
Flood Plain Management Newsletter California Floods of 1997



US Army Corps
of Engineers

No. 97-1
Date: July 2, 1997



Editor: Serene M. Terrazas
Staff Chief: Paul W. Doble

Outreach Meetings Held in Modesto and Sacramento

The U.S. Army Corps of Engineers and the California Department of Water Resources hosted their first two outreach meetings on June 24 and June 25, 1997, in Modesto and Sacramento, respectively. Ms. Dee Dee Moosekian of Congressman Gary Condit's office provided opening remarks during the Modesto meeting. The general purpose of the meetings was to educate and inform the Reclamation; Levee; and Flood Control Districts; together with concerned citizens on flood plain management activities currently underway by the U.S. Army Corps of Engineers; and to discuss recommendations of the Governor's Flood Emergency Action

Team (FEAT) report. A copy of the FEAT report was provided to the attendees. The meetings provided an opportunity to present the public with additional tools and avenues necessary for a successful flood recovery program. A discussion of a new challenge for managing flood waters that addressed the term known as "Nonstructural Alternatives" was presented. A brochure entitled "Meeting the CHALLENGE" was distributed to the attendees and a copy is provided with this newsletter. The meetings also provided a forum for questions and answers.

FEAT Overview

Mr. Ward Tabor, General Manager of the Reclamation Board, summarized recommendations in the Governor's FEAT report. The recommendations addressed the need for better emergency response actions at all levels of government and how to better manage our floodplains. Land use decisions need to be reviewed and considered as part of the overall comprehensive analysis. The recommendations also highlighted the need to review the roles and responsibilities of the Reclamation Board. The Board has been in existence since 1911 with little change. Some of the issues that lie ahead include authorization for new projects and an

examination of Federal and State flood plain management regulations. The FEAT report encourages the Reclamation Board to support U.S. Fish and Wildlife Service flood plain restoration proposals. The Department of Fish and Game is urged to facilitate levee repair and river channel maintenance.

(continued on page 2)

Purpose of Newsletter:

The purpose of the Flood Plain Management Newsletter is to communicate current and future issues relative to flood plain management activities with the local citizens, Reclamation, Levee, and Flood Control Districts, State and Federal Agencies.

Congress is urged to increase FEMA funding for updating rate maps. There is a need to improve computer modeling and mapping capabilities, and a FEAT recommendation that the Department of Water Resources strengthen local outreach to landowners to explore nonstructural alternatives. In closing, Mr. Tabor addressed the requirements for establishing a floodplain management task force and the challenges that lie ahead for improving floodplain management.

Public Law 84-99 Update

Mr. Ray Williams, Sacramento District, U.S. Army Corps of Engineers provided an overview of PL84-99, which is the Corps authority to provide emergency assistance and repair damaged levees. The Corps authority only provides for repairs back to pre-flood conditions and the repair project must be economically justified. Mr. Williams summarized the flood recovery strategy being used by the Corps. This strategy included: Phase 1 - Floodfight operations; Phase 2 - Emergency repairs to close breaches and restore a 20-25 year level of protection until final repairs could be made; both phase 1 and 2 are complete; Phase 3 - Repair of damaged structures to pre-flood conditions; and Phase 4 - Long term strategy for future needs.

The current Phase 3 effort underway by the Corps includes the process for obtaining Corps assistance. This process entailed a public notice period that closed on May 10, 1997. Under this process, the Reclamation Districts could request assistance in coordination with the Reclamation Board. Considering the request, the Corps would conduct field investigations and prepare project information reports (PIR) detailing the plans for repair of the damaged structures. After the PIR is completed and approved, the Corps would prepare plans and specifications and then award repair contracts.

Progress update on the PIRs underway: The PIRs for the San Joaquin are expected to be completed in July with plans and specifications in the July-September time period. Construction work is expected to be completed during the August-November period. In addition, Mr. Williams provided information relative to the Water Resource Development Act (WRDA) of 1996 which now provided the Corps the flexibility to use PL84-99 funds for nonstructural alternatives.

Options for Nonstructural Alternatives

Mr. Doug Plasencia, Kimley-Horn and Associates, Inc., under contract with the Sacramento District, U.S. Army Corps of Engineers to assist in the nonstructural alternatives program provided a short overview briefing on nonstructural alternatives. The concept of nonstructural alternatives is not new to floodplain management. It was not widely used in the past because authority and policy for use were non-existent. Congress has now given the Corps the authority to pursue nonstructural alternatives under the PL84-99 program. What this means to the owners and operators of levees is that they now have another choice.

The definition of a nonstructural measure along with examples was discussed as outlined in the brochure on "*Meeting the CHALLENGE*". We are examining options of this type because it makes good sense economically and environmentally. In addition, considering lessons learned from previous flood disasters, and to continue to repair structures that are repeatedly damaged is perhaps not the wisest use of the taxpayer's dollars. Traditional methods for flood control only work to the point they are designed. From a systems basis, nonstructural measures will allow the reduction of potential flooding system wide, while removing the risk to the public.

U.S. Fish and Wildlife Service - San Joaquin Refuge

Mr. Bruce Barbour and Mr. Scott Frazer, U.S. Fish and Wildlife Service briefed attendees at both meetings on the proposed San Joaquin River Floodplain Restoration Project. The current proposal would acquire land in RDs 2100, 2099, and 2102 and annex them into the neighboring wildlife refuge.

Mr. Scott Frazer indicated that this was a good bridge between the Phase 3 and Phase 4 work.

Planning in advance to allow the water in the San Joaquin area to fill its natural floodplain will provide more protection to those areas downstream. Why not reap the environmental benefits of this repeated flooding and the natural changes of the system? Goals for the floodplain would address: a) ways to reduce flooding, b) ways to reduce landowners taxes, and c) ways to improve habitats for endangered species and ecology. The transient storage of flood waters and improvement to aquatic systems in combination with the dual use of the floodplain, is a win-win situation for all.

The U.S. Fish and Wildlife Service held a separate workshop on the proposed project July 1, 1997, at the Old Fisherman's Club in Modesto. The workshop was to initiate the National Environmental Policy Act process.

Next Steps

Short Term - Mr. Bill Fakes, Sacramento District, U.S. Army Corps of Engineers provided an overview on the short term approach that currently exist for nonstructural alternatives. PL84-99 was changed by WRDA 96 to permit the inclusion of nonstructural alternatives in the repair

process. The Corps is being challenged to "think out of the box". The Corps along with other Federal and State agencies are working together to develop options for consideration. There are several objectives tied to this approach which include: a) reduction in overall Federal expenditures; b) reduction in flood damages; and c) be a fully implementable management solution.

The decision to implement a nonstructural alternative belongs to the local sponsor and not the Federal government. Sponsors will still have responsibilities under a nonstructural alternative. In that regard, the sponsor must accept transfer of ownership of lands or interests associated with the land. They must participate in the funding package on the nonstructural alternative to be developed and execute a project cooperation agreement.

August 1 Deadline for Nonstructural Decisions

The Corps is looking for a decision by August 1, 1997, from sponsors on whether or not they want to pursue a nonstructural alternative rather than repairing a damaged levee.

Long Term - Mr. Ward Tabor, Reclamation Board provided a closing overview of long term recommendations. The Governor's FEAT Report urges Congress to support the Corps study efforts associated with the flooding. Recommendations include funding the Yuba River Feasibility Report as well as legislation to conduct a comprehensive study of the San Joaquin River Basin. The Reclamation Board, Corps and Flood Control agencies need to pursue a 200 year level of protection project for the Sacramento River. The report also directs the DWR to evaluate the effect of canals or ditches adjacent levees relative to levee integrity.

Questions and Answers

Highlights of the meetings Q&A sessions follow:

Q. If there is a greater benefit cost/ratio for structural versus nonstructural, which alternative would be implemented?

A. *It is a local option, we are not going to make you consider something you do not want.*

Q. The problem with seepage along the levees, is it possible to resolve that?

A. *Currently, we are wrestling with the seepage problems. If seepage existed prior to the 97 event, it would be a local maintenance requirement. The policy under PL84-99 provides for restoring projects back to their pre-flood condition. Slurry walls are a solution to the seepage problem, but are not necessarily the least cost alternative. Corps policy provides for the least cost alternative. Slurry walls would be considered a betterment. If the RD provides the funding, the Corps may provide for completing this type of work as part of the repair contract.*

Q. Are procedures for the Corps to perform repairs/restoration policy or law? Is it the intent of Congress for inadequate repairs to be made and the projects to fail and flooding to occur again next year?

A. *Congress provided the Corps authority to perform repair/restoration work under PL84-99. It is the Corps policy, which is standardized throughout the country, that is followed in order to conduct repairs. Our policy changed in 1986 in order to adequately address lack of maintenance on levees by some sponsors. The changes were meant to give the taxpayer a break. Just as in all natural disasters, there are policies regarding how funds are applied to recovery. The intent was to provide funding to repair levees damaged by a flood event in order to be prepared for the next event.*

Q. What is the benefit of repairing the levees to the same pre-flood condition, isn't it resulting in the same problem? What are the risks we face from a storm and how can we say that storm will not come again?

A. *No one can predict floods - its evaluating the risk and how we respond. Please understand, the flood of 97 exceeded the design capacity of some of the levees. A similar flood in the future will probably result in similar damage. Flood control is to manage the flood risk. Repairing a levee does not mean we control the flood. A nonstructural alternative can be another method of reducing flood impacts. We may repair the levee now and keep our eyes open for nonstructural alternatives in the long term analysis. We need your input for the future.*

Q. What are the nonstructural alternative options for the locals? Is it just spreading the flood out? The river can only discharge so much. We need to do something about the river!

A. *The short term process is dedicated largely to reduce flood impacts down stream. Nonstructural alternatives can provide for widening the floodplain and reducing impacts downstream. There is no easy answer. The overall long term analysis should address all aspects of the river and those systems impacting the river.*

Q. In reference to funding, are there funds ONLY for certain items, can some of those funds be used for other repairs?

A. *The Interagency Task Force has reviewed all the Federal and State agency funding available. Some funds are for ecosystem management and water quality control management. There has to be a clear relationship to repairs, nonstructural alternatives, etc. We have to use the*

authority correctly. We may go back to the Office of Management and Budget to recommend that specific authority and funding be identified for nonstructural alternatives.

Q. What is the impact of implementation of the short term and do long term options really work?

A. *The short term will provide for immediate fixes. Long term solutions could have an impact on natural storage and reduce downstream flooding.*

Q. Is habitat restoration also tied to nonstructural alternatives?

A. Yes.

Q. What will happen to RDs when land is turned over to Fish and Wildlife?

A. *This will be addressed in the project cooperation agreement. The 3 RDs will be more than likely be disbanded and the refuge will be operated by the U.S. Fish & Wildlife Service.*

Q. Are their land restrictions?

A. *Yes, public use – education, bird watching, duck hunting, etc.*

Q. What happens to land acquired for nonstructural?

A. *It depends on what type of nonstructural option is considered, easements, habitats, etc. Land that is still in agricultural production will remain on the tax roles.*

Q. Is the reclamation district going to have to bear some responsibilities for a nonstructural solution?

A. *The sponsor would have to be responsible for maintenance based on the project cooperation agreement.*

Q. What long term strategies are recommended? How does it compete with other basin studies?

A. *The Corps is conducting recon studies and feasibility studies. Finding sponsors for projects is required. The long term strategies must consider all activities being undertaken. One reason for the Interagency Task Force is to sort out ongoing studies and issues to prevent duplication and to focus on the whole system.*

Q. Regarding fixing levees, because we cannot do any improvements, does this mean short term fixes must be done?

A. *There are advantages to looking at nonstructural alternatives. However the short term could include a temporary fix with a nonstructural implementation in the long term.*

Q. If a project is not listed in the FEAT Report, does it mean they are not considered?

A. *Individual PL84-99 levee rehabilitation projects are not referenced in the FEAT Report. The system wide analysis to be completed will identify and propose implementation of specific projects. We need to hear from you on those projects.*

Q. Are you planning on having a similar public forum held in the Yuba City area?

A. *We will take your recommendation and coordinate it with Yuba County OES, if a meeting can be arranged we will participate.*

Q. How is PL84-99 eligibility determined for boils, seepage, etc?

A. *It will be analyzed on a case by case and site by site basis. We will examine to determine if it was a pre-existing condition or if it was caused by the flood.*

Q. In reference to PL84-99, is there a link with hazard mitigation?

A. *No, there is no direct link. The hazard mitigation program is administered by FEMA.*

Q. When reviewing damages for repair - restoration is "deferred maintenance" (should have been done that hasn't been done) being considered in the Project Information Reports.

A. *The Corps is working with the Reclamation Board on deferred maintenance issues. For the most part, it is up to the local reclamation district to repair this type of damage.*

Q. What other funds can be made available for nonstructural measures?

A. *Other sources of funds are CALFED, NRCS, and others for floodplain restoration and wetland improvements. There may be a bond act in 1998 with State funding.*

Q. Slurry cut off walls - can they be funded as a structural fix through PL84-99?

A. *If it was determined to be necessary and found to be the least costly alternative. Economics must be evaluated for each particular situation to include modifications to PIRs in areas where we can address the seepage.*

Q. How much is earmarked for repairs under PL84-99?

A. *There is \$415 million in the Supplemental Appropriation Bill recently signed by the President for the Corps. There are adequate funds to cover what will be done here in California.*

Q. Where are we with the Auburn Dam situation? Can we do something to assist the efforts prior to a catastrophe?

A. *We will focus on that issue in the long term analysis. There is a FEAT recommendation to provide a minimum of 200 year level of protection.*

Q. What is the policy on the weirs above Sacramento? Concerning the size of the sand bars, the sand deposits, is the Corps going to be pumping these out?

A. *The state and the Corps are willing to discuss changes in weir operations. We have completed emergency navigation dredging of the Stockton channel, etc. We will look at the problem and see if we can determine a mechanism in the future to address.*

Q. What is the time frame for completing a Draft PIR to the final to include eligibility requirements, funding, etc?

A. *Our goal is to complete field work, determine eligibility and complete the PIR in a 60 day period.*

Q. How do you determine deferred maintenance data?

A. *The Corps is working with the Reclamation Board to determine this. We will be reasonable in the process.*

Q. Is there an appeal process if ineligible?

A. *Yes. The RD can appeal to the District Engineer.*

Q. Define work eligible under PL84-99?

A. *Generally, a repair is authorized for levees damaged that are active in the Corps PL84-99 program. This repair effort will restore projects back to pre-flood conditions. Betterments are not authorized.*

Q. How much money is available in the Delta?

A. That is hard to say. The Corps of Engineers has adequate funds for repair of those eligible projects in the Delta.

Q. How do we get the status of individual projects?

A. If there are particular projects that are of interest, you should send an inquiry to the appropriate agency.

Visit the U.S. Army Corps of Engineers Internet homepage for the South Pacific Division at www.spd.usace.army.mil for information regarding the Interagency Task Force efforts associated with the nonstructural alternative program. For further information or clarification about this document, please contact:

**Ms. Serene M. Terrazas,
Office: (916) 364-3025 FAX: (916) 364-3107**

Mailing Address:

**Interagency Task Force
Disaster Field Office
Building 3750, Room 25A
3695 Bleckely Street
Mather, CA 95655**