Case Studies – Levees

CALFED Levee Stability Program

Today the Delta includes 57 islands or tracts that are inadequately protected from flooding by more than 1,100 miles of levees. Reclamation and agriculture have led to subsidence of the land surface on developed islands in the central and western Delta at long - term average rates of 1–3 inches annually. Many islands in the central Delta are presently 10 to nearly 25 feet below sea level. As subsidence progresses, the levees themselves must be regularly maintained and periodically raised and strengthened to support the increasing stresses on their banks.

A report that provides both short- and long-term strategies to address Delta levee stability reconstruction projects and priorities is being undertaken by the U.S. Army Corps of Engineers as a compliment to both the Delta Risk Management Strategy and Delta Vision conclusions.

Called for by the CALFED Bay-Delta Authorization Act, the Corps is preparing the report that will not include a decision document. The report prioritizes levee projects and presents the Corps' long-term strategy for Delta levees. This study is important to pending levee management decisions because it will provide guidance for Congress to direct the Corps to participate in the improvement of specific Delta Levees.

The Delta's levee tracts and islands help to protect water-export facilities in the southern Delta from saltwater intrusion by displacing water and maintaining favorable freshwater gradients. However, ongoing subsidence behind the levees reduces their stability and threatens to degrade water quality in the massive north-to-south water-transfer system.

Schedule: The study is being conducted in coordination with DRMS and the Delta Vision, and is expected to be finished by 2012.