



**CALIFORNIA DEPARTMENT OF WATER RESOURCES**  
**DIVISION OF SAFETY OF DAMS**

**Downstream Hazard**

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

<b>Downstream Hazard Potential Classification</b>	<b>Potential Downstream Impacts to Life and Property</b>
Low	No probable loss of human life and low economic and environmental losses. Losses are expected to be principally limited to the owner’s property.
Significant	No probable loss of human life but can cause economic loss, environmental damage, impacts to critical facilities, or other significant impacts.
High	Expected to cause loss of at least one human life.
<i>Extremely High</i>	Expected to cause considerable loss of human life or would result in an inundation area with a population of 1,000 or more.

**Condition Assessment**

California DSOD uses NID’s condition rating definitions, with additional criteria, as a guideline in assigning condition assessments.

<b>Rating</b>	<b>National Inventory of Dams Definitions</b>	<b>California DSOD Additional Criteria</b>
Satisfactory	No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the applicable regulatory criteria or tolerable risk guidelines	None
Fair	No existing dam safety deficiencies are recognized for normal loading conditions. Rare or extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in the range to take further action	<ul style="list-style-type: none"> <li>• Dam has a long-standing deficiency that is not being addressed in a timely manner</li> <li>• Dam is not certified and its safety is under evaluation</li> <li>• Dam is restricted and operation of the reservoir at the lower level does not mitigate the deficiency</li> </ul>
Poor	A dam safety deficiency is recognized for loading conditions that may realistically occur. Remedial action is necessary. A poor rating may also be used when uncertainties exist as to critical analysis parameters that identify a potential dam safety deficiency. Further investigations and studies are necessary	Dam has multiple deficiencies or a significant deficiency that requires extensive remedial work
Unsatisfactory	A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution	None
Not Rated	The dam has not been inspected, is not under State jurisdiction, or has been inspected but, for whatever reason, has not been rated	None