1. INTRODUCTION

Study Authority

The Matilija Dam Ecosystem Restoration Feasibility Study is prepared in response to the Resolution of the U.S. House of Representatives Committee on Transportation and Infrastructure (Docket 2593), adopted 15 April 1999, which reads as follows:

> "Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That the Secretary of the Army is requested to review 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, with particular attention to restoring anadromous fish populations on Matilija Creek and returning natural sand replenishment to Ventura and other Southern California beaches."

Study Purpose

The purpose of this feasibility study is to evaluate opportunities for reestablishing natural ecosystem functions and riverine processes that have been degraded as a result of the construction of Matilija Dam. This study evaluates the effect of Matilija Dam on the ecosystem and the natural dynamic riverine, estuarine and coastal processes, and formulates restoration features designed to improve the potential for long-term survival of native aquatic, wetland and terrestrial complexes as self-regulating, functioning systems.

Specifically this study focuses on identification of the Federal interest in (1) ecosystem restoration for terrestrial and aquatic habitat to benefit native fish and wildlife (including the federally listed endangered southern steelhead trout) to the Ventura River and Matilija Creek in the vicinity of Matilija Dam; and (2) improvements to the natural hydrologic and sediment transport regime to support Ventura River's coastal beach sand replenishment. Enhancement of recreational use along the Ventura River and Matilija Creek compatible with the ecosystem restoration outputs will also be considered.

Study Scope

The scope of the feasibility study includes the identification of problems and needs, and objectives and constraints, the evaluation of the historical, existing and future baseline conditions (also know as the "without-project conditions"). Alternative measures are formulated to address the study problems, needs and objectives. These measures are combined to form alternative plans.

For each alternative plan, the "most likely" future conditions are forecast with the plan in place ("with-project conditions"). The most important effects (impacts) of each alternative plan are evaluated on the basis of a without and with-project condition comparison, and the differences are identified. These differences are then assessed and appraised. The evaluation

process continues by qualifying which plans merit further consideration and which ones to drop. This is followed by a comparison of the identified most important effects among all the alternative plans, utilizing a more formal and analytical approach to insure that the plans are responsive to the needs of the public, and finally a recommend plan is identified.

An Environmental Impact Statement/Environmental Impact Report (EIS/EIR) is being prepared to address the environmental review requirements of both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The purpose of the EIR/EIS document is to identify the environmental effects of the proposed environmental restoration alternatives.

Study and Report Process

The Los Angeles District Corps of Engineers completed the reconnaissance phase of the General Investigation study process in June 2001. The reconnaissance phase 905(b) study determined that there was a Federal interest in participating in a cost-shared feasibility phase study to evaluate ecosystem restoration improvements to the Ventura River in the vicinity of Matilija Dam, in Ventura County. The reconnaissance phase effort included the development of a feasibility-level Project Management Plan (PMP) and the execution of a Feasibility Cost Sharing Agreement (FCSA) between the Los Angeles District Corps of Engineers and the Ventura County Watershed Protection District (VCWPD).

This Public Draft report is one of a series of deliverables leading to the Final Matilija Dam Ecosystem Restoration Feasibility Study Report. This draft report presents a summary of the process and products that are a result of the study process to date, including the inventory and forecast of without project conditions, the identification of problems and opportunities, the formulation, evaluation and comparison of alternative plans, and the selection of a Recommended Plan. The report includes a draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) and technical appendices.

The total timeframe for the review of the public draft report is 45 days. A public meeting will be held during the review to present the report findings and provide an opportunity to solicit comments on the study and the Recommended Plan. Comments raised at the public meeting and comments submitted in writing will be addressed in the final feasibility report.

Study Participants and Coordination

The Los Angeles District Corps of Engineers and the Ventura County Watershed Protection District (VCWPD) are responsible for conducting and coordinating this Feasibility Study. The VCWPD is the local sponsor. The VCWPD and the California Coastal Conservancy shared the fiscal contributions to the feasibility study. The VCWPD has provided invaluable in-kind services by way of their own staff, including GIS mapping, some biology surveying and assessment tasks, meeting coordination, and dissemination of information to interested parties; and by way of their contracted services with the U.S. Bureau of Reclamation (BOR), efforts including survey and mapping, geotechnical field investigations, and hydrology, hydraulics and sedimentation studies.

An organizational structure was developed during the preparation of the PMP with the intent to outline the efforts by members of the Steering Committee/Task Force, VCWPD, and the Corps in addressing feasibility activities. The organizational structure also includes non-Federally funded efforts that may provide products and information useful to the feasibility study. These groups include the Legislative/Lobbying and Funding Group, Research Program Group, and Recreation Access Group. The Corps chairs all groups that pertain directly to the feasibility study, while other groups are chaired by the local sponsor, the County of Ventura, the Bureau of Reclamation, and the Matilija Coalition. The organizational chart is presented in Figure 1-1.

Other organizations that have participated in the study process to date include the following agencies and groups:

Federal Agencies
U.S. Fish and Wildlife Service
U.S. Bureau of Reclamation
U.S. Forest Service, Los Padres National Forest
U.S. Geological Survey
National Marine Fisheries Service
National Park Service
National Fish and Wildlife Foundation

Local Committees/Groups
Casitas Municipal Water District
Matilija Coalition
Matilija Environmental Science Area (MESA)
Friends of the Ventura River
American Rivers
Surfrider Foundation, Ventura Chapter
Southern California Wetlands Recovery Project
Fixing Stream Habitats Technical Assistance Program (FiSHTAP)
BEACON
California Trout
Aspen Environmental Group
Southern California Steelhead Coalition

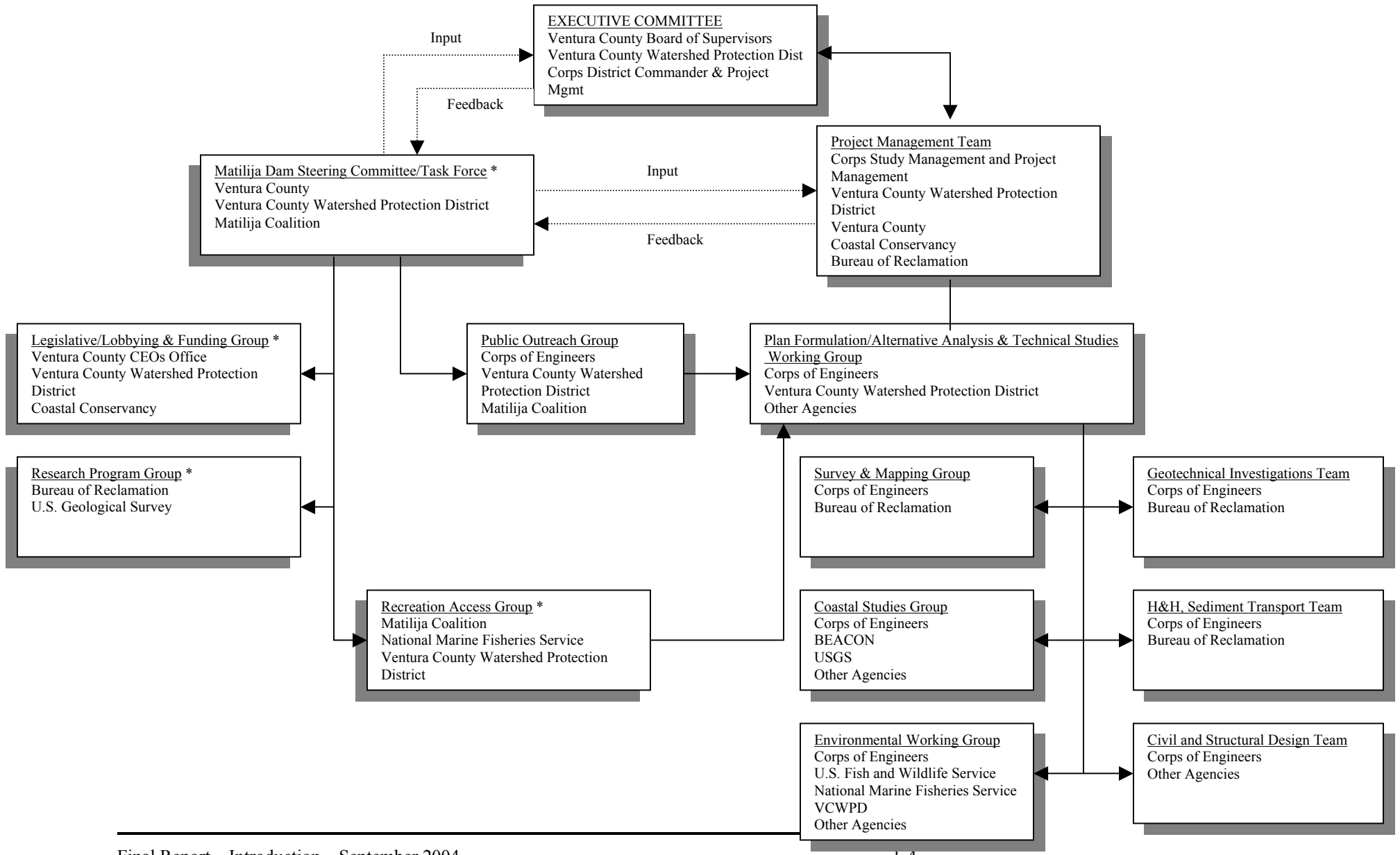
State Agencies
California Coastal Conservancy
California Department of Fish and Game
California Regional Water Quality Control Board

County of Ventura Agencies
County Board of Supervisors
Public Works
Watershed Protection District
County Executive Office
Environmental and Energy Resources Department

City Governments
Ventura
Oxnard
Ojai
Port Hueneme

Universities
University of California Cooperative Extension
California State University, Northridge

FIGURE 1-1: MATILIJA CREEK FEASIBILITY STUDY ORGANIZATIONAL STRUCTURE



* Denotes Non- Feasibility Study Groups

Prior Studies and Reports

The following reports were reviewed as a part of this study:

1. House of Representatives Document No. 323, 77th Congress, 1st Session Report of the Chief of Engineers on the Ventura River Basin - April 1941:

   This letter report was submitted to Congress in response to the study authority described in the first section of this chapter. In general, the Chief's Report cites local interests desires, including construction of flood control channel protection along 15 miles of the Ventura River and several dams for combined flood control and water conservation. Dam sites include Matilija Creek and Coyote Creek. The Corps could not justify support of the dams due to the inability of the structures to provide flood control on the lower Ventura River.

   The report recommendations included construction of a levee for flood control along the east bank of the lower Ventura River to protect the city of Ventura, and a debris basin and channel in Stewart Canyon to protect the city of Ojai. The 1944 Flood Control Act authorized construction of the projects. The 2.6 mile-long Ventura River earthen levee with one-foot grouted stone slope protection was completed by the Corps in December 1948. Local interests maintain the project.

   The Stewart Canyon Debris Basin and channel was constructed by the Corps in January 1963, and consists of an earthfill 40-foot high debris basin with a storage capacity of 300,000 cubic yards, and a 4,500-foot long box and open rectangular concrete lined channel that extends from the basin through the City of Ojai to a natural channel south of the city.

2. Matilija Dam Removal Appraisal Report – April 2000: A reconnaissance level investigation focusing on the feasibility of removing Matilija Dam, prepared by the BOR. Supplemental environmental evaluation and some cost estimates prepared by USACE, Los Angeles District.

3. Planning Aid Memorandum for the Proposed Matilija Dam Removal Project Appraisal Study, Ventura County, California – 2000: Prepared by the U.S. Fish & Wildlife Service (USFWS) for the USBR's Appraisal Study.

4. Sediment Loads in the Ventura River Basin, Ventura County, California, 1969-81 – Dated 1988: Focuses on the sediment transport in the Ventura River, from 1969 to 1981; prepared by the U.S. Geological Survey, in cooperation with the California Department of Boating and Waterways.

5. Coastal Benefits and Impacts of Dismantling Matilija Dam – 2000: Prepared by James A. Bailard and published in the proceedings of the Sand Rights Conference. The report focused on the benefits of the sediment currently trapped behind the dam as beach nourishment, if the dam were removed.

6. Report on the Reconnaissance Investigation, Ventura River Watershed – June 1964: Prepared for the Ojai Soil Conservation District by Boyle Engineering.

7. Ventura River Steelhead Survey – 1997: Prepared by M. H. Capelli for the California Department of Fish and Game. The report focused on the existing steelhead migration and potential restoration in the Ventura River.

8. Ventura Watershed Analysis – 1997: Prepared by S. Chubb for the Forest Service, Los Padres National Forest. The report focused on steelhead restoration.

9. Survey Report for Beach Erosion Control, Ventura County, California – 1980: Prepared by the U.S. Army Corps of Engineers, Los Angeles District.

10. Ventura River State of the Watershed Report (Final)- May 2002: Prepared by the California Regional Water Quality Control Board. Presents an overview of the watershed, its infrastructure, history, and data from a number of surface water sampling programs and general observations on surface water quality.

11. Ventura River Estuary Enhancement- Existing Conditions- October 1992: Prepared by Wetlands Research Associates, Inc. Presents historical changes, existing biological resources, hydrology, and public access.