



Sacramento
Area Flood
Control
Agency

April 15, 2010

U.S. Army Corps of Engineers
Attn: CECW-CE, Douglas J. Wade
Engineering and Construction Community of Practice
441 G Street, NW.
Washington, DC 20314-1000
Douglas.J.Wade@usace.army.mil

Re: Docket Number COE-2010-0007 — Comments on Process for Requesting a Variance from Vegetation Standards for Levees and Floodwalls

Dear Mr. Wade:

The Sacramento Area Flood Control Agency (SAFCA) appreciates this opportunity to provide the U.S. Army Corps of Engineers (USACE) with comments on your February 9, 2010 proposal to update the process for requesting a variance from vegetation standards for levees and floodwalls. This important dialogue is consistent with our longstanding, productive partnership with USACE that has focused on ambitious, large scale flood risk reduction projects in the Sacramento Metropolitan Region. While our joint accomplishments are considerable, we wish to add our voice to the many concerns expressed regarding USACE proposed levee vegetation standards and regulatory procedures, and the implications and costs to SAFCA and California. We support and endorse the technical comments you have received thus far from various agencies, including our mutual flood management partners, the California Department of Water Resources (DWR) and the Central Valley Flood Protection Board (CVFPB), and submit the following additional comments for your consideration.

Incorporate Proceedings of the August 28-29, 2007 Vegetation Challenge Symposium into Public Record

In August 2007, SAFCA, DWR, CVFPB, and USACE jointly planned, sponsored and convened the *Vegetation Challenge* symposium. The symposium was held to explore science, real-world engineering experience, challenges, and policy solutions to some of the requirements proposed by USACE' April 20, 2007 release of a *Draft Final White Paper titled: Treatment of Vegetation within Local Flood-Damage-Reduction Systems*, which would require removal of trees and shrubs along the waterside and landside of USACE program levees nationwide, including 1600 miles of California Central Valley levees. The symposium was enormously successful, with attendance exceeding 500 people from 21 states nationwide, representing over 151 agencies from Federal, State and local flood management and resource agencies, academic institutions, and consulting engineering and environmental firms.

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Some key outcomes of the symposium included:

- More science and applied field research is needed regarding our current understanding of the risk factors associated with vegetation on levees before initiating broad-scale implementation and enforcement of new USACE policy on levee vegetation.
- Existing literature suggests that in some cases the benefits of vegetation to flood risk reduction (e.g. erosion protection) may outweigh the negative consequences and costs of vegetation removal.
- Preliminary assessments of the consequences of implementing USACE vegetation policy in California indicate substantial adverse impacts to natural resources, infeasible mitigation requirements, and costs exceeding available state and local financial resources at the expense of greater priorities for flood risk reduction.
- Regional and geographic differences in levee systems, meteorology, vegetation characteristics, and levee management resources should be accommodated through thoughtful collaboration between USACE, State and local agencies, and other affected stakeholders.
- Scientific and engineering uncertainty and contrasting regional geographic differences warrant a flexible and more gradual approach to implementation of any revised policy on levee vegetation, including phased implementation, regional variances, and tailored regional policies.

We respectfully request USACE incorporate by reference the proceedings of the jointly sponsored August 27-28, 2007 Vegetation Challenge Symposium held in Sacramento, California.

The Symposium led to the formation in August 2007 of the California Levees Roundtable (Roundtable), an ongoing state-federal governmental stakeholder collaboration that developed the Central Valley Flood System Improvement Framework Agreement (Framework). A central element of the Framework includes the development of a California system-wide levee vegetation plan. Roundtable member agencies have met regularly for the past 2 ½ years to advance and implement the many commitments agreed to and contained in the Framework document.

Consistency with the California Levees Roundtable ‘Framework Agreement’, Water Resources Development Act (WRDA) 1996 Sec. 202. Flood Control Policy (G) Vegetation Management Guidelines, and recently proposed ‘National Objectives, Principles, and Standards for Water Resources Planning’ under WRDA 2007, Sec. 2031

We appreciate USACE’ commitment to “map out a way ahead” through the many concerns expressed by a variety of stakeholders during and subsequent to the *Vegetation Challenge* symposium, as evidenced by USACE’ ongoing participation in the California Levees

Roundtable¹ (Roundtable). Roundtable agencies agreed to work together to draft a phased, system-wide levee vegetation plan for California, with short and long-term elements. Through extensive and thoughtful stakeholder collaboration we developed this plan which was formalized as the recently adopted *California's Central Valley Flood System Improvement Framework*. The Framework and Roundtable sponsored actions represent an important step towards fulfilling the intent of WRDA 1996 Section 202 (g) which states,

“the Secretary shall undertake a comprehensive review of the current policy guidelines on vegetation management for levees. The review shall examine current policies in view of the varied interests in providing flood control, preserving, protecting, and enhancing natural resources, protecting the rights of Native Americans pursuant to treaty and statute, and such other factors as the Secretary considers appropriate... so as to provide a coherent and coordinated policy for vegetation management for levees. Such revised guidelines shall address regional variations in levee management”.

The Framework is also consistent with the December 3, 2009 proposed National Objectives, Principles, and Standards for Water Resources Planning, pursuant to Section 2031 of WRDA 2007, which applies to all implementation studies conducted by USACE (Civil Works), USBR, NRCS, and other Federal agencies engaged in water-resource related plans and projects. USACE proposed levee vegetation guidance and variance process is inconsistent with these overarching Federal guidelines and standards.

We urge USACE to abide by, and continue to support, commitments by USACE contained in the Roundtable ‘Framework Agreement’, consistent with the above referenced WRDA guidelines and procedures.

Promote, Adequately Fund, and Incorporate Conclusions from Levee Vegetation Scientific Studies Underway into Future Policy Revisions

The member agencies of the California Levees Roundtable are conducting ongoing research that will determine the extent to which woody vegetation may affect the integrity of levees in California’s Central Valley. These studies include a national research program implemented by USACE in concert with a parallel and complementary effort initiated in California referred to as the California Levee Vegetation Research Program (CLVRP).

The goal of the CLVRP is to collaboratively conduct objective scientific research, to create new knowledge or correct and integrate previous knowledge regarding levee vegetation. Our goal is to have these scientific findings incorporated into levee vegetation management policies suitable for the unique climatic, ecological and hydro-geomorphic conditions in California. The research is also intended to inform the FloodSAFE Levee Evaluation Program, which is evaluating and prioritizing all geotechnical factors that impact the safety

¹ Comprised of officials representing USACE (Headquarters, South Pacific Div., and the Sacramento District); the CVFPB, DWR, National Marine Fisheries Service (NMFS), U.S. Fish & Wildlife Service (USFWS), the California Department of Fish & Game (DFG), the Federal Emergency Management Agency (FEMA), Reclamation District No. 2068, and SAFCA.

and performance of Central Valley levees. Field research by CLVRP was initiated in 2009, is in-progress in 2010, and will be expanded and completed in 2011. Final analysis, research findings and recommendations are scheduled for the end of 2011.

USACE' Engineer Research and Development Center (ERDC) has been tasked with implementing a national levee vegetation research program. ERDC and the Agencies sponsoring the CLVRP have been collaboratively coordinating and sharing their research efforts for the past two years. A successful process of peer review and support has included mutual review and comment at key intervals throughout the research process, conducting joint fieldwork in California, and mutual input on research methods, data analysis and reporting of results. ERDC's cooperation in this process is deeply appreciated.

While this has been a very productive and successful collaboration, we are concerned that USACE has established an overly ambitious schedule that compromises our mutual goals of conducting solid scientific research. We both agree that good science must underlie good public policy and urge USACE to commit to a fully-funded three-year national research program as originally proposed in your Flood Risk Management Newsletter July 2008 (Vol. 1, no. 4). Similarly, we respectfully request that the products of ERDC's research be completed before any policy or regulatory processes regarding levee vegetation is finalized.

Continue Using Time-Tested Vegetation Management and Mitigation Strategies in Use by Levee Maintaining Areas

In California USACE, DWR, SAFCA and local levee maintaining districts and have considerable experience mitigating risk factors associated with vegetation. These strategies use time-tested and successful approaches to dealing with site specific problems including; tree trimming for canopy reduction to improve levee access and visibility; constructing 'launchable' rip rap in over-steepened and narrow levee sections; removal of hazardous trees and snags; and thoughtful design and construction of bank protection projects that allow for essential riparian vegetation and fish habitat to remain in place.

In addition, we have partnered with USACE on many flood risk reduction projects where vegetation features have been incorporated to stabilize the soil cover, attenuate wave energy, and offset sensitive habitat losses associated with construction to meet regulatory permit requirements. One such example is the 2006 Sand Cove Stream Bank Protection project along the lower Sacramento River in Natomas, we jointly designed bank protection involving a unique combination of rock rip rap, anchored bundles of cut trees, and a restored stream bank slope planted with native vegetation to re-construct and protect a severely eroded river bank. The bank is adjacent to a levee protecting the 80,000 residents of the Natomas Basin, and severe erosion had exposed a 4,000-year old Native American burial site. This highly successful project accomplished all of its objectives, dramatically transforming a steep, eroding bank to a sediment accretion zone with well-established native vegetation. It has been the subject of two separate documentary television programs to illustrate the success of this innovative design and construction project. These successes should be carefully studied to incorporate appropriate design criteria and concepts into the proposed vegetation variance standards.

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SAFCA believes that the stakes are very high in the evolving debate over how best to achieve both public safety and environmental quality at a cost we can afford. We urge USACE to take full advantage of past experience and evolving scientific understanding in crafting its national levee vegetation standards, including the subject vegetation variance guidelines. We look forward to continuing a productive collaboration through the ongoing relationships we have developed with staff at all levels within USACE and ERDC.

Please feel free to contact me at buers@saccounty.net or by telephone at 916.874.7606.

Sincerely,



Stein M. Buer, Executive Director
Sacramento Area Flood Control Agency

Cc:

Honorable Diane Feinstein, United States Senate

Honorable Barbara Boxer, United States Senate

Honorable Doris Matsui, United States House of Representatives

Honorable Daniel Lungren, United States House of Representatives

Honorable Jo-Ellen Darcy, Assistant Secretary of the Army, Civil Works

MG William Grisoli, Deputy Commanding General for Civil and Emergency Operations,
USACE

Mr. Steve Stockton, Director of Civil Works, USACE

BG Rock Donahue, Commander, South Pacific Division, USACE

Colonel Thomas Chapman, Commander, Sacramento District, USACE

Mr. Mark Cowin, Director, California Department of Water Resources

Mr. John McCamman, Director, California Department of Fish and Game

Ms. Melinda Terry, Executive Director, California Central Valley Flood Control Association
SAFCA Board of Directors