

S E C T I O N 1

Introduction

This Mitigated Negative Declaration (MND)/Environmental Assessment (EA) evaluates the impacts of implementing the 2-Gates Fish Protection Demonstration Project (2-Gates Project, or Project) in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The Project would be located in the Sacramento-San Joaquin River Delta (Delta), which is a vital source of drinking water for 25 million Californians and supports more than 1.3 million acres of irrigated agricultural lands. The 2-Gates Project would install and operate removable gates in two key channels in the central Delta (Old River and Connection Slough) in order to control flows and thereby help reduce entrainment of delta smelt (*Hypomesus transpacificus*) at the State Water Project (SWP) and Central Valley Project (CVP) export facilities while preserving water management options. Delta smelt is a federally and state-listed threatened species, and both the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) are considering petitions to change its status to endangered.

1.1 CEQA REQUIREMENTS, LEAD AGENCY, AND STATE ACTIONS

This document is being prepared in accordance with relevant provisions of CEQA (Public Resources Code [PRC] 21000 et seq.), and the CEQA Guidelines as amended (California Code of Regulations [CCR], Title 14, Division 6, 15000 et seq.). The foundation of CEQA documents is the Initial Study environmental checklist included in Section 4 of this document. Section 15063(c) of the CEQA Guidelines indicates that the purposes of an Initial Study include:

- Provide the CEQA lead agency, with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration.
- Enable the lead agency to modify a project and mitigate adverse impacts before an EIR is prepared, thereby enabling the Project to qualify for a Negative Declaration.
- Identify the effects determined not to be significant.
- Explain the reasons why potentially significant effects would not be significant.
- Facilitate environmental assessment early in the design of a project.
- Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
- Eliminate unnecessary EIRs.

CEQA Guidelines Section 15070 indicates that an MND is appropriate when:

- The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the Project may have a significant effect on the environment, or
- The Initial Study identifies potentially significant effects but;

- Revisions in the Project plans or proposals made by, or agreed to by the applicant before a proposed MND and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
- There is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment.

An MND is the appropriate CEQA document for this Project because the above guidelines have been met. Adequate mitigation measures have been incorporated into the Project to either avoid significant impacts or reduce them to less than significant.

Section 15050(a) of the CEQA Guidelines indicates that the lead agency is the public agency with the principal responsibility for carrying out or approving a project. The lead agency is to decide whether an EIR or Negative Declaration will be required and will initiate the preparation of the document as identified in CEQA Guidelines Sections 15367, 15051(a).

[REDACTED] is the lead agency for the preparation of this MND under CEQA because [REDACTED].

1.2 NEPA REQUIREMENTS, LEAD AGENCY, AND FEDERAL ACTIONS

The EA has been prepared in accordance with NEPA (42 United States Code [USC] 4321 et seq.) and the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508. An EA is a concise public document that has three defined functions: (1) it briefly provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS); (2) it aids an agency's compliance with NEPA when no EIS is necessary (i.e., it helps to identify better alternatives and mitigation measures); and (3) it facilitates preparation of an EIS when one is necessary (CFR Section 1508.9(a)). Since the EA is a concise document, it should not contain long descriptions or detailed data which the agency may have gathered. Rather, it should contain a brief discussion of the need for the proposal, alternatives to the proposal, the environmental impacts of the proposed Project and alternatives, and a list of agencies and persons consulted (CFR Section 1508.9(b)). An EA also may include mitigation measures that would be desirable to consider and adopt even though the impacts of the proposal will not be "significant."

Reclamation is the lead agency for compliance with NEPA because it or its designee would operate the 2-Gates Project.

1.3 BACKGROUND

1.3.1.1 State Water Project and Central Valley Project Facilities

A substantial amount of the water exported from the Delta is conveyed by the SWP and CVP. The SWP is operated to provide flood control and water supply for agricultural, municipal, industrial, recreational, and environmental purposes. The California Department of Water Resources (DWR) has State Water Resources Control Board (SWRCB) permits and licenses to appropriate and divert (or redivert) water for the SWP. Water is conserved in the Oroville Reservoir and released to three Upper Feather River area contractors, two contractors served by the North Bay Aqueduct, and the Harvey O. Banks Pumping Plant (Banks) in the Delta, after which it is delivered to the remaining 24 contractors in the SWP service areas south of the Delta. In addition, Banks pumps water from other sources entering the Delta (i.e., the Sacramento River, San Joaquin River, and Mokelumne River). The current operations of the SWP reservoirs,

pumping plants, and aqueducts vary throughout the year based on changing hydrologic and environmental factors, as well as regulations and agreements governing the operation of the SWP.

The CVP is operated by Reclamation and includes several reservoirs, hydroelectric plants, and pumping plants, including the Jones Pumping Plant in the south Delta near Tracy. The CVP's major storage facilities are Shasta, Trinity, Folsom and New Melones. The upstream reservoirs release water to provide water for the Delta, of which a portion is exported through Jones Pumping Plant for storage in San Luis Reservoir (jointly operated by the CVP and SWP) or delivered down the Delta Mendota Canal to south of Delta contractors. DWR and Reclamation collectively have built water conservation and water delivery facilities in the Central Valley in order to deliver water supplies to water rights holders as well as project contractors. Some CVP facilities were developed in coordination with the SWP. Both the CVP and the SWP use the San Luis Reservoir, O'Neill Forebay, and more than 100 miles of the California Aqueduct and its related pumping and generating facilities.

1.3.1.2 State-Imposed Regulatory Conditions

Both DWR and Reclamation's water rights are conditioned by the SWRCB to protect the beneficial uses of water within each respective project and jointly for the protection of beneficial uses in the Sacramento Valley and the Sacramento-San Joaquin Delta Estuary. The Coordinated Operations Agreement was signed in 1986 and defines both SWP and CVP facilities and their water supplies; sets forth procedures for coordination of operations; identifies formulas for sharing joint responsibilities for meeting Delta standards, as the standards existed in the SWRCB Water Right Decision 1485 (D-1485), and other legal uses of water; identifies how unstored flow will be shared; sets up a framework for exchange of water and services between the two projects; and provides for periodic review of the Agreement. Additional water management restrictions are included in the SWRCB Water Right Decision 1641 (D-1641).

CVP and SWP operations within the Delta are further constrained by regulatory conditions imposed by recent Biological Opinions (BO) by the U.S. Fish and Wildlife Service (USFWS 2008) and National Marine Fisheries Service (NMFS 2009) addressing the Operations Criteria and Plan (OCAP) for the CVP and SWP.

1.3.1.3 Biological Opinion for the Operations Criteria and Plan for the Operation of the Central Valley Project and State Water Project

The December 15, 2008 BO by the USFWS on the coordinated operations of the CVP and SWP concluded that continued long term operations of the CVP and SWP, as proposed, were "likely to jeopardize" the continued existence of delta smelt without further flow conditions in the Delta for their protection and the protection of designated delta smelt critical habitat. The USFWS developed a "Reasonable and Prudent Alternative (RPA) that consists of five components aimed at protecting delta smelt, improving and restoring habitat, and monitoring and reporting results. Two RPA components establish flow conditions for the Old and Middle Rivers (OMR) to reduce the effects that negative flows have on the entrainment of adults, larvae, and juvenile life stages into the CVP and SWP export facilities in the south Delta:

- RPA Component 1 - addresses high and low entrainment risk periods and actions to protect adult delta smelt under specific conditions during the winter adult migration period. The measures reduce entrainment risk by limiting OMR reverse flows.
- RPA Component 2 - implemented upon the completion of RPA Component 1 or when Delta water temperatures reach 12°C, a level that is associated with start of delta smelt spawning, or

biological evidence is collected in trawl programs or at the fish facilities that adult smelt have started spawning. OMR flows are also limited under RPA Component 2 depending on the location of the population relative to the proximity of the conveyance channels leading to the pumping facilities in the south Delta.

1.3.1.4 National Marine Fisheries Service Biological Opinion on Coordinated Operations of the Central Valley Project and State Water Project

NMFS published a BO on June 4, 2009 describing the anadromous fish protections for the continued long-term coordinated operations of the CVP and SWP. This BO concluded that continued long term operations of the CVP and SWP, as proposed, were “likely to jeopardize” the continued existence of Sacramento River winter run Chinook salmon, Central Valley spring run Chinook salmon, Central Valley steelhead, and the southern distinct population segments (DPS) of North American green sturgeon. They also concluded that continued CVP and SWP operations were “likely to destroy or adversely modify” designated or proposed critical habitat of these species.

In its BO, NMFS concluded that the current status of listed salmonids and green sturgeon that occur within the Delta is “precarious” and that future conditions and activities are likely to apply “stressors” to these populations that are not entirely in the control of Reclamation or DWR. Consequently, NMFS developed focused actions RPAs designed to compensate for particular stressors using the full range of authorities available to Reclamation and DWR to implement them.

NMFS concluded that Reclamation and DWR (the “water projects”) both “directly altered the hydrodynamics of the Sacramento-San Joaquin River basins and have interacted with other activities affecting the Delta to create an altered environment that adversely influences salmonid and green sturgeon population dynamics.” Within the Delta, the NMFS opinion identified adverse effects that include water diversion from the north Delta into the Delta interior; enhanced vulnerability of juvenile salmonids to entrainment at the export pumping facilities; enhanced vulnerability of San Joaquin River steelhead to direct entrainment and export relate changes in Delta hydrodynamics; and direct mortality of salmonids due to entrainment at the export pumps. To address these issues, the NMFS described six actions within RPA IV to be taken in the Delta:

- Action IV.1 - Modify Delta Cross Channel gate operations and evaluate methods to control access to Georgiana Slough and the interior Delta to reduce diversion of listed fish from the Sacramento River into the southern or central Delta.
- Action IV.2 - Control the net negative flows toward the export pumps in OMR to reduce the likelihood that fish will be diverted from the San Joaquin or Sacramento River into the southern or central Delta.
- Action IV.3 - Curtail exports when protected fish are observed near the export facilities to reduce mortality from entrainment and salvage.
- Action IV.4 - Improve fish screening and salvage operations to reduce mortality from entrainment and salvage.
- Action IV.5 - Establish a technical group to assist in determining real-time operational measures, evaluating the effectiveness of the actions, and modifying them if necessary.
- Action IV.6 - Do not implement the South Delta Barriers Improvement Program.

The description of existing conditions and the evaluation of impacts of the 2-Gates Project consider the various components of D-1641 and the Coordinated Operations Agreement (e.g., water quality standards, discharge requirements, and allowed diversions), as well as the conditions established by others, particularly those contained in the OCAP BOs. This layering of conditions and constraints provided a range of conditions that were used to bound the analysis. During certain time periods and environmental conditions, the components of D-1641 provide the bounding condition, while during under other time periods and environmental conditions, the RPA in the USFWS and NMFS OCAP BOs describe the limit of operational conditions.

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1.4 CONTENTS AND ORGANIZATION OF THE MND/EA

Together, Reclamation and [REDACTED] have the responsibility for the scope, content, and legal adequacy of the MND/EA. The terminology and specific needs of CEQA and NEPA do not entirely overlap; therefore, modifications have been made to the standard requirements of each to accommodate these differences. For example, CEQA uses the term “proposed project or project” to refer to the subject of the document, whereas NEPA uses the term “proposed action.” In this MND/EA, the term used is “Project.” The resources include those that are typically evaluated under both NEPA and CEQA; additionally, Section 5 includes discussions of resources that are required by NEPA, but not CEQA, including environmental justice, Indian Trust Assets, socioeconomics, wild and scenic rivers, and irreversible and irretrievable commitments of resources. Significance criteria for evaluating impacts on resources that are considered under both NEPA and CEQA have been provided in the environmental checklist included in Section 4. They are based on CEQA Guidelines, Appendix G, and modified where appropriate to address impacts specific to the Project. NEPA does not require the use of specific significance criteria, and specifies that the description of their impacts is to be based on the context and intensity of the impacts and on the relationship between them. Thus, no significance criteria have been provided for those resources required only in an EA.

This MND/EA is organized as follows:

- **Section 1.** Introduces the Project and the uses of the MND/EA.
- **Section 2.** Describes the Project, required permits and approvals, and alternatives that were considered.
- **Section 3.** Describes related projects that are included in the cumulative impact analysis.
- **Section 4.** Provides an environmental evaluation/checklist identifying the environmental setting and impacts of the Project categorized pursuant to Appendix G of the CEQA Guidelines as “potentially significant unless mitigation incorporated,” “less than significant,” and “no impact” (in response to the checklist findings). It also provides mitigation measures for any impacts found to be “potentially significant unless mitigation incorporated.” Impacts of the No Project Alternative also are considered, as are cumulative impacts.
- **Section 5.** Evaluates potential impacts on climate change, as well as impacts on resource areas required by NEPA but not CEQA.
- **Section 6.** Identifies references used in this document.
- **Section 7.** Lists agencies contacted.
- **Section 8.** Lists the document preparers.

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- *Note: we will add a Coordination section per Reclamation's direction in the next iteration and therefore deleted Section 1.5, Public Review Process.*