

Lauro Dam Structural Modification



Lauro Dam and Reservoir

Lauro Dam and Reservoir are located in the foothills on the north edge of the City of Santa Barbara, east of San Roque Road, and north of Foothill Road.

An earthquake fault, possibly associated with the Mission Ridge - Arroyo Parida - Santa Ana system of faults, lies within a portion of the dam foundation. Recent analysis indicates that movement could occur on this fault as the result of a large magnitude earthquake. Maximum displacement is estimated to be 3 to 6 feet. Movement along the foundation fault could cause the dam crest to crack and the water to erode and breach the embankment.

Corrective Action Required

Under its Dam Safety Program, the Bureau of Reclamation (Reclamation) regularly monitors, examines and evaluates the performance of dams in its inventory to ensure facilities do not present unreasonable risks to the public, property, or the environment. Issues are evaluated in terms of loading conditions, structural response and the potential consequences of dam failure. Reclamation strives to provide adequate protection from inherent risks. When risks are determined to be unreasonable, corrective actions are formulated and implemented.

Based on Reclamation guidelines, there is justification for remedial action to reduce the long-term risks at Lauro Dam. Modification plans have been completed and this project has been approved by Congress. While performing remedial action, water delivery operations will continue at Lauro Dam under current operating procedures.



Structural Modification

A contract to modify the dam was awarded to the A.J. Diani Construction Co., Inc. of Santa Maria, California. Construction began in late November 2005. The modification features sand and gravel layers that will be installed within the downstream portion of the dam. These layers will prevent movement of the clay core materials as well as provide a means to collect and channel any seepage. It will be necessary to import sand and gravel so there will be increased truck traffic on San Roque Road, north of Foothill Road, during some construction periods.

Emergency Preparedness

The Emergency Action Plan (EAP) for Lauro Dam was updated in 1999. A Functional Exercise of this plan was performed in 2000. Participating agencies included Cachuma Operation and Maintenance Board (COMB), Santa Barbara County Public Works Department, Santa Barbara County Sheriff's Department, Santa Barbara County Office of Emergency Services, Santa Barbara County Flood Control, California Highway Patrol, City of Santa Barbara Public Works Department, and the City of Santa Barbara Police Department. The most recent emergency management exercise was held in August 2005.

About Lauro Dam

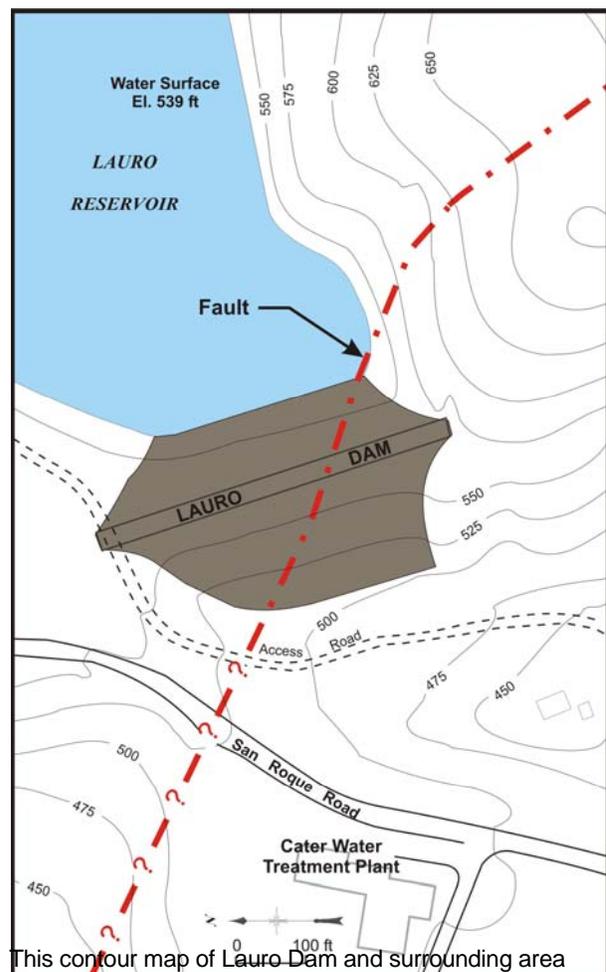
Built in 1952, Lauro Dam is an earthfill structure, 99 feet high, 540 feet long, with a crest width of 30 feet. Lauro Reservoir has a water storage capacity of 640 acre-feet. It serves as a regulating reservoir on the South Coast Conduit, helping to meet peak water demands of the City of Santa Barbara and other south coast communities. Water enters the reservoir through the South Coast Conduit and Tecolote Tunnel from Cachuma Lake. Gibraltar Reservoir also provides water to Lauro Reservoir via the Mission Tunnel. The Cachuma Operation and Maintenance Board operates the dam.

Next Steps

Fall 2006: Complete Construction
Winter 2006: Habitat Restoration

Contact Information

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This contour map of Lauro Dam and surrounding area shows the approximate fault location.