Lucky Peak Dam Safety Fact Sheet

U.S. ARMY CORPS OF ENGINEERS BUILDING STRONG®

Lucky Peak Dam

Lucky Peak Dam and Lake are on the Boise River, 10 miles upstream from Boise, Idaho. The dam, operated by the Walla Walla District of the U.S. Army Corps of Engineers (USACE), provides multiple benefits including flood risk management, irrigation, hydropower, and recreation. Since the dam's construction it has prevented over one billion dollars of flood damage to downstream communities.

Dam Safety Updates at Lucky Peak

The U.S. Army Corp of Engineers has completed an updated risk assessment for Lucky Peak Dam on a standard 10 year cycle. The dam risk classification has been updated from "moderate" to "high." This risk assessment, called a Dam Safety Action Classification (DSAC), considers three main contributors to risk: loading on the dam, performance of the dam, and consequence of dam failure. Our most recent Periodic Assessment reaffirmed that Lucky Peak Dam is in good condition, was constructed well, and the likelihood of failure is very low. However, the consequences, should a failure occur, are high. The primary driver for the change is a better understanding from updated modeling of potential consequences should a failure occur. Several factors contribute to the magnitude of consequences including, a large amount of water stored behind the dam, a large population center 10 miles downstream and a confined canyon downstream of the dam that concentrates flows. The DSAC process is used primarily to prioritize and categorizes dams in the USACE inventory so that further evaluations and actions are resourced appropriately. The change in classification will prioritize Lucky Peak Dam for further study over the next few years. In the meantime, USACE will continue to work with local emergency managers to increase public safety by minimizing the potential consequences and maximizing preparedness.

USACE will share the details of the Lucky Peak Dam DSAC change with the public on November 3, 2021. It is important to emphasize that the structural integrity of Lucky Peak Dam has not changed. This classification change is a result of a more detailed risk assessment and advances in the Corps of Engineers' ability to model the consequences of a dam failure and the impacts to affected communities.

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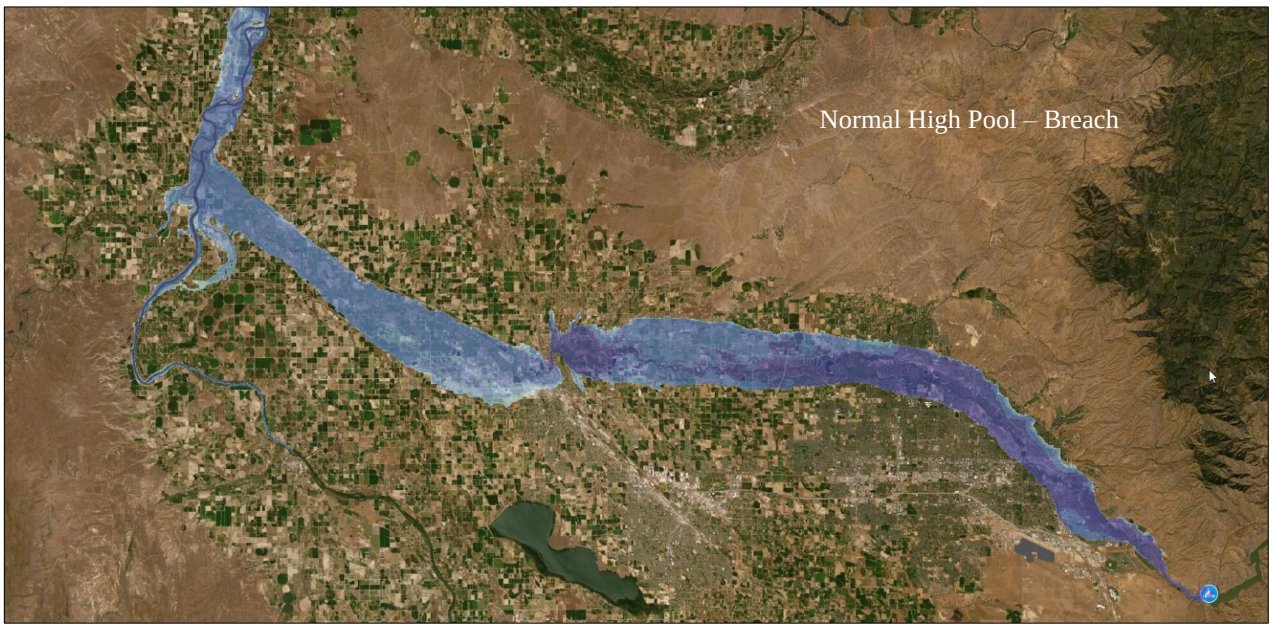
Flood Potential for the Treasure Valley

Every Spring, rain and snowmelt from thousands of square miles of mountain terrain flows into the Boise River. The amount of snowpack and the rate that it melts determines how much water is carried by the Boise River at any time. A flood can occur even when the three large dams upstream of Boise – Lucky Peak, Arrowrock and Anderson Ranch - are operating properly. Since 1982, the Boise River has experienced 15 years with a peak flow over 6,500 cubic feet per second, the regulation objective of the upstream reservoirs. These events cause flood damages throughout the Treasure Valley. Managing flood risk and irrigation demand on the Boise River is a shared responsibility among local, state, and federal partners. USACE strives to minimize flood risk by actively engaging with state and local governments, first responders and community emergency managers. While we cannot eliminate risk, our goal is to reduce risk while also balancing other authorized purposes.

Flood Inundation Maps

USACE also is updating the National Inventory of Dams (NID) to provide a centralized location for flood inundation maps to be available to Emergency Managers, First Responders, and the public in the near future. These maps show estimated areas of potential flooding for specific conditions. Flood inundation maps also include details like flood depths, critical infrastructure, and the time it takes for water to reach downstream areas.



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