” classification into an “Extremely High” classification in order to identify dams upstream of highly populated areas or extensive development and dams with short evacuation warning times. Whenever the population at risk within the inundation area is 1,000 persons or more, the dam is generally assigned an “Extremely High” classification.

**Effective July 1, 2017**

**Criteria for DSOD’s Downstream Hazard Potential Classification**

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

\*Reference FEMA P-946, July 2013, Federal Guidelines for Inundation Mapping of Flood Risks Associated with Dam Incidents and Failures