



C O N F E R E N C E

**June 2-5, 2015
San Francisco, CA**



Friday, June 5, 2015 at 9:30am

FEATURED SPEAKER

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California, USA

**CEMENT DEEP SOIL MIXING SHEAR WALL STABILIZATION CALAVERAS DAM
REPLACEMENT PROJECT, CALIFORNIA**

The Calaveras Dam Replacement Project (CDRP) requires large disposal sites to store excess excavated materials that could not be utilized for dam construction. Because of access restrictions during design, the disposal site rockfill toe dike area at the edge of the reservoir could not be explored to evaluate soil conditions. As such, the site had to be explored as part of the construction contract. Exploration revealed very soft clay and loose silty sand up to 40 feet thick that would not be able to support the rockfill dike at the toe of a large disposal site fill. Several alternatives were evaluated to stabilize these soils. Based on constructability, cost and risk considerations, cement deep soil mixing (CDSM) was selected as the preferred method of soil stabilization. The challenge was to design and construct the CDSM stabilization to minimize construction delays. A joint effort by the design engineer, construction manager and contractor achieved CDSM stabilization in about three months, from design through completion of construction. A rigorous quality control program included compression testing of both wet grab and cored soil cement samples to demonstrate that specified strength requirements were being achieved.

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