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## EXECUTIVE SUMMARY

SAN JOAQUIN VALLEY NATIONAL WILDLIFE REFUGE  
PHASE II HABITAT DEVELOPMENT PROJECT

Applicant: Department of Water Resources

There has been increased attention between the Corps, USF&WS, California Department of Fish and Game, National Marine Fisheries Service, State Water Resources Control Board, Department of Water Resources, the Reclamation Board, San Joaquin Reclamation District and other local jurisdictions concerning nonstructural opportunities to improve the San Joaquin River flood channel, both in flood control and environmental state.

The Department of Water Resources, Central District, proposes to collaborate on the studies and actions to construct riparian and shaded riverine aquatic habitat along the San Joaquin River at the San Joaquin Valley National Wildlife Refuge. The U.S. Fish and Wildlife Service and local reclamation districts have proposed adding about 4,100 acres to the preserve and are in the process of negotiating with adjacent landowners and evaluating potential impacts. Phase I of the improvement project includes land acquisition and planning and designing the land restoration. The USF&WS is submitting a Category III application package to assist with the land acquisition. Phase II of the restoration project includes construction of the improvements. DWR is requesting funds to assist with the construction and studies needed to answer questions about deauthorization. All plantings would be done using the plans developed in Phase I by the USF&WS. These studies are to be conducted in a manner that does not improperly jeopardize the flood protection of local interests.

The primary purpose of the demonstration project is to improve the condition of the San Joaquin River basin by restoring the riparian vegetation and improving the floodplain to reduce the incidence of failure during storm events. Benefits will be: (1) developing and demonstrating methods of restoring riparian and shaded riverine aquatic habitat along the river, benefitting San Joaquin River chinook salmon, winter-run salmon, spring-run salmon, steelhead trout, and migratory birds; (2) improving the reliability of the San Joaquin River levee system by planting riparian vegetation on revetment; and (3) studying of the possible addition of meander zones between the levees to increase the floodplain carrying capacity.

This project meets CALFED and FEAT objectives because it (1) helps restore the river riparian and shaded riverine aquatic habitat, (2) is cooperative between state, federal, and local agencies, and (3) investigates and demonstrates nonstructural alternatives to improving the river channel without jeopardizing current flood protection levels.

The total cost proposed is \$6.5 million for construction. Since the property is public land, no third party impacts are expected.

DWR has qualified staff available to administer this project. Central District staff is experienced in undertaking and overseeing levee repair/revegetation projects and has established

**workable project criteria with the USF&WS, National Marine Fisheries Service, Department of Fish and Game, and U.S. Corps of Engineers. Curt Schmutte, the project manager, has managed more than \$30 million of Delta flood control and habitat development projects. He was formally the program manager of the Levee System Integrity Component of CALFED.**

**Monitoring is scheduled to be undertaken by the USF&WS.**

**This project will be performed in full cooperation with the Corps, USF&WS, NMFS, and DFG and with other restoration projects and studies on the San Joaquin River.**

**SAN JOAQUIN VALLEY NATIONAL WILDLIFE REFUGE  
PHASE II HABITAT DEVELOPMENT PROJECT**

**Applicant:**

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**RFP Project Group Type:    Public Works/Construction**

## PROJECT DESCRIPTION

### a. Project Description and Approach

There has been much discussion between the Corps, USF&WS, California Department of Fish and Game, National Marine Fisheries Service, State Water Resources Control Board, Department of Water Resources, the Reclamation Board, San Joaquin Reclamation District and other local jurisdictions concerning the opportunities to improve the flood carrying capacity and habitat values of the San Joaquin River.

DWR, Central District, is proposing to cooperate and assist with the demonstration on the restoration of riparian and shaded riverine aquatic habitat at the San Joaquin Valley National Wildlife Refuge. The USF&WS and local reclamation districts have proposed adding about 4,100 acres to the preserve and are in the process of negotiating with adjacent landowners and evaluating impacts. Phase I of the improvement project includes land acquisition and planning and designing the land restoration. The USF&WS is submitting a Category III application package for the land acquisition. Phase II of the restoration project includes construction of improvements. DWR is requesting funds to assist the USF&WS with this process. All plantings would be done using the plans developed in Phase I by the USF&WS. USF&WS funds have been identified and are needed to complete this project.

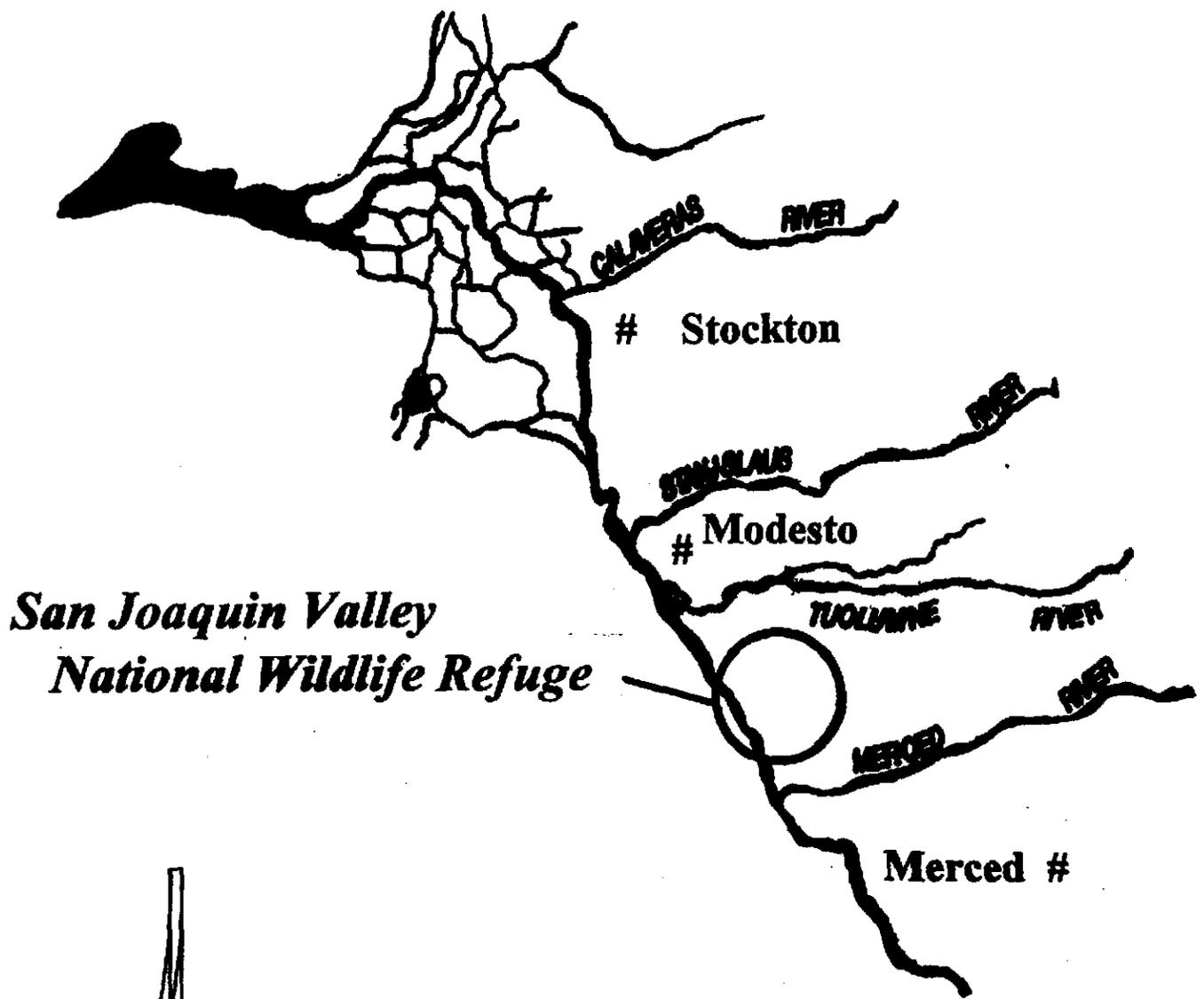
Effective floodplain management will require cooperation among all levels of government and the public to share in the responsibility of managing flood risk. The State must formulate a consistent floodplain policy that provides adequate protection from unchecked development in floodplains, but that also respects private property rights and local land use control. There are existing regulatory mechanisms to accomplish much; however, these mechanisms are not structured in any manner that provides a cohesive policy. Working in close association with the USF&WS, Corps, and Bureau of Reclamation will provide the additional benefit of setting a ground work for development of this policy.

### b. Location of Project

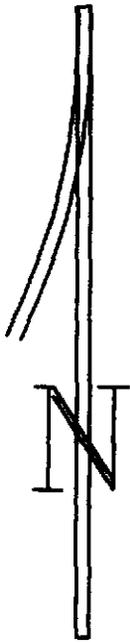
The study area includes the San Joaquin River National Wildlife Refuge. This site has been chosen for an initial phase of construction of floodplain modifications and habitat improvements. See map, Attachment A.

### c. Expected Benefits

The purpose of Category III funding will be: (1) to demonstrate methods of restoring riparian and shaded riverine aquatic habitat along the river; (2) to demonstrate and improve the reliability of the San Joaquin River levee system by planting riparian vegetation on revetment; and (3) study the possible addition of meander zones between the levees to increase the floodplain carrying capacity. Habitat improvements will benefit San Joaquin River chinook salmon, winter-run salmon, spring-run salmon, steelhead trout, and migratory birds.



*San Joaquin Valley  
National Wildlife Refuge*



**Project Location**

**Approximate Scale: 1 inch = 15 Miles**

Planting low-lying riparian vegetation on revetment has been shown to increase deposition of sediment, thereby reducing washouts. Changes to the levee system will increase the carrying capacity of the river during flood events, reducing the incidence of levee failure. Additional improvements include increased recreational opportunities and productivity of fisheries.

Information developed through this proposed Category III demonstration project will be useful in evaluating environmental restoration measures throughout the San Joaquin River system.

d. **Background and Biological/Technical Justification**

The Governor=s Flood Emergency Action Team recommended the development of proactive nonstructural floodplain management strategies which can be implemented cooperatively with local government and landowners to reduce future flood loss and curtail the spiraling cost of State and federal disaster assistance.

The U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, and the Reclamation Board are working collaboratively to undertake a long-term, basin-wide assessment to examine strategies to improve flood management throughout the San Joaquin River basin.

The devastating impacts to the levee system due to the January floods, the anticipated high cost of repairs, and concern that engineered structures may not be the most effective long-term approach to flood management led to a number of efforts to investigate the use of nonstructural alternatives. These included the formation of an ad hoc committee to review a range of alternatives in the San Joaquin Valley as the flood event was still underway with an emphasis on nonstructural measures.

Significant repair and restoration was anticipated under the Corps= PL84-99 program. Based on lessons learned in previous flood recovery, the Clinton Administration directed that an interagency task force be established. The ITF would be under the direction of the Corps and would include State and federal agency participation.

Complimentary with the Corps efforts, other state and federal agencies were working on other nonstructural issues. The USF&WS was working on the expansion of the San Joaquin River National Wildlife Refuge in a manner consistent with the nonstructural alternative approach.

The State, through the efforts of Governor=s Flood Emergency Action Team (FEAT) was identifying long-term strategies for recovery efforts including the use of nonstructural alternatives. In addition, the California legislature was looking at potential bond issues that would provide funding mechanisms for nonstructural solutions as well as upgrades to existing flood control systems. Through these efforts, it became apparent that a multi-level/multi-agency approach was needed. This was necessary in order to develop a floodplain management strategy that would include provisions for nonstructural alternatives.

In mid-February, a formal Interagency Levee Task Force was created and chaired by the

Corps. Members invited to participate and identify funding sources included the Corps, the Department of the Interior, Department of Commerce, the Federal Emergency Management Agency, Department of Agriculture, Environmental Protection Agency, Housing and Urban Development, Department of Transportation, Small Business Administration, DWR, the Resources Agency, and CALFED.

This Category III project will demonstrate ways to improve the habitat and river channel as part of the larger, cooperative effort to restore the San Joaquin River basin and is consistent with the stated goals of DWR and CALFED.

e. **Proposed Scope of Work**

In Phase I of the project, the USF&WS proposes to acquire about 4,100 acres of adjacent land for addition to the preserve. They will acquire permits as required and plan and design the habitat improvements. Phase II will be the construction stage of the project. The USF&WS does not yet have the funds available to initiate construction, so DWR has proposed construction of the nonstructural habitat improvements.

DWR will construct the habitat and floodplain improvements.

f. **Monitoring and Data Evaluation**

USF&WS will provide the monitoring of the constructed habitat.

g. **Implementability**

The site chosen for construction of habitat and floodplain improvements has been studied previously and is owned by public agencies. All work will be done cooperatively with the USF&WS and state and local agencies. There are no anticipated impediments to implementing these improvements.

IV. **Costs and Schedule to Implement Proposed Project**

a. **Budget Costs**

Total Category III costs are expected to be \$6,500,000, as follows:

<b>CATEGORY III COST BREAKDOWN</b>						
<b>Project Phase &amp; Tasks</b>	<b>Direct Salary &amp; Benefits</b>	<b>Overhead Labor (General Admin &amp; Fee)</b>	<b>Service Contracts</b>	<b>Material and Acquisition Contracts</b>	<b>Misc. And Other Direct Costs</b>	<b>Total Costs</b>
<b>Construction &amp; Habitat Development</b>	<b>\$280,000</b>	<b>\$28,000</b>	<b>\$5,892,000</b>	<b>\$300,000</b>	<b>\$0</b>	<b>\$6,500,000</b>

**b. Schedule Milestones**

Construction will start at the completion of Phase I and will continue for about one year.

**c. Third Party Impacts**

The proposed projects are located on public lands; all third party impacts will be minimal. Before the Wildlife Refuge is expanded, all neighbor conflicts will be resolved by the USF&WS and local agencies. USF&WS funds are needed since the total project costs may exceed \$20 million.

**V. Applicant Qualifications**

The USF&WS will be the lead agency for all phases of the project. The DWR program manager working in cooperation with the USF&WS will be Curt Schmutte. Mr. Schmutte has managed more than \$30 million of Delta flood control and habitat development projects. Additionally, he was formally the program manager of the Levee System Integrity Component of CALFED.

**VI. Compliance with standard terms and conditions**

DWR is able to comply with the Terms and Conditions of the Category III Proposal, as laid out in Appendix D of the Request for Proposals.