

SEISMIC STABILITY OF DELTA LEVEES

APRIL 29, 1995

BACKGROUND

- Three phase program.
- Phase I was completed in August, 1992.
- Phase I consisted of the following tasks:
 1. Review previous studies and historical data relating to the seismic stability of Delta levees.
 2. Perform preliminary studies to estimate bedrock ground motions using deterministic and probabilistic methods.
 3. Perform preliminary dynamic response analyses to investigate the amplification/attenuation characteristics of Delta soil profiles.
 4. Perform preliminary evaluations of liquefaction potential and estimates of earthquake-induced deformations.
 5. Produce Phase I report.
- Phase II consists of the following tasks:
 1. Install surface and subsurface strong motion instruments at four locations in the Delta. - completed
 2. Install two strong motion instruments at rock sites near the western side of the Delta. - ongoing
 3. Perform field and laboratory geotechnical studies to define the site characteristics of the accelerometer locations. - completed.
 4. Prepare Phase II report. - ongoing
 5. Convene the Special Consulting Board and present Phase II report.
 6. Develop Phase Three program.
- Phase III will consist of the following:
 1. Sponsor research on the dynamic response characteristics of organic soils.
 2. Refine the seismic stability evaluations of Delta levees based on new information.
 3. Prepare Phase III report.