

### **Levee Vegetation - Habitat vs. Stability**

Following the tragic devastation caused by Hurricane Katrina, the U.S. Army Corps of Engineers (USACE) called for the removal of vegetation from levees in the state-federal flood protection system in the Central Valley. USACE's intention in removal of all vegetation is to reduce factors they believe contribute to levee failures and facilitate levee inspections. In California's Central Valley, most remaining riparian habitat is found on levees, and the Department of Fish and Game's (DFG) habitat experts believe vegetation removal under USACE's new policy would have a significant impact on California's riparian and adjacent riverine ecosystem. The levees that confine California's river systems hold the last remnants of a once great riparian forest ecosystem that dominated the Central Valley. Some federal- and state-listed wildlife species, such as winter- and spring-run Chinook salmon, depend on habitats now only occurring on vegetated levees along Central Valley rivers and in the Sacramento San-Joaquin Delta. In addition, the Central Valley and Delta habitats provide the critical rearing area for one of the last remaining commercial salmon stocks in California, the Central Valley fall-run Chinook.

USACE is moving forward to implement its vegetation removal policy in California. Local flood control districts and agencies with maintenance and operation responsibilities for federal-project levees in the Central Valley have little choice but to try to comply with the USACE's policy or risk losing federal assistance in post-flood levee rehabilitation for failing to meet the new vegetation standards. This could also lead to decertification under the Federal Emergency Management Agency's National Flood Insurance Program and further, loss of federal funds for flood control projects upon which local districts depend.

DFG along with other concerned state, local and federal agencies that partner on flood control and natural resource protection efforts, have been working together with USACE to compile data, conduct studies and review research to determine whether large trees and other riparian vegetation indeed contribute to levee failure (current evidence shows they do not significantly contribute), and to develop interim guidelines for maintaining vegetation on levees until a more scientifically informed vegetation policy is developed. DFG also will continue working with other federal, state and local agencies to encourage USACE to permanently adopt a more flexible policy. In the interim, DFG will review proposed levee projects such as the one in West Sacramento, which is the first project in the state proposing to implement USACE's vegetation removal policy along 50 miles of Sacramento River levees. DFG will evaluate this project for its environmental impacts, and work with the City of West Sacramento and USACE to identify solutions that allow for effective flood control management and wildlife and habitat conservation.