

Experts: Bad design, building caused dangers at tallest dam

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In this Feb. 14, 2017, file photo, water gushes from the Oroville Dam's main spillway in Oroville, Calif. An independent team of dam experts says bad design and construction a half-century ago contributed to a disastrous spillway collapse at the nation's tallest dam. Dam-safety experts investigating February's spillway failures at the Oroville Dam say California should have assessed the original flaws. (AP Photo/Marcio Jose Sanchez, File)

Bad design and construction and inadequate state oversight led to a

disastrous spillway collapse at the nation's tallest dam, an independent team of national dam safety experts said Tuesday.

The experts investigating February's spillway failures at California's Oroville Dam say the state probably could have detected the problems if dam managers had reviewed the original flaws in the half-century-old dam, using modern engineering standards.

Authorities ordered nearly 200,000 people to evacuate Feb. 12 after both spillways at Oroville Dam collapsed. Authorities feared an uncontrolled release of massive amounts of water, which did not happen.

Experts from the national Association of State Dam Safety Officials and the U.S. Society on Dams are conducting their own independent [review](#) of the causes of the Oroville crisis for any [safety](#) lessons the California crisis holds for dam managers nationally. State and federal officials also have initiated investigations.

Tuesday's report says water entering through cracks or repair seams in the main spillway may have triggered crumbling of the spillway. It cites a series of problems with the original construction of the spillway in the 1960s, including thin concrete, poorly placed drains, and inadequate foundations.



In this Feb. 28, 2017, file photo, water flows down the Oroville Dam's crippled spillway in Oroville, Calif. An independent team of dam experts says bad design and construction a half-century ago contributed to a disastrous spillway collapse at the nation's tallest dam. Dam-safety experts investigating February's spillway failures at the Oroville Dam say California should have assessed the original flaws. (AP Photo/Rich Pedroncelli, File)

Inspections alone would not have been enough to have dealt with the original flaws, the experts said.

However, a thorough review of flaws built into the dam originally "would likely have connected the dots ... by identifying the physical factors that led to failure," the investigators said.

The independent investigators found no sign that such a review using modern engineering standards had ever been conducted.

State Department of Natural Resources spokeswoman Erin Mellon says officials are reviewing the report.

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