



# Lake Tahoe Dam

## Overview

Located in Tahoe City, California, Lake Tahoe Dam plays a critical role in managing water resources within the Truckee River Basin. Originally constructed in 1870 and rebuilt as a concrete structure in 1913, the dam is a vital component of the Newlands Project, one of Reclamation's first water development efforts, authorized in 1903.



*Lake Tahoe Dam*

Lake Tahoe Dam is a concrete spillway structure measuring 18.2 feet high and 109 feet long. It includes 17 adjustable rectangular gates capable of releasing a maximum of 2,100 cubic feet per second of water into the Truckee River. While Lake Tahoe's natural rim is at an elevation of 6,223 feet, the dam allows for the controlled storage of water up to 6,229.1 feet, providing about 744,600 acre-feet of storage capacity. The dam controls the top 6.1 feet of Lake Tahoe and regulates the lake outflows into the Truckee River, supporting a range of downstream needs.

Operations at the dam are guided by the [Truckee River Operating Agreement](#) and managed day-to-day by the Federal Water Master, appointed by the U.S. District Court. Reclamation works closely with federal, tribal, state, and local partners, including the Truckee Meadows Water Authority, the Pyramid Lake Paiute Tribe, the U.S. Fish and Wildlife Service, and the states of California and Nevada to ensure balanced, coordinated water management.

Beyond its water supply function, Tahoe Dam supports environmental and recreational benefits. It helps sustain habitat for threatened and endangered species such as the Lahontan cutthroat trout and cui-ui. Controlled releases contribute to the health of downstream wetlands and riparian areas, while also maintaining the clarity and ecological balance of Lake Tahoe itself.

## Lake Tahoe Dam Rehabilitation Study

Restoration repairs are needed to address deterioration in the 115-year old dam structure, which was constructed prior to the introduction of air-entraining admixtures in concrete that allow space for expansion and contraction of water molecules as the concrete goes through natural freeze-thaw cycles. While the dam is currently safe to operate, the study is being conducted to evaluate alternatives for needed repairs.

As temperatures at the dam routinely drop below freezing at night and climb above freezing during the day, the dam experiences freeze-thaw cycles regularly, which are known to cause deterioration of the concrete. Additionally, analysis of the concrete in 2005 indicated signs of deterioration from alkali-aggregate reactions. Gate operations have also been affected as gates have become temporarily immobile or unable to close due to the concrete deterioration.

The study will identify problems and opportunities, assess existing resources, forecast future conditions, and evaluate alternative solutions to select a recommended plan. As part of the study, concrete core samples were collected to assess the dam's structural integrity. The results of the study are expected in Spring 2027.