Chapter 8

Compliance with Applicable Laws, Policies, and Plans and Regulatory Framework

This chapter provides preliminary information on the major requirements for permitting and environmental review and consultation for implementation of the SDIP. Certain local, state, and federal regulations require issuance of permits before project implementation; other regulations require agency consultation but may not require issuance of any entitlements before project implementation. The SDIP's requirements for permits and environmental review and consultation may change during the EIS/EIR review process as discussions with involved agencies proceed.

Regulatory Framework

Setting

The south Delta region is a diverse mix of multiple uses, functions, and values and includes agricultural lands, water conveyance networks, wildlife habitats, recreation opportunities, and recreation-based businesses. Because of the diverse nature of the region, proposed actions within this region are often subject to compliance and conformity with multiple laws, regulations, policies, plans, and agency requirements. Agencies responsible for the management and health of specific Delta functions and values, and for corresponding regulations, often have jurisdictions that overlap geographically. Thus, some agencies have collaborated with other agencies to create focused Delta region oversight agencies with goals and responsibilities guided and governed by plans, policies, and guidance documents.

CALFED Bay-Delta Program

The CALFED Bay-Delta Program is a cooperative effort of more than 24 state and federal agencies with regulatory and management responsibilities in the Bay-Delta to develop and implement a long-term comprehensive plan to restore ecological health and improve water management for beneficial uses of the Bay-Delta system. SDIP is a program element of the conveyance program of the Bay-Delta Plan, and is thus subject to the plan's requirements (refer to the CALFED

ROD for other program elements and Chapter 1 for additional CALFED discussion).

The SDIP is a proposed action subject to regulation by multiple agencies but is also a product of the collaboration of goals and responsibilities of DWR and Reclamation. These two agencies are involved because of the interrelated nature of federal CVP and state SWP operations and based on the 1987 COA. Through this agreement, DWR and Reclamation coordinate the operations of the SWP and CVP to meet the various Delta regulatory requirements (refer to Chapter 1 for additional COA discussion).

Laws, regulations, policies, plans, and agency requirements for the SDIP are discussed further below and are organized by federal and state requirements collectively, federal and state requirements separately, state and regional plan consistency, and by local plan consistency and regulatory requirements.

Federal and State Requirements

Federal and State Compliance Integration

National Environmental Policy Act and California Environmental Quality Act

The preparation of this joint EIS/EIR document for the SDIP requires close coordination and cooperation among the federal, state, and local agencies involved. Most agency involvement with the SDIP is limited to specific permitting and approvals related to each agency's authority and responsibility. As the federal and state lead agencies, Reclamation and DWR are responsible for the preparation of a NEPA- and CEQA-compliant EIS/EIR document for this project.

Federal and state guidelines, statutes, and regulations developed by CEQ and the OPR encourage and provide frameworks for agencies to comply with the requirements of both CEQA and NEPA concurrently. Such frameworks are summarized below.

Sections 15222 and 15226 of Chapter 3, Guidelines for Implementation of the CEQA, Title 14, CCR, state:

> If a lead agency finds that an EIS or finding of no significant impact would not be prepared by the federal agency by the time when a lead agency will need to consider an EIR or negative declaration, the lead agency should try to prepare a combined EIR-EIS or negative declaration–finding of no significant impact. To avoid the need for the federal agency to prepare a separate document for the same project, the lead agency must involve the federal agency in preparation of the joint document. This involvement is necessary because federal law generally prohibits a federal agency from using an EIR prepared by a state

> agency unless the federal agency was involved in the preparation of the document and State and local agencies should cooperate with federal agencies to the fullest extent possible to reduce duplication between the California Environmental Quality Act and the National Environmental Policy Act. Such cooperation should, to the fullest extent possible, include: (a) Joint planning processes, (b) Joint environmental research and studies, (c) Joint public hearings, (d) Joint environmental documents.

Under 40 CFR 1506.2, the NEPA CEQ regulations similarly encourage federal agencies to cooperate with local agencies:

> (a) Agencies authorized by law to cooperate with State agencies of statewide jurisdiction pursuant to section 102(2)(D) of the Act may do so.
>
> (b) Agencies shall cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements, unless the agencies are specifically barred from doing so by some other law. Except for cases covered by paragraph (a) of this section, such cooperation shall to the fullest extent possible include: (1) Joint planning processes. (2) Joint environmental research and studies. (3) Joint public hearings (except where otherwise provided by statute). (4) Joint environmental assessments.
>
> (c) Agencies shall cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and comparable State and local requirements, unless the agencies are specifically barred from doing so by some other law. Except for cases covered by paragraph (a) of this section, such cooperation shall to the fullest extent possible include joint environmental impact statements. In such cases one or more Federal agencies and one or more State or local agencies shall be joint lead agencies. Where State laws or local ordinances have environmental impact statement requirements in addition to but not in conflict with those in NEPA, Federal agencies shall cooperate in fulfilling these requirements as well as those of Federal laws so that one document will comply with all applicable laws.

In California, environmental review for this size and scope of project requires an EIR. The EIR records the scope of the applicant's proposal and analyzes all its known environmental effects. Project information is used by state and local permitting agencies in their evaluation of the proposed project. (OPR, Overview of the California Environmental Review and Permit Approval Process.)

Because this project requires federal involvement, it is also subject to the requirements of NEPA. Under NEPA, the federal equivalent of the EIR is the EIS. The processes of preparation, review, and acceptance of the EIR and EIS share many similarities but differ in the following ways: oversight agencies, level of detail in discussion of alternatives, mitigation requirements, terminology, and more. Additional details about NEPA and CEQA and the compliance requirements of SDIP are discussed further under Federal Requirements and State Requirements in this chapter.

Bay-Delta Framework Agreement

In June 1994, state-federal cooperation for the management and regulatory responsibility in the San Francisco Bay/Sacramento–San Joaquin River Delta Estuary (Bay-Delta Estuary) was formalized with the signing of a framework agreement by the state and federal agencies involved. The framework agreement pledged that the state and federal agencies would work together in three areas of Bay-Delta management:

- water quality standards formulation,
- coordination of SWP and CVP operations with regulatory requirements, and
- long-term solutions to problems in the Bay-Delta Estuary. (2001 CALFED Bay-Delta Program History.)

Bay-Delta Accord and Water Quality Standards

In December 1994, state and federal agencies reached agreement known as the Bay-Delta Accord on water quality standards and related provisions that would remain in effect for 3 years. This agreement was based on a proposal developed by the stakeholders. Elements of the agreement include:

- springtime export limits expressed as a percentage of Delta inflow,
- regulation of the salinity gradient in the estuary so that a salt concentration of two parts per thousand (X2) is positioned where it may be more beneficial to aquatic life,
- specified springtime flows on the lower San Joaquin River to benefit Chinook salmon, and
- intermittent closure of the Delta Cross Channel gates to reduce entrainment of fish into the Delta.

A second category of provisions is intended to reconcile operational flexibility and compliance with ESA). Compliance with provisions of the ESA is intended to result in no reduction in water supply from what would be available for export under other operational requirements of the agreement. This will be accomplished in part by better monitoring for the presence of aquatic organisms of concern, faster interpretation of monitoring information, and immediate response in the operation of export facilities. This is known as real-time monitoring.

A third category of provisions—referred to as *Category III*—is intended to improve conditions in the Bay-Delta Estuary that are not directly related to Delta outflow. Some of these Category III measures may include screening water diversions, waste discharge control, and habitat restoration. Parties to the agreement committed to implementation and financing of such measures and estimated that a financial commitment of $60 million would be required in each of the 3 years of the agreement.

The 1994 Accord is reflected in the State Water Board's *Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* dated December 1994 and the *Final Water Quality Plan*, which was adopted May 22, 1995.

The Accord was extended in 1997 for 1 year, and again in 1998, to allow the CALFED Program to continue working with stakeholders to develop a long-term solution for problems in the Bay-Delta system.

The CALFED ROD expressly replaced the provisions of the Accord in their entirety. The SDIP is a project level component of the ROD.

California-Federal Operations Group

The 1994 Bay-Delta Framework Agreement also established the California-Federal Operations Group (CALFED Ops Group) to coordinate SWP and CVP operations. The CALFED Ops Group consists of representatives from the project agencies (Bureau of Reclamation and the California Department of Water Resources), the management agencies (U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Game), the U.S. Environmental Protection Agency and staff of the State Water Resources Control Board. Its functions include reviewing, discussing, coordinating, and cooperating with others on activities related to operating the CVP and SWP to meet requirements of the winter-run salmon and delta smelt biological opinions, applicable state and federal water quality standards, and the CVPIA. The group recommends changes in combined Delta operations that allow for Delta exports while minimizing incidental take and satisfying other ESA biological opinion requirements based on real-time fish monitoring results. Other responsibilities of the CALFED Ops Group include satisfying 1995 WQCP water quality objectives, and cooperating with the IEP to (1) determine factors that affect Delta habitat and the health of fisheries, and (2) identify appropriate corrective measures for the CVP and SWP. The IEP is a consortium of agencies that work together to develop a better understanding of the estuary's ecology and the effects of water project operations on the physical, chemical, and biological conditions of the Bay-Delta Estuary. The IEP provides information about the factors that affect ecological resources in the Bay-Delta Estuary that allows for more efficient management of the estuary. The IEP has 10 member agencies including DWR, DFG, State Water Board, USFWS, Reclamation, USGS, the Corps, NOAA Fisheries, USEPA, and the San Francisco Estuary Institute (a nongovernmental organization). Currently, the CALFED Ops Group functions as a stakeholder group for various CALFED projects, including SDIP.

Water Operations Management Team and Data Assessment Team

The Water Operations Management Team (WOMT) is a group composed of executives from DWR, Reclamation, DFG, USFWS, and NOAA Fisheries. The

group has the responsibility of making decisions about CVP and SWP operations for the following week based on proposed project operations. The WOMT does not normally include stakeholders, however they may be invited depending on the subject of the meeting. The Data Assessment Team (DAT) is an advisory group composed of biologists and SWP and CVP operations staff. This group meets on an as needed basis to make agency recommendations to WOMT. The DAT identifies abundance and distribution of special-status species to determine if changes in operation and pumping would reduce take. This input is presented to the WOMT for consideration in making final decisions about operations of CVP and SWP facilities. Implementation of the SDIP would require decisions by the WOMT regarding operations of the gates.

Long-Term Solutions

The third element of the Framework Agreement called for a joint state-federal process to develop long-term solutions to problems in the Bay-Delta Estuary related to fish and wildlife, water supply reliability, natural disasters, and water quality. The intent is to develop a comprehensive and balanced plan that addresses all of the resource problems. This effort is carried out under the policy direction of the CALFED agencies.

The public has a central role in the development of a long-term solution. A group of more than 30 citizen-advisors selected from California's agriculture, environmental, urban, business, fishing, and other interests with a stake in finding long-term solutions for the problems of the Bay-Delta Estuary was chartered under the Federal Advisory Committee Act as the Bay-Delta Advisory Council (BDAC). BDAC advised the CALFED agencies on its mission and objectives, the problems to be addressed, and proposed actions. BDAC also provided a forum for public participation and reviewed reports and other materials prepared by CALFED staff.

In 2000 the BDAC was terminated and was replaced by the Bay-Delta Public Advisory Committee (BDPAC) which was chartered in 2001. The purpose of this new committee is to provide recommendations to the Secretary of the Interior, the Governor of California, other participating federal agencies, and California Bay-Delta Authority (Authority) on the implementation of the CALFED ROD. This committee is expected to exist until the completion of Stage 1 of the CALFED Program in 2008 (California Bay-Delta Authority 2003).

The CALFED Program is managed by an interdisciplinary, interagency staff team and assisted by technical experts from state and federal agencies as well as consultants. The program is following a three-phase process to achieve broad agreement on long-term solutions.

First, a clear definition of the problems to be addressed and a range of solution alternatives were developed. Second, to comply with CEQA and NEPA, a program-level or first-tier EIS/EIR was prepared to identify impacts associated

with the various alternatives. Finally, a project-level or second-tier EIS/EIR will be prepared for each element of the selected solution.

In the first phase, the CALFED Program developed a range of alternatives, consisting of hundreds of actions. The program conducted meetings and workshops to obtain public input, prepared a notice of intent and notice of preparation pursuant to NEPA and CEQA, and held public scoping sessions to determine the focus and content of the EIS/EIR. The first phase concluded in September 1996 with the development of a range of alternatives for achieving long-term solutions to the problems of the Bay-Delta Estuary.

During Phase II, the program conducted a comprehensive programmatic environmental review process. A draft programmatic EIS/EIR and interim Phase II Report identifying three draft alternatives and program plans was released on March 16, 1998. The release of the documents was followed by a 105-day public comment period. On June 25, 1999, CALFED again released a draft programmatic EIS/EIR followed by a 90-day comment period. The final programmatic EIS/EIR was released July 21, 2000, followed by the ROD on August 28, 2000. The ROD completed Phase II.

The CALFED Program is now in Phase III—implementation of the preferred alternative. The first 7 years of this phase is referred to as Stage 1 and will lay the foundation for the following years. Site-specific, detailed environmental review will occur during this phase prior to the implementation of each proposed action. Implementation of the CALFED Bay-Delta solution is expected to take 30 years.

As of January 1, 2003, the Authority formally assumed responsibility for the implementation of the Bay-Delta Program. This new agency was established by Senate Bill (SB) 1653 (Costa) enacted in 2002 which provides a permanent governance structure to the state-federal effort that began in 1994.

SB 1653 (Costa) requires the Authority to provide accountability, ensure balanced implementation of the Program, use sound science and ensure public involvement and outreach. This legislation also provides for the Authority to sunset on January 1, 2006, unless federal legislation has been enacted to authorize the participation of appropriate federal agencies in the Authority (California Bay-Delta Authority 2001).

Since the inception of the program, progress has been made in all three areas. These management efforts have included close cooperation not only among state and federal agencies, but involvement of urban and agricultural water users, fishing interests, environmental organizations, business, and others. These groups—the stakeholders in resources of the Bay-Delta Estuary—play an important role in the collaborative process of solving problems.

The Multi-Species Conservation Strategy

The Multi-Species Conservation Strategy (MSCS) is an approach that entities implementing CALFED actions may use to fulfill the requirements of the ESA, CESA, and the Natural Community Conservation Plan Act (NCCPA). The MSCS serves as the CALFED programmatic BA under Section 7 of the ESA and the Natural Community Conservation Plan (NCCP) under the NCCPA. In instances in which a nonfederal entity proposes to implement a CALFED action that does not require federal permits, funding, or other authorization, the MSCS can also act as a programmatic level habitat conservation plan (HCP) under the Section 10 process.

Specifically, the MSCS:

- analyzes CALFED's effects on 244 *evaluated species* and 20 natural communities (*NCCP communities*)—comprising 18 habitats and two ecologically based fish groups composed of anadromous and estuarine fish species for ESA, CESA, and NCCPA purposes;
- identifies species goals (*recovery, contribute to recovery*, or *maintain*) for each of the 244 evaluated species, as well as conservation measures to achieve the goals;
- identifies goals for each of the 20 NCCP communities, as well as conservation measures to achieve the goals; and
- provides for the preparation of ASIPs, which will strengthen and simplify the CALFED Program's compliance with ESA, CESA, and NCCPA.

The MSCS contains two types of conservation measures:

- measures to avoid, minimize, and compensate for adverse effects to NCCP communities and evaluated species caused by individual program actions; and
- measures to enhance NCCP communities and evaluated species that are not directly linked to adverse effects from program actions.

On February 2, 2002, Governor Davis signed SB 107, which completely repealed and replaced the NCCPA with a new NCCPA. SB 107 became effective on January 1, 2003. However, in accordance with Section 2830 (c) of SB 107, the MSCS will remain in place as an approved NCCP, and DFG may authorize take of covered species pursuant to the MSCS and DFG's NCCP approval.

Action Specific Implementation Plans

The MSCS requires CALFED project proponents and lead agencies (if different from the project proponent) to coordinate preparation of ASIPs with USFWS, NOAA Fisheries, and DFG. This coordination initiates informal consultation under Section 7 of the ESA. The SDIP ASIP serves as the SDIP biological

assessment under Section 7 of the ESA and as the SDIP NCCP under the NCCPA.

ASIPs, which are consistent with information presented in the MSCS, present the information necessary for USFWS and/or NOAA Fisheries to issue incidental take authorization under Section 7 of the ESA for six species covered under the CALFED USFWS Programmatic BO and three species covered under the CALFED NOAA Fisheries Programmatic BO, and for DFG to issue incidental take authorization under Section 2835 of the NCCPA for 25 species covered under the CALFED Programmatic NCCP Determination.

To fulfill the requirements of ESA Sections 7 and 10 and California Fish and Game Code Sections 2835 and 2081, as applicable, each ASIP must include the following:

- detailed project description of the CALFED action or group of actions to be implemented, including site-specific and operational information;
- a list of evaluated species and any other special-status species that occur in the action area;
- an analysis identifying the direct, indirect, and cumulative impacts on the evaluated species other special-status species occurring in the action area (along with an analysis of impacts on any designated critical habitat) likely to result from the proposed CALFED action or group of actions, as well as actions related to and dependent on the proposed action;
- measures the implementing entity will undertake to avoid, minimize, and compensate for such impacts and, as appropriate, measures to enhance the condition of NCCP communities and evaluated species, along with a discussion of: (1) a plan to monitor the impacts and the implementation and effectiveness of these measures, (2) the funding that will be made available to undertake the measures, and (3) the procedures to address changed circumstances;
- measures the implementing entity will undertake to provide commitments to cooperating landowners, consistent with the discussion in Section 6.3.5 below;
- a discussion of alternative actions the applicant considered that would not result in take, and the reasons why such alternatives are not being used;
- additional measures USFWS, NOAA Fisheries, and DFG may require as necessary or appropriate for compliance with ESA, CESA, and NCCPA; and
- a description of how and to what extent the action or group of actions addressed in the ASIP will help the CALFED Program achieve the MSCS's goals for the affected species (i.e., how the ASIP implements the MSCS).

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) in general requires federal agencies to coordinate with USFWS and state fish and game agencies whenever streams or bodies of water are controlled or modified. This coordination is intended both to promote the conservation of wildlife resources by providing equal consideration for fish & wildlife in water project planning and to provide for the development and improvement of wildlife resources in connection with water projects. Federal agencies undertaking water projects are required to include recommendations made by USFWS and state fish and game agencies in project reports, and give full consideration to these recommendations.

In conjunction with the issuance of a draft EIS/EIR, USFWS will provide a Coordination Act Report in accordance with the FWCA.

Federal Requirements

NEPA

NEPA is the nation's broadest environmental law, applying to all federal agencies and most of the activities they manage, regulate, or fund that affect the environment. It requires federal agencies to disclose and consider the environmental implications of their proposed actions. NEPA establishes environmental policies for the nation, provides an interdisciplinary framework for federal agencies to prevent environmental damage, and contains action-forcing procedures to ensure that federal agency decision makers take environmental factors into account.

NEPA requires the preparation of an appropriate document to ensure that federal agencies accomplish the law's purposes. The President's CEQ has adopted regulations and other guidance that provide detailed procedures that federal agencies must follow to implement NEPA. Reclamation would use this EIS/EIR to comply with CEQ's regulations and document NEPA compliance.

Federal Endangered Species Act

Section 7 of the ESA requires federal agencies, in consultation with USFWS and/or NOAA Fisheries, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species. The required steps in the Section 7 consultation process are as follows:

- Agencies must request information from USFWS and/or NOAA Fisheries on the existence in a project area of special-status species or species proposed for listing.

- Following receipt of the USFWS/NOAA Fisheries response to this request, agencies generally prepare a BA to determine whether any special-status species or species proposed for listing are likely to be affected by a proposed action.
- Agencies must initiate formal consultation with USFWS and/or NOAA Fisheries if the proposed action may adversely affect special-status species.
- USFWS and/or NOAA Fisheries must prepare a BO to determine whether the action would jeopardize the continued existence of special-status species or adversely modify their critical habitat.
- If a finding of jeopardy or adverse modifications is made in the biological opinion, USFWS and/or NOAA Fisheries must recommend reasonable and prudent alternatives that would avoid jeopardy, and the federal agency must modify project approval to ensure that special-status species are not jeopardized and that their critical habitat is not adversely modified (unless an exemption from this requirement is granted).

The SDIP ASIP serves as the SDIP BA under Section 7 of the ESA.

Clean Water Act Section 404, 404(b)(1) Guidelines and Section 401

Section 404

Section 404 of the CWA requires that a permit be obtained from the Corps for the discharge of dredged or fill material into "waters of the United States, including wetlands."

Waters of the United States include wetlands and lakes, rivers, streams, and their tributaries. Wetlands are defined for regulatory purposes, at 33 CFR 328.3 as:

> (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of tide; (2) All interstate waters, including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; (4) All impoundments of waters otherwise defined as waters of the United States under the definition; (5) Tributaries of waters identified in paragraphs 1–4 in this section; (6) The territorial seas; and (7) Wetlands adjacent to waters identified in paragraphs 1–6 in this section.

CWA Section 404(b) requires that the Corps process permits in compliance with guidelines developed by EPA. These guidelines (404(b)(1) Guidelines) require that there be an analysis of alternatives available to meet the project purpose and need including those that avoid and minimize discharges of dredged or fill materials in waters. Once this first test has been satisfied, the project that is

permitted must be the least environmentally damaging practical alternative before the Corps may issue a permit for the proposed activity.

Actions typically subject to Section 404 requirements are those that would take place in wetlands or stream channels, including intermittent streams, even if they have been realigned. Within stream channels, a permit under Section 404 would be needed for any discharge activity below the ordinary high water mark, which is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, or the presence of litter or debris.

The CALFED ROD for the Final Programmatic EIS/EIR includes a CWA Section 404 memorandum of understanding (MOU) signed by Reclamation, EPA, the Corps, and DWR. Under the terms of the MOU, when a project proponent applies for a Section 404 individual permit for CALFED projects, the proponent is not required to reexamine program alternatives already analyzed in the Programmatic EIS/EIR. The Corps and EPA will focus on project-level alternatives that are consistent with the PEIS/EIR when they select the least environmentally damaging practicable alternative at the time of a Section 404 permit decision.

A 404 (b)(1) Alternatives information package will be prepared for the SDIP and submitted to the Corps and EPA.

Note: Section 404 does not apply to authorities under the Rivers and Harbors Act of 1899 except that some of the same waters may be regulated under both statutes; the Corps typically combines the permit requirements of Section 10 and Section 404 into one permitting process.

Section 401

Under CWA Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and may affect state water quality (including projects that require federal agency approval [such as issuance of a Section 404 permit]) must also comply with CWA Section 401. In California, the authority to grant water quality certification has been delegated to the State Water Board, and applications for water quality certification under CWA Section 401 are typically processed by the RWQCB with local jurisdiction. Water quality certification requires evaluation of potential impacts in light of water quality standards and CWA Section 404 criteria governing discharge of dredged and fill materials into waters of the United States.

For purposes of this project, Reclamation will obtain certification from the Central Valley RWQCB under Section 401 of the CWA.

River and Harbors Appropriation Act of 1899

The River and Harbors Appropriation Act of 1899 addresses activities that involve the construction of dams, bridges, dikes, etc., across any navigable water, or placing obstructions to navigation outside established federal lines and excavating from or depositing material in such waters, require permits from the Corps. Navigable waters are defined in section 329.4 as:

> Those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.

In the Corps Sacramento District, navigable waters of the U.S. in the project area that are subject to the requirements of the River and Harbors Appropriation Act include Middle River, San Joaquin River, Old River, and all waterways in the Sacramento–San Joaquin drainage basin affected by tidal action (U.S. Army Corps of Engineers 2003). Sections of the River and Harbors Act applicable to the SDIP are:

Section 9

Section 9 (33 USC 401) prohibits the construction of any dam or dike across any navigable water of the United States in the absence of Congressional consent and approval of the plans by the Chief of Engineers and the Secretary of the Army. Where the navigable portions of the water body lie wholly within the limits of a single state, the structure may be built under authority of the legislature of that state, if the location and plans or any modification thereof are approved by the Chief of Engineers and by the Secretary of the Army.

Section 10

Section 10 (33 USC 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters, is unlawful unless the work has been authorized by the Chief of Engineers.

Section 13

Section 13 (33 USC 407) provides that the Secretary of the Army, whenever the Chief of Engineers determines that anchorage and navigation will not be injured thereby, may permit the discharge of refuse into navigable waters. In the absence of a permit, such discharge of refuse is prohibited. While the prohibition of this section, known as the Refuse Act, is still in effect, the permit authority of the Secretary of the Army has been superseded by the permit authority provided the

Administrator, EPA, and the states under Sections 402 and 405 of the CWA, respectively.

Central Valley Project Improvement Act

The CVP is the largest federal Reclamation project and was originally authorized by the Rivers and Harbors Act of 1935. It was reauthorized in 1937 for the purposes of several beneficial uses including improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of stored water, to accommodate reclamation of arid and semiarid lands, and electricity generation. This Act also designated the order of priority for which each use would have. Since then, subsequent amendments have refined and further defined the objectives and agencies roles in the CVP's operations. The CVPIA, signed in October 1992, made significant changes to the management of the CVP and created a complex set of new programs and requirements applicable to the project. These changes and programs cover five primary areas:

- limitations on new and renewed CVP contracts,
- water conservation and other water management actions,
- water transfers,
- fish and wildlife restoration actions, and
- establishment of an environmental restoration fund.

With a few exceptions, new contracts for CVP water are prohibited until several requirements have been met, including completion of a programmatic EIR.

The CVPIA requires that 800,000 acre-feet of project yield be dedicated to fish and wildlife habitat purposes each year. In 1993, the secretary approved a memorandum signifying roles of Reclamation and USFWS in regard to implementing the CVPIA. The USFWS's role was defined as having "primary responsibility for decisions on biological resource issues; for studies on fish and wildlife, their populations and habitat requirements; for fishery restoration program direction; and for the planning, design, and decisions on the administration of fish and wildlife facilities."

For the SDIP, the CVPIA section 3406(b)(15) provides Reclamation the authority to revise operations and construct a fish control gate in the south Delta at the head of Old River to increase survival rates of outmigrating salmon.

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) establishes a management system for national marine and estuarine fishery resources. This legislation requires that all federal agencies consult with NOAA Fisheries regarding all actions or proposed actions permitted, funded, or undertaken that may adversely affect "essential fish habitat." Essential fish habitat is defined as "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The legislation states that migratory routes to and from anadromous fish spawning grounds are considered essential fish habitat. The phrase *adversely affect* refers to the creation of any impact that reduces the quality or quantity of essential fish habitat. Federal activities that occur outside of an essential fish habitat but that may, nonetheless, have an impact on essential fish habitat waters and substrate must also be considered in the consultation process.

Under the Magnuson-Stevens Act, effects on habitat managed under the Pacific Salmon Fishery Management Plan must also be considered. The Magnuson-Stevens Act states that consultation regarding essential fish habitat should be consolidated, where appropriate, with the interagency consultation, coordination, and environmental review procedures required by other federal statutes, such as NEPA, FWCA, CWA, and ESA. Essential fish habitat consultation requirements can be satisfied through concurrent environmental compliance if the lead agency provides NOAA Fisheries with timely notification of actions that may adversely affect essential fish habitat and if the notification meets requirements for essential fish habitat assessments. Reclamation and associated cooperating agencies will use the EIS/EIR and ASIP to comply with Magnuson-Stevens Act regulations.

National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to evaluate the effects of their undertakings on historic properties, which are those properties eligible for listing on, or listed on, the NRHP. Implementing regulations at 36 CFR Part 800 require that federal agencies, in consultation with the SHPO, identify historic properties within the APE of the proposed project and make an assessment of adverse effects if any are identified. If the project is determined to have an adverse effect on historic properties, the agency is required to consult further with the SHPO and the Advisory Council on Historic Preservation (ACHP) to develop methods to resolve the adverse effects. The Section 106 process has four basic steps:

1. Initiation of the Section 106 process (define APE and scope of identification efforts).
2. Evaluation of historic properties.

3. Determination from adverse effects to historic properties.
4. Resolution of adverse effects to historic properties.

This EIS/EIR summarizes the efforts taken to identify cultural resources within the APE and evaluates their eligibility for listing in the NRHP (See Section 7.7). Reclamation has initiated the Section 106 process, and will complete consultation with the SHPO prior to the issuance of the SDIP EIS/EIR ROD.

Farmland Protection Policy Act and Memoranda on Farmland Preservation

Two policies require federal agencies to include assessments of the potential effects of a proposed project on prime and unique farmland. These policies are the FPPA and the Memoranda on Farmland Preservation, dated August 30, 1976, and August 11, 1980, respectively, from the CEQ. Under requirements set forth in these policies, federal agencies must determine these effects before taking any action that could result in converting designated prime or unique farmland for nonagricultural purposes. If implementing a project would adversely affect farmland preservation, the agencies must consider alternative actions to lessen those effects. Federal agencies also must ensure that their programs, to the extent practicable, are compatible with state, local, and private programs to protect farmland. NRCS is the federal agency responsible for ensuring that these laws and policies are followed.

In this EIS/EIR, the effects to agricultural lands from implementation of the SDIP have been assessed using methods described in Section 7.1, Land and Water Use, and through consultation with NRCS. One impact, the potential for substantial loss of important farmland as a result of constructing the permanent operable gates and dredging in the local project area, was identified. Mitigation is proposed to address this impact and minimize (or compensate for) agricultural losses.

Executive Order 11988 (Floodplain Management)

Executive Order 11988 (May 24, 1977) requires federal agencies to prepare floodplain assessments for proposed actions located in or affecting floodplains. If an agency proposes to conduct an action in a floodplain, it must consider alternatives to avoid adverse effects and incompatible development in the floodplain. If the only practicable alternative involves siting in a floodplain, the agency must minimize potential harm to or in the floodplain and explain why the action is proposed in the floodplain.

The SDIP project elements are being integrated into the existing comprehensive flood control system of the Delta.

Executive Order 11990 (Protection of Wetlands)

Executive Order 11990 (May 24, 1977) requires federal agencies to prepare wetland assessments for proposed actions located in or affecting wetlands. Agencies must avoid undertaking new construction in wetlands unless no practicable alternative is available and the proposed action includes all practicable measures to minimize harm to wetlands. Section 6.2 of this EIS/EIR, Vegetation and Wetlands, describes impacts on wetlands and mitigation measures for reducing significant impacts.

Executive Order 12898 (Environmental Justice)

Executive Order 12898 (February 11, 1994) requires federal agencies to identify and address adverse human health or environmental effects of federal programs, policies, and activities that could be disproportionately high on minority and low-income populations. Federal agencies must ensure that federal programs or activities do not directly or indirectly result in discrimination on the basis of race, color, or national origin. Federal agencies must provide opportunities for input into the NEPA process by affected communities and must evaluate the potentially significant and adverse environmental effects of proposed actions on minority and low-income communities during environmental document preparation. Even if a proposed federal project would not result in significant adverse impacts on minority and low-income populations, the environmental document must describe how Executive Order 12898 was addressed during the NEPA process.

Executive Order 13007 (Indian Sacred Sites) and April 29, 1994, Executive Memorandum

Executive Order 13007 (May 24, 1996) requires federal agencies with land management responsibilities to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies are to maintain the confidentiality of sacred sites. Among other things, federal agencies must provide reasonable notice of proposed actions or land management policies that may restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites. The agencies must comply with the April 29, 1994, Executive Memorandum, "Government-to-Government Relations with Native American Tribal Governments."

Based on the analysis, no sacred sites would be adversely affected by the implementation of SDIP.

Federal Clean Air Act

The federal Clean Air Act (CAA) was enacted to protect and enhance the nation's air quality in order to promote public health and welfare and the productive capacity of the nation's population. The CAA requires an evaluation of any federal action to determine its potential impact on air quality in the project region. California has a corresponding law, which also must be considered during the EIR process.

For specific projects, federal agencies must coordinate with the appropriate air quality management district as well as with EPA. This coordination would determine whether the project conforms to the CAA and the State Implementation Plan (SIP).

Section 176 of the CAA prohibits federal agencies from engaging in or supporting in any way an action or activity that does not conform to an applicable SIP. Actions and activities must conform to a SIP's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and in attaining those standards expeditiously. EPA promulgated conformity regulations (codified in 40 CFR 93.150 *et seq.*).

The potential air quality impacts of the SDIP are discussed in Section 5.9 of this EIS/EIR.

Federal Water Project Recreation Act

The Federal Water Project Recreation Act requires federal agencies with authority to approve water projects to include recreation development as a condition of approving permits. Recreation development must be considered along with any navigation, flood control, reclamation, hydroelectric, or multipurpose water resource project. The act states that "consideration should be given to opportunities for outdoor recreation and fish and wildlife enhancement whenever any such project can reasonably serve either or both purposes consistently."

Compliance with the act is achieved through the documentation of the consideration of recreation opportunities in Corps reports and NEPA documents. Within this joint CEQA/NEPA EIS/EIR document, DWR and Reclamation have taken into consideration, and addressed, outdoor recreation and fish and wildlife enhancement in the south Delta region.

The SDIP addresses outdoor recreation and fish and wildlife enhancement through the implementation of a fish control gate, boat locks, boat ramps, and public restroom facilities. The proposed fish control gate, located at the confluence of Old River with the San Joaquin River, is designed to enhance both fish and wildlife, and recreational fishing, through the implementation of a gate that would minimize downstream movement of special-status fish species into

the south Delta waterways from the San Joaquin River. Boat locks proposed at Old River and Grant Line Canal would provide access for recreational/fishing boat users; and public restroom facilities would be provided at all four gate locations.

State Requirements

California Environmental Quality Act

CEQA requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The environmental review required imposes both procedural and substantive requirements. At a minimum, an initial review of the project and its environmental effects must be conducted. CEQA's primary objectives are to:

- disclose to decision makers and the public the significant environmental effects of proposed activities,
- identify ways to avoid or reduce environmental damage,
- prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures,
- disclose to the public reasons for agency approval of projects with significant environmental effects,
- foster interagency coordination in the review of projects, and
- enhance public participation in the planning process.

CEQA applies to all discretionary activities proposed to be carried out or approved by California public agencies, including state, regional, county, and local agencies, unless an exemption applies. It requires that public agencies comply with both procedural and substantive requirements. Procedural requirements include the preparation of the appropriate public notices (including notices of preparation), scoping documents, alternatives, environmental documents (including mitigation measures, mitigation monitoring plans, responses to comments, findings, and statements of overriding considerations); completion of agency consultation and State Clearinghouse review; and provisions for legal enforcement and citizen access to the courts.

CEQA's substantive provisions require agencies to address environmental impacts disclosed in an appropriate document. When avoiding or minimizing environmental damage is not feasible, CEQA requires agencies to prepare a written statement of overriding considerations when they decide to approve a project that will cause one or more significant effects on the environment that cannot be mitigated. CEQA establishes a series of action-forcing procedures to ensure that agencies accomplish the purposes of the law. In addition, under the direction of CEQA, the California Resources Agency has adopted regulations, known as the State CEQA Guidelines, which provide detailed procedures that

agencies must follow to implement the law. DWR would use this EIS/EIR to comply with State CEQA requirements.

California Endangered Species Act

The CESA requires a state lead agency to consult formally with DFG when a proposed action may affect state-listed endangered or threatened species. The provisions of the ESA and CESA will often be activated simultaneously. The assessment of project effects on species listed under both the ESA and CESA is addressed in USFWS's and NOAA Fisheries' BOs. However, for those species listed only under CESA, DWR must formally consult with DFG, and DFG must issue a BO separate from USFWS's BO. The preparation of an ASIP serves to comply with Section 2081 of the CESA and Section 2835 of the NCCPA. The ASIP will be distributed subsequent to the EIS/EIR during the public review period.

Natural Community Conservation Planning Act

The NCCPA, California Fish and Game Code, Section 2800, et seq., was enacted to form a basis for broad-based planning to provide for effective protection and conservation of the state's wildlife heritage, while continuing to allow appropriate development and growth. The purpose of natural community conservation planning is to sustain and restore those species and their habitat identified by DFG that are necessary to maintain the continued viability of biological communities affected by human changes to the landscape. An NCCP identifies and provides for those measures necessary to conserve and manage natural biological diversity within the plan area while allowing compatible use of the land. DFG may authorize the take of any identified species, including listed and non-special-status species, pursuant to Section 2835 of the NCCPA, if the conservation and management of such species is provided for in an NCCP approved by DFG. For the SDIP, an ASIP has been prepared to serve as the equivalent of an NCCP. Pursuant to the NCCPA, DFG, as a responsible agency and trustee agency, may rely on the EIS/EIR and the ASIP to authorize take of covered species identified in the ASIP. DFG may issue an NCCP permit for the Physical/Structural Component under existing operations, and for existing SWP operations, described for the Stage 1 decision-making process. After DWR completes any further analysis for the Stage 2 decision-making process relative to the Operational Component, DFG may amend the NCCP permit to authorize take associated with this stage.

Section 1602 of the California Fish and Game Code

DFG regulates work that will substantially affect resources associated with rivers, streams, and lakes in California, pursuant to Fish and Game Code Sections 1600–1607. Any action from a public project that substantially diverts or

obstructs the natural flow or changes the bed, channel, or bank of any river, stream, or lake, or uses material from a streambed must be previously authorized by DFG in a Lake or Streambed Alteration Agreement under Section 1602 of the Fish and Game Code. This requirement may in some cases apply to any work undertaken within the 100-year floodplain of a body of water or its tributaries, including intermittent streams and desert washes. As a general rule, however, it applies to any work done within the annual high-water mark of a wash, stream, or lake that contains or once contained fish and wildlife, or that supports or once supported riparian vegetation.

Activities associated with SDIP that require 1602 authorization and a Streambed Alteration Agreement include the modification and setting back of the existing levees, placement of fish and flow control gates, and conveyance improvements. These actions would result in the alteration of the flow within water bodies and occur within the annual high-water mark of water bodies that contain and wildlife, and support riparian vegetation.

The current temporary barriers program operates under DFG 1602 authorization. This EIS/EIR document will be used as the CEQA review document by DWR for either continued authorization of activities under the existing agreement, or for the issuance of a new Streambed Alteration Agreement (California Fish and Game Code 1600).

Porter-Cologne Water Quality Control Act of 1969

In 1967, the Porter-Cologne Act established the State Water Board and nine RWQCBs as the primary state agencies with regulatory authority over California water quality and appropriative surface water rights allocations. Under this act (and the CWA), the state is required to adopt a water quality control policy and WDRs to be implemented by the State Water Board and nine RWQCBs. The State Water Board also establishes WQCPs) and statewide plans. The RWQCBs carry out State Water Board policies and procedures throughout the state.

WQCPs, also known as basin plans, designate beneficial uses for specific surface water and groundwater resources and establish water quality objectives to protect those uses. WQCPs and water resource management plans relevant to SDIP include the WQCP for the Sacramento and San Joaquin River Basins; San Francisco Bay Basin WQCP; WQCP for the Tulare Lake Basin; Inland Surface Waters Plan; the Enclosed Bays and Estuaries Plan; and the Delta Plan. Delta-specific beneficial uses protected through water quality objectives are municipal and domestic water supply, agricultural supply, industrial supply (process and service), recreation (water contact and non-contact), freshwater habitat (warm- and coldwater), fish migration (warm- and coldwater), fish spawning (warmwater fish), wildlife habitat, and navigation. The basin plans define surface water quality objectives for several parameters, including suspended material, turbidity, pH, DO, bacteria, temperature, salinity, toxicity, ammonia, and sulfides.

The SDIP has the potential to affect water quality in surface water or groundwater in the Central Valley region and the San Francisco Bay region, which are governed by the Central Valley RWQCB and the San Francisco Bay RWQCB, respectively. Each SDIP alternative considered in this EIS/EIR was analyzed for compliance with the water quality objectives set forth in the applicable WQCPs. Section 5.3 of this EIS/EIR describes SDIP water quality compliance specific to these basin plans.

Water Use Efficiency

The California Constitution prohibits the waste or unreasonable use of water. Further, Water Code Section 275 directs DWR and the State Water Board to "take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste or unreasonable use of water." Several legislative acts have been adopted to develop efficient use of water in the state:

- Urban Water Management Planning Act of 1985,
- Water Conservation in Landscaping Act of 1992,
- Agricultural Water Management Planning Act,
- Agricultural Water Suppliers Efficient Management Practices Act of 1990,
- Water Recycling Act of 1991, and
- Agricultural Water Conservation and Management Act of 1992.

The purpose of the SDIP is to improve the efficiency of conveying existing water supplies to CVP and SWP; thus, the proposed action would not result in the waste or unreasonable use of water.

Public Trust Doctrine

When planning and allocating water resources, the State of California is required to consider the public trust and preserve for the public interest the uses protected by the trust. The public trust doctrine embodies the principle that certain resources, including water, belong to all and, thus, are held in trust by the state for future generations.

In common law, the public trust doctrine protects navigation, commerce, and fisheries uses in navigable waterways. However, the courts have expanded the doctrine's application to include protecting tideland, wildlife, recreation, and other public trust resources in their natural state for recreational, ecological, and habitat purposes as they affect birds and marine life in navigable waters. *The National Audubon Society v. Superior Court of Alpine County* (1983) 33 Cal 3d 419 decision extended the public trust doctrine's limitations on private rights to appropriative water rights, and also ruled that longstanding water rights could be subject to reconsideration and could possibly be curtailed. The doctrine,

however, generally requires the court and the State Water Board to perform a balancing test to weigh the potential value to society of a proposed or existing diversion against its impact on trust resources.

The 1986 Rancanelli decision applied the public trust doctrine to decisions by the State Water Board and held that this doctrine must be applied by the State Water Board in balancing all the competing interests in the uses of Bay-Delta waters (*United States v. State Water Resources Control Board* (1986) 182 Cal. App. 3d 82).

The SDIP is consistent with the public trust doctrine as its primary goals include a balance between fisheries, ecosystem restoration, and improved water supply reliability.

Davis-Dolwig Act

The Davis-Dolwig Act declares that recreation and fish and wildlife enhancement are among the purposes of state water projects. It specifies that costs for recreation and fish and wildlife enhancement not be included in prices, rates, and charges for water and power to urban and agricultural users. Under the Davis-Dolwig Act, land for recreation and fish and wildlife enhancement must be planned and initiated at the same time as any other land acquisition for the project. Implementation of the SDIP would include the construction of recreation facilities such as boat locks, drinking fountains and restrooms. The head of Old River fish control gate would serve to increase the population of outmigrating fish. Therefore, SDIP would be consistent with this Act.

State and Regional Plan Consistency

San Francisco Estuary Project's Comprehensive Conservation and Management Plan

The San Francisco Estuary Project (SFEP) was established by EPA in 1987 because of growing public concern related to the health of the bay and the Delta. SFEP is jointly sponsored by EPA and the State of California and is part of the National Estuary Program. The National Estuary Program was created by Congress in response to growing public concern over the decline of the nation's estuaries. The program's purpose is to protect and improve the water quality and natural resources of estuaries throughout the country by addressing the environmental problems specific to each. As directed by Section 320 of the CWA, representatives of each estuary in the National Estuary Program must develop a Comprehensive Conservation and Management Plan (CCMP).

The primary focus of the SFEP CCMP is to "restore and maintain the chemical, physical, and biological integrity of the bay and Delta." The CCMP provides a

thorough implementation strategy describing 145 actions to protect the Bay-Delta Estuary. Ten program areas are identified in the CCMP. For each program area, the CCMP presents a problem statement, discusses existing management, identifies program area goals, recommends approaches, and states objectives and actions specific to the program. With regard to wetlands, the CCMP focuses on the restoration and ultimate enhancement of ecological productivity and habitat value. SFEP defines the estuary as the waters of San Francisco Bay, San Pablo Bay, Suisun Bay, and the Sacramento–San Joaquin River Delta. The proposed project boundaries include these waters, their watersheds, and lands in the Delta as delineated by Section 12220 of the State Water Code. Implementation of the SDIP would be consistent with this program as it would assist DWR and Reclamation in improving water quality within the south Delta.

Area of Origin

During the years when the SWP and CVP were being developed, area of origin legislation was enacted to protect local northern California supplies from being depleted. County of origin statutes provide for the reservation of water supplies for counties in which the water originates when, in the judgment of the State Water Board, an application for the assignment or release from priority of a State water right filing would deprive the county of necessary water for present and future development. The proposed project will have little effect on water supplies for North of Delta users; therefore, this project is consistent with the area of origin legislation (see Section 5.1, Water Supply, for more detail).

Delta Protection Act of 1959

The Delta Protection Act, enacted in 1959 (not to be confused with the Delta Protection Act of 1992, which relates to land use), declares that the maintenance of an adequate water supply in the Delta—to maintain and expand agriculture, industry, urban, and recreational development in the Delta area and provide a common source of fresh water for export to areas of water deficiency—is necessary for the peace, health, safety, and welfare of the people of the state, subject to the County of Origin and Watershed Protection laws. The act requires the SWP and the CVP to provide an adequate water supply for water users in the Delta through salinity control or through substitute supplies in lieu of salinity control. In 1984, additional area of origin protections were enacted to prohibit the export of groundwater from the Sacramento River and the Delta basins unless export is in compliance with local ground water plans. Water Code Section 1245 also holds municipalities liable for economic damages resulting from their diversion of water from a watershed. (Bulletin 160-93.) Implementation of the SDIP would improve water quality and quantity for south Delta users, while allowing a greater diversion and pumping capacity at SWP Banks for south of Delta water contractors.

Water Rights Contracts

When the federal government undertook to construct the CVP nearly 40 years ago, the scheme of reservoirs and conveyances it contemplated threatened to substantially alter the natural flows of the Sacramento River, among other rivers. Because there were various irrigation, reclamation, and other water districts holding senior and vested water rights under California law to divert surface water from the Sacramento River, the government was forced to reckon with those water right holders in order to construct and operate the CVP.

Accordingly, Reclamation entered into long-term settlement contracts with these local districts, recognizing the districts' senior water rights to divert certain natural flows of the Sacramento River and also providing a contractual entitlement to additional water supplies during the summer months from the CVP's yield. The SWP also has water rights settlement with prior rights holders on the Feather River and in the Delta. The proposed project will allow the CVP and SWP more flexibility in the operations of the south Delta and will therefore have the potential to deliver more of the water that is contracted to south of Delta users.

Water Right Decision D-1485 and the 1978 Water Quality Control Plan

In 1978, the State Water Board adopted the WQCP for the Delta and Suisun Marsh (1978 Delta Plan). At the same time, the State Water Board adopted Water Right Decision D-1485, which required compliance with water quality objectives in the 1978 Delta Plan that were designed to protect natural resources by maintaining Delta conditions as they would exist in the absence of the CVP and SWP. This decision also mandated an extensive monitoring program and required special studies of the Delta and Suisun Marsh areas. D-1485 standards require that the SWP and CVP make operational decisions to maintain Delta water quality and to meet Delta freshwater outflow within specified limits.

Various interests challenged D-1485, and it was overturned in 1984. In 1986, the State Water Board was required by the Appellate Court to separate its water quality planning and water rights functions and maintain a "global perspective" in identifying beneficial uses and in allocating responsibility for implementing water quality objectives. Thus, the State Water Board revised its water quality standards and issued revised water quality objectives in the 1991 Delta WQCP for Salinity, Temperature and Dissolved Oxygen (1991 Delta Plan).

In response to D-1485, DWR and Reclamation signed the Coordinated Operation Agreement in 1986, which specified the respective responsibilities of each project. The agreement sets a formula for sharing the obligation of meeting water quality standards and other in-basin uses. The sharing formula provides for CVP/SWP proportionate splits of 75/25 responsibility for meeting in-basin use from stored water releases and 55/45 for capture and export of excess flow.

In 1992, interim standards were proposed in Water Right Decision 1630 (D-1630). EPA, however, rejected D-1630 and then announced its own proposed standards to replace those proposed by the State Water Board. Debate over the management of Delta waters resulted in the signing of the Joint Federal and State Delta Agreement between EPA and the State of California. Implementation of SDIP would improve water quality in the south Delta.

San Joaquin Valley Drainage Program

The Statewide Drainage Management Program/San Joaquin Valley Drainage Implementation Program (SJVDIP) is a function of the Office of Water Use Efficiency within the DWR. SJVDIP is an interagency program established in 1991 by an MOU signed among four state and four federal agencies. The MOU created the SJVDIP Management Group to help implement recommendations of the San Joaquin Valley Drainage Program published as the Rainbow Report in 1990. The 1990 report recommended a number of in-valley options to manage agricultural drainage and drainage-related problems. In 2000, the 1990 report was updated, and a new drainage management strategy was introduced to implement the updated recommendations. Because objectives of the SDIP include the improvement of water circulation and reduction of water pollution, SDIP would be consistent with the goals of the SJVDIP.

Land Use and Resource Management Plan for the Primary Zone of the Delta

The Delta Protection Act of 1992 (Public Resources Code Section 29760 *et. seq*.) requires the Delta Protection Commission to prepare and adopt and thereafter review and maintain a comprehensive long-term resource management plan for land uses within the Primary Zone of the Delta (resource management plan). The goals of the plan as set out in the act are to "protect, maintain, and where possible, enhance and restore the overall quality of the Delta environment, including but not limited to agriculture, wildlife habitat, and recreational activities; assure orderly, balanced conservation and development of Delta land resources and improve flood protection by structural and nonstructural means to ensure an increased level of public health and safety." Also pursuant to the act, to the extent that any of the requirements specified in this Land Use and Resource Management Plan are in conflict, nothing in this plan shall deny the right of the landowner to continue the agricultural use of the land (Land Use and Resource Management Plan for the Primary Zone of the Delta, Adopted February 23, 1995 [Delta Protection Commission 1995]).

The Commission adopted the plan on February 23, 1995, and provided it to the five counties within its jurisdiction to incorporate into their general plans and zoning codes. The Counties will then carry out the plan through their day-to-day activities. The proposed project will minimize and mitigate, to the extent possible, any impacts to land uses in the area. In addition, the SDIP will increase

water supply reliability for south Delta water users and irrigated farmlands. Therefore, this project is consistent with the Land Use and Resource Management Plan (see Section 7.1 for more detail).

Delta Protection Commission

The DPC is a state agency created in 1993 to address concerns that increasing pressures for residential, residential/recreation, and commercial/industrial users would continue to encroach into the Delta, an area of statewide agricultural significance. The commission is charged with preparation of the regional plan (mentioned previously) for the heart of the Delta, which includes portions of Solano, Yolo, Sacramento, San Joaquin, and Contra Costa Counties. SDIP is consistent with this regional plan.

The DPC has appeal authority over local government actions. Thus, if any person believes a local government has taken an action, or approved a project, that is not in conformance with the act and plan, that local government action can be appealed to the commission. The appeal "suspends" the local permit, allowing the commission the opportunity to review the action. If the commission finds the local government action to be in conformance with the act and plan, the action can go forward. If the commission finds the local government action is not in conformance with the act and plan, the commission will forward its findings to the local government for further review. In 1999, the sunset date of the commission was extended to January 1, 2010.

1995 Water Quality Control Plan

The 1995 WQCP was written to replace/update both the 1991 and 1978 WQCPs. The State Water Board reviews the WQCP every 3 years. The differences between the 1995 plan and the 1991 and 1978 plans is that it revised the existing standards for flow and salinity in the Delta's channels and ordered Reclamation and DWR to meet these standards by reducing pumping or releasing water stored in upstream reservoirs or both. It also includes objectives for flow and water project operations that the other plans did not.

In 1994, the State Water Board initiated development of new water quality objectives and released a draft version, the same day the Bay-Delta Accord was signed. The State Water Board subsequently released an environmental report that documented the effects of implementing the plan. The WQCP was adopted in May 1995 (1995 WQCP) and incorporated several elements of EPA, NOAA Fisheries, and USFWS regulatory objectives for salinity and endangered species protection. Implementation of the SDIP will assist the DWR and Reclamation in meeting these objectives.

Clean Water Act—Section 303(d)

Under CWA Section 303(d), the RWQCB and the State Water Board list water bodies as impaired when not in compliance with designated water quality objectives and standards. A TMDL program must be prepared for waters identified by the state as impaired. A TMDL is a quantitative assessment of a problem that affects water quality. The problem can include the presence of a pollutant, such as a heavy metal or a pesticide, or a change in the physical property of the water, such as DO or temperature. A TMDL specifies the allowable load of pollutants from individual sources to ensure compliance with water quality standards. Once the allowable load and existing source loads have been determined, reductions in allowable loads are allocated to individual pollutant sources.

The currently applicable basin plan chronic water quality standard for nickel in San Francisco Bay north of the South San Francisco Bay segment is 7.1 mg/l total recoverable nickel (San Francisco Bay Regional Water Quality Control Board 1995, p. 3–9). The state's analysis of available data found that this standard has been exceeded 102 times since 1993 (Strauss 2003a). The state erroneously applied the dissolved nickel criterion in assessing the data and reached the conclusion that the bay meets the nickel standards based on the application of an inapplicable standard. EPA identified the Sacramento–San Joaquin Delta (portion in San Francisco Bay Region) segment for inclusion on the 2002 Section 303(d) list based on the state's analysis of available nickel data in comparison with the applicable basin plan objective. EPA established a low priority ranking for this listing as the state is in the process of developing site-specific water quality standards for nickel that will likely be attained. Therefore, it is most reasonable to proceed with water quality standards modification that will likely obviate the need to complete a nickel TMDL for the bay. (Strauss 2003a) and (Waters added to 303(d) list for California, Enclosure to letter from Alexis Strauss, EPA Region 9 to Celeste Cantú, State Water Resources Control Board, July 25, 2003 (Strauss 2003b). Implementation of the SDIP would assist DWR and Reclamation in meeting these standards.

Water Rights

The State of California recognizes riparian and appropriative surface water rights. Riparian rights are correlative entitlements to water that are held by owners of land bordering natural watercourses. California requires a statement of diversion and use of natural flows on adjacent riparian land under a riparian right. Appropriative water rights allow the diversion of a specified amount of water from a source for reasonable and beneficial use during all or a portion of the year. In California, previously issued appropriative water rights are superior to and take precedence over newly granted rights. The State Water Board has authority to issue permits to grant appropriative water rights.

SDWA states that adequate water for agricultural purposes in the south Delta is dependent upon water quality and water levels that are influenced by a variety of factors, including tides and water exports from the SWP and CVP. To protect SDWA water rights, there is a need to maintain adequate water quality and levels for the consumptive use needs of south Delta agricultural users. This is one of the needs for the proposed project.

Local Plan Consistency and Regulatory Requirements

In addition to the federal, state regulatory and local plan requirements, SDIP may be subject to certain zoning or other ordinances and general plans of the Counties of San Joaquin, Contra Costa, and Alameda. Such regulatory requirements may include compliance with general plan elements, grading permits, and compliance with Williamson Act land programs. For more discussion on local plans and requirements applicable to SDIP, refer to the Regulatory Setting part of the specific resource sections of interest within this document.