BRUTAL ENDEAVORS PRESS

DIVERT THE RIVER

The Engineering and Human Cost of Hoover Dam (1931–1936)



High-scalers at the Arizona intake tower site, July 28, 1932.

ILLUSTRATED SAMPLER

The men on the wall

The photograph on the cover shows high-scalers working about 550 feet above the Colorado River.



Two Apache high-scalers in Black Canyon, October 5, 1932. National Archives

Before excavation could proceed safely below, scaling crews had to clear loose rock from the canyon walls. The men worked suspended from ropes, using bars to pry away loose material and drills where rock had to be blasted. Look at the cliff in the cover photograph. The ropes make the distance down to the river easier to grasp. See the cover photograph in the archive.

Moving the Colorado

To reach the dam’s foundation, crews had to move the Colorado River out of the way.

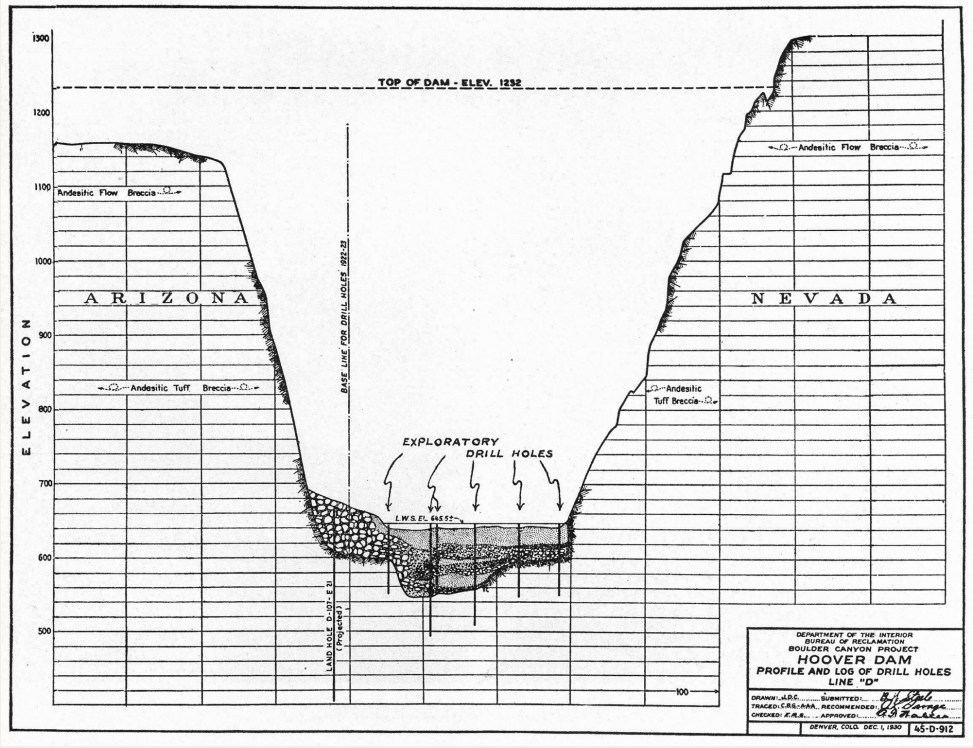


The crew and the truck-mounted rig used to drill the upper part of the diversion tunnels. National Archives

Four tunnels carried the river around the dam site. Each went from 56 feet across at excavation to 50 feet after lining. On November 13, 1932, the Colorado began flowing through the Arizona tunnels. Crews could then clear the riverbed for the foundation. Reclamation’s construction history.

Beneath the river

This drawing records what crews found when they drilled beneath the proposed dam site.

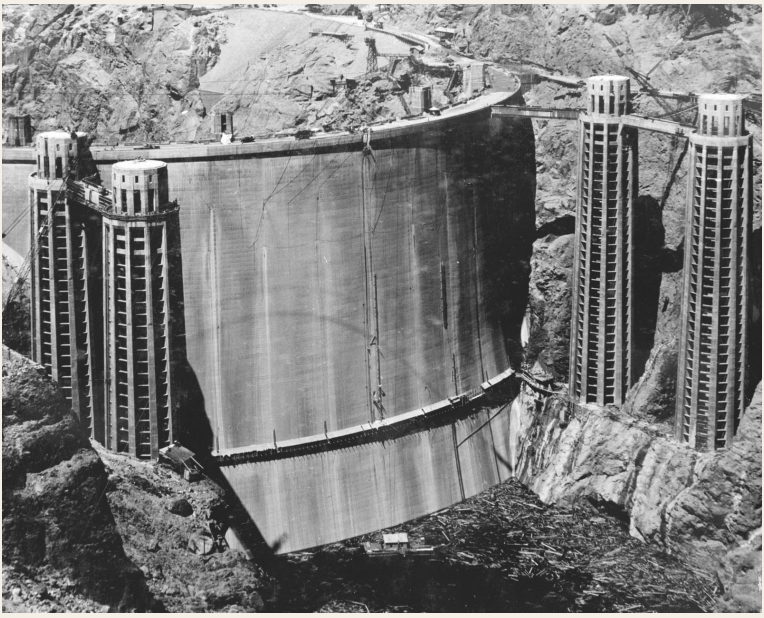


Line D drill-hole profile, Bureau of Reclamation, December 1, 1930. Open the original sheet

Follow the five arrows marked “Exploratory Drill Holes” into the riverbed. Then find the dashed line near the top. That was the proposed elevation of the dam’s crest. The entire task is visible in one sheet, from the rock the structure would bear on to the height it would eventually reach.

Watch the river diversion

See the crews and equipment in motion in the Brutal Endeavors Hoover Dam film.



Upstream face of the dam and its intake towers, May 1935. Reclamation photograph

Watch the Hoover Dam film on YouTube

Follow Brutal Endeavors for more historic builds.

The full Divert the River ebook follows the project from Black Canyon to Lake Mead, with 30 archival photographs and six original engineering drawings. A large-format collector hardcover is planned.

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