

CHAPTER 1 - STUDY INFORMATION

1.1 PURPOSE AND NEED FOR THE PROJECT AND REPORT*

The community of Hamilton City relies on the existing "J" levee to contain flows in the Sacramento River. The "J" levee does not meet Corps or any other levee construction standards and could fail at river levels well below the top of the levee. Native habitat and natural river function in the study area have been degraded by construction of the "J" levee and conversion of the floodplain to agriculture and rural development. The purposes of a project for the Hamilton City area are to reduce flood damage and to restore the ecosystem.

This report presents the findings of the Hamilton City Flood Damage Reduction and Ecosystem Restoration, California, Feasibility Study (Feasibility Study). The purpose of the Feasibility Study is to determine if there is a Federal interest¹ in providing flood damage reduction and ecosystem restoration improvements in and around Hamilton City, California. This report integrates plan formulation with documentation of environmental effects. This report is also an Environmental Impact Statement/Environmental Impact Report (EIS/EIR). It serves to satisfy documentation requirements of the National Environmental Policy Act (NEPA) of 1969, as amended, and the requirements of the California Environmental Quality Act (CEQA). The report describes the flooding, ecosystem, and other related water resource problems and opportunities in the Hamilton City area and expresses desired changes as planning objectives. Alternative plans are then presented to achieve these objectives. These alternative plans include a plan of no action and various combinations of individual management measures². The economic, social, and environmental effects of the alternative plans are described and a feasible plan is selected for recommendation. The report also presents details on the U.S. Army Corps of Engineers (Corps) and non-Federal sponsor (State of California) participation needed to implement the selected plan. The report concludes with a recommendation for authorization.

1.2 STUDY AUTHORITY

The Hamilton City Flood Damage Reduction and Ecosystem Restoration, California, Feasibility Study is part of the Sacramento and San Joaquin River Basins Comprehensive Study (Comprehensive Study) initiated by the Corps and The Reclamation Board of the State of California (The Reclamation Board) in 1998. The Comprehensive Study was authorized in the 1998 Energy and Water Development Appropriations Act, Public Law (PL) 105-62. The U.S. House of Representatives Report 105-190, which accompanied the 1998 act, directed the Corps to conduct a comprehensive assessment of the flood management system for the Sacramento and San Joaquin River Basins.

Sacramento River and San Joaquin River Basins Comprehensive Study, California. - In response to the devastating floods of 1997, the Committee has added funds and directs the Corps of Engineers to conduct a comprehensive assessment of the entire flood control

¹ A project is said to be in the **Federal interest** if it is consistent with the mission of the Corps of Engineers and the project benefits are in excess of the project costs.

² A **management measure** is a feature or activity that can be implemented at a specific geographic site to address one or more planning objectives.

system within the existing study authorizations of the Sacramento River Watershed Management Plan (authorized by the Flood Control Act of 1962) and the San Joaquin River and Tributaries authority (authorized by 1964 Resolution of the House Committee on Public Works). These comprehensive investigations will include . . . development and formulation of comprehensive plans for flood control and environmental restoration purposes . . .

The Hamilton City area was identified early in the Comprehensive Study as a potentially feasible site for a multipurpose flood damage reduction and ecosystem restoration project consistent with the overall objectives of the Comprehensive Study. Preliminary evaluation of the problems and potential solutions in the Hamilton City area led to the initiation of this site-specific feasibility study.

The U. S. House Report 108-357, which is the Conference Report accompanying the Energy and Water Development Appropriations Act, 2004, P.L. 108-137, urged the Secretary of the Army to include in the study an area extending from 2 miles due north to four miles due south of State Highway 32, and extending at least 1.2 miles due south of County Road 23. The language also states that the study should incorporate locally preferred options that provide protection to agricultural lands and residential properties. The study area includes this specified area and considered locally developed features.

1.3 STUDY LOCATION

Hamilton City is located along the west bank of the Sacramento River in Glenn County, California, about 85 miles north of the City of Sacramento.

1.4 STUDY SPONSOR AND PARTICIPANTS

The Corps initiated the Feasibility Study at the request of The Reclamation Board, the non-Federal sponsor for the study. The Corps and The Reclamation Board are the lead agencies in the Feasibility Study and shared the cost of the study equally. The Reclamation Board received a State of California grant from the CALFED Bay-Delta Authority to help fund the non-Federal share of the study cost. This project has been developed to be consistent with the CALFED Record of Decision (ROD) (2000).

The local partners in the Feasibility Study include the Hamilton City Community Services District, the Hamilton City Citizens in Action, Glenn County, and The Nature Conservancy (TNC). Numerous other agencies, organizations, and individuals participated in the study including local landowners and residents, Glenn-Colusa Irrigation District, neighboring Butte County, California Department of Transportation, California Department of Fish and Game, California Department of Parks and Recreation, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration (NOAA Fisheries), U.S. Environmental Protection Agency, Sacramento River Partners, and Sacramento River Preservation Trust. The Sacramento River Conservation Area Forum (SRCAF) helped to facilitate open discussion between all interests. Additional information on public involvement in the study is included in Chapter 6 - Public Involvement, Review and Consultation.

Chapter 6, Public Involvement, Review and Consultation, describes the concerns expressed during the public involvement process and how those concerns have been addressed during the study.

1.5 HISTORY OF HAMILTON CITY INVESTIGATIONS

In January 1974, high water in the Sacramento River induced flooding in portions of Hamilton City and the surrounding agricultural areas. In response to the flooding, Glenn County requested an investigation of “the Hamilton City flood problem.” The Corps produced a reconnaissance report in March 1975 that recommended a setback levee be constructed. The study concluded that there was likely a positive benefit-to-cost ratio, although it never progressed to the feasibility study phase due to lack of local support.

In February 1986, floodwaters reached near the crown of the levee northeast of Hamilton City and residents of the town were evacuated. Flood fighting efforts prevented flows from overtopping the levee. A Section 205 Reconnaissance Investigation³ was initiated in response to a letter from the Glenn County Board of Supervisors. The Corps produced a reconnaissance report in January 1991 that concluded that there was no Federal interest in participating in further studies for a flood control project because a cost-effective project could not be developed. (Similar studies conducted at different points in time could have different findings, based on construction costs and possible monetary benefits of the day.)

In March 1996, a feasibility study was initiated under Section 205 at the direction of Congress. A marginally cost-effective alternative was developed that consisted of building a setback levee along the existing railroad embankment continuing around the east side of Hamilton City and tying into the existing levee near Dunning Slough.

Concurrently, the January 1997 flood prompted the initiation of the Comprehensive Study to investigate opportunities to improve the flood management system for the two river basins while also restoring the degraded river ecosystems. Figure 1-1 shows flood fighting of the existing “J” levee. It was recognized that a potential multipurpose project could be developed in the Hamilton City area as part of the Comprehensive Study to demonstrate how a project could reduce flood damages and restore the ecosystem simultaneously. Preliminary analyses determined there was a likely Federal interest in such a project.



Figure 1-1: Emergency crews flood fighting the existing “J” levee.

In November 2002, The Reclamation Board, as the non-Federal sponsor, with funding from the CALFED Bay-Delta Authority, and the Corps continued a site-specific multi purpose feasibility investigation for the Hamilton City area and work on the Section 205 study was

³ Section 205 is the Corps’ small flood control project continuing authority program authorized by Congress in Section 205 of the Flood Control Act of 1948, as amended.

suspended. The cost of the feasibility study was shared equally between the Corps and the non-Federal sponsor. This report presents the results of the feasibility investigation.

1.6 EXISTING PROGRAMS, STUDIES, AND PROJECTS

There are several ongoing water resources related programs, projects, and studies that could affect flooding and ecosystem conditions in the Sacramento River basin and, specifically, in the Hamilton City area. Those efforts that pertain directly to this feasibility study are summarized here.

1.6.1 Programs

CALFED Bay-Delta Program (CALFED). CALFED was established in May 1995 as a cooperative effort among the State and Federal agencies that handle management and regulatory responsibilities in the Sacramento and San Joaquin River Delta. CALFED's mission is to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta. In July 2003, the State of California formalized the cooperative effort by creating the CALFED Bay-Delta Authority, a State agency responsible for overseeing implementation of the Bay-Delta Program. The Hamilton City study area is located within the Red Bluff to Chico Landing Reach of the Sacramento River as described in CALFED's Draft Ecosystem Restoration Program Plan⁴. This plan identifies an action to "protect, enhance and restore the meander belt between Red Bluff and Chico Landing."

Central Valley Project Improvement Act (CVPIA). The Central Valley Project (CVP) was authorized by Congress in 1937 as a multipurpose development to store and transfer surplus water primarily from the Sacramento and Trinity River basins to the water-deficient lands of the San Joaquin River and Tulare Lake Basins. The project is operated by the U.S. Bureau of Reclamation (USBR). The CVPIA amended previous authorizations of the CVP to include fish and wildlife protection, restoration, and mitigation as project purposes having equal priority with irrigation and domestic water supply uses, and fish and wildlife enhancement having an equal priority with power generation. The CVPIA gives first priority to measures that protect and restore natural channel and riparian habitat values through habitat restoration actions (CVPIA amendment b (1)(A)). USBR, in partnership with other agencies, used CVPIA funds to complete an upgrade of the fish screen at the Glenn-Colusa Irrigation District pumping facility located near the northern end of the study area.

Federal Emergency Management Agency (FEMA), Flood Mitigation Assistance Program and the Hazard Mitigation Grant Program. These programs seek to reduce or eliminate the loss of life and property damage resulting from natural and human-caused hazards. In order to qualify for these programs, a community must be enrolled in the National Flood Insurance Program (NFIP) and have a Flood Mitigation Plan approved by the FEMA Regional Director. This plan must include a description of the existing flood hazard and identification of the flood risk including estimates of the number and type of structures at risk, repetitive loss properties, and the extent of flood depth and damage potential. A project must be cost-effective, not costing more than the

⁴ CALFED Bay-Delta Program, Final programmatic EIS/EIR, July 2000, Ecosystem Restoration Program Plan

anticipated value of the reduction in both direct damages and subsequent negative impacts to the area if future flooding were to occur, computed on a net present value basis. Applicants for these programs must compete for the funding. Glenn County is enrolled in the National Flood Insurance Program (NFIP), which includes Hamilton City as an unincorporated area of the county.

Sacramento River Conservation Area Forum (SRCAF). Passed by the State Legislature in 1986, Senate Bill 1086 called for a management plan for the Sacramento River and its tributaries that would protect, restore, and enhance both fisheries and riparian habitat. The law established an Advisory Council, composed of representatives of State and Federal agencies, county supervisors, and representatives of landowners, water contractors, commercial and sport fisheries, and general wildlife and conservation interests. This group produced the Upper Sacramento River Fisheries and Riparian Management Plan in 1989. Many of the fisheries actions were rapidly implemented. The Riparian Habitat Committee of the Advisory Council was created in 1993 to ensure that riparian habitat management along the Sacramento River addresses the dynamics of the riparian ecosystem and the reality of the local agricultural economy. The Riparian Habitat Committee prepared a handbook in 1998 (revised January 2002) to describe its goals to preserve remaining riparian habitat and to reestablish a continuous riparian ecosystem along the river, and the principles and management guidelines to achieve these goals. SRCAF has been established with a Board composed of representatives from the seven counties and landowners adjacent to the Sacramento River in the Conservation Area. This organization acts as a clearinghouse for projects affecting the Conservation Area and as a forum for information sharing and problem solving.

Designated Floodway Program. The Reclamation Board administers the Designated Floodway Program, which addresses land use management within the floodway. This program provides a nonstructural way to keep development from encroaching into flood-prone areas. It also reduces future potential flood damages by preserving the reasonable flood passage capacities of natural watercourses. The Reclamation Board controls the Designated Floodway Program by adopting floodway boundaries, developing plans for modifications of boundaries, and approving changes in acceptable use and types of structures within the floodways. The area between Hamilton City and the Sacramento River, including the existing "J" levee, is within the designated floodway. This designation stipulates that levees damaged by 50 percent or more must be removed.

1.6.2 Projects

The Nature Conservancy, Sacramento River Project. The long-term goal for TNC's Sacramento River Project is to establish and sustain a healthy floodplain ecosystem with functioning natural, political, social and economic processes to support the diversity of natural communities and native species along the Sacramento River. Over the past decade, TNC and its partners have secured over 15,000 acres for conservation within the 100-year floodplain of the Sacramento River and restored 2,200 of those acres to native riparian vegetation.

U.S. Fish and Wildlife Service (USFWS). Sacramento River National Wildlife Refuge.

The Sacramento River National Wildlife Refuge is one of six wildlife refuges in the USFWS Sacramento Wildlife Refuge Complex. The complex consists of a land acquisition and habitat restoration program that covers about 35,500 acres. Additional acres held in easements expand the complex to 59,000 acres in the Sacramento Valley. In 1989, Congress authorized the Sacramento River National Refuge as part of this complex. To date, USFWS has acquired slightly more than 14,000 of the 18,000 initially approved. The remaining lands will be purchased from willing sellers as funds are appropriated and as public disclosure in accordance with the National Environmental Policy Act (NEPA) is completed for each incremental expansion. The USFWS owns lands within and adjacent to the study area that are included the Sacramento River Nation Wildlife Refuge.

Sacramento River Floodplain Acquisition and Monitoring. TNC, the California Wildlife Conservation Board, California Department of Fish and Game (DFG), and the USFWS have requested funds for the acquisition and management of fee title or permanent conservation easement interests on floodplain lands within the conservation area of the Sacramento River between Keswick Dam and Verona. A floodplain restoration-monitoring program will be developed to enhance existing monitoring programs. The acquisitions will facilitate the recovery of ecological processes within the floodplain, including the regeneration of native riparian habitat. Ten thousand acres is the long-term goal for acquisition and restoration. Currently the reserve has acquired approximately 1,800 acres.

Shasta Dam. Shasta Dam and Lake, completed in 1945, are components of a multipurpose project built by the USBR and operated for flood management by the Corps. Constructed on the Sacramento River downstream from its confluence with the Pit River, 10 miles north of the City of Redding, the dam is a concrete gravity structure 487 feet high above the streambed and 3,500 feet long. Shasta Lake has a capacity of 4,552,100 acre-feet and a flood management reservation of 1,300,000 acre-feet. Keswick Dam is about 9 miles downstream from Shasta Dam and provides reregulation for Sacramento River flow releases. Shasta Dam provides flood protection to nearby communities and agricultural land downstream along the Sacramento River. Shasta Dam is operated for an objective release of 79,000 cubic feet per second (cfs) at Redding.

Black Butte Dam. Black Butte Dam is owned, operated and maintained by the Corps and is on Stony Creek, a westside tributary of the Sacramento River. Constructed in 1963, it consists of an earthfill dam 140 feet high above the streambed and 5,975 feet long, including six auxiliary earthfill dikes. Black Butte Lake has a capacity of 136,200 acre-feet and provides the entire capacity as flood management space reservation during the winter months. The specific flood management objectives of Black Butte Dam are to protect Hamilton City, the City of Orland, Interstate 5, and 64,000 acres of agricultural areas along Stony Creek from rain floods.

Sacramento River Flood Control Project, California. Congress directed the California Debris Commission in 1910 to prepare a flood management plan for the Sacramento River system. The proposal incorporated the leveed bypass concept, which became the basis of the present project. This major project was authorized by the 1917 Flood Control Act and was sponsored by The Reclamation Board. The Sacramento River

Flood Control Project consists of a comprehensive system of 1,000 miles of levees, 5 major overflow weirs, 2 sets of outfall gates, 3 major drainage pumping plants, 95 miles of bypass floodways, overbank floodway areas, and channel enlargement in the lower reach of the Sacramento River. The levees constructed during this project are known as "project levees". The project levees begin just south of Hamilton City near Chico Landing (see Figure 2-1). Details of the existing flood protection at Hamilton City may be found in Section 2.1.

Sacramento River Flood Control Project, Glenn-Colusa Irrigation District Fish Screen Improvement Project, California. Flood flows in the Sacramento River have altered the river channel and lowered the water surface at the Glenn-Colusa Irrigation Hamilton City pumping plant. Changing conditions cause significant adverse impacts to river stability, water supply and anadromous fishery resources in the area. The project includes a gradient facility, which includes use of multiple sheet piles coupled with stone to replicate a natural riffle in the river to restore river hydraulic gradient to appropriate pre-1970 conditions. The Glenn-Colusa Irrigation District, the Corps, and USBR and the State of California are implementing fish screen project to build new screens near the Glenn-Colusa Irrigation District plant.

Sacramento River Bank Protection Project, California. The Sacramento River Bank Protection Project (SRBPP) is a continuing construction project of the Corps and The Reclamation Board to repair and protect levees from erosion. Phase I was authorized in 1960 to preserve the integrity of the Sacramento River Flood Control Project's levee system. The levee system protects over 1 million acres, 2.2 million people, and \$37 billion of property. Construction of the First Phase began in June 1965. Phase II of construction was authorized in 1974 and the remaining bank protection sites are located along the Sacramento River downstream from river mile 194 at Chico Landing, and along the Sacramento River tributaries and distributaries. Congressional authorization is needed for Phase III.

Sacramento River, Chico Landing to Red Bluff, California. Congress authorized the Sacramento River, Chico Landing to Red Bluff Project in 1958 as an extension and modification of the Sacramento River Flood Control Project to help stabilize the main river channel, to alleviate bank erosion, and to reduce downstream maintenance dredging. Continued construction was authorized in 1976, however, no additional bank protection has been placed under this authority since 1985, primarily for environmental reasons. The Reclamation Board is the non-Federal sponsor.

Sacramento River Major and Minor Tributaries. This project was initially authorized by the 1944 and 1950 Flood Control acts and first funded in 1948. It supplements the Sacramento River Flood Control Project in providing flood protection to all major cities along the river system and to 880,000 acres of prime agricultural land. The Reclamation Board is the sponsor of this project that provided for levee construction and channel modifications on the Sacramento River from Colusa to Chico Landing and on lower reaches of its tributaries.

1.6.3 Studies

Corps of Engineers. Hamilton City, California, Small Flood Control Project, Detailed Project Report. The Corps, The Reclamation Board, Glenn County, and the Hamilton

City Community Service District undertook a study under the authority of Section 205 of the Flood Control Act of 1948. The Corps initiated a feasibility-level study and in 1997 determined that there is potential Federal interest in implementing a small flood control project in the Hamilton City area. This study has been suspended and the information developed under the Section 205 study is incorporated in this feasibility study.

Corps of Engineers. Central Valley River Basins Enhanced Flood Response and Emergency Preparedness. The Corps and The Reclamation Board are studying as part of the Comprehensive Study. A plan to increase the effectiveness of the existing flood response and emergency preparedness system to warn residents of the Central Valley of impending flooding from the Sacramento and San Joaquin Rivers and their tributaries. The study has investigated flood warning system problems and opportunities; a measures evaluation; a description and comparison of alternatives; and an evaluation of the potential environmental effects of these alternatives. In addition, the document includes mitigation measures and performance standards to ensure that any potential effects on the environment identified during future site selection for flow and rain gages will be mitigated to a less than significant level.

The Nature Conservancy. Hydrologic and Hydraulic Model for the Sacramento River from Glenn-Colusa Irrigation District (GCID) to Princeton Incorporating Existing Butte Basin Model. Prepared By Ayres and Associates. This model was completed in 2002 and will be used in coordination with models prepared by the Corps in the development of this feasibility study.

The Bureau of Reclamation and Department of Water Resources. North-of-the-Delta Offstream Storage Investigations. Storing water in offstream reservoirs during high flow periods provides opportunities to increase water storage in an environmentally sensitive manner. The stored water is then made available for beneficial uses at times when conflicts over available supplies are most pronounced, such as during droughts. The North-of-the-Delta Offstream Storage Investigation has focused on four potential projects on the west side of the Sacramento Valley, including the Red Bank Project, Newville Reservoir, Colusa Reservoir, and Sites Reservoir. The Draft Feasibility Study and EIS/EIR are scheduled for completion in June 2005.

The Nature Conservancy, Floodplain Reconnection/Limited Channel Meander Investigation. TNC has completed a two-dimensional (2D) hydraulic model to (1) evaluate the potential flood damage reduction and ecosystem restoration benefits of a setback levee somewhere southwest of the existing levee, and (2) potentially remove the private levees within and around the USFWS Pine Creek Unit. Potential ecosystem restoration strategies would result in the reconnection of about 2,500 acres of floodplain for floodwater and debris storage and reestablishment of channel migration within a 3-mile-long reach of the channel. In addition, flood damage reduction benefits experienced by Hamilton City residents will be quantified through the modeling analysis. The first phase of the analysis includes building and calibrating a 2D model of existing conditions with all levees in place, reflecting current land uses and their respective roughness values. The second phase is running the model to reflect potential riparian restoration, a setback levee somewhere southwest of the existing levee, and removal of private levees on the USFWS Pine Creek Unit. The third

phase involves a preliminary setback levee design including a foundation investigation and flow net seepage analysis.

The Nature Conservancy. Riparian Recruitment Pilot Study. Cottonwoods (*Populus* species) are a keystone riparian species, and river regulation often results in a decrease in seedling recruitment. TNC, in partnership with California Department of Water Resources, has completed a draft pilot project to evaluate the current status of cottonwood recruitment with respect to the present altered flow regime of the Sacramento River. The pilot study involves topographic surveys across the floodplain, the development of site-specific stage discharge relations, and a dendrochronological analysis of existing stands of cottonwood forest. The pilot study is based on a model of cottonwood recruitment that has met with success on other rivers where river managers have mimicked some aspects of the flow regime that are critical to cottonwood recruitment. The successful natural recruitment of cottonwood seedlings serves as an indicator of ecosystem function. Successful cottonwood recruitment integrates many natural river processes, including a more natural flow regime; limited channel meander; creation of quality habitat for riparian species, accretion of new floodplain; and, at a longer temporal scale, the production of large woody debris serving critical habitat function for migrating Chinook salmon.

The Nature Conservancy. Integrating Floodplain Management. Various ongoing studies will be combined at the subreach scale to develop an integrated approach to floodplain management in this area. This may include integration of multi-agency ownership and policy (such as public access) the determination of the highest and best use for multiple parcels in the area, and locations of compatible agriculture and how to implement compatible agriculture in conjunction with restoration.

The Nature Conservancy. Restoration/Planning Proposal. TNC has submitted a restoration/planning proposal to the CVPIA Anadromous Fish Restoration Program. The proposal would fund the planning and restoration of one parcel at the confluence of the Sacramento River and Big Chico Creek as a demonstration of parcel-specific planning within the subreach-planning context. This proposal is not currently funded.

The Nature Conservancy. Sacramento River Public Recreation Access Study: Red Bluff to Colusa. This report was prepared by EDAW Consulting for the Nature Conservancy's Sacramento River Project. One of the goals of this study was to recommend future public recreation access opportunities and programs within the 100-mile long study area along the Sacramento River. The study identified that the area would benefit from increased facilities and amenities such as trails, picnicking, camping, improved boat ramps, and signage to anticipate the expected substantial population growth within the study area. The study also addresses increased coordination among land managers, law enforcement, and resource agencies with regard to recreation opportunities and public health and safety.

The Nature Conservancy. Socioeconomic Assessment of Proposed Habitat Restoration within the Riparian Corridor of the Sacramento River Conservation Area. This report was prepared by Jones and Stokes Associates with technical support from TWC Economics and Ayres & Associates for The Nature Conservancy's Sacramento River Project in March 2003. This document provides information regarding the social and

economic consequences that could result from the conversion of agricultural land along the river into a riparian corridor. The analysis is intended to describe possible future conditions on the basis of a number of broad assumptions, and to serve as a tool for those entities involved in habitat restoration programs along the Sacramento River. The document includes the potential socioeconomic consequences for recreation by creating the riparian corridor.

Numerous other prior studies and reports have valuable background information for the Feasibility Study. These studies and reports are listed in Chapter 12 references.

1.7 PLANNING PROCESS AND REPORT ORGANIZATION

The planning process consists of six major steps: (1) Specification of water and related land resources problems and opportunities; (2) Inventory, forecast and analysis of water and related land resources conditions within the study area; (3) Formulation of alternative plans; (4) Evaluation of the effects of the alternative plans; (5) Comparison of the alternative plans; and (6) Selection of the recommended plan based upon the comparison of the alternative plans.

This report documents the study process. It also serves as the environmental document for compliance with the NEPA and the CEQA. The chapter headings and order in this report generally follow the outline of an EIS. The report chapters relate to the six steps of the planning process as follows:

- The second chapter of this report, Need for and Objectives of Action, covers the first step in the planning process (Specification of water and related land resources problems and opportunities).
- The third chapter of this report, Alternative Plans, is the heart of the report and is therefore placed before the more detailed discussions of resources and effects. It covers the third step in the planning process (Formulation of alternative plans), the fifth step in the planning process (Comparison of alternative plans), and the sixth step of the planning process (Selection of the recommended plan based upon the comparison of the alternative plans).
- The fourth chapter of this report, Affected Environment, covers the second step of the planning process (Inventory, forecast and analysis of water and related land resources in the study area).
- And, the fifth chapter of this report, Environmental Consequences, covers the fourth step of the planning process (Evaluation of the effects of the alternative plans).
- The remaining chapters of the report discuss public involvement, review, and consultation (Chapter 6); list the report preparers (Chapter 7); describe compliance with applicable laws, policies, and plans (Chapter 8); present a description of the recommended plan (Chapter 9); and present the study recommendation (Chapter 10); a list of references (Chapter 11); and, a list of recipients of the March 2004 draft feasibility report/EIS/EIR (chapter 12). A list of acronyms and abbreviations and a glossary of terms precede Chapter 1. An index is at the end of the report.