

SECTION 3.0

Related Projects

Considered in the Cumulative Impact Analysis

Both CEQA ([CEQA Guidelines Sections 15064\(h\) and 15065\(a\)\(3\)](#)) and NEPA ([40 CFR 1508.7 and 1508.25\(a\)\(2\)](#)) require the analysis of the cumulative impacts of a proposed project in combination with those of other related projects. Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. A cumulative impact is the change in the environment that results from the incremental impact of a project when added to other closely related past, present, or reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant impacts taking place over time.

The following projects were identified after consultation with relevant federal, state, and local agencies and review of other current environmental documents being prepared in the vicinity of the Project. The cumulative impacts of these projects in combination with the 2-Gates Project are addressed in Section 4 [under each resource](#).

3.1 CALIFORNIA [NATURAL RESOURCES AGENCY](#) – BAY-DELTA CONSERVATION PLAN

The Bay-Delta Conservation Plan (BDCP) is being developed as a collaborative process to set near-term and long-term approaches to meet the following objectives: (1) providing for the conservation of covered species and their habitats, (2) addressing the requirements of the federal and state endangered species laws, and (3) improving water supply reliability. Specifically, the BDCP would serve as a habitat conservation plan that satisfies the requirements of Section 10 of the federal ESA and provide the basis for consultations between Reclamation, USFWS, and NMFS under Section 7 of the ESA. The BDCP would also provide the basis for compliance with State law under the Natural Communities Conservation Planning Act and/or the California Endangered Species Act (CESA). Successful completion of the plan approval process will result in long-term “take” authorizations for covered activities, including certain water operations of the SWP and CVP, and operations of certain Mirant Delta power plants. The plan is expected to achieve these objectives through a number of actions: habitat restoration and enhancement to increase the quality and quantity of habitat in the Delta; other conservation actions to help address a number of stressors on covered species; conveyance facilities to enhance operational flexibility and water supply reliability; water operations; and a comprehensive monitoring, assessment, and adaptive management program.

The planning area for the BDCP [is the Statutory Delta as defined in California Water Code Section 12220](#). The Statutory Delta includes parts of Yolo, Solano, Contra Costa, San Joaquin, and Sacramento counties. However, it may be necessary for the BDCP to include conservation actions outside of the Statutory Delta that advance the goals and objectives of the BDCP within

the Delta, including as appropriate, conservation actions in the Suisun Marsh, Suisun Bay, and areas upstream of the Delta.

The covered species that are the initial focus of the BDCP include the following aquatic species:

- Central Valley steelhead (*Oncorhynchus mykiss*)
- Central Valley Chinook salmon (*Oncorhynchus tshawytscha*) (spring-run and fall/late fall-runs)
- Sacramento River Chinook salmon (*Oncorhynchus tshawytscha*) (winter-run)
- Delta smelt (*Hypomesus transpacificus*)
- Green sturgeon (*Acipenser medirostris*)
- White sturgeon (*Acipenser transmontanus*)
- Sacramento splittail (*Pogonichthys macrolepidotus*)
- Longfin smelt (*Spirinchus thaleichthys*)
- Pacific lamprey (*Lampetra tridentata*)
- River lamprey (*Lampetra fluviatilis*)
- Other species also may be considered for inclusion in the BDCP.

An Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that will assess the potential impacts of BDCP implementation is being developed by DWR, the lead agency under CEQA, and Reclamation, NMFS, and USFWS, the federal lead and co-lead agencies under NEPA. The EIR/EIS will analyze the impacts of alternative conservation actions, including improved water conveyance infrastructure in the Delta (e.g., dual or isolated conveyance systems). New dual or isolated conveyance systems would require a canal from the Sacramento River to the SWP Harvey O. Banks and the CVP C.W. Jones pumping plants near Tracy. The EIR/EIS will also analyze the impacts of alternative water operations and management actions to achieve conservation and water supply reliability goals. The 2-Gates Project is one of the conservation actions that is being contemplated in the BDCP, but the 2-Gates Project has separate utility and is not dependent on the implementation of the BDCP.

A Notice of Preparation of the EIR/EIS was prepared in March 2008. A public draft of the EIR/EIS is expected to be released toward the end of 2009/early 2010, with acceptance of the plan at the end of 2010. Given the complexity of the BDCP, it is likely that its full implementation would be outside of the five-year horizon established for the 2-Gates Project.

3.2 CONTRA COSTA WATER DISTRICT – WATER QUALITY IMPROVEMENT PROJECTS

3.2.1 Alternative Intake Project

The Alternative Intake Project is a drinking water quality improvement project that would protect and improve delivered water quality for Contra Costa Water District (CCWD) customers by enabling the CCWD to relocate some of its existing diversions to Victoria Canal, a Delta

location with better source water quality than is currently available at its Old River and Rock Slough intakes. The project will help maintain the benefits of the Los Vaqueros Reservoir by enabling CCWD to extend the time periods during which Delta water of high quality is available for 1) filling Los Vaqueros Reservoir and 2) direct use without the need for blending with higher-quality water from Los Vaqueros Reservoir. The alternative intake would divert up to 250 cfs from a new intake on Victoria Canal; however, the project would not increase CCWD's total Delta diversion capacity and would not change demands or the quantity of water delivered to its service area each year.

The project includes a new, screened water intake and pump station located along the lower third of Victoria Canal, on Victoria Island in the central Delta, and a buried pipeline that would extend 12,000 to 14,000 feet from the new intake directly across Victoria Island and beneath Old River and tie into CCWD's existing Old River conveyance system on Byron Tract. The project also involves adding a new point of diversion to certain existing water rights held by CCWD and Reclamation. The EIR/EIS for this project was completed in 2006. This project is currently under construction and is expected to be operational in 2010.

3.2.2 Contra Costa Canal Replacement Project

The project involves replacing the unlined portion of the Contra Costa Canal, approximately 3.97 miles in length, with a buried pipeline within Reclamation's existing right-of-way. The project site is located in the south Delta in eastern Contra Costa County, in the city of Oakley or its sphere of influence. The purpose of this project is to eliminate shallow groundwater seepage from entering the Canal, eliminate non-engineered berms and improve safety and security in a growing urban area.

An Initial Study/MND was adopted by the CCWD Board of Directors in November 2006 and Reclamation completed an EA and Finding of No Significant Impact for this project in July 2007. No significant impacts are anticipated from this project. In addition, the USFWS has issued a non-jeopardy BO on the delta smelt and determined that the project will not result in the adverse modification or destruction of delta smelt critical habitat. CCWD is planning to construct the first 2,000 feet of the Canal Replacement Project from Pumping Plant No. 1 to Marsh Creek in 2009. Ultimately, CCWD will replace the entire 21,000 feet of the unlined canal.

3.2.3 Contra Costa Water District and U.S. Bureau of Reclamation – Los Vaqueros Reservoir Expansion Project

Expansion of the Los Vaqueros Reservoir from 100,000 acre-feet to as large as 275,000 acre-feet is being evaluated for the ability to protect and restore Delta fisheries and improve Bay Area water quality and reliability. The Draft EIS/EIR was issued in February 2009, and a Final EIS/EIR is expected to be issued in September 2010.

With an expanded reservoir, the Bay Area would have a more reliable supply of higher quality water when faced with water shortages caused by drought, emergencies in the Delta, or regulatory restrictions on Delta pumping. An expanded reservoir could also provide water supplies for environmental water management in the Delta to support fish protection, habitat management and other environmental water needs. In 2007, key decision-makers became increasingly convinced of the need to expand the reservoir as one of many timely actions needed

to protect the Delta and the Bay Area's water supplies, and Governor Schwarzenegger specifically named the reservoir expansion in his proposals to upgrade the state's water infrastructure.

The environmental effects of the expansion project have been evaluated in an EIS/EIR. The expansion project is being designed to create environmental and water supply reliability benefits without creating any associated impacts on the Delta ecosystem or water quality. General effects of the reservoir expansion may include a net shift in timing of Delta export pumping to periods of less fishery sensitivity, and from drier years to wetter years. These effects would help reduce or mitigate for other cumulative impacts on the Delta ecosystem and water quality. Project construction is expected to commence as early as 2012.

3.3 CONTRA COSTA WATER DISTRICT AND U.S. BUREAU OF RECLAMATION – ROCK SLOUGH FISH SCREEN

This project would construct a fish screen structure without bypasses at the entrance of the Contra Costa Canal along the north bank of Rock Slough. CCWD plans to use the Old River Pump Station and the Alternative Intake Pump Station to support water deliveries during construction of the fish screen. If necessary, CCWD may consider a limited duration pump around depending on hydrological conditions, water quality and Los Vaqueros Reservoir storage levels. The fish screening facilities would generally consist of the following items:

1) New fish screen structure, which would include:

- a. Log boom
- b. Fish screens
- c. Steel blocking panels up to the operating deck of the fish screen structure.
- d. A precast concrete operating deck
- e. Baffle guides downstream of the fish screens
- f. Adjustable baffles, if required
- g. Two trash racks with conveyance system
- h. Differential water level probes
- i. A check or control structure may also be incorporated to minimize tidal effects, if required

2) Fencing

3) Road work

4) Cofferdamming and dewatering

5) Excavation for the screen structure afterbay

6) Permanent water conveyance channels, as required

The project is part of the Contra Costa Canal Pumping Plant Mitigation Program and complies with Section 3406(b)(5) of the Central Valley Project Improvement Act (CVPIA) and the USFWS 1993 BO for delta smelt. The program also is referenced in the OCAP BO (USFWS

2008b). The major objectives are to minimize the entrainment of fish, reduce potential predation, and minimize take of endangered species and debris loading (Reclamation 2009, CCWD 2009). This project is currently in the permitting phase.

3.4 CENTRAL VALLEY PROJECT IMPROVEMENT ACT REQUIRED PROGRAM

The CVPIA includes a requirement for Reclamation to develop and implement a program to mitigate fishery impacts resulting from the operation of Pumping Plant No. 1. The program may include a fish screen at Rock Slough (described above), modified operations, or other measures to mitigate fishery impacts.

3.5 SACRAMENTO COUNTY WATER AGENCY AND EAST BAY MUNICIPAL UTILITIES DISTRICT – FREEPORT REGIONAL WATER PROJECT

The Freeport Regional Water Project is a cooperative effort of Sacramento County Water Agency (SCWA) and East Bay Municipal Utilities District (EBMUD) to supply surface water from the Sacramento River to customers in central Sacramento County and in Alameda and Contra Costa counties. The project will provide SCWA with up to 85 million gallons of water per day (mgd) which will in turn be supplied to customers in central Sacramento County to supplement groundwater use in the central part of the county. Sacramento will begin receiving water from this project in 2011 after construction of the Vineyard Surface Water Treatment Plant is completed. EBMUD will use up to 100 mgd of water during dry years only, estimated to be three out of every 10 years, as a supplemental water source to complement existing conservation programs. EBMUD will be able to receive water from the Project by the end of 2009. An EIR/EIS was completed for this project in July 2005. Significant, unavoidable impacts of the project were determined to be short-term increases in construction noise in the project area during the day, an exposure of noise-sensitive land uses to general construction noise at night, and an increase in ambient noise levels in the project area due to facility operations. Construction for this project is currently underway and is expected to be completed in July 2009. The project is expected to be operational beginning December 2009.

3.6 SEMITROPIC WATER STORAGE DISTRICT – DELTA WETLANDS PROJECT PLACE OF USE

The Delta Wetlands Project would provide water to Semitropic to augment its water supply by banking water in the Semitropic Groundwater Storage Bank and Antelope Valley Water Bank. The project would divert water in the Delta, store water on two Delta islands, create habitat, supplement water storage in groundwater banks, and provide water to users south of the Delta.

The project was originally proposed in 1987 and after several project changes, a Final EIR was published in 2001. The courts required Semitropic to identify water users. In 2007, Semitropic and the Delta Wetlands Project agreed to transfer water to Semitropic for irrigation, storage, and use by the San Bernardino Valley Municipal Water District, the Western Municipal Water District of Riverside County and member agencies of The Metropolitan Water District of Southern California.

The Project will divert Delta inflow during times of surplus for storage on reservoir islands until released for rediversion and conveyance using SWP and CVP facilities to south-of-Delta users within Semitropic's service area.

3.7 U.S. BUREAU OF RECLAMATION AND SAN LUIS DELTA MENDOTA WATER AUTHORITY – DELTA-MENDOTA CANAL/CALIFORNIA AQUEDUCT INTERTIE

The Delta-Mendota Canal/California Aqueduct Intertie is a proposed action in the August 2000 CALFED Bay-Delta Program Programmatic Record of Decision. The Intertie would be located in an unincorporated area of the San Joaquin Valley in Alameda County, west of the city of Tracy. The site is in a rural agricultural area owned by the state and federal governments. It would connect the Delta-Mendota Canal (DMC) (Mile 7.2) and the California Aqueduct (Mile 9) via a new pipeline and pumping plant. The project purpose is to improve the DMC conveyance conditions that restrict the CVP Jones Pumping Plant to less than its authorized pumping capacity of 4,600 cubic feet per second (cfs) and to improve operational flexibility for operations, maintenance, and emergency activities at the Tracy pumping plant and fish facility, the Delta-Mendota Canal, and the O'Neill pumping plant and intake canal. The project also includes an interconnection and construction and operation of a new transmission line, and a new point of delivery on Western Area Power Administration's system for delivery of power for the Intertie. The Draft EIS was published in July 2009, addressing potential impacts on giant garter snake among other issues. The final EIR is scheduled for completion in November 2009.

3.8 EMERGENCY LEVEE REPAIRS

On February 24, 2006, following sustained heavy rainfall and runoff, Governor Arnold Schwarzenegger declared a State of Emergency for California's levee system, commissioning up to \$500 million of state funds to repair and evaluate State/federal project levees. Following the emergency declaration, Governor Schwarzenegger directed the DWR to secure the necessary means to fast-track repairs of critical erosion sites. To date, nearly 250 levee repair sites have been identified, with more than 100 of the most critical sites having already been completed. Repairs to others are either in progress or scheduled to be completed in the near future, and still more repair sites are in the process of being identified, planned, and prioritized.

In general, repairs to State/federal project levees are being conducted under three main programs: the Critical Erosion Repairs Program, the Sacramento River Bank Protection Project, and the PL84-99 Rehabilitation Program. A fourth program to repair critically damaged levees on the San Joaquin Flood Control System is under development by DWR.

DWR is the lead agency for the Critical Erosion Repairs Program, while the Corps is the lead agency for the Sacramento River Bank Protection Project and the PL 84-99 Rehabilitation Program. ("PL 84-99" refers to federal Public Law 84-99, the Flood and Coastal Storm Emergencies Act).

DWR is also working with local agencies to survey and document erosion damage at additional sites that are under local control (not part of the State/federal flood control system), with the aim of assisting local jurisdictions in determining the best approach for needed repairs. Local

maintaining agencies can participate in the Local Levee Grant Program with State/local cost-sharing divided evenly, provided the repair sites are deemed critical by DWR.

3.9 STATE DELTA LEVEE SUBVENTION PROGRAM

The DWR Flood Control Subventions Program and the Central Valley Flood Protection Board (formerly Reclamation Board) provide financial assistance to local reclamation districts cooperating in the construction of federally authorized flood control projects. The Central Valley Flood Protection Board administers the State financial assistance for major Corps projects in the Central Valley, while the Flood Control Subventions Section is responsible for disbursing funds for all other State authorized projects. Levee repair projects have been completed on a number Delta islands including Sherman, McDonald and Tyler Islands (Lawson 2009).

3.10 DELTA LEVEES SPECIAL FLOOD CONTROL PROGRAM

The Delta Levees Special Flood Control Projects provides financial assistance to local agencies to maintain and rehabilitate levees in the Delta. The program was established by the California Legislature under Senate Bill (SB) 34, SB 1065, and Assembly Bill (AB) 360, to preserve the Delta. This program is authorized in the California Water Code, Sections 12300 thru 12314, and has provided more than \$100 million for flood control and related habitat projects. The intent of Legislature, as stated in the Water Code, is to preserve the Delta much as it exists at the present time. The program is currently focused on flood control and related habitat restoration projects primarily on eight western Delta Islands including Bethel, Bradford, Holland, Hotchkiss, Jersey, Sherman, Twitchell and Webb Islands, as well as the towns of Thornton and Walnut Grove. Projects currently proposed for funding include a 1.5-mile stretch of levee along Sand Mound Slough, Roosevelt Cut, and Franks Tract and improvements on a 5-mile stretch of exterior levee along Middle River.

3.11 SACRAMENTO RIVER DEEP WATER SHIP CHANNEL PROJECT

The Sacramento River Deep Water Ship Channel Project is a congressionally authorized project being implemented by the Corps and the Port of Sacramento. Currently, the Corps and the Port of Sacramento are conducting a Limited Reevaluation Study to recommend navigation improvements for federal funding and preparing a joint Supplemental EIS (SEIS) and Subsequent EIR (SEIR) to evaluate resumption of navigational improvements to the Sacramento River Deep Water Ship Channel (SRDWSC).

This project would deepen the existing federal navigation channel from -30 feet to -35 feet (mean lower low water) and widen portions of the channel to improve navigational efficiency and safety. The SRDWSC is a 46.5-mile long shipping channel that runs from the Contra Costa county line to the Port of Sacramento. The SRDWSC joins the existing 35-foot deep channel at New York Slough, thereby affording the Port of Sacramento access to San Francisco Bay Area harbors and the Pacific Ocean. The Corps and Port of Sacramento are planning to conduct annual maintenance dredging with upland placement of the material. The project would include water quality control and fish monitoring and establishment of wetland/riparian habitat on Prospect Island and lower Sherman Island.

The SEIS/ SEIR will reexamine water and air quality issues, fish and wildlife impacts, and impacts on threatened or endangered species. The impact of deepening on salinity intrusion and its effect on water quality in the Delta will be reexamined. Effects on water and air quality and fish and wildlife from dredging and disposal of dredged material at upland disposal sites will be reexamined, as will the economic benefits.

3.12 OTHER POTENTIAL PROJECTS

Reclamation has considered constructing a barrier-gate near the head of Georgiana Slough to block highly turbid waters from entering the central Delta. If pursued and implemented, this could be tested as a complementary action to the 2-Gates Project at a future date.

While not currently a part of the 2-Gates Project, and not evaluated in this MND/EA, the Old River gate could be operated in conjunction with potentially modified Delta Cross Channel gate operations or upstream reservoir releases to provide additional flow to the San Joaquin River, and help push conditions favorable to smelt in a seaward direction.

Other construction projects in Contra Costa County are listed in Table 3-1. No related projects were identified for San Joaquin County.

Table 3-1 Other Projects—Approved, Proposed, or under Construction					
Project Name	Status	Acreage	Proposed/Existing Use		
			Residential Units	Industrial SF	Commercial SF
Cypress Grove	Under construction	147	637	—	—
Dutch Slough Properties	Proposed	320	Approximately 1,275	—	Approximately 100,000
East Cypress Corridor Specific Plan	Proposed	2,546	5,759	166,356 (5.7 acres)	638,600
Summer Lake (formerly Cypress Lake and Country Club)	Under construction (although changes have been proposed for the northern, as-yet-undeveloped portion of the project site)	678 ^a	1,330 ^b (with an additional 119 units proposed)	166,356 (5.7 acres)	10,000 ^d
Tuscany Estates (formerly Baldocchi property)	Approved	24	100	—	—
Dutch Slough Community Park(formerly Emerson Dairy)	Planning	55	—	—	—
Lindquist Landing project on Holland Tract Road	Planning	19	Add 50,000 sq feet boat storage	—	—
Dutch Slough Wetland Restoration Project (DWR)	Planning	1,166	1,166	—	—
Holland Tract Wetlands Project Wildlands Inc.	Construction expected starting in 2009	263	263	109	—
Ironhouse Sanitary District Waste Water Expansion Project, 8 Million Gallon per	Construction schedule to begin in 2009 and online in 2011	—	—	—	—

Table 3-1 Other Projects—Approved, Proposed, or under Construction					
Project Name	Status	Acreage	Proposed/Existing Use		
			Residential Units	Industrial SF	Commercial SF
day Tertiary Treatment Plant					
^a This acreage is included in the acreage shown for the East Cypress Corridor Specific Plan. ^b These units are included in the total number of units shown for the East Cypress Corridor Specific Plan. ^c This industrial development is included in the development shown for the East Cypress Corridor Specific Plan. ^d This commercial square footage is included in the development shown for the East Cypress Corridor Specific Plan. Source: Data compiled by EDAW 2005/CCWD 2008					

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