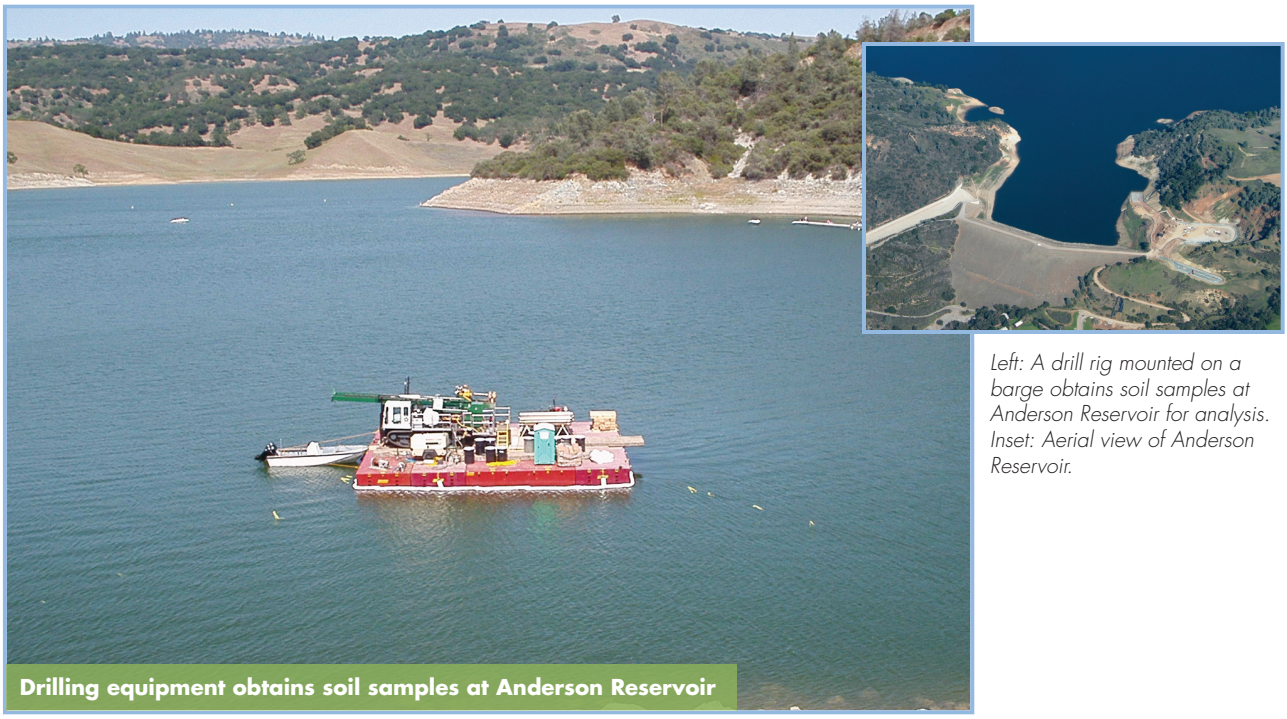
Anderson Dam Seismic Study

Oct. 2010



Drilling equipment obtains soil samples at Anderson Reservoir

Left: A drill rig mounted on a barge obtains soil samples at Anderson Reservoir for analysis. Inset: Aerial view of Anderson Reservoir.

The Santa Clara Valley Water District has received preliminary findings of a seismic study of Anderson Dam that focuses on its stability during a large earthquake.

These findings show that the material at the base of Anderson and in its foundation is weak and would liquefy in a 7.25 magnitude earthquake on the Calaveras Fault about two kilometers from the dam. As a result, the dam could deform significantly, risking an uncontrolled release of the reservoir water.

Further studies on the dam will yield more information that will allow the water district to determine the amount of movement and slumping, known as deformation, that could occur in a large earthquake and what corrective measures are needed to ensure public safety and continue dam operations. The water district is also studying a fault trace under the dam to see if it is active, and whether it could cause damage to the dam's outlet.

Based on an earlier study, the water district imposed an operating restriction at Anderson Dam of 20-feet below the spillway or 40-feet below the crest. Based on these new findings, however, the water district plans to temporarily operate Anderson Reservoir at levels lower than these operating restrictions, keeping water at least 37-feet below the spillway and 57-feet below the crest for an added margin of safety until completing more detailed analyses.

The additional operating restrictions should contain and prevent an uncontrolled release of the water if a large earthquake occurred.

As a long term solution, the water district will construct modifications to the dam so that it can withstand large earthquakes. The future capital improvement project will require extensive planning and design efforts.

Contact us

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Dams and Reservoirs **Anderson Dam Seismic Study**

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