



**COUNTY OF SAN JOAQUIN**  
**OFFICE OF EMERGENCY SERVICES**  
ROOM 610, COURTHOUSE  
222 EAST WEBER AVENUE  
STOCKTON, CA 95202  
TELEPHONE (209) 468-3962  
HAZARDOUS MATERIALS DIVISION (209) 468-3969

January 30, 2006

Colonel Ronald N. Light, District Engineer  
Sacramento District  
U.S. Army Corps of Engineers  
1325 J Street  
Sacramento, CA 95814

Dear Colonel Light:

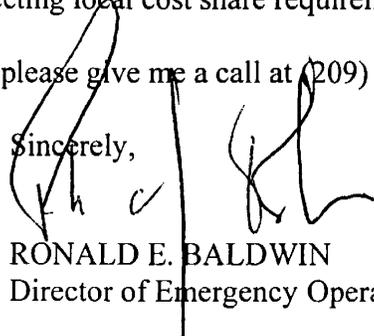
This letter conveys the intent of the County of San Joaquin to participate in feasibility studies and/or other actions in the development of the San Joaquin County Flood Contingency and Evacuation Engineering Project as a non-Federal sponsor consistent with the CALFED Bay-Delta Authorization Act (PL108-361).

The above agency understands that the type, cost, and scope of actions will be determined and specified later if selected for development and/or implementation pursuant to the Act. The County of San Joaquin understands that if our project is approved for implementation, we will be responsible for sharing the cost of planning, designing, and implementation of the project with the U.S. Army Corps of Engineers and providing all necessary lands, easements, rights-of-way, relocations, excluding railroads, and suitable borrow and dredged or excavated material disposal areas and accomplishing operation, maintenance, repair, replacement and rehabilitation of the project. The responsibilities for local cost sharing are indicated in the attached proposal.

Please note that this letter of intent is not an obligation of funds. The County of San Joaquin must further reserve the right to review our ability to continue to participate in the project in the event that the local cost share is calculated by your agency to significantly exceed the amount calculated from the cost estimates included in the attached proposal. We further request participation of the State of California in meeting local cost share requirements.

If you have any questions on this submittal, please give me a call at (209) 468-3962.

Sincerely,

  
RONALD E. BALDWIN  
Director of Emergency Operations

REB/hld

Attachment

c: Lester Snow, Director, Department of Water Resources

# SAN JOAQUIN COUNTY FLOOD CONTINGENCY AND EVACUATION ENGINEERING PROJECT

## PROJECT NAME AND PURPOSE

The San Joaquin County Flood Contingency and Evacuation Engineering Project has three purposes. The first purpose is to ensure rapid and effective engineering decision-making aimed at limiting damage and expediting community recovery in the event of a levee failure. The second purpose is to identify floodwater arrival times and maximum depths that would result from levee failures in order to form the basis for improved evacuation and rescue plans. The third purpose is to allow the U.S. Army Corps of Engineers, Sacramento District, to review emergency projects that have been jointly determined with local agencies to be beneficial in the event of various levee failure scenarios. This review would pre-identify those actions which would meet Corps criteria for participation. Such a review would further allow the Corps of Engineers to pre-determine project scopes and costs of such actions thereby expediting federal response in the event an actual levee failure.

## LOCATION

The County of San Joaquin is located in the Central Valley and encompasses a major portion of the eastern Sacramento-San Joaquin Delta. The County contains 51 reclamation districts and over 500 miles of levees. There is a flood threat to over 40% of its population of 600,000 to include levee failure scenarios that would be life threatening.

## PROBLEMS

Response to past major flood events have been hindered by three problems that could be resolved prior to future flood events.

1. Engineering options to reduce flooding extent and damages from a levee failure have been developed at the time of the flood while under time pressures thereby preventing optimum effectiveness and results. Development of action plans at the time of the event have been hindered by the absence of pertinent topographical, historical, elevation, and survey information.
2. Arrival times, flow characteristics, and potential maximum depths of floodwaters from potential levee failure scenarios in urban areas have not been identified. Such flow studies would assist with identification of engineering options for reducing flood limits, impact, and dewatering time. They would also assist with planning for evacuation and rescue in areas at risk.

3. The Corps of Engineers, the Department of Water Resources, and local jurisdictions have in the past evaluated the extent of their participation in flood fight actions at the time of the flood. The time needed to determine extent of participation, and subsequent project scope and probable cost, has delayed response to imminent hazards. Addressing Problems #1 and #2 above would allow jurisdictions to pre-plan responsibilities and pre-determine project scope and approximate costs thereby expediting response.

### OPPORTUNITIES

This project, and this time, presents a great opportunity for the federal, state, and local agencies responsible for flood response to move beyond the current system of reactive planning to pro-active planning. Decisions on what to do, and who will do it, are now made at the time of the flood or levee failure under the worst of all possible circumstances. The fact is that many engineering options that could limit damages, save lives, and speed recovery in the event of levee failure can be identified before the event actually happens. Identifying these options and collecting the information needed for decision making in advance would allow agencies to pre-identify roles and pre-plan implementation of appropriate engineering and other actions.

San Joaquin County is in a good position to accomplish this project at this time. Preliminary work has been completed by the San Joaquin County Office of Emergency Services on a number of flood contingency maps with the cooperation of city, County, and reclamation district officials. This current effort has already created a basis of cooperation and recognition of need that would expedite implementation of this project.

However, San Joaquin County resources have been limited and contingency planning could cease in the fall. The County has never had, and does not anticipate having, the resources for detailed engineering studies that are needed to supplement these current efforts, nor for collecting much of the survey information that has been identified as needed for effective decision making. The participation of the U.S. Army Corps of Engineers in furthering this effort would provide an additional opportunity for Corps preparedness personnel to pre-plan response to predictable levee failure scenarios thereby expediting federal response.

### PROJECT DESCRIPTION

The San Joaquin County Office of Emergency Services has attempted to address the problems identified above since 2003 through the funding of the development of flood contingency maps for areas subject to flooding from levee failure. Staff from the Corps of Engineers, Department of Water Resources, the Governor's Office of Emergency Services, local reclamation districts and other agencies have participated in setting standards for such maps although no resources have been forthcoming from those agencies for furthering the effort. The Office of Emergency Services' efforts have been hindered by lack of resources for collection of all needed survey information, completion of complementary flood flow studies, and facilitation of agency pre-event coordination.

The local district of the Corps of Engineers has been hindered from pre-identifying potential Corps emergency actions and performing advanced planning by the absence of sufficient emergency planning funding.

The fact is that most engineering emergency actions needed at the time of a levee failure, e.g. relief cuts, emergency berms, emergency pumping station locations, can be identified prior to an actual flood event. It is not necessary to wait for the flood to determine the potential practicality, suitability, and advantages of such actions. In addition, considerable critical survey information needed for identification and implementation of such emergency actions, or the development of other options at the time of an emergency, has not been collected. Finally, considerable historic information is being lost over time that will be useful when the flood control system fails to perform as designed.

The development of these flood fight options and information would be greatly complemented by detailed engineering studies to identify floodwater arrival times, flow characteristics, and depths. Such information would greatly expedite decision-making and subsequent action to limit flood extent and damage. It would also serve as the basis for better evacuation and rescue planning.

It should be noted that all flood flows that would be examined in this project extend at some point into the primary or secondary Delta zones. In some cases they may commence in areas to the East but in all cases travel to the Delta. Failure to effectively control flows starting to the East of the Delta would have a direct and adverse impact on Delta levee integrity.

This project proposes the following sequence of actions. Details may be modified based on review by Corps of Engineers and other participating personnel at project startup.

1. Flood contingency maps would be completed for the following areas based on criteria developed by the Corps of Engineers, Department of Water Resources, and local agencies. Survey and engineering information needed to identify emergency engineering options and expedite decision making would be collected.

- South San Joaquin River – East Bank
- South San Joaquin River – West Bank
- River Isles/Steward Tract
- Union Island/Stark Tract
- Roberts Island
- Central/South Stockton Metropolitan Area
- North Stockton Metropolitan Area
- Brookside/Wright-Elmwood Tract
- Jones Tract
- Deep Delta Islands South – Woodward, Bacon, Victoria, McDonald
- Deep Delta Islands North – Mandeville, Rindge, Medford, Venice, Bouldin, Staten
- Empire/King Tracts

Terminus Tract  
Canal Ranch/Brack Tracts  
New Hope Tract  
North Lodi

Total estimated cost of survey and engineering work and drafting costs of final products is \$100,000 of which the local cost share is \$35,000.

2. Engineering studies to determine flood arrival, flow characteristics, and potential depths would be completed for the following critical areas.

Central/South Stockton  
Calaveras River South Bank Failure – City of Stockton  
Calaveras River North Bank Failure – City of Stockton  
Reclamation District 2074 – Brookside Subdivision, City of Stockton  
Reclamation District 1608 – Lincoln Village Subdivision, City of Stockton  
Reclamation District 17 – Cities of Stockton and Lathrop  
Roberts Island – South Bank Failure  
Mokelumne River – South Bank Failure

Total estimated cost is \$350,000 of which the local cost share is \$122,500 to cover hydrological modeling, supplemental survey costs, and drafting of maps.

3. Evacuation maps for the following areas would be completed.

Reclamation District 17 – Cities of Stockton and Lathrop  
Downtown/South Stockton – City of Stockton  
Reclamation District 404 – City of Stockton  
Reclamation District 828 – City of Stockton and County of San Joaquin  
Reclamation District 1614 – City of Stockton and County of San Joaquin  
Calaveras South Bank – City of Stockton  
Calaveras North Bank – City of Stockton  
Reclamation District 2074 – City of Stockton  
Reclamation District 1608 – City of Stockton  
Reclamation District 2115/2042 - City of Stockton  
Terminus Tract – County of San Joaquin  
North Lodi – City of Lodi  
Reclamation Districts 2064/2075/2094/2096 – County of San Joaquin  
Reclamation Districts 2085/2095/2058 – County of San Joaquin

Total estimated cost is \$280,000 of which the local cost share is \$98,000 which would cover engineering/drafting work to create maps.

4. Federal, State, and local agencies will pre-identify emergency engineering actions from contingency maps that would meet their criteria for participation and complete an initial project scope and cost pre-review.

Final products will be distributed to agencies that would be jointly involved in responding to a flood in the identified areas.

#### STATE OF WILLINGNESS AND ABILITY TO COST SHARE

The County of San Joaquin is willing and able to provide the local cost share for this project. The County of San Joaquin reserves the right to review participation in this project if subsequent Corps of Engineer evaluations cause the local cost share to increase above those identified in this proposal. The County would have to review their ability to meet any absolute costs share amounts above the \$255,500 included in this proposal.

The County of San Joaquin further requests that the State of California assists with meeting local cost share requirements.

#### POINTS OF CONTACT

Agency: San Joaquin County Office of Emergency Services  
Contact: Ronald E. Baldwin, Director  
Phone: (209) 468-3962

#### SCOPING AND SCREENING INFORMATION

The rapid urbanization of San Joaquin County creates significant urgency for the development of more efficient and pre-planned response to problems on levees and levee failures. There is an imminent threat to life and property from the greatly expanded community exposure to the affects of a single levee failure.

Implementation of this project would not change the magnitude, frequency, or duration of flood flows except in the case of levee failure where the duration of flood flows in built up areas could be reduced.

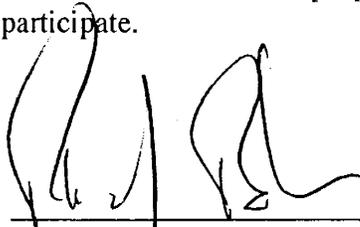
This project would lead to improved response times and quality of decision making at the time of a flood which could 1) prevent levee failure and subsequent flooding and 2) reduce the extent and damages of flooding to property and the ecosystem.

Approximately 350,000 residents of San Joaquin County would benefit from the improved response and better information that would result from implementation of this project.

It is believed that the Cities of Stockton, Lodi, Manteca, and Lathrop would participate and possibly share in meeting the local cost share if needed. The Department of Water Resources has shown a willingness to participate in this type of project.

The primary concerns for project delays or overruns center on the Federal project process. Environmental impacts should be negligible or non-existent.

The County of San Joaquin is willing and able to serve as non-Federal sponsor as indicated above with caveat that local cost share amounts that may be required above those calculated from project cost estimates contained in this proposal may require a review of their ability to continue to participate.

A handwritten signature in black ink, appearing to read 'R. Baldwin', written over a horizontal line.

Ronald Baldwin, Director  
San Joaquin County  
Office of Emergency Services