

CALFED BAY-DELTA PROGRAM
LEVEE AND CHANNEL TECHNICAL TEAM
SEISMIC SUSCEPTIBILITY SUB-TEAM

DECEMBER 10, 1996

STATUS REPORT

Phase II Work

Dynamic Laboratory Testing of Peats

DWR staff met with Dr. Boulanger and his staff to observe dynamic testing of peat samples from Sherman Island. Tests were performed at the U.C. Berkeley laboratory in Richmond. Several successful tests have been completed. However, test results need to be checked and verified. Preliminary test assessments indicate that the peat samples tested behave similar to clay soils that amplify ground motions. These samples were obtained from beneath the levee and are much denser and stronger than peat that exists inland from the levee toe. Additional samples from other sites where the peat thickness is less than at Sherman Island will also be tested. We are presently considering testing peat samples that have been consolidated to a lesser degree.

Accelerometer Sites

Accelerometer sites in the Delta are shown in the attached Figure.

A new accelerometer was installed on a rock site in Antioch (see Attached Figure).

We are in the process of updating several of our previously installed accelerometers.

We are continuing to look for a new accelerometer site on rock in the Montezuma Hills area near Rio Vista.

Phase II Report

In process of summarizing data from field and laboratory testing. We are reanalyzing the one dimensional response analyses performed in phase I with the new field and laboratory data we obtained in Phase II.

Future Studies

We are considering performing two dimensional finite element analyses to determine the effect of the less consolidated peat beyond the levee toe. Perhaps these less consolidated soils may contribute some degree of damping.