



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

REPLY TO
ATTENTION OF:

20 DEC 2004

CEMP-SPD (1105-2-10a)

SUBJECT: Matilija Dam, Ventura County, California

THE SECRETARY OF THE ARMY

1. I submit, for transmission to Congress, my report on ecosystem restoration and recreation on the Ventura River, Ventura County, California. It is accompanied by the report of the district and division engineers. These reports are in response to a resolution by the Committee on Transportation and Infrastructure of the House of Representatives adopted 15 April 1999. The resolution requested a review of the report of the Chief of Engineers on the Ventura River, Ventura County, California, published as House Document 323, 77th Congress, 1st Session, and other pertinent reports, with a view to determining whether any modifications of the recommendations contained therein are advisable at this time, in the interest of environmental restoration and protection, and related purposes. This is the authority under which pre-construction engineering and design activities will continue.

2. The reporting officers recommend authorization of a plan to restore and improve approximately 33 miles of the Ventura River, beginning at the coast at the outlet of the Ventura River and extending approximately 17 miles upstream of the existing Matilija Dam location. The plan includes removal of the non-federally constructed Matilija Dam to restore a more natural sediment transport regime along the river and the coast; restore the natural passage for the endangered steelhead trout beyond the existing dam location; protect existing water resources; provide features to remove and control the proliferation of the invasive weed, *Arundo donax*; and extend the recreation trail system. Specifically, the recommended plan includes the following measures:

- Removal of Matilija Dam to allow natural sediment transport and fish passage;
- Removal of approximately two million cubic yards of fine sediments behind the dam, by slurry and placement, to dispose of those sediments in a manner that will minimize water quality impacts associated with turbidity and the potential effects on water districts that draw water from the Ventura River system;
- Raising levees and flood walls and enlarging bridge openings in several locations, to maintain existing levels of flood protection to local communities;
- Acquiring and removing properties at several locations to mitigate the potential adverse impacts of induced flooding due to the dam removal;
- Construction of a high-flow bypass to divert sediments around the Los Robles

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- Diversion structure to minimize the impacts to the ability to divert flows;
- Removal of an invasive weed, *Arundo donax*, to improve the habitat value in the riparian zones;
- Installation of two groundwater wells to mitigate for water losses due to increased turbidity that may occur;
- Excavation and placement of sediments upstream of Matilija Dam to more closely replicate the sinuous river of the pre-dam conditions, and to allow for natural river erosion of the remaining trapped sediment in the dam reservoir; and
- Construction of recreation facilities consisting of approximately 7 miles of multi-use non-motorized trails, parking lots with trailheads, and interpretive signs.

3. Additionally, the reporting officers 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 report. The development and selection of the recommended plan was accomplished in close coordination with a public interest group, members from the Bureau of Reclamation, the Ventura County Watershed Protection District, and the Corps. The total habitat area that would be restored is approximately 2,800 acres. The recommended plan is the National Ecosystem Restoration plan. At the request of the non-Federal sponsor, the project also includes, as an associated feature at 100 percent non-Federal cost, a desilting basin located near Lake Casitas along the diversion channel. The desilting basin would prevent extra fine sediment from entering Lake Casitas, thereby further protecting the Lake Casitas water supply facility.

4. Based on October 2003 price levels, the estimated first cost for the project is \$123,770,000. Following the cost sharing provisions of Section 103 of the Water Resources Development Act (WRDA) of 1986, as amended by Section 210 of WRDA 1996, the Federal share of the total project cost would be about \$76,860,000 and the non-Federal cost would be about \$46,910,000. Ecosystem restoration measures are cost shared at 65 percent Federal and 35 percent non-Federal. The estimated total first cost includes approximately \$5,520,000 for monitoring and adaptive management designed to ensure the project performs as designed. Also included in the cost are recreational development features appropriate to an ecosystem restoration project, including trails, rest areas, parking and interpretive signage. These recreational features have projected first costs of \$1,000,000 and will be cost shared 50 percent Federal and 50 percent non-Federal. The non-Federal share includes 100 percent of the cost of the desilting basin, estimated at \$5,700,000. The total estimated annual operation and maintenance costs are \$350,000, including the cost to operate and maintain the desilting basin, and are a 100 percent non-Federal responsibility. The non-Federal sponsor is the Ventura County Watershed Protection District.

5. To ensure that an efficient plan was recommended, cost effectiveness, incremental cost analysis, and trade-off analysis techniques were used to evaluate alternatives. The recommended

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plan was developed to reasonably maximize environmental benefits while providing protection from downstream potential impacts. The cost of the recommended plan is justified by the increase of 731 average annual habitat units and by achieving ecosystem function increases in the most cost effective manner. Restoration of these resources in this setting is significant because natural riparian areas of major rivers in southern California are scarce. Many of southern California's rivers have been made into channels, eliminating much natural habitat for native species. An additional feature of the project is a recreation plan which, based on October 2003 price levels and a discount rate of 5.625 percent, has an average annual cost of \$151,000 and provides average annual benefits of about \$240,000 for a benefit-to-cost ratio of 1.6.

6. I concur with the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend that the Matilija Dam, Ventura County, California, project be constructed in accordance with the reporting officers' recommended plan. My recommendation is subject to cost sharing and financing and other applicable requirements of Federal and State laws and policies, including WRDA 1986, as amended by WRDA 1996. Federal implementation of the authorized project would be subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies, including but not limited to:

a. Provide 35 percent of the total project costs allocated to ecosystem restoration and 50 percent of the total 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;

(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 total project costs allocated to ecosystem restoration and 50 percent of the total project costs allocated to recreation.

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p. Prevent obstructions of, or encroachments on, the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might reduce the ecosystem restoration, hinder its operation and maintenance, or interfere with its proper function, such as any new development on project lands or the addition of facilities which would degrade the benefits of the project.

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

7. 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 inherent 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 sponsor, the State, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.



CARL A. STROCK
Lieutenant General, US Army
Chief of Engineers