



DEPARTMENT OF THE ARMY  
OFFICE OF THE CHIEF OF ENGINEERS  
WASHINGTON, D.C. 20314-1000

REPLY TO  
ATTENTION OF:

22 DEC 2004

CEMP-SPD (1105-2-10a)

SUBJECT: Napa River Salt Marsh Restoration, California

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the study of ecosystem restoration and recreation in the Napa River Basin, Napa, Sonoma, and Solano Counties, California. It is accompanied by the report of the district and division engineers. These reports are in full response to a resolution adopted by the Committee on Public Works and Transportation of the House of Representatives on September 28, 1994, for Napa River, California. The resolution requested the U.S. Army Corps of Engineers to examine problems and opportunities associated with environmental protection and restoration, flood damage reduction, and other purposes in the Napa River Basin, California. Preconstruction engineering and design activities for this project will be continued under this authority.

2. The reporting officers recommend authorization of a plan to restore approximately 4,500 acres of former salt production ponds to managed pond and tidal marsh habitat in the Napa-Sonoma Marshes Wildlife Area. The recommended plan would involve salinity reduction in Ponds 4, 5, 6, and 6A, via discharges to the Napa River, and bittern removal/salinity reduction in Ponds 7, 7A, and 8, via a discharge to Napa Slough. Water control structures would connect Ponds 4, 5, 6, and 6A, and discharge to Napa River would occur via a breach of the Pond 4 levee. The recommended plan would use a combination of natural water sources to achieve the required pre-discharge dilution in the Upper and Lower Ponds, including seasonal rainfall and neighboring waters (Napa Slough and Mud Slough). Recreational opportunities would be significant with the restoration of the ponds and tidal areas. Recreational features in the recommended plan include minor upgrades to existing facilities to enhance educational activities, including interpretive signage, a comfort station, footpaths, and fishing platforms.

3. The recommended plan would create a mix of tidal and pond habitats by restoring Ponds 4 and 5 to tidal action and retaining Ponds 6, 6A, 7, 7A, and 8 as managed ponds. It is anticipated that Ponds 4 and 5 would be restored to tidal action within two to five years, depending on the rate of habitat evolution in Pond 3. Habitat evolution would be adaptively managed in Ponds 6 and 6A, with the possibility of opening these ponds to tidal action in the future, under a separate project initiated by the non-Federal sponsor. The recommended plan would rely on natural sediment processes for the majority of the restoration area and on natural colonization by marsh vegetation. Pond 4 is expected to

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~~become tidal marsh within approximately 40 years. Habitat evolution in Pond 5 would be somewhat slower than in Pond 4, because it is farther removed from the sediment supply.~~

4. The total first cost of the project (Based on October 2003 prices) is estimated at \$55,092,000, with the Federal share estimated at \$35,549,000 and the non-Federal share estimated at \$19,543,000. The first cost for construction of the ecosystem restoration portion of the recommended plan would be \$53,344,000. The first cost for construction of recreation features would be \$1,748,000. Based upon the requirements of the Water Resources Development Act (WRDA) of 1986, as amended, cost sharing for ecosystem restoration would be 65 percent Federal and 35 percent non-Federal. Recreation features would be cost-shared 50 percent Federal, 50 percent non-Federal. Thus, the Federal share for ecosystem restoration would be \$34,675,000 and the non-Federal share would be \$18,669,000. The Federal and non-Federal shares for recreation features each would be \$874,000. The cost for all operations and maintenance (O&M) for the recommended project, estimated at \$76,000, would be the responsibility of the non-Federal sponsor. The non-Federal sponsor is also responsible for the repair and replacement of water control structures and post-construction levee repairs. The California State Coastal Conservancy has agreed to be the non-Federal sponsor for the project.

5. To insure that an efficient plan was recommended, cost effectiveness and incremental analysis techniques were used to evaluate the alternative ecosystem restoration plans. The cost of the recommended ecosystem restoration features is justified by an increase of about 2000 average annual habitat units and provides for achieving habitat increases in the most cost efficient manner. The recommended plan would result in the restoration of approximately 4,534 acres of high-quality pond and tidal marsh habitat. In addition, average annual benefits for recreation of about \$1,100,000 result in a benefit-cost ratio of 10.6 for the recreation features of the project.

6. The reporting officers also recommend that the U.S. Army Corps of Engineers participate in cost-shared monitoring and minor modifications, as may be required to ensure success of the project, as identified and described within the Monitoring and Adaptive Management Plan of the reporting officers.

7. Accordingly, I recommend improvements for ecosystem restoration for the Napa River Basin salt marshes be authorized generally in accordance with the reporting officers recommended plan. This recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended. Federal implementation of the authorized project would be subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies. Also, this recommendation is subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies, and that it shall be responsible for the following items of local cooperation:

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a. Provide 35 percent of the separable project costs allocated to environmental restoration, 50 percent of the separable project costs allocated to recreation, as further specified below:

(1) Enter into an agreement that provides, prior to execution of a project cooperation agreement for the project, 25 percent of design costs for environmental restoration and recreation features and 100 percent of design costs allocated to the LPP that are in excess of the costs allocated to the NER;

(2) Provide, during construction, any additional funds needed to cover the non-federal share of design costs;

(3) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of the project;

(4) Provide or pay to the Government the cost of providing all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of the project; and

(5) Provide, during construction, any additional costs as necessary to make its total contribution equal to 35 percent of the separable project costs allocated to environmental restoration and 50 percent of the separable project costs allocated to recreation;

b. For so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, including mitigation features, at no cost to the Government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and any specific directions prescribed by the Government in the OMRR&R manual and any subsequent amendments thereto;

c. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the local sponsor owns or controls for access to the project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project;

d. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

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- e. Hold and save the Government free from all damages arising for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors;
- f. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project to the extent and in such detail as will properly reflect total project costs;
- g. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction, operation, and maintenance of the project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government;
- h. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Government determines necessary for the construction, operation, or maintenance of the project;
- i. To the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project and otherwise perform its obligations in a manner that will not cause liability to arise under CERCLA;
- j. Prevent obstructions of or encroachments on the project (including prescribing and enforcing regulations to prevent such obstruction or encroachments) which might reduce the level of protection it affords, hinder operation and maintenance, or interfere with its proper function, such as any new developments on project lands or the addition of facilities which would degrade the benefits of the project;
- k. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public law 91-646, as amended (U.S.C. 4601-4655), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, operation, and maintenance of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said Act;
- l. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto,

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as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army", and all applicable Federal labor standards and requirements, including but not limited to 40 U.S.C. 3141- 3148 and 40 U.S.C. 3701 – 3708 (revising, codifying and enacting without substantial change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c *et seq.*);

m. Provide the non-Federal share of that portion of the costs of archaeological data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with cost sharing provisions of the agreement;

n. Not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized by Federal law;

o. Provide and maintain necessary access roads, parking areas, and other public use facilities, open and available to all on equal terms;

p. At its sole expense, obtain and provide all water necessary to implement, operate and maintain the project.

8. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities in the formulation of a national civil works construction program nor the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the non-Federal sponsor, the State, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.



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