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# 1 INTRODUCTION AND PURPOSE AND NEED FOR THE ACTION

## 1.1 Introduction

The Port of West Sacramento (Port) and the U.S. Army Corps of Engineers (USACE) propose to re-initiate the previously authorized deepening and selective widening of the Sacramento River Deep Water Ship Channel (SRDWSC) from an authorized depth of 30 feet to 35 feet. In accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), USACE (as NEPA lead agency) and the Port (as CEQA lead agency) are preparing this joint Supplemental Environmental Impact Statement and Subsequent Environmental Impact Report (SEIS/SEIR) to re-evaluate deepening the SRDWSC (73 Federal Register [FR] 33807; USACE 2008a).

Construction of the SRDWSC (Figure 1) was initially authorized by the Rivers and Harbors Act (RHA) of 1946 (Public Law [Pub. L.] 525, 79th Congress, 2nd Session). The USACE originally constructed the SRDWSC in 1963 to a depth of 30 feet mean lower low water (MLLW) and, in 1969, Congress authorized funds to study deepening the SRDWSC from -30 to -35 feet MLLW. In 1980, USACE completed the *Sacramento River Deep Water Ship Channel, California: Feasibility Report and Environmental Impact Statement for Navigation and Related Purposes* (EIS; Appendix A; USACE 1980). Construction was not initiated at that time because of the expense. The original SRDWSC deepening project was scaled back in the extent of widening to reduce cost and, in 1986, USACE completed a *General Design Memorandum* (GDM; USACE 1986) and *Final Supplemental Environmental Impact Statement* (Appendix A; USACE 1986). Deepening the SRDWSC to a depth of 35 feet MLLW was authorized in the Supplemental Appropriations Act of 1985 (Pub. L. 99-88) and under Section 202(a) of the Water Resources and Development Act of 1986 (Pub. L. 99-662, 100 Stat. 4092). The USACE initiated construction to deepen the channel to -35 feet MLLW in 1989, completing dredging from river miles (RMs) 35.0 to 43.4. The deepening work was suspended in 1990 at the request of the Port due to funding constraints and now-resolved issues pertaining to utility relocations. In 1998, Congress directed USACE to prepare a Limited Reevaluation Report (LRR) for the remaining portions of the deepening project. The USACE issued the Notice of Intent (NOI) and Notice of Preparation (NOP) for a joint SEIS/SEIR to re-evaluate the SRDWSC project on June 17, 2008 (USACE 2008a). The LRR is being developed in conjunction with this SEIS/SEIR to document USACE's reevaluation of the deepening project.

This Draft SEIS/SEIR was prepared in accordance with the requirements of NEPA (42 United States Code [USC] §§ 4321-4347), Council for Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] §§ 1500-1508), and USACE's Regulations for Implementing NEPA (33 CFR Part 230 and Part 325 Appendix B and guidance specified in Engineer Regulations [ER]-200-2-2 Procedures for Implementing NEPA and ER 1105-2-100

for USACE Planning Principles). This document also fulfills the requirements of CEQA (California Public Resources Code [PRC] 15000 and 21000 et seq.).

This Draft SEIS/SEIR describes the affected resources and evaluates the potential impacts to those resources as a result of deepening and widening the SRDWSC. The Channel Deepening to -35 Feet MLLW and Selective Widening Alternative (Proposed Project), which is briefly summarized below, is described in more detail along with other alternatives in Section 2. This Draft SEIS/SEIR will be used to inform decision-makers and the public about the environmental effects of the Proposed Project and alternatives. This Draft SEIS/SEIR updates the analyses of impacts that were evaluated in previously approved feasibility studies and NEPA/CEQA documents for the Proposed Project.

### **1.1.1 Overview of the Proposed Project**

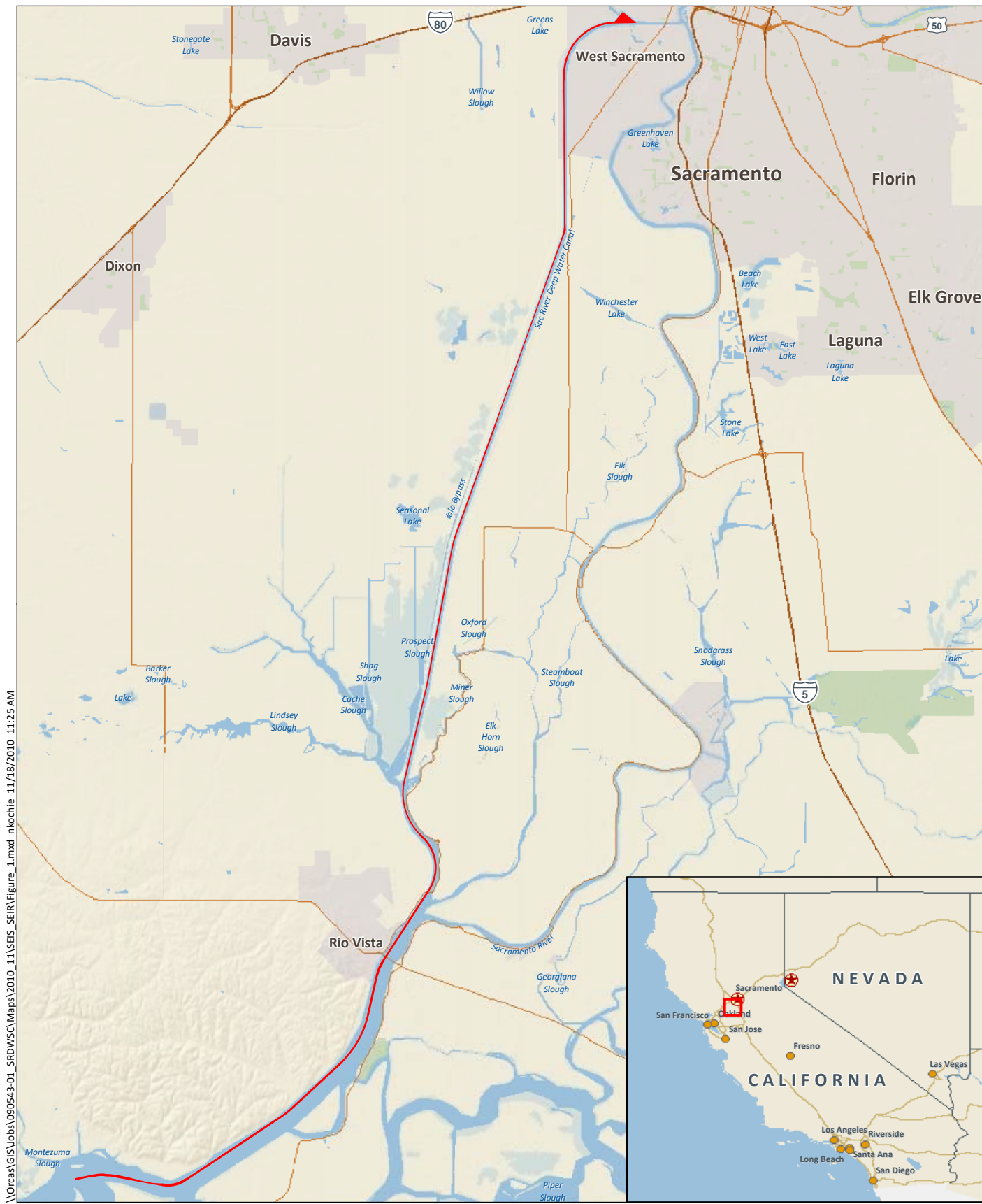
The Port originally served the agricultural industry, particularly imports and exports of commodities including rice, fertilizer, grains, and lumber. The Port has since expanded its business to include more commodities such as cement and “green” commodities, including biofuels and wood pellets. Vessels laden with some commodity types must “light-load” (travel less than fully loaded with the desired amount of cargo) to navigate the SRDWSC with sufficient under-keel clearance. Light-loading increases the cost of transportation and the cost of the shipped products, which is passed on to the consumer. In addition, the existing widths of sections of the SRDWSC can make navigating to the Port difficult, particularly in inclement weather. The Proposed Project, therefore, involves both deepening the SRDWSC to a depth of 35 feet MLLW and widening in selective areas from RMs 0.0 to 35.0, completing the construction that was suspended in 1990. It also includes maintenance dredging from RMs 35.0 to 43.4 to return that previously constructed portion of the channel to its 35-foot depth. The total volume of dredged material is estimated to be 8.1 million cubic yards (cy) including a 1-foot overdepth<sup>3</sup>, and just less than 10 million cy including a 2-foot overdepth.

The Proposed Project also includes the upland placement of material dredged from the SRDWSC. An extensive search was conducted of beneficial use opportunities in California’s Sacramento-San Joaquin River Delta (Delta). Ten dredged material placement sites were identified to either permanently accommodate or temporarily stockpile dredged material for later beneficial reuse. The methodology for the site selection process is discussed in Section 2.3. Figure 2 shows the footprint of the Proposed Project, inclusive of deepening and widening locations in relation to the existing channel bathymetry, and the ten proposed dredged material placement sites.

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<sup>3</sup> Overdepth is defined as additional depth tolerance below the project depth that is permitted—but not required—due to the inaccuracies of dredging.

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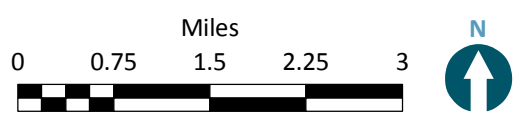
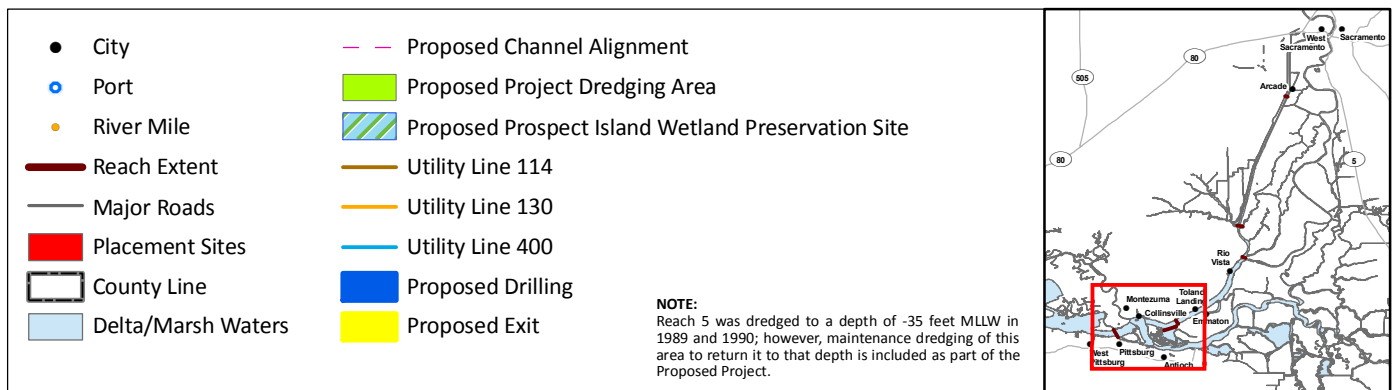
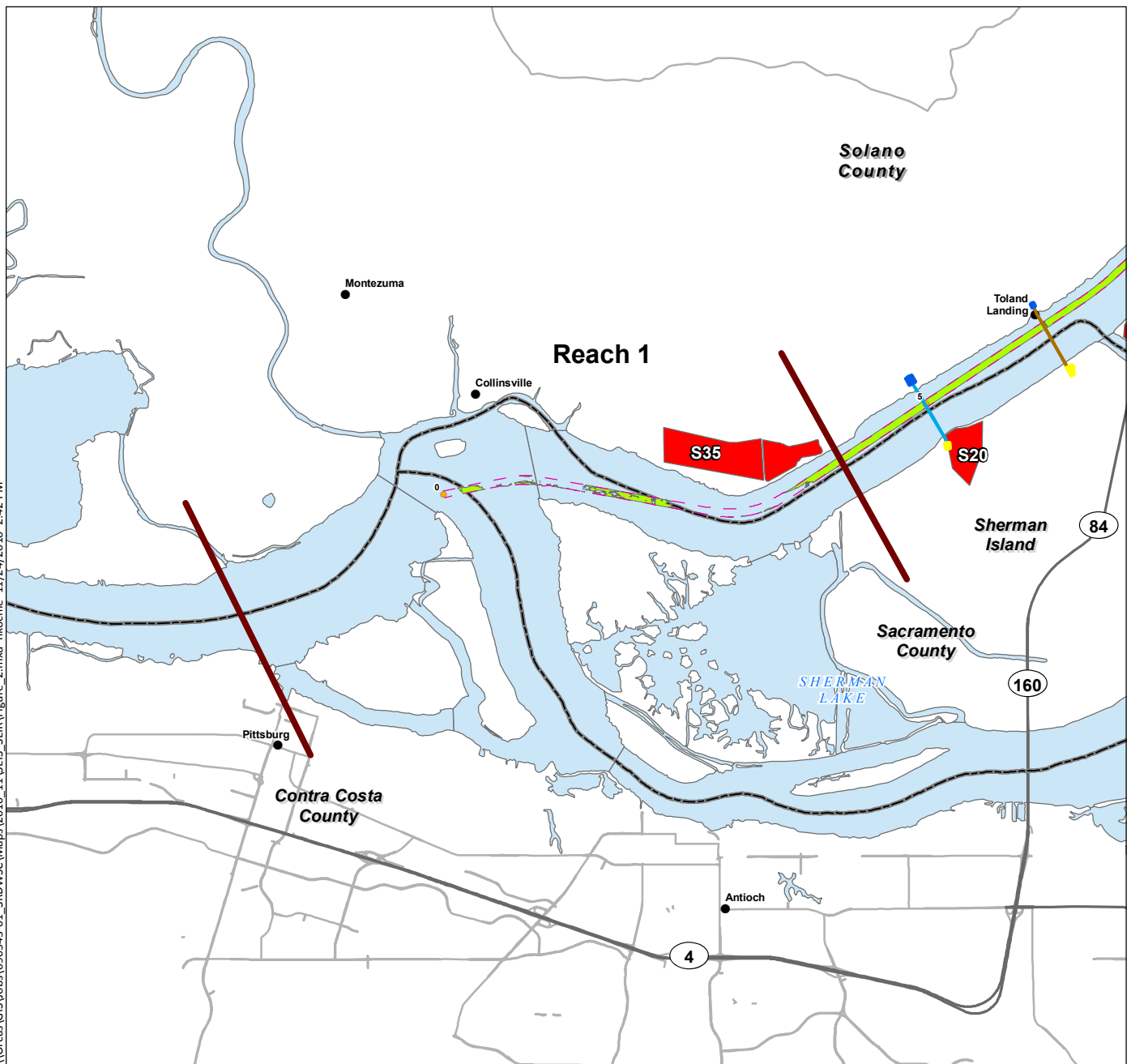
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ESRI Data and Maps [DVD]. (2009). Redlands, CA: Environmental Systems Research Institute.



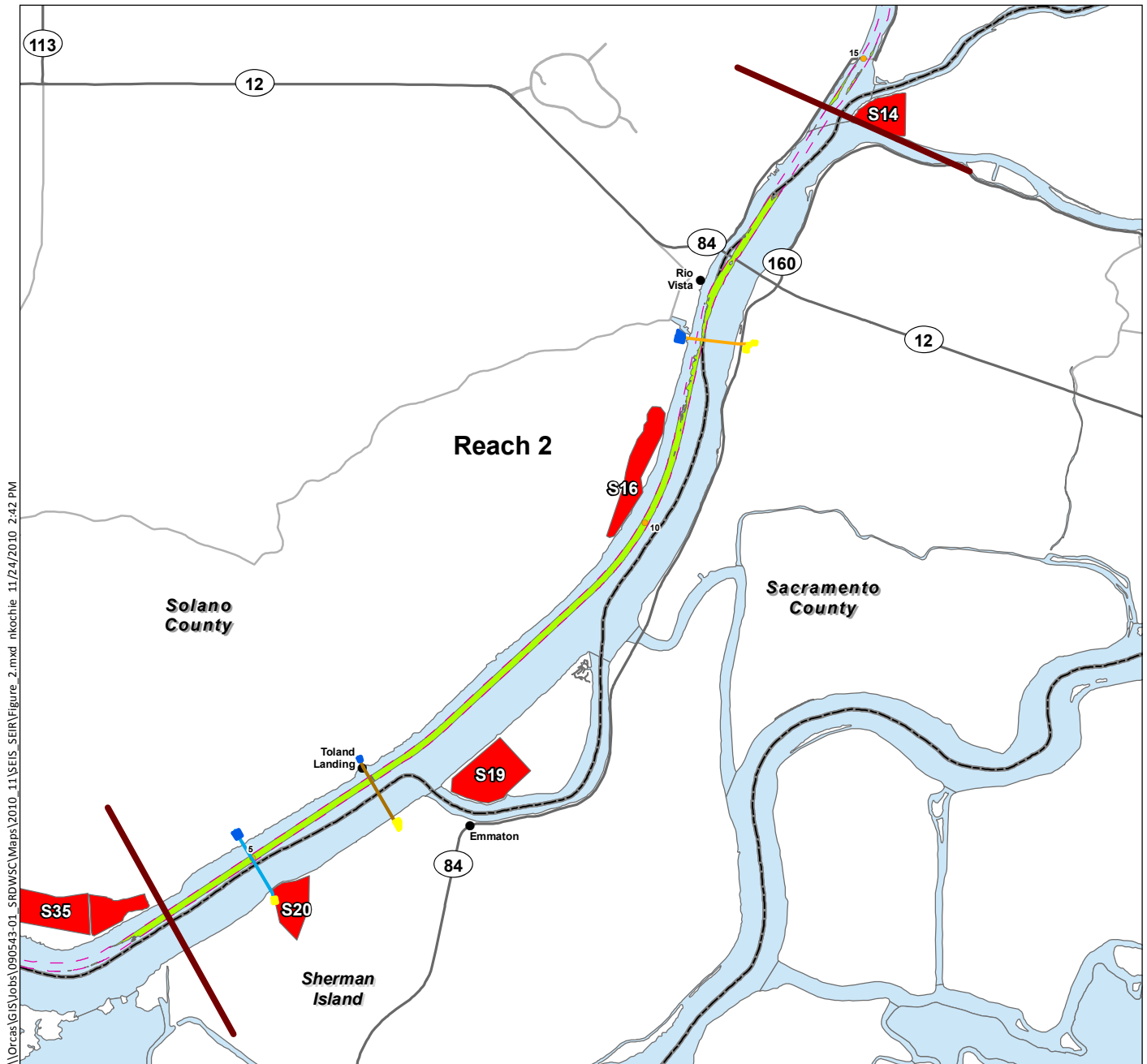
 Sacramento River Deep Water Ship Channel

**Figure 1**  
SRDWSC Vicinity Map  
SEIS/SEIR  
Sacramento River Deep Water Ship Channel

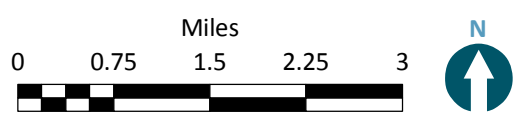
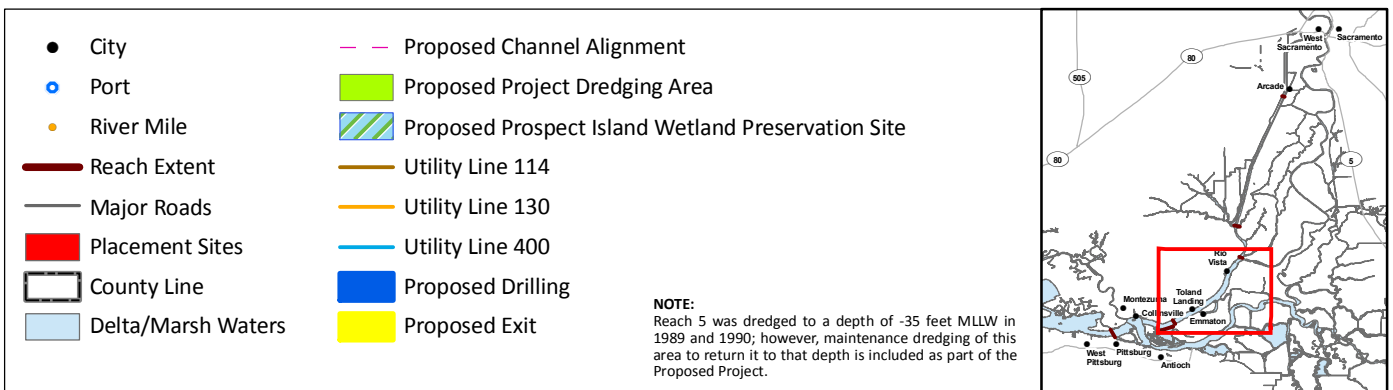
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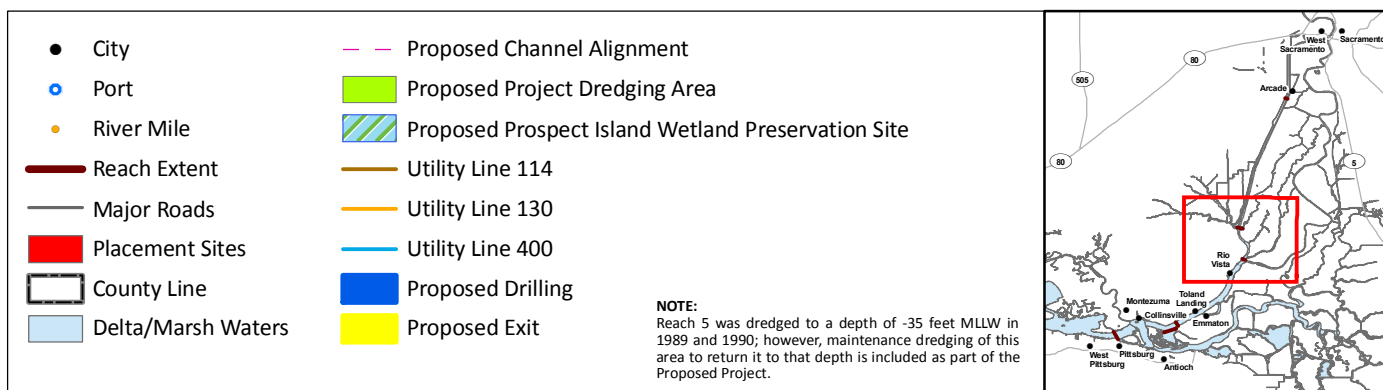
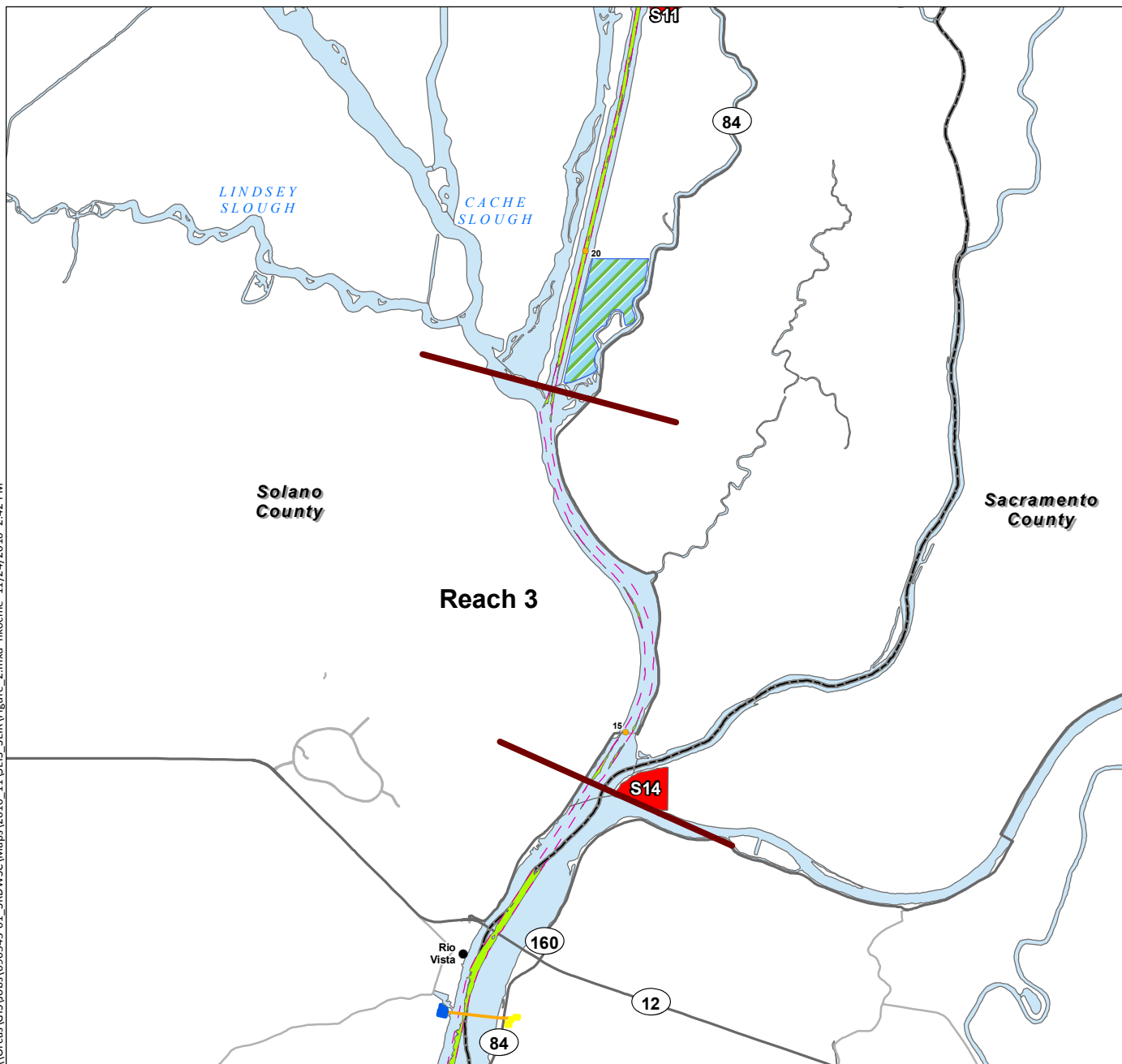
**Figure 2a**  
Proposed Project Footprint  
SEIS/SEIR  
Sacramento River Deep Water Ship Channel



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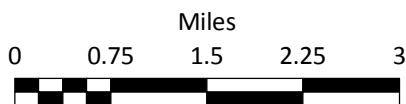
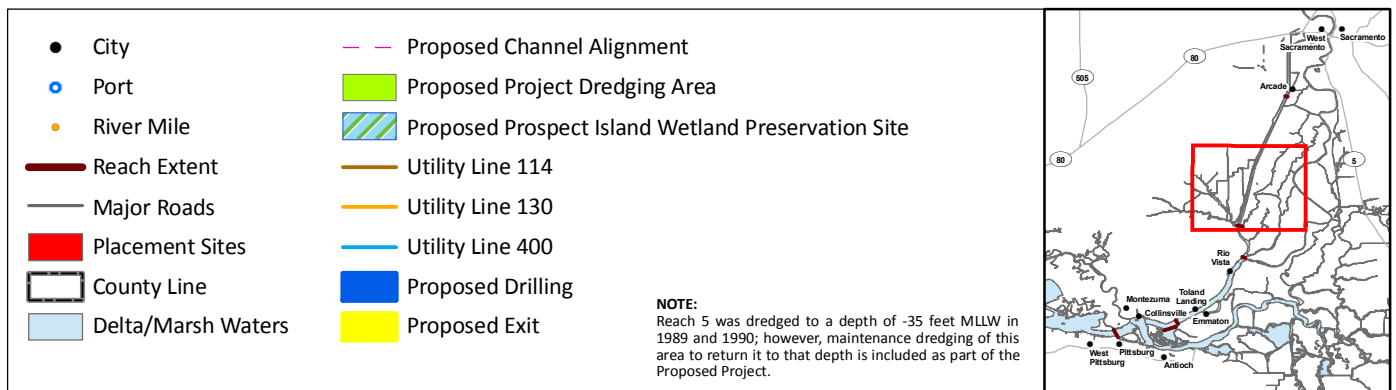
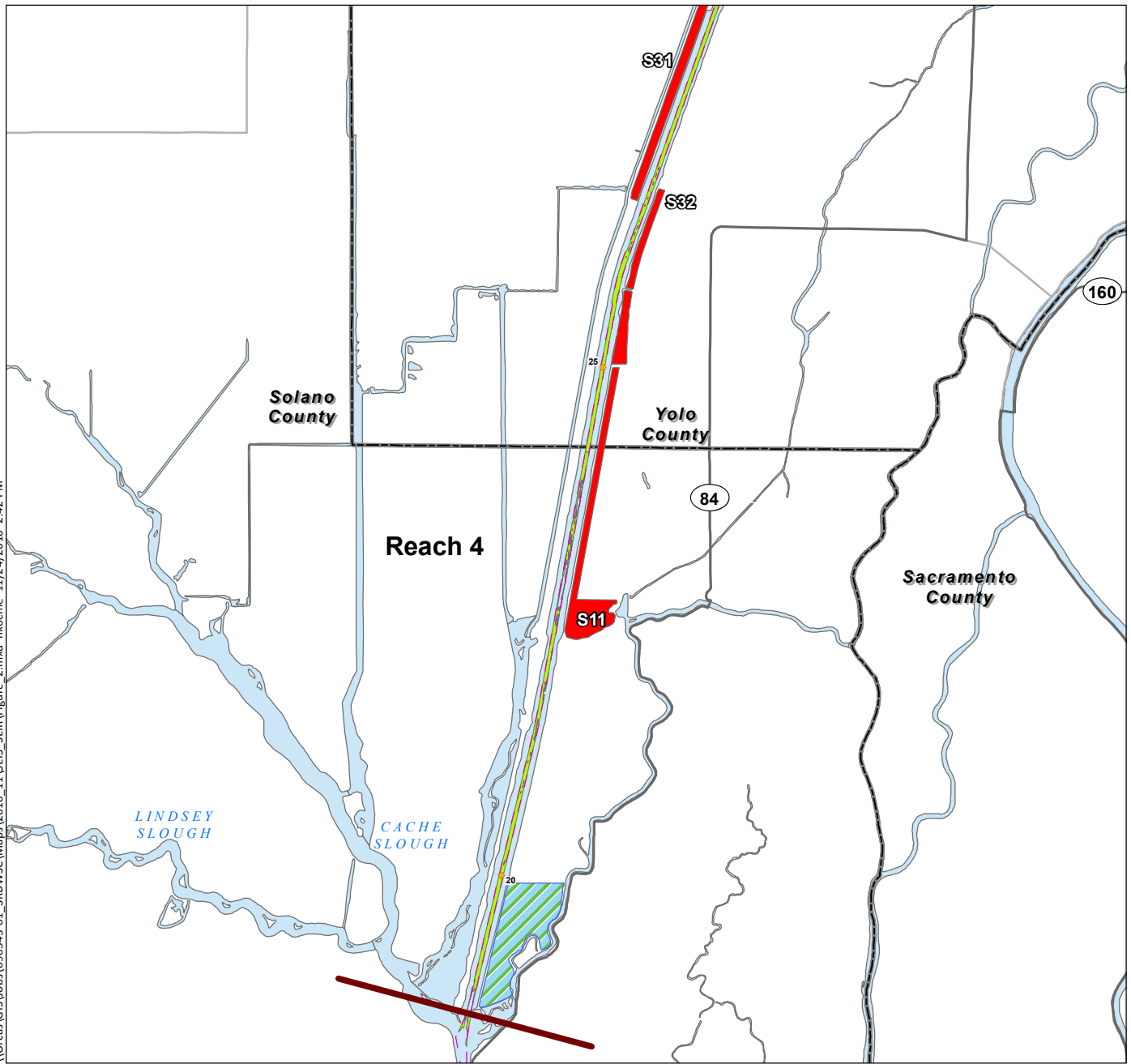


**Figure 2b**  
Proposed Project Footprint  
SEIS/SEIR  
Sacramento River Deep Water Ship Channel



**Figure 2c**  
Proposed Project Footprint  
SEIS/SEIR  
er Deep Water Ship Channel

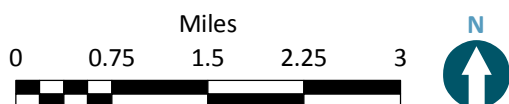
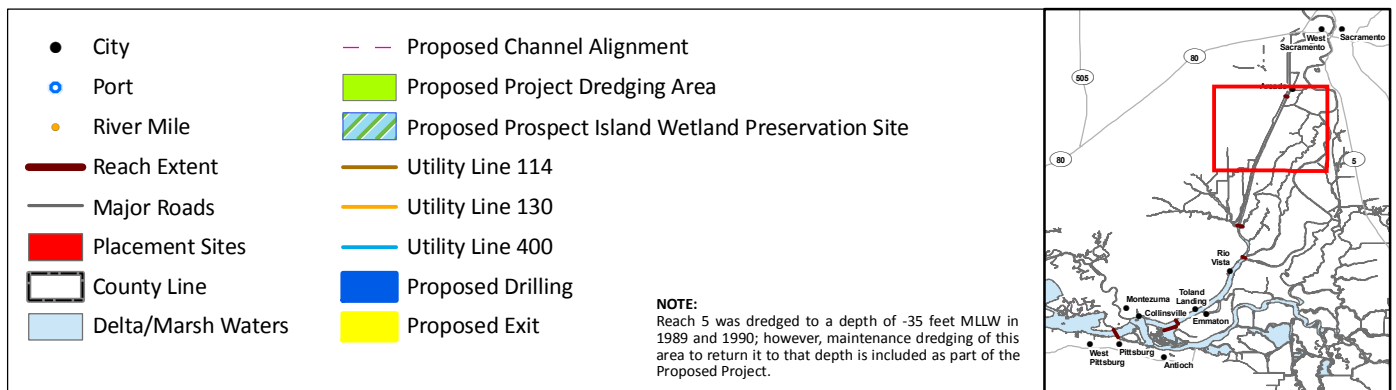
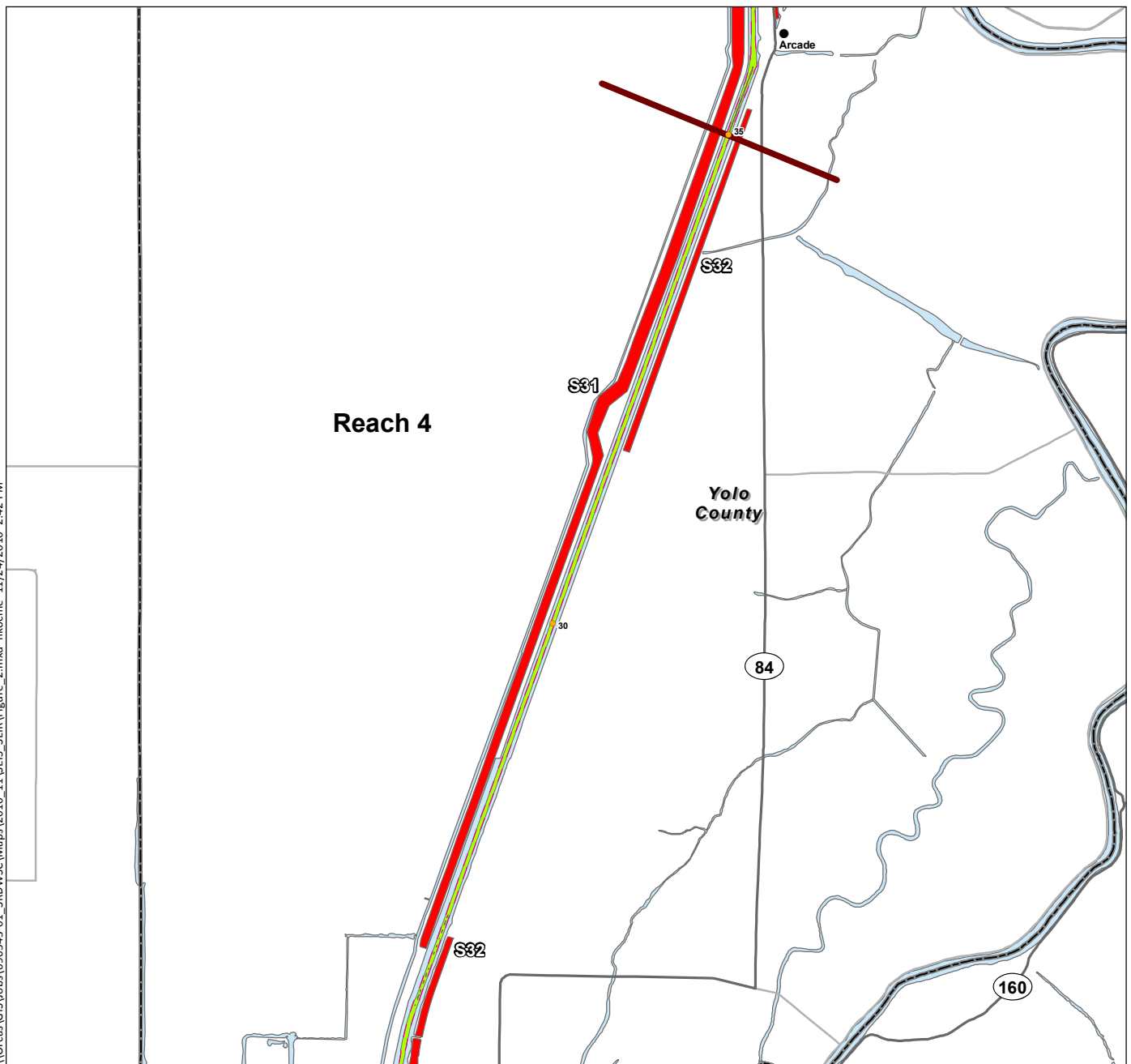
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**Figure 2d**  
Proposed Project Footprint  
SEIS/SEIR  
Sacramento River Deep Water Ship Channel



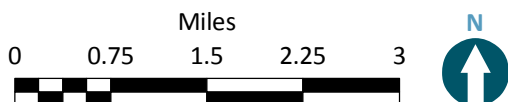
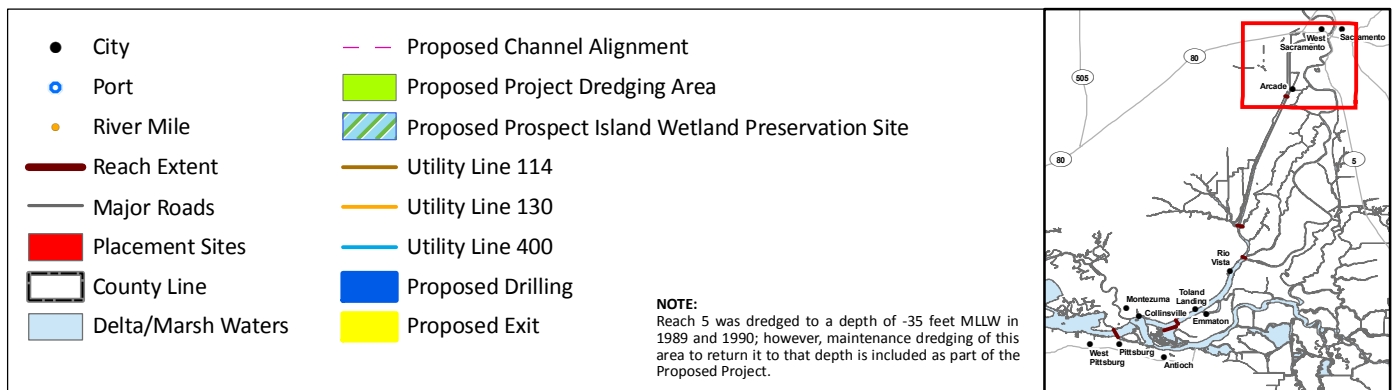
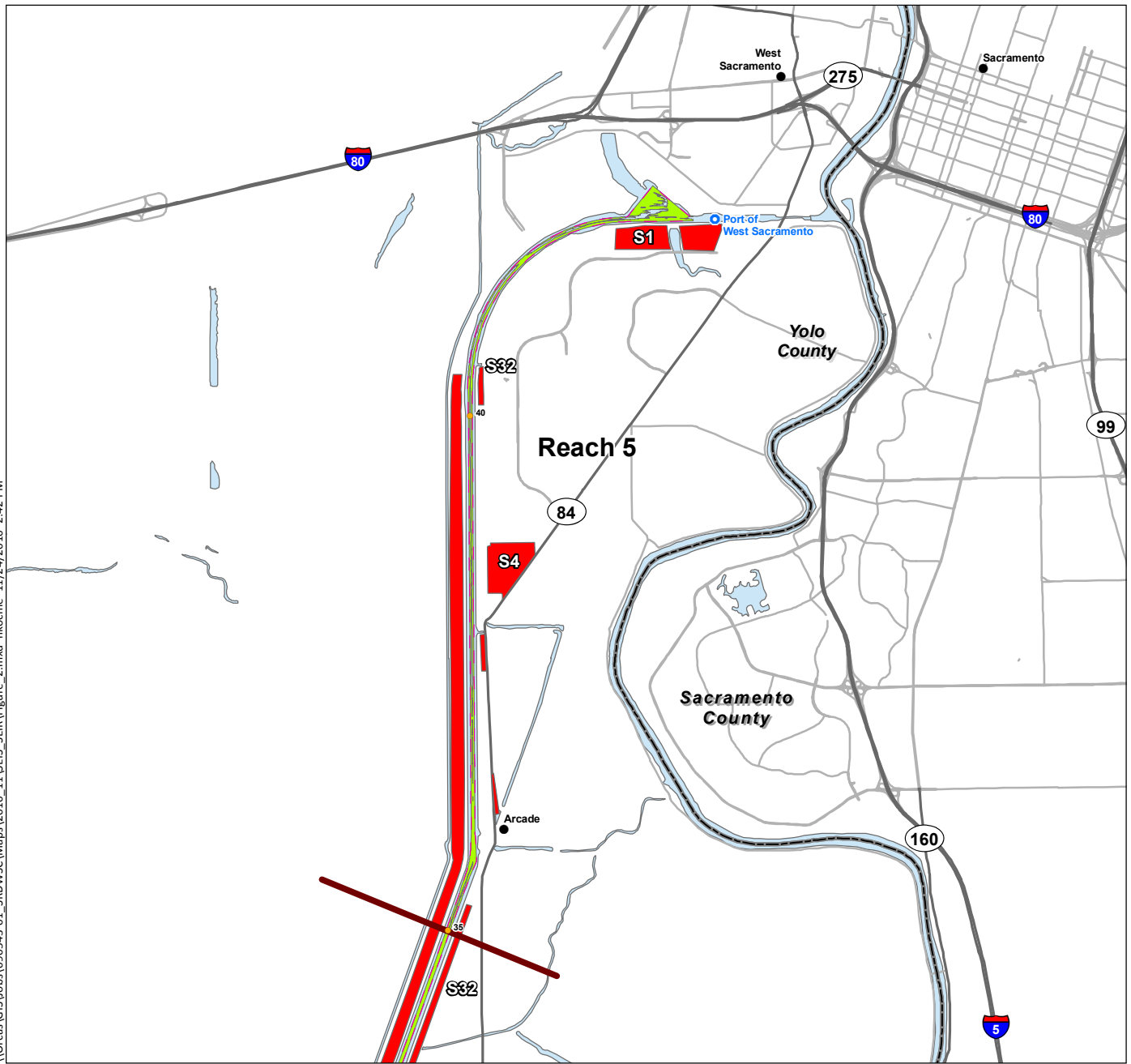
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**Figure 2e**  
Proposed Project Footprint  
SEIS/SEIR  
Sacramento River Deep Water Ship Channel



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**Figure 2f**  
Proposed Project Footprint  
SEIS/SEIR  
Sacramento River Deep Water Ship Channel

## **1.2 Purpose and Need/Project Objectives**

In accordance with NEPA, an EIS requires a statement of purpose and need (40 CFR 1502.13). The need is the broad underlying necessity or requirement to which the NEPA lead agency is responding. Statements of purpose and need are intended to be comprehensive enough to adequately encompass the need, and specific enough to guide the development of alternatives. Consequently, the need determines the range of alternatives that must be studied and the alternatives considered under NEPA must meet the project need. The proposed action is the lead agency's proposed response to the need for the project. Typically, the proposed action is only one of a number of alternatives that will meet the stated need. The purpose is typically the specific objectives of the proposed action, by which the need will be met. Project purposes do not define the need, but respond to it by including related considerations that must be integrated into the overall project.

Evaluation of proposed discharges of dredged material under the Clean Water Act (CWA) Section 404(b)(1) Guidelines (described further in Section 1.6.1) requires a statement of basic and overall project purpose to serve as the basis for alternatives analysis. Because the Proposed Project would involve discharges of fill under Section 404(b)(1), the 404(b)(1) requirements were considered as part of development of the Proposed Project and alternatives (see discussion of dredged material placement site screening in Section 2.3). The determination that proposed discharges of fill are the Least Environmentally Damaging Practicable Alternative (LEDPA) is documented in the Draft 404(b)(1) Alternatives Analysis, which is included as Appendix B.

The NEPA statement of purpose and need is similar to CEQA "objectives." The CEQA Guidelines Section 15124(b) states that the project description must include "a statement of objectives sought by the proposed project" and that the objectives are intended to help the lead agency develop a reasonable range of alternatives to evaluate in an EIR (in this way, objectives are similar to the NEPA need, and the Section 404 overall project purpose). The CEQA Guidelines further state "the statement of objectives should include the underlying purpose of the project."

Alternatives considered in an EIS must meet the need to which the lead agency is responding. The evaluation of alternatives must consider and address the project's purposes. The environmental evaluation presented in an EIS/EIR, as well as the findings made when approving a project alternative, also must consider and address the overall project objectives, which include the underlying project purpose. However, while CEQA encourages decision-makers to select alternatives that meet project objectives, it does not require that the approved project meet all project objectives.

For this SEIS/SEIR, the requirements to state the underlying NEPA “need,” CEQA “purpose,” and CWA Section 404 “overall project purpose” to which the Proposed Project responds are met by the following statement:

- Resume deepening of the SRDWSC to its Congressionally authorized depth to realize increased economic benefits associated with a reduced transportation cost of moving goods to the Port, and provide safe navigation for commercial marine traffic.

With regard to CWA Section 404, the basic project purpose, as previously approved by Congress, is safe and efficient commercial marine navigation, which is a water-dependent purpose.

To meet the need, the Proposed Project must meet the following objectives:

- Effectively and efficiently accommodate existing and likely future vessel traffic to the Port
- Improve the cost-efficiency of vessel transits through the SRDWSC, while providing suitable conditions in the SRDWSC for current and future classes of ships to access the Port safely, in an environmentally acceptable and sustainable manner
- Reduce current and expected future light-loading requirements for vessels calling at the Port
- Reduce current and expected future maneuvering access problems in the SRDWSC
- Maximize the potential for beneficial use of dredged material as practicable

The Proposed Project meets a public need for efficient and safe import and export of commodities to and from the Port.

### **1.3 Study Area Description and Scope of Analysis**

The 43.4-mile-long SRDWSC is located in the Delta. The SRDWSC comprises an approximately 17-mile section of the Sacramento River (from New York Slough to approximately 2 miles north of Rio Vista) and the entire length of the 29-mile navigation channel (from approximately 2 miles north of Rio Vista to the Port). The upper approximately 25 miles of the navigation channel is man-made, and the 8.4 miles of the navigation channel nearest the Port comprise the portion that was previously dredged to -35 feet MLLW. For the purposes of this Draft SEIS/SEIR, the SRDWSC is divided into five reaches. The geographic boundaries of each reach are shown in Figure 2 and detailed in Table 1.

**Table 1**  
**Study Area Reach Extents**

Reach	Begins at River Mile, Station	Ends at River Mile, Station	Description of Reach Extents
Reach 1	RM -2.4, -126+72	RM 4.0, 211+20	Begins at New York Slough and the Stockton Deep Water Ship Channel and ends northeast of Sherman Lake (Sherman Island)
Reach 2	RM 4.0, 211+20	RM 14.4, 761+25	Begins northeast of Sherman Lake (Sherman Island) and ends just north of the SRDWSC's confluence with the Sacramento River
Reach 3	RM 14.4, 761+25	RM 18.6, 983+98	Begins north of the confluence of the Sacramento River and ends at the southern extent of the man-made portion of the navigation channel
Reach 4	RM 18.6, 983+98	RM 35.0, 1848+00	Begins at the southern end of the man-made portion of the navigation channel and ends at the southern end of the previously deepened portion of the navigation channel
Reach 5	RM 35.0, 1848+00	RM 43.4, 2290+33	Begins at the southern end of the previously deepened portion of the navigation channel and ends east of the Port's turning basin

The scope of analysis under NEPA and CEQA for this Draft SEIS/SEIR includes the Port, the proposed dredging footprint (for deepening and widening activities) within the SRDWSC, and the proposed dredged material placement sites. The study area for the Proposed Project is defined as all areas within the scope of analysis.

#### **1.4 Problems and Opportunities**

Two primary problems were identified with the SRDWSC in its current condition: 1) the existing depth of the channel limits both the load per vessel and the vessel type that can access the Port; and 2) the existing width of the SRDWSC can make navigating to the Port difficult and unsafe, particularly in inclement weather (USACE 2009c). Unsafe and difficult navigation also limits the type (length) of vessel that can call at the Port.

An opportunity is defined as a future desirable condition or a description of what could or should be. The primary opportunity of the Proposed Project is the improvement of safety and efficiency associated with commercial navigation on the SRDWSC (USACE 2009c), which would thereby reduce transportation costs and increase safety of marine commerce on the SRDWSC.

#### **1.5 Relevant Prior Studies, Reports, and Plans**

In preparing this Draft SEIS/SEIR, a number of related plans and projects were reviewed and considered that were, or are proposed to be, conducted in the vicinity of the study area.

Representative plans and projects are summarized below.

**Bay-Delta Conservation Plan** – The Bay-Delta Conservation Plan (BDCP) is a long-term conservation strategy focused on promoting the recovery of endangered, threatened, and sensitive fish and wildlife species and their habitats in the Delta in a way that will also protect and restore water supplies. The BDCP is being developed in compliance with the federal Endangered Species Act (ESA) and the California Natural Communities Conservation Planning Act (NCCPA). Specific goals of the BDCP include: identifying conservation strategies to improve the overall ecological health of the Delta; identifying ecologically friendly ways to move freshwater through and/or around the Delta; addressing toxic pollutants, invasive species, and impairments to water quality; and establishing a framework and funding to implement the recommendations of the BDCP over time. The BDCP comprises a collaboration of federal, state, and local water and resource protection agencies; environmental organizations; and other interested parties. A Draft EIS/EIR for the BDCP is being prepared under the Delta Habitat Conservation and Conveyance Program (DHCCP), which was formed in 2008 and is a partnership between the California Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (USBR). The DHCCP Draft EIS/EIR is expected to be ready for public review and comment by 2011, and will evaluate options for conveying Delta water throughout the state while avoiding sensitive habitat (commonly referred to as the Peripheral Canal or Alternative Conveyance project); these options include constructing water intake facilities along the Sacramento River (and potentially along the SRDWSC). The DHCCP will advance the preferred alternative for water conveyance facilities and habitat restoration.

**Delta Vision** – The Delta Vision effort was initiated by Governor Arnold Schwarzenegger in 2007 due to growing concerns that the current combination of uses, resources, and ecosystems in the Delta cannot be sustained. Soon thereafter, the Governor appointed a Delta Vision Committee to prepare a strategic plan for the Delta. In October 2008, the Delta Vision Committee submitted the Delta Strategic Plan to the Governor and State Legislature. It recommended a number of priority actions to improve water conveyance and environmental quality throughout the Delta, including a commitment to restore and sustain a vibrant and diverse Delta ecosystem; maintain a focus on sea level rise; develop an emergency response plan; improve water conservation throughout the state; and provide a new system of dual water conveyance through and around the Delta to protect municipal, agricultural, environmental, and other beneficial uses of water.

**Delta Long Term Management Strategy** – The Delta Long Term Management Strategy (LTMS) is a cooperative effort to coordinate, plan, and implement dredging and beneficial use of dredged sediments in the Delta. It is a joint effort of state and federal agencies and

stakeholders. The ultimate goal of the Delta LTMS is to adopt a comprehensive plan for dredging permitting and sediment management and a plan for regulating placement of dredged material. The plan's sediment use objectives include stabilizing levees and maintaining channels for navigation, water conveyance, and recreation, while protecting and enhancing water quality and wildlife habitat.

**Levee System Integrity Program** – The Levee System Integrity Program seeks long-term protection of Delta resources by maintaining and improving the integrity of the region's extensive levee system. Protected Delta resources include water and habitat quality, local towns and villages, existing infrastructure, agricultural and recreational industries, and the 500,000 area residents. Implementing agencies for the Levee System Integrity Program are DWR, California Department of Fish and Game (CDFG), and USACE. This program has resulted in increased protection and maintenance of nearly 700 miles of Delta levees since 2000.

**Delta Risk Management Strategy** – The Delta Risk Management Strategy is a work group tasked with analyzing the sustainability of the Delta and assessing major risks to Delta resources from floods, seepage, subsidence, and earthquakes. The group will also develop recommendations to manage the risks. The need for the Delta Risk Management Strategy emerged as a component of a larger-scale effort undertaken by the CALFED Bay-Delta Program (CALFED) in 2000 to help make the Delta levee system more sustainable for the future. Specifically, the Delta Risk Management Strategy was intended to examine the sustainability of, and assess major risks to, Delta resources from floods, seepage, subsidence, and earthquakes. In February 2009, DWR released the *Delta Risk Management Strategy Phase 1 Report*, which will be used to develop a set of strategies to manage levee failure risks in the Delta and to improve the management of state funding that supports levee maintenance and improvement (CDWR 2009).

**CALFED Delta Dredging and Reuse Strategy** – CALFED is a unique collaboration among 25 state and federal agencies seeking to improve water supplies in California and the health of the Delta. CALFED's Delta Dredging and Reuse Strategy is the first step toward a solution to the regulatory constraints pertaining to dredging projects and levee management in the Delta. The strategy focuses on developing a permitting process for dredging projects that is protective of water quality, fish and wildlife resources in the Delta, safe navigation, and the structural integrity of levees. The strategy contains: 1) a summation of existing sediment quality data; 2) guidelines for assessing sediment quality; 3) an outline of pilot studies needed to evaluate the environmental fate of identified constituents of concern; and 4) a prioritized list of regions in the Delta where sediment quality data are incomplete or lacking (Central Valley RWQCB et al. 2002).

**Delta Stewardship Council** – The Delta Stewardship Council was created by legislation passed in 2009 to adopt and oversee implementation of a comprehensive management plan for the Delta by January 1, 2012. This plan will be used to guide state and local actions in the Delta in a manner that furthers the coequal goals of Delta restoration and water supply reliability. The Delta Stewardship Council assists state and federal implementing agencies with tracking and reporting of performance measures associated with the Delta. The team utilizes a collaborative management approach to work closely with partner agency staff, program stakeholders, and other parties interested in the overall ecosystem health, water supply reliability, and beneficial uses of the Delta (Delta Stewardship Council 2010).

**San Francisco Bay to Stockton Deep Water Ship Channel Plan** – The San Francisco Bay to Stockton Deep Water Ship Channel Plan (Stockton Deepening Plan) is a Congressionally authorized project being implemented by USACE, the Port of Stockton, and the Contra Costa County Water Agency. A joint EIS/EIR will evaluate the proposed navigational improvements to the John F. Baldwin and Stockton Deep Water Ship Channels. A General Reevaluation Report is in preparation to evaluate the feasibility of altering the current dimensions of the West Richmond, Pinole Shoal, Suisun Bay, and Stockton Ship Channels, which are currently maintained to -35 feet MLLW and provide access to oil terminals, industry in Pittsburg, and the Port of Stockton. There exists the potential that with construction of the Stockton Deepening Plan, deeper draft vessels could call on the Port of Stockton instead of the Port of West Sacramento; however, direct competition between the two ports is minimal because they offer unique and different commodity services. The relationship of the Stockton Deepening Plan to the various alternatives evaluated in this Draft SEIS/SEIR is addressed in more detail in Sections 2.2.2.6 and 2.2.3.6.

**Port of Sacramento Maritime Demand Analysis** – The Port of Sacramento Maritime Demand Analysis addresses the markets, forecasts, cargo priorities, regional significance, marine facility and infrastructure requirements, costs, and development options of the Port. The report forecasted growth without channel deepening to be in the range of 550,000 to 1,000,000 metric tons (MT) in 2010; whereas, growth with channel deepening would be in the range of 740,000 to 1,400,000 MT in 2010. The analysis suggested that the Port focus on bulk cement, bagged rice, import lumber, and bulk fertilizer. Woodchips, other mineral bulk and breakbulk cargoes, bulk rice, marine-dependent industrial tenants, and possibly domestic freight distribution opportunities should also be considered priority markets for the Port (Parsons Brinckerhoff 2004).

## **1.6 Relationship of Proposed Project to Environmental Statutes and Requirements**

This section describes federal, state, and local environmental statutes and requirements with



which the Proposed Project must comply.

### **1.6.1 Federal**

#### **Executive Orders**

- Protection of Wetlands 11990 (42 FR 26961, May 25, 1977)
- Federal Compliance with Pollution Control Standards 12088 (43 FR 47707, October 13, 1978)
- Environmental Justice 12898 (February 11, 1994)
- Amendments to Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks 13296 (68 FR 78, April 18, 2003)

**National Environmental Policy Act** (42 USC 4321 et seq.; 40 CFR 1500.1), as amended – NEPA was enacted by Congress in 1969 to ensure evaluation of the probable environmental consequences of proposals before decisions are made by federal agencies. When a federal agency determines that a proposed action could result in significant environmental effects, an EIS is prepared. The USACE has its own procedures for implementing NEPA, which are outlined in ER 200-2-2. An EIS informs decision-makers and the public of reasonable alternatives that avoid or minimize significant impacts to, or enhance the quality of, the environment while accomplishing the purpose and need of the proposal. An EIS is not only a disclosure document, it is a tool for federal agencies to plan actions and make decisions. The proposed action constitutes a major federal action requiring NEPA review (42 USC 4341 et seq.). Because a significant amount of time has passed since the initial EIS was completed for the proposed action, USACE is completing this Draft SEIS/SEIR to re-analyze the proposed action's potential effects pursuant to NEPA.

**Clean Water Act** (33 USC 1251 et seq.), as amended – The CWA established the federal structure for regulating surface water quality standards and discharges of pollutants into waters of the United States. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, which was significantly reorganized and expanded in 1972.

As previously discussed, any discharge of dredged or fill material into waters of the United States is regulated under Section 404 of the CWA. The proposed discharge must comply with the Section 404(b)(1) Guidelines, and the lead agency must determine that the proposed discharge is the LEDPA. Any discharge under Section 404 must also obtain a Section 401 Water Quality Certification (WQC). A Section 401 WQC is thus required for the Proposed Project and would be issued by the Central Valley Regional Water Quality Control Board (RWQCB). This Draft SEIS/SEIR contains necessary information to support a 404(b)(1) decision and issuance of a 401 WQC.

**Clean Air Act** (42 USC 7401 et seq.), as amended – The Clean Air Act (CAA) of 1955 and as amended in 1970 established the structure of the clean air program as it exists today. Major amendments enacted in 1977 and 1990 made significant changes to the program but continued to build on the program as designed in 1970. The primary objective of the CAA is to establish federal standards for air pollutants from stationary and mobile sources and to work with states to regulate polluting emissions. The CAA is designed to improve air quality in areas of the country that do not meet federal standards and to prevent significant deterioration in areas where air quality exceeds those standards. The Proposed Project must establish conformity with the CAA. The air quality analysis assumes compliance with regulatory requirements as part of the Proposed Project.

**Rivers and Harbors Act of 1899** (33 USC 401 et seq.) – The RHA of 1899 prevents unauthorized obstruction or alteration of navigable waters of the United States. Section 10 (33 USC 403) of the RHA covers construction, excavation, or deposition of materials in, over, or under such waters, or any work that would affect the course, location, condition, or capacity of those waters. The geographic jurisdiction of the RHA includes all navigable waters of the United States, which are defined (33 CFR 329) 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 to use to transport interstate or foreign commerce." Construction of the Proposed Project is regulated under the RHA.

**Coastal Zone Management Act of 1972** (16 USC 1451 et seq.) – The Coastal Zone Management Act (CZMA) is the Congressional plan for managing the nation's coasts. It was enacted to encourage the participation and cooperation of state, local, regional, and federal agencies and governments with programs affecting the coastal zone, and is the only environmental program that requires a balance between economic development and resource protection within the coastal zone. The CZMA allows states to develop a Coastal Zone Management Plan (CZMP) in which they define permissible land and water use within the state coastal zone, which extends 3 miles seaward and inland as far as necessary to protect the coastal zone. Federal agencies are required to carry out their activities in such a way that they conform to the maximum extent practicable with a state's CZMP. Construction of the Proposed Project is regulated under the CZMA.

**Fish and Wildlife Coordination Act** (16 USC 661 et seq.) – Under the Fish and Wildlife Coordination Act, any federal agency that proposes to control or modify any body of water must first consult with the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries (NMFS), as appropriate, and with the head of the appropriate state agency exercising administration over wildlife resources of the affected state. The USACE and the Port are consulting with USFWS for the Proposed Project. USFWS completed a Habitat

Evaluation Procedures (HEP; Appendix C) in November 2010 and a Draft Coordination Act Report in February 2011 (Appendix D).

**Magnuson-Stevens Fishery Conservation and Management Act** (Pub. L. 104-297; 16 USC 1801 et seq.) – The 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) require federal agencies that fund, permit, or carry out activities that may adversely impact essential fish habitat (EFH) of commercial fishery-managed species to consult with NMFS on the potential adverse effects of their actions on EFH. EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH for specific commercial fishery-managed species on the West Coast of the United States is described in three Fishery Management Plans (FMPs): Pacific Groundfish FMP, Pacific Coast Salmonid FMP, and Pelagic FMP. Under the Magnuson-Stevens Act, NMFS is required to comment and provide conservation recommendations for any activity (either federal or state agency-sponsored) that could impact EFH. On April 8, 2009, USACE sent a letter to NMFS requesting early coordination on the Proposed Project pursuant to the Magnuson-Stevens Act (USACE 2009e). Since then, USACE and NMFS representatives met to discuss the Proposed Project and potential impacts on EFH and EFH-managed species, and conducted a site visit to view maintenance dredging activities and fish entrainment monitoring. A Biological Assessment/EFH Assessment was prepared and sent to NMFS, requesting formal consultation. NMFS will provide USACE with Conservation Recommendations to avoid, offset, or compensate for impacts to EFH and EFH-managed species. Conservation Recommendations that are agreed upon by USACE and NMFS will be incorporated into the Final SEIS/SEIR.

**Endangered Species Act** (16 USC 1531 et seq.), as amended – The federal ESA protects threatened and endangered species and their designated critical habitat from unauthorized take. Section 9 of the ESA defines take as to harm, harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Take incidental to otherwise lawful activities can be authorized under Section 7 of the ESA when there is federal involvement and under Section 10 when there is no federal involvement. USFWS and NMFS share responsibilities for administering the ESA. ESA consultation for the Proposed Project would occur under Section 7. On April 8, 2009, USACE sent a letter to NMFS, USFWS, and CDFG requesting early coordination on the Proposed Project pursuant to the state and federal ESAs (USACE 2009e). Since then, USACE, NMFS, USFWS, and CDFG representatives met to discuss the Proposed Project and potential impacts on state and federal special status species and critical habitat and USACE and NMFS representatives conducted a site visit to view maintenance dredging activities and fish entrainment monitoring. A Biological Assessment/EFH Assessment was prepared and sent to the

agencies, requesting formal consultation. It is expected that ESA consultation will result in additional mitigation and monitoring, including full mitigation for state-listed species and a federal and state incidental take statement/permit. Mitigation measures developed through consultation will be incorporated into the Final SEIS/SEIR.

**Migratory Bird Treaty Act** (16 USC 703 et seq.) – The Migratory Bird Treaty Act (MBTA), as amended, provides for the protection of migratory birds by making it illegal to possess, pursue, hunt, take, or kill any migratory bird species, unless specifically authorized by the Secretary of the Interior (i.e., designated seasonal hunting). The MBTA also applies to removing nests occupied by migratory birds during the breeding season. Under certain circumstances, a depredation permit can be issued to allow limited and specified take of migratory birds. Because migratory birds exist in the study area, the Proposed Project must be in compliance with the MBTA.

**Marine Mammal Protection Act** (16 USC 1361 et seq.) – The Marine Mammal Protection Act (MMPA) was enacted in 1972 and protects all marine mammals. The MMPA “prohibits, with certain exceptions, the ‘take’ of marine mammals in United States waters and by United States citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States.” Sightings of harbor seals and whales in the SRDWSC are extremely rare; these species are thus not expected to be impacted by the Proposed Project.

**National Historic Preservation Act** (16 USC 470 et seq.) – The National Historic Preservation Act (NHPA) provides direction in preserving, restoring, and maintaining the historic and cultural environment of the nation. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on cultural resources listed or determined eligible for listing in the National Register of Historic Places (NRHP). The Section 106 implementing regulations are codified in 36 CFR 800, which describe the procedures that federal agencies follow to consult with the State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation, Native American tribes, and interested parties. The Section 106 process may conclude in a Memorandum of Agreement between the consulting parties and a Treatment Plan to resolve adverse effects to the identified significant cultural resources, referred to as “historic properties.” The Proposed Project must comply with the NHPA.

**Archaeological and Historical Preservation Act** (16 USC 469 et seq.) – Also known as the Archeological Recovery Act and the Moss-Bennett bill, the Archaeological and Historical Preservation Act (AHPA) requires federal agencies to preserve “historical and archeological data (including relics and specimens) which might otherwise be irreparably lost or destroyed

as the result of any alteration of the terrain caused as a result of any Federal construction project of federally licensed activity or program (Section 1)." The Proposed Project must comply with the AHPA.

**Federal Water Project Recreation Act** (16 USC 4601 et seq.) – The Federal Water Project Recreation Act (FWPRA) establishes the policy requiring consideration of opportunities for outdoor recreation and fish and wildlife enhancement when investigating and planning any federal navigation, flood control, reclamation, hydroelectric, or multi-purpose water resource project, whenever any such project can reasonably serve either or both purposes consistently (16 USC 4601-12). Recreational uses should be coordinated with other existing and planned federal, state, or local recreational developments. Local flood control, beach erosion control, small boat harbors, or hurricane protection projects are exempted (16 USC 4601-17(e)). The Proposed Project must comply with the FWPRA.

**Department of the Army Regulation** (AR 200-1) – Army Regulation 200-1, Environmental Protection and Enhancement, establishes policies, procedures, and responsibilities for protecting the environment. These include material substitution, process/equipment modification, waste stream segregation, improved procurement practices and inventory control, good housekeeping or best management practices (BMPs), proper storage, and employee training.

### **1.6.2 State**

**California Environmental Quality Act** (California Public Resource Code, Div. 13 21100), as amended – The CEQA was enacted by the California Legislature in 1970 and, like NEPA, requires public agencies to consider the environmental effects of their actions. Under CEQA, the state lead agency completes an EIR for projects that may have the potential to significantly affect the environment. The purpose of an EIR is comparable to that of an EIS. Because the Proposed Project will need other state approvals, it must comply with CEQA. Due to the significant amount of time that has passed since the initial EIR was completed, the Port is completing this SEIS/SEIR to re-analyze the potential effects of the Proposed Project pursuant to CEQA.

**Porter-Cologne Water Quality Control Act of 1966** (Water Code 1300 et seq.), as amended – The California Legislature enacted the Porter-Cologne Water Quality Control Act (Porter-Cologne) in 1969 to preserve, enhance, and restore the quality of the state's water resources. Porter-Cologne established the State Water Resources Control Board (SWRCB) and nine RWQCBs. These agencies are responsible for setting the state's water quality policy, enforcing ground and surface water quality standards, and regulating the discharges of pollutants from point and non-point sources by issuing Waste Discharge Requirements.

Dredging and discharge of dredged material under the Proposed Project requires issuance of Waste Discharge Requirements (WDRs) under Porter-Cologne, which would be issued by the Central Valley RWQCB. This Draft SEIS/SEIR contains information in support of the required WDRs, as well as information on past permits.

**California Clean Air Act of 1988** – The California Clean Air Act (CCAA) of 1988 requires nonattainment areas to meet and maintain the state ambient air quality standards as soon as possible. The CCAA required air districts to develop plans to meet the state ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. The air quality analysis assumes compliance with regulatory requirements as part of the Proposed Project. By complying with the California Air Resources Board (ARB) and local air quality management district emissions thresholds, the Proposed Project would comply with the CCAA.

**California Endangered Species Act of 1974**, as amended – Like the federal ESA, the California Endangered Species Act (CESA) provides for the protection of CDFG-recognized rare, threatened, and endangered plants and animals, and prohibits take of such species without CDFG authorization under Section 2081 of the Fish and Game Code. The lead agencies must consult with CDFG during the CEQA process if state-listed threatened or endangered species are present and could be affected by a project. For projects that could affect both state and federally listed species, compliance with the federal ESA satisfies the CESA as long as CDFG determines that the federal incidental take authorization is consistent with the CESA under Fish and Game Code Section 2080.1. CESA includes a requirement for full mitigation for take of listed species, and no net impacts to listed species may occur under CESA. CESA defines impacts that must be minimized and fully mitigated as "all impacts on the species that result from any act that would cause the proposed taking" (CESA Sec. 2081[b][2]). It goes on to require mitigation measures be "roughly proportional" to the impacts caused by a project (CESA 2052.1 Sec. 2081[b]). The Proposed Project coordination that has occurred to date with CDFG is consistent with coordination that occurred with NMFS and USFWS for the federal ESA. The USACE requested formal consultation, and it is expected that the CESA consultation will result in additional mitigation and monitoring, including full mitigation for state-listed species and a state incidental take permit. Mitigation measures developed through consultation will be incorporated into the Final SEIS/SEIR.

**California Fish and Game Code** (Sections 1600 et seq., Lake or Streambed Alteration Agreement Program) – Section 1600 et seq. of the California Fish and Game Code requires notifying CDFG before activities that substantially alter the bed, bank, or channel of a stream, river, or lake, including obstruction or diversion of the natural flow. This requirement applies to all perennial, intermittent, and ephemeral waterbodies, as well as the associated riparian vegetation that is used by fish and wildlife resources. Activities that have

the potential to affect jurisdictional areas can be authorized through issuance of a Streambed or Lake Alteration Agreement. The Streambed or Lake Alteration Agreement specifies conditions and mitigation measures that will minimize impacts to riparian or aquatic resources from proposed actions. The Proposed Project will require a Streambed Alteration Agreement.

**California Native Plant Protection Act.** –The California Native Plant Protection Act (CNPPA) protects the state’s endangered and rare plants. The CESA expanded on the original regulations and enhanced legal protection for plants, but the CNPPA remains part of the Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species and designated all "rare" animals in the CESA as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Since rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between the CDFG and the project proponent. Because CNPPA-listed species exist in the study area, the Proposed Project must be in compliance with the CESA.

**California Department of Transportation Encroachment Permit** – Written authorization from the California Department of Transportation (Caltrans) may be required for use of California state highways for other than normal transportation purposes (Caltrans 2007). Permits may be required for utility crossings and other modifications or encroachment of state highways (Caltrans 2009) that may occur as part of construction of the Proposed Project.

### **1.6.3        *Local***

**County (Contra Costa, Sacramento, Solano, and Yolo) General Plans** – The California Public Resources Code Section 65302a mandates that a general plan’s land use element designates “...the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land.” The California Public Resources Code Section 65583 requires that a general plan’s housing element consist of “...an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives and scheduled programs for the preservation, improvement and development of housing.” These plans guide local zoning, which is a regulatory control and is considered in the CEQA process. The Proposed Project must comply with all applicable County General Plans.

**Local Plans and Ordinances**, as applicable – Local general plans guide the zoning



requirements of cities within California. Like the county plans, the local plans provide guidance on land uses and general design requirements. The plans also specify general requirements for infrastructure and establish special districts that may be subject to additional regulatory requirements. Local ordinances, such as the noise ordinance in the City of Rio Vista, may also apply to the Proposed Project.

## **1.7 Intended Uses**

This Draft SEIS/SEIR was prepared in accordance with applicable federal and state environmental statutes, regulations, and policies to inform federal, state, and local decision-makers regarding the potential environmental impacts of the viable alternatives for the project. As an informational document, an EIS/EIR does not recommend approval or denial of a project. This Draft SEIS/SEIR is being provided to the public for review, comment, and participation in the planning process. After public review and comment, a Final SEIS/SEIR will be prepared, and all comments received from agencies, organizations, and individuals will be responded to in the Final SEIS/SEIR. The Final SEIS/SEIR will be the basis for decision-making by the NEPA and CEQA lead agencies, as described below, and other concerned agencies. The SEIS/SEIR will also document compliance with Section 404(b)(1) of the CWA.

### **1.7.1 USACE Uses**

This SEIS/SEIR will be used to support the reauthorization of the Proposed Project, and it will be considered in any permit actions that may be undertaken by USACE to implement the Proposed Project. The eventual USACE Record of Decision (ROD) will document USACE's decision on the Proposed Project, as well as any required environmental mitigation commitments.

### **1.7.2 Port Uses**

The Port has jurisdictional authority over the Proposed Project primarily pursuant to CEQA. The Final SEIS/SEIR will be used by the Port to inform agencies considering permit applications and other actions required to construct and operate the Proposed Project. The Port's certification of the SEIS/SEIR, Notice of Completion, Findings of Fact, and Statement of Overriding Considerations (if necessary) will document its decision as to the adequacy of the SEIS/SEIR and inform subsequent decisions on whether to approve the Proposed Project.