

Case Studies – Levees

Delta Risk Management Strategy

The Delta Risk Management Strategy (DRMS) is an ongoing study that is an outgrowth of the Management Program Element described in the CALFED Record of Decision. When completed, DRMS will analyze and quantify the risk of levee failures in the Delta. It is also intended to provide a set of alternative plans to reduce the risk of levee failures that would be considered in subsequent decision and implementation initiatives, such as Delta Vision and the US Army Corps of Engineers' CALFED Levee Stability Program. Risk reduction measures that would be common to all possible alternatives would be recommended for immediate implementation.



The 2000 CALFED Programmatic Record of Decision presented its Preferred Program Alternative that described actions, studies and conditional decisions to help fix the Delta. The completion of a Delta Risk Management Strategy that would assess major risks to Delta resources from floods, seepage, subsidence, climate change and earthquakes was part of the Preferred Program Alternative for a Stage 1 implementation.

The DRMS objectives are twofold. First, the study will evaluate potential impacts to the Sacramento-San Joaquin Delta and related assets resulting from various potential stressing events. Second, DRMS will result in development of options or strategies to protect and reduce risk to Delta assets and related beneficiaries.

DRMS has the objective of evaluating ongoing and future risks of levee failure; identifying probable consequences; as well as levee maintenance and upgrades that are necessary and economically justified to reduce risk. Data gained from this critically important study will help establish the priorities for near- and long-term actions that will reduce risk associated with catastrophic levee failure in the Delta.

This study is important to pending decisions on Delta levee management because it will provide important technical information on not only the probability of Delta levee failures, but also the consequences of failed levees on the Delta and water export regions.

Schedule: DRMS Phase I, which was quantification of the risk of Delta levee failures, was completed in July 2007; Phase II, which is identification of risk reduction measures, is expected to be completed by January 2008.