YOLO BYPASS EAST LEVEE REACH

California Environmental Quality Act Initial Study
SCH NUMBER 2009072055

Prepared for
West Sacramento Area Flood Control Agency

November 2021



NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR THE WEST SACRAMENTO AREA FLOOD CONTROL AGENCY WEST SACRAMENTO PROJECT, CALIFORNIA, YOLO BYPASS EAST LEVEE

(Pursuant to CEQA Section 21092 and CEQA Guidelines Section 15072)

In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, the West Sacramento Area Flood Control Agency (WSAFCA), has prepared an Initial Study and proposed Mitigated Negative Declaration (IS/MND) for the Yolo Bypass East Levee (the proposed Project). Based on the results of the Initial Study, WSAFCA determined that construction and operation of proposed Project would not have significant impacts on the environment. All potentially significant impacts identified in the Initial Study would be reduced to less than significant levels with implementation of appropriate mitigation measures.

Project Description:

The U.S. Army Corps of Engineers and its non-federal partner WSAFCA propose to install stability berms, replenish waterside revetment, reconstruct maintenance roads, and improve the levee drainage system of the Yolo Bypass East Levee (YBEL) in West Sacramento, California. The proposed Project is the first increment of the larger federal West Sacramento Project that will improve the West Sacramento Levee System.

Public Comment Period: November 5, 2021 to December 6, 2021.

NOTICE IS HEREBY GIVEN that the WSAFCA Board of Directors intends to adopt a CEQA Mitigated Negative Declaration for the proposed Project on December 16, 2021 at its regular meeting of the WSAFCA Board of Directors, in accordance with the CEQA Guidelines.

The public, all interested agencies and stakeholders are invited to review the IS/MND and submit written comments, pursuant to CEQA. The IS/MND may be accessed through the City of West Sacramento's website: https://www.cityofwestsacramento.org/government/departments/city-manager-s-office/flood-protection/levee-projects-overview

During the 30-day public review period, a virtual public meeting will be held to present the proposed project analyzed in the CEQA Initial Study. The public meeting will be held on Nov 17, 2021 at 6 pm. Information to attend the virtual public meeting is available the City of West Sacramento's website: https://www.cityofwestsacramento.org/government/departments/city-manager-s-office/flood-protection/levee-projects-overview

Written comments are due by 5 PM on December 6, 2021 and may be sent via USPS mail to:

West Sacramento Area Flood Control Agency
Attn: Greg Fabun, General Manager
1110 West Capitol Avenue
West Sacramento, California 95691

Or via email to: gregf@cityofwestsacramento.org
Please reference Yolo Bypass East Levee *comments in the subject line.*

YOLO BYPASS EAST LEVEE REACH

California Environmental Quality Act Initial Study
SCH NUMBER 2009072055

Prepared for
West Sacramento Area Flood Control Agency

November 2021

2600 Capitol Avenue
Suite 200
Sacramento, CA 95816
916.564.4500
esassoc.com

Bend
Camarillo
Delray Beach
Destin
Irvine
Los Angeles
Oakland
Orlando
Pasadena
Petaluma
Portland
Sacramento
San Diego
San Francisco
San Jose
Santa Monica
Sarasota
Seattle
Tampa

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Yolo Bypass East Levee Reach – Initial Study

Page

Chapter 1, Introduction 1
- 1.1 Organization of the Document 1
- 1.2 Purpose of the Mitigated Negative Declaration 2
- 1.3 Decision to Prepare a Mitigated Negative Declaration for this Project 3
- 1.4 Public Review Process 3
- 1.5 Agency Use of This Document 4

Chapter 2, Project Description 5
- 2.1 Proposed Project 5
- 2.2 Need for Proposed Project 6
- 2.3 Project Location 7
- 2.4 Background and Previous Environmental Documents 7

Chapter 3, Initial Study 13
- 3.1 Environmental Factors Potentially Affected 15
- 3.2 Environmental Checklist 16
  - 3.2.1 Aesthetics 16
  - 3.2.2 Agriculture and Forestry Resources 18
  - 3.2.3 Air Quality 19
  - 3.2.4 Biological Resources 22
  - 3.2.5 Cultural Resources 35
  - 3.2.6 Energy 39
  - 3.2.7 Geology and Soils 40
  - 3.2.8 Greenhouse Gas Emissions 43
  - 3.2.9 Hazards and Hazardous Materials 44
  - 3.2.10 Hydrology and Water Quality 47
  - 3.2.11 Land Use and Planning 51
  - 3.2.12 Mineral Resources 52
  - 3.2.13 Noise 53
  - 3.2.14 Population and Housing 54
  - 3.2.15 Public Services 55
  - 3.2.16 Recreation 56
  - 3.2.17 Transportation 57
  - 3.2.18 Tribal Cultural Resources 59
  - 3.2.19 Utilities and Service Systems 62
  - 3.2.20 Wildfire 64
  - 3.2.21 Mandatory Findings of Significance 66

Chapter 4, Report Preparers 69

Chapter 5, Mitigation Monitoring and Reporting Program 71

Page

List of Figures

Figure 1 West Sacramento Levee System 8
Figure 2 Regional Location 9
Figure 3 Project Location 10
Figure 3-1a Habitat Types....23
Figure 3-1b Habitat Types....24
Figure 3-1c Habitat Types....25
Figure 3-1d Habitat TypesFigure 3-1e Habitat Types....26
Figure 3-1f Habitat Types....28
Figure 3-1g Habitat Types....29

List of Tables

Table 1-1 Anticipated Permits and Approvals....4
Table 5-1 Mitigation Monitoring and Reporting Program....72

CHAPTER 1
Introduction

This initial study and proposed mitigated negative declaration (IS/MND) was prepared pursuant to Article 6, Section 15070 of the California Environmental Quality Act (CEQA) Guidelines. California Public Resources Code (PRC) Division 13, Section 21050 et seq. describes the CEQA process.

The West Sacramento Area Flood Control Agency (WSAFCA) is a non-Federal sponsor (NFS) and the lead agency under CEQA. The State of California Central Valley Flood Protection Board (CVFPB) is another NFS that has a Local Cooperation Agreement with WSAFCA. As discussed in Chapter 1 of the Environmental Assessment (EA), the U.S. Army Corps of Engineers (USACE), Sacramento District as the Federal Lead Agency under the National Environmental Policy Act (NEPA). USACE, CVFPB and WSAFCA proposes to reduce the overall flood risk to the City of West Sacramento by making structural modifications to Segments AA and AD of the Yolo Bypass East Levee (YBEL). USACE and WSAFCA propose to install stability berms, replenish waterside revetment, reconstruct maintenance roads, and improve the levee drainage system. The proposed project is the first increment of the larger federal West Sacramento Project that will improve the West Sacramento Levee System and conducted under the USACE Civil Works Program. The proposed project would be constructed in summer 2022.

This Initial Study (IS) is a California Environmental Quality Act (CEQA) document that will address project-level design changes from the 2015 West Sacramento General Revaluation Report Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The 2015 EIS/EIR (State Clearinghouse No. 2009072055) covered nine levee reaches within West Sacramento, including portions of the Sacramento River, Yolo Bypass, Sacramento Bypass, and the Sacramento Deep Water Ship Channel. This supplemental IS reviews the proposed project, YBEL Reach. The decisions are to adopt a Mitigated Negative Declaration (MND) under CEQA based on the findings included in this IS.

1.1 Organization of the Document

This document is organized to assist the reader in understanding the potential impacts of the proposed Project on the environment and to fulfill CEQA requirements. The IS contains the following sections:

Chapter 1, *Introduction*, describes this document's purpose under CEQA, describes the public participation process, and summarizes the applicable regulatory requirements and CEQA lead agency contact information.

Chapter 2, *Project Description*, provides an introduction to the Project, including Project background, needs, and objectives, and describes the proposed facilities. This section provides a detailed description of the proposed Project, its location and components, and the required entitlements anticipated for implementation of the proposed Project.

Chapter 3, *Initial Study*, presents the CEQA Initial Study Environmental Checklist and analyzes the potential environmental impacts of the proposed Project. The checklist identifies environmental issue areas that could be affected by the proposed Project and lists the determination of whether the Project's potential effects on those resources would be significant, less than significant with mitigation, less than significant, or no impact. The checklist also contains the rationale and support for each determination and describes mitigation measures that would avoid or reduce potentially significant impacts on the environment to less-than-significant levels.

Chapter 4, *Report Preparers*, presents a list of the individuals who have contributed to this IS/MND.

Chapter 5, *Mitigation Monitoring and Reporting Plan*, provides a table outlining the Project's mitigation measures for each of the impacted resource areas. The MMRP lists the responsible party, timing, and implementation of each mitigation measure for the proposed project.

1.2 Purpose of the Mitigated Negative Declaration

The purpose of the IS is to provide a basis for deciding whether to prepare an environmental impact report, an MND, or a negative declaration. Based on its findings, WSAFCA determined that a MND would satisfy the requirements of CEQA (PRC Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts on the environment. It is anticipated that this CEQA IS document will form the basis for state review by California responsible agencies such as the California Department of Water Resources, Central Valley Flood Protection Board (CVFPB). Federal review under the NEPA accompany the CEQA process, as an environmental assessment (EA) will support federal NEPA review. For more detail regarding agency uses of this IS, refer to section 1.7 of the EA *Decisions to Be Made* and section of this IS 1.5 *Agency Use of This Document*.

Section 15063(d) of the CEQA Guidelines states the content requirements of an IS as follows:

> 15063(d) Contents. An Initial Study shall contain in brief form:
>
> (1) A description of the project including the location of the project;
>
> (2) An identification of the environmental setting;
>
> (3) An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
>
> (4) A discussion of the ways to mitigate the significant effects identified, if any;

(5) An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;

(6) The name of the person or persons who prepared or participated in the Initial Study.

1.3 Decision to Prepare a Mitigated Negative Declaration for this Project

As discussed above, this Project is subject to the requirements of CEQA and WSAFCA is the CEQA lead agency for this Project. Before making a decision to approve a project, the lead agency must identify and document the potential significant environmental effects of the project in accordance with CEQA. This IS/MND has been prepared under the direction of WSAFCA to fulfill these requirements.

The IS analysis indicates that some impacts would be potentially significant, but that Project modifications (such as resource avoidance and impact minimization measures) as well as the recommended mitigation measures would result in the impacts being reduced to less-than-significant levels. In accordance with CEQA Guidelines Section 15070, an MND is the appropriate document for this Project because the IS identifies potentially significant effects. However:

a. Revisions to the project plan were made that would avoid, or reduce, the effects to a point where clearly no significant effects would occur; and

b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

1.4 Public Review Process

The draft IS/MND is being circulated to state and local agencies, interested organizations, and individuals who might have had interest in, and wish to review and provide comments on, the project description, the proposed mitigation measures, or other aspects of the report. The 30-day public review period per CEQA Guidelines Section 15105(b) will commence on November 5, 2021and run through December 6, 2021.

This draft IS/MND and supporting documentation is posted on WSAFCA's website during this public review period: https://www.cityofwestsacramento.org/government/departments/city-manager-s-office/flood-protection/levee-projects-overview.

Printed copies of the draft IS/MND and supporting documents are also available for review at:

Arthur F. Turner Community Library
1212 Merkley Ave
West Sacramento, CA 95691

Via written request for a paper copy or download directly from the City of West Sacramento's website at https://www.cityofwestsacramento.org/government/departments/city-manager-s-office/flood-protection/levee-projects-overview.

Written comments regarding the IS/MND should be directed to the attention of Greg Fabun at the address provided below.

Greg Fabun, WSAFCA General Manager
Flood Protection Division
City of West Sacramento
1110 West Capitol Avenue, 2nd Floor
West Sacramento, CA 95691

e-mail: gregf@cityofwestsacramento.org

1.5 Agency Use of This Document

CEQA *responsible agencies* are state and local agencies that have some responsibility or authority for carrying out or approving a project. In many instances, these public agencies must make a discretionary decision to issue an approval or permit, provide a right-of-way or encroachment, or provide funding or other resources critical to the execution of a project. *Trustee agencies* are state agencies that have the authority by law for the protection of natural resources held in trust for the public. CVFPB is an example of a responsible agency anticipated to have jurisdiction over resources potentially affected by the proposed project.

This IS/MND is intended to assist federal, state, and local agencies with some form of discretionary jurisdiction to carry out their responsibilities for permit review or approval authority over various aspects of a project. The proposed project would likely require specific permitting, approvals and/or review by the agencies listed in **Table 1-1**.

TABLE 1-1
ANTICIPATED PERMITS AND APPROVALS

Potential Permit or Approval	Agency
Adoption of YBEL IS/MND	West Sacramento Area Flood Control Agency
Concurrence of YBEL IS/MND; Encroachment Permit per CCR Title 23, Division 1, Table 8.1	Central Valley Flood Protection Board
Biological Assessment, West Sacramento Project, Yolo Bypass East Levee Reach	U.S. Fish and Wildlife Service
Consistency Determination	Delta Stewardship Council
National Pollutant Discharge Elimination System with Waste Discharge Requirements	Central Valley Regional Water Quality Control Board (Region 5)
Storm Water Pollution Prevention Plan (SWPPP) under the General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009 DWQ) under the NPDES	Central Valley Regional Water Quality Control Board (Region 5)
National Historic Preservation Act, Section 106 Consultation	California State Historic Preservation Officer

CHAPTER 2
Project Description

2.1 Proposed Project

The Yolo Bypass East Levee (YBEL) was originally constructed prior to the formation of Reclamation District 900 in 1911. Levee improvements and repairs are necessary to maintain structural integrity of the YBEL and to meet current performance guidelines and requirements. The USACE proposes to reduce the overall flood risk to the City of West Sacramento by making structural modifications to Segments AA and AD of the YBEL. The proposed project consists of structural modifications to the levee, to address seepage, levee stability, erosion, and overtopping concerns. The modifications would occur on approximately 3,300 linear feet of the YBEL, including 2,475 linear feet along the AA segment and 825 linear feet along the AD segment. The total project area would be approximately 15 acres.

Structural modifications are proposed on approximately 2,475 linear feet (station 22+00 to station 53+00) of Segment AA. Primary improvements include installation of a stability berm adjacent to the existing levee, replenishment of existing waterside revetment extending north from the Navigation Levee to the I-80 Causeway, reconstruction of the existing maintenance road adjacent to the levee, and installation of piping in the drainage ditch.

Structural modifications are proposed along 825 linear feet (station 114+00 to station 124+00) of Segment AD. Primary improvements include landside embankment grading and extending a subgrade levee drainage system. The extension consists of approximately 800-feet of 30-inch diameter perforated pipe to alleviate ongoing seepage. A new pump station would be constructed as part of the levee drainage system with capacity to discharge seepage away from the levee prism into the Yolo Bypass. The new pump station would be sited at station 122+00, adjacent to RD 900's existing pump station (Racetrack pump station) and would be sized to pump and discharge up to 33.6 cubic feet per second during a 100-yr flood event into the Yolo Bypass in years when the Yolo Bypass is flooded and the drainage system is active and collecting drainage water that would be discharged back to the Yolo Bypass. Additionally, the landside levee slope would be constructed at 3.5H:1V with a drainage blanket along the base of the reconstructed levee.

The proposed project is the first increment of the larger federal West Sacramento Project that will improve the West Sacramento Levee System and conducted under the USACE Civil Works Program (**Figure 1**). The proposed project would be constructed in summer 2022. As a complementary document to the NEPA EA, this IS is based on the same project information, construction activities and analysis contained in the NEPA EA. A complete description of the anticipated construction schedule and activities, including anticipated workers, equipment, staging areas, site preparation, restoration and operations and maintenance is found in NEPA EA sections 2.3.1 through 2.3.8.

2.2 Need for Proposed Project

The project purpose is to reduce the overall flood risk to the City of West Sacramento, California. An unacceptably high risk of flooding from levee failure threatens the public safety of people, as well as property and critical infrastructure, throughout West Sacramento and the region. In addition to the high probability of flooding, the consequences of flooding at the project site would be catastrophic. The flooding would rapidly inundate an urbanized area with minimal warning or evacuation time. Providing flood risk management would reduce loss of life and damage to property in the study area.

Furthermore, the State of California has developed new standards and criteria for protecting urban areas to reduce flood risk. Bringing the West Sacramento project levees up to these standards would reduce risk of uncontrolled flooding in the study area that could result in significant damages.

California Senate Bill (SB) 5 of 2007, the Central Valley Flood Protection Act (Act), required that Department of Water Resources (DWR) and the CVFPB address flooding problems in the Central Valley and report to the Legislature in 2012 with updates every 5 years. This landmark legislation obligated the State and local governments to approach flood management in a much more holistic way. Importantly, the Act required that urban communities (communities with a population with 10,000 people or communities expected to have 10,000 people within 10 years) achieve a 200-year level of protection by 2016 or no new development entitlements may be granted unless the communities certify they have made (and annually are making) adequate progress in implementation and will achieve the State's 200-year standard by 2025. The Act also required that DWR prepare maps showing areas subject to inundation in a 200-year event and provide annual notices to all homes protected by levees to ensure homeowners understand their flood risk. Significantly, the Act also required that DWR prepare and the CVFPB adopt a Central Valley Flood Protection Plan (CVFPP) by July of 2012. This plan was to provide the framework for modification of and future investment decisions in the Central Valley's flood protection system. On June 29, 2012, the CVFPB did adopt the CVFPP which included a strategy for reducing the flood risk of the citizens of the Central Valley. The plan focuses on: (1) urban areas obtaining at least 200-year protection through structural improvements; (2) significant upgrades to system-wide facilities (such as bypasses) to add additional robustness and redundancies to the system; (3) investment in small community systems (structural improvements or nonstructural improvements, such as home elevation) to achieve at least 100-year protection; (4) spot repairs and operation and maintenance improvements for the rural areas of the Valley; and (5) investment

to update emergency response and recovery plans. In 2007, West Sacramento voters approved an assessment on property to fund the local portion of costs to improve the West Sacramento levee system. The assessment has been used to construct improvements under the State's Early Implementation and Urban Flood Risk Reduction Programs in advance of the federal West Sacramento Project (WSP). YBEL is the first levee increment to be improved under the WSP. The WSP will meet the USACE's and State's current levee design criteria and provide at least a 0.5% annual chance of exceedance (200 year) level of protection.

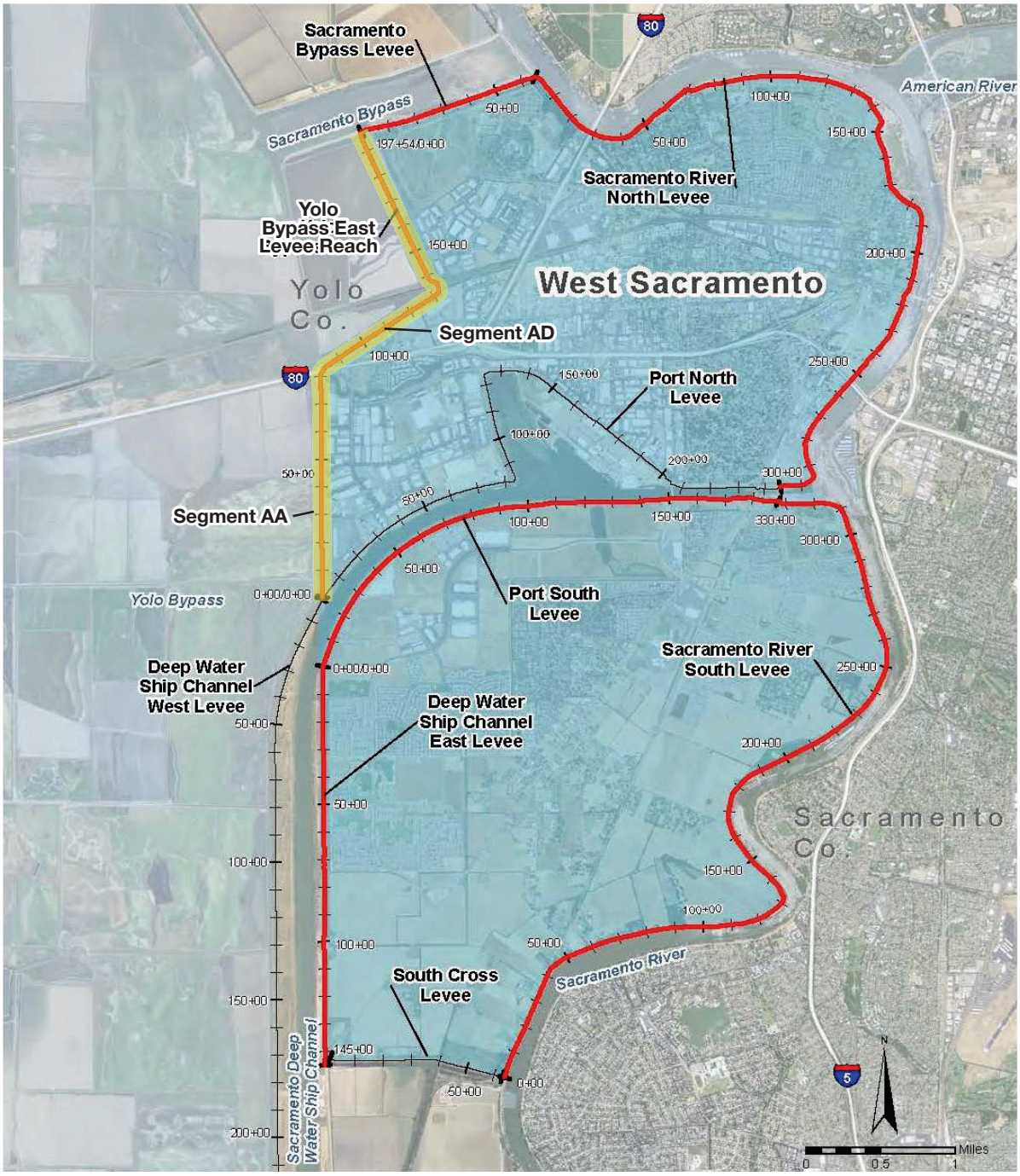
In 2007, West Sacramento voters approved an assessment on property to fund the local portion of costs to improve the West Sacramento levee system. The assessment has been used to construct improvements under the State's Early Implementation and Urban Flood Risk Reduction Programs in advance of the federal West Sacramento Project (WSP). YBEL as shown in **Figure 1** is the first levee increment to be improved under the WSP.

2.3 Project Location

The project site is located within the City of West Sacramento, and resides within WSAFCA's boundaries, which encompass portions of the YBEL, specifically, segments AA and AD are subject to the proposed levee repairs, as shown in **Figures 2 and 3**. The flood protection system associated with these waterways consists of over 50 miles of levees in RD 900, RD 537, and DWR's Maintenance Area 4, that completely surround the City of West Sacramento. The City of West Sacramento is located in eastern Yolo County at the confluence of the American and Sacramento Rivers. The City of West Sacramento lies within the natural floodplain of the Sacramento River, which bounds the city along the north and east. It is made up of a small amount of high ground between the Tower Bridge to south of Highway 50 along the Sacramento River, and reclaimed land protected from floods by levees and the Yolo and Sacramento Bypass systems.

2.4 Background and Previous Environmental Documents

The history of the Sacramento River Flood Control Project (SRFCP) dates back to the mid-1800s with the initial construction of levees along the Sacramento, American, Feather, and Yuba Rivers. The early history of the SRFCP was characterized by trial and error, with initial construction followed by a levee failure, followed by improvement (strengthening and/or raising), followed by another levee failure, etc. This continued until the California Legislature authorized a comprehensive plan for controlling the floodwaters of the Sacramento River and its tributaries in the Flood Control Plan of 1911. Federal participation in the SRFCP began shortly after authorization in 1917 and continues to this day.



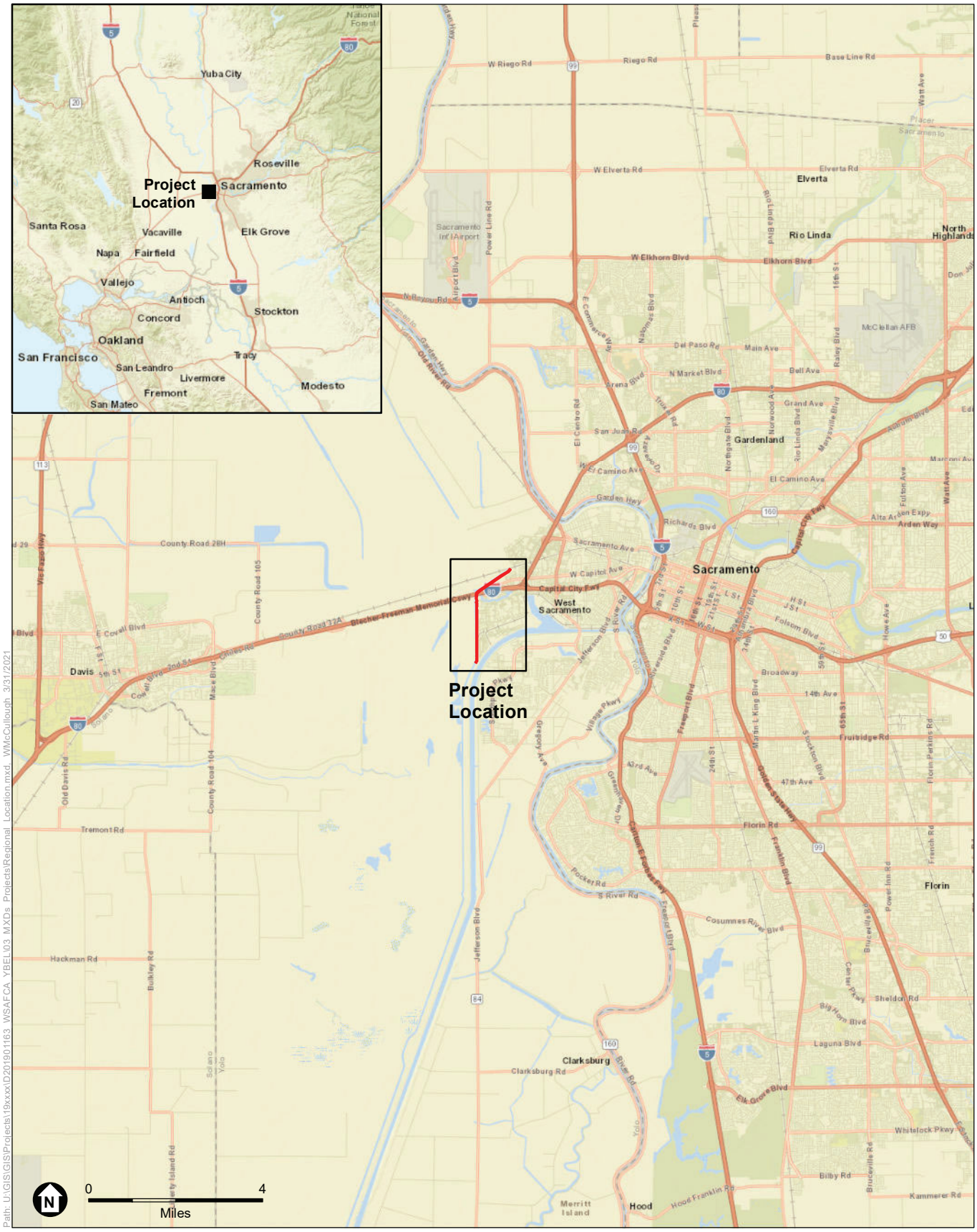
SOURCE: Post Authorization Change Report, 2014

Yolo Bypass East Levee Environmental Assessment

Figure 1
West Sacramento Levee Area

ESA

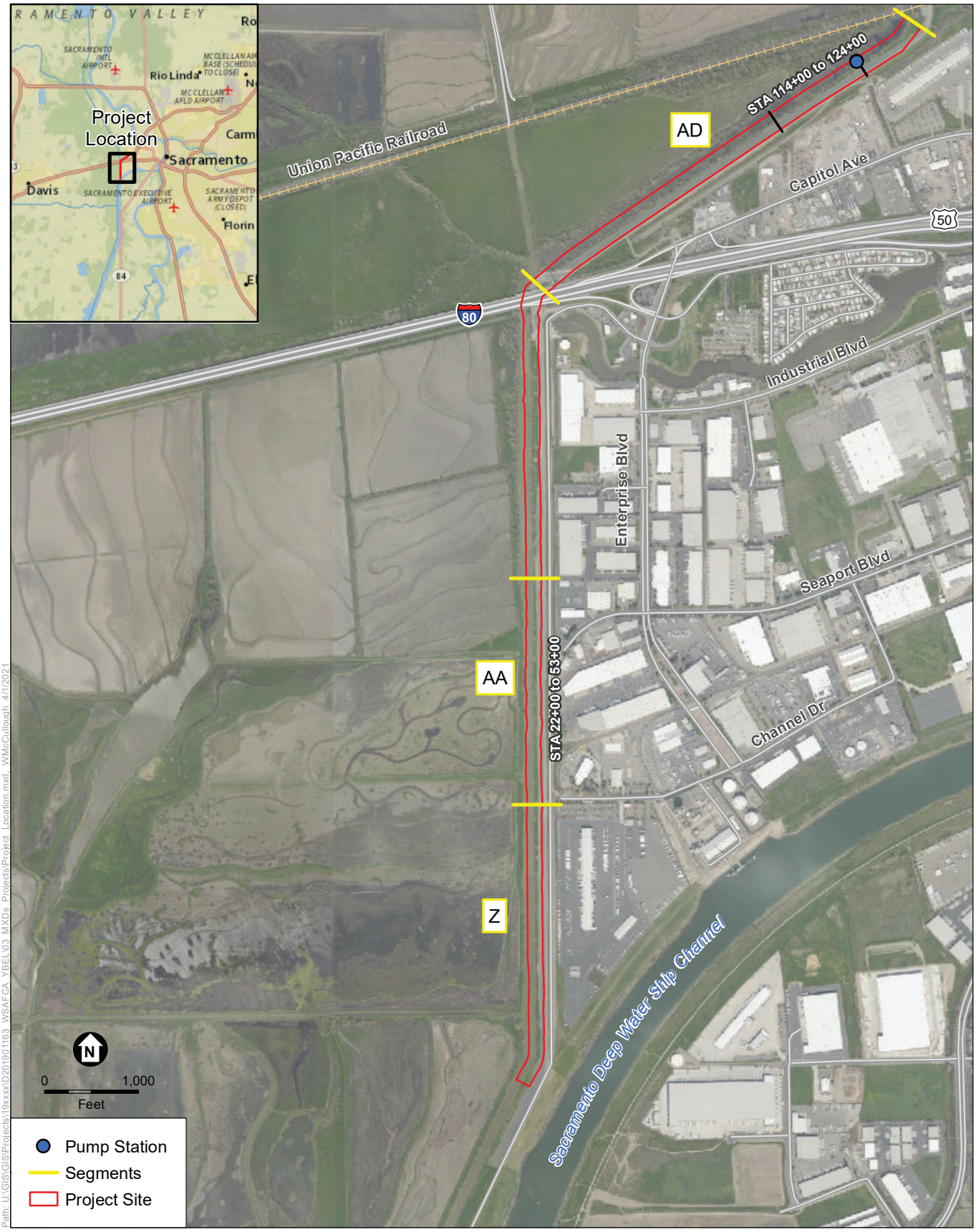
D2019011163.00 - West SAFCA Yolo Bypass East Levee\05 Graphics-GIS-Modeling\Illustrator



SOURCE: ESRI, 2021

Yolo Bypass East Levee Environmental Assessment

Figure 2
Regional Location



Yolo Bypass East Levee Environmental Assessment

Figure 3
Project Location

ESA

Historically, from the mid-1800s onward, most hydraulic engineers at the Federal, State, and local level thought that the most effective way to control flood flows in the river system was to construct levees close to the main channel. This approach served two purposes. First, it allowed reclamation of as much land as possible for agricultural purposes. Second, it kept flows in the main channel and thus helped to flush out the hydraulic mining debris that clogged much of the river system and impaired navigation. The record floods of 1907 and 1909 forced a reevaluation of this historic approach. It was clear from the size of these flood events in relation to existing channel capacities that major bypass systems were needed to control excess flood flows. These bypasses were designed to divert flood flows away from urban centers. Throughout the SRFCP, the frequency upon which flow starts to divert from the Sacramento River to the bypass system, varies between a 3-year to 5-year flood event.

The series of storms that struck California in February of 1986 resulted in the flood of record for many areas in northern and central California. The estimated peak flows associated with the 1986 flood were nearly equal to or exceeded the design flows of the Sacramento River, Sacramento Bypass, and the Yolo Bypass in the vicinity of West Sacramento. As a result of the problems experienced during the 1986 flood, the USACE initiated a study of the levees comprising the SRFCP that were impacted by the flood. Due to the large scale of the study, the review was split into five phases. The first phase of this study included West Sacramento and was documented through an Initial Appraisal Report titled, Sacramento Urban Area Levee Reconstruction Project, California dated May 1988. This phase included the review of approximately 110 miles of levee and recommended the improvement of 34 miles.

The USACE was preparing construction plans and specifications for the levee improvements authorized in the WRDA of 1992, when the 1997 New Year's Day Flood occurred. It was one of the largest experienced in northern California since beginning of record keeping and exceeded the 1906 event. In the wake of the 1997 flood, the USACE identified underseepage as an area of greater concern in the design and repair of levees. This resulted in a number of design revisions to the levee improvements recommended in the West Sacramento Project Design Memorandum. These design revisions and the associated increase to the total estimated project cost were captured in a supplemental authorization through the Energy and Water Development Appropriation Act of 1999 (PL 105-245).

Through the course of implementation of authorized project features, it was found that the scope of the authorized project was not adequate to address the residual flood risk for the West Sacramento area, and construction of the features authorized thus far had caused the project to reach its authorized cost limit. The Corps conducted a general revaluation study of the West Sacramento Project which included measures to address seepage, stability, erosion, and levee height concerns throughout the system of levees that surround West Sacramento and documented the findings in the West Sacramento GRR. In December 2015, the FEIS/EIR was published for the West Sacramento GRR; followed by the Chief's Report (signed on April 26, 2016) with a Record of Decision signed on August 22, 2016.

This page intentionally left blank

CHAPTER 3
Initial Study

1. Project Title:	Yolo Bypass East Levee Reach Improvement Project
2. Lead Agency Name and Address:	**West Sacramento Area Flood Control Agency** 1110 West Capitol Avenue West Sacramento, CA 95691
3. Contact Person and Phone Number:	Mark Zollo Senior Administrative Analyst Flood Protection 1110 West Capitol Avenue West Sacramento, CA 95691
4. Project Location:	Reach of the YBEL in the City of West Sacramento, California
5. Project Sponsor's Name and Address:	West Sacramento Area Flood Control Agency U.S. Army Corps of Engineers 1325 J Street, Sacramento, 95814
6. General Plan Designation(s):	Agricultural (AG)
7. Zoning:	Agricultural – General (AG)

8. Description of Project:

The Yolo Bypass East Levee was originally constructed prior to the formation of Reclamation District 900 in 1911. As such, portions of the levee predate contemporary guidance for levee construction. Levee improvements and repairs are necessary to maintain structural integrity of the YBEL and to meet current performance guidelines and requirements. The YBEL has undergone several structural improvements in the last forty years, the most recent in 1999 and 1998; however, other segments of the YBEL received structural improvement and repair in the mid-1990s and back to 1983. As a continuation of these efforts, the USACE proposes to reduce the overall flood risk to the City of West Sacramento by making structural modifications to Segments AA and AD of the YBEL. The USACE proposes to install stability berms, replenish waterside revetment, reconstruct maintenance roads, and improve the levee drainage system. The proposed project is the first increment of the larger federal West Sacramento Project that will improve the West Sacramento Levee System and conducted under the USACE Civil Works Program.

9. Surrounding Land Uses and Setting.

The project site is located within the City of West Sacramento, and within WSAFCA's boundaries, fully encompasses the YBEL, including the proposed levee repairs at segments AA and AD as shown in **Figures 2 and 3**. The flood protection system associated with these waterways consists of over 50 miles of levees in Reclamation District (RD) 900, RD 537, and DWR's Maintenance Area 4, that completely surround the City of West Sacramento. The City of West Sacramento is located in eastern Yolo County at the confluence of the American and Sacramento Rivers. The City of West Sacramento lies within the natural floodplain of the Sacramento River, which bounds the city along the north and east. It is made up of a small amount of high ground south of Highway 50 along the Sacramento River, and reclaimed land protected from floods by levees and the Yolo and Sacramento Bypass systems.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

- Re-initiated Consultation with USFWS (Revised Biological Opinion/Statement of Take)
- Central Valley Flood Protection Board, Encroachment Permit pursuant to CCR Title 23, Division 1, Table 8.1
- RWQCB National Pollutant Discharge Elimination System (NPDES) Waste Discharge Requirements for the new pump station
- State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit); Stormwater Pollution Prevention Plan (SWPPP)
- State Historic Preservation Officer, National Historic Preservation Act, Section 106 Consultation and Concurrence coordinated with USACE Clean Water Act Section 404 permit
- Yolo County, Grading Permit

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Consultation pursuant to PRC Section 21080.3.1 was completed by the Lead Agency, WSAFCA. Outreach occurred through contact letters mailed to three California Native American tribes on November 12, 2020. Yoche Dehe Winton Nation (YDWN), United Auburn Indian Community (UAIC) and Winton Rancheria provided responses during the 30-day consultation period. A complete discussion of tribal consultation is provided in Section 3.6 of the NEPA EA. YDWN provided input on mitigation measures for tribal cultural resources that could be inadvertently discovered during construction activities.

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☒ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☒ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



11/04/2021

Signature Date

Signature Date

3.2 Environmental Checklist

3.2.1 Aesthetics

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
I. AESTHETICS — Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☐	☒

Discussion

Section 3.2 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for aesthetic resources.

a) The project area is not located within a local, state or federally designated scenic vista; therefore, there would be **no impact** to scenic vistas or other designated scenic resources.

b - c) As described in Section 3.2 of the EA, site preparation for the proposed project would not involve removal of trees or shrubs, but would involve clearing non-native groundcover. All construction activities would be contained to the project boundaries, which is currently degraded and lacking in visual appeal. Once construction is completed, all disturbed areas would be restored and all equipment and trucks would be removed. Disturbed areas would be reseeded with native grasses and forbs to promote revegetation. The staging areas would also be reseeded and planted with native grasses and forbs and would be returned to pre-project conditions. The grasses, as well as annuals and some small shrubs, would be expected to grow relatively quickly and improve that condition of the viewshed within a year or two.

The proposed project includes a new pump station within Segment AD at station 122+00. The pump station is similar in size to the existing Racetrack pump station and would be designed similar to the surrounding urban environment, therefore, there would be no effect on scenic vistas. Additionally, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality.

As a result, the project would have a **less than significant** impact on scenic resources and visual character in the area.

d) As shown in Figure 3, the project area is in a quasi-industrial setting where primary sources of nighttime light and daytime glare occur on the eastern side of the YBEL within the commercial spaces; the western side is open space and further west, the Yolo Bypass. Light sources on the western side are attributed to nighttime agricultural activities and passing vehicles. The proposed action would not install or add substantial new sources of light or glare to the project vicinity. Furthermore, construction would typically occur during 8-hour daytime shifts and is not anticipated to extend into the nighttime. Operation of the proposed project would not require additional nighttime light compared to current conditions. Given the relatively short-term nature of project construction activities and the urbanized location of the project area, project-related lighting impacts would be **less than significant**.

3.2.2 Agriculture and Forestry Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
II. AGRICULTURE AND FORESTRY RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

Subsection 3.1.2 of the EA describes the effects of the proposed project on land use, agriculture, and forestry.

a, e) As described in Section 3.1.3 of the EA, there are no prime and unique farmlands within the project area. Therefore, there would be **no impact**.

b) As described in Section 3.1.3 of the EA, the project area is not enrolled in or restricted by a Williamson Act contract. There would be **no impact** related to an existing Williamson Act contract.

c, d) As described in Section 3.1.3 of the EA, to forest land or timberland exists on or adjacent to the project area. There would be **no impact**.

3.2.3 Air Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Discussion

Section 3.3 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for air quality.

a) As described in Section 3.3 of the EA, the Yolo-Solano Air Quality Management District (YSAQMD) is the regulatory agency responsible for regulating air quality in Yolo County. Yolo County is considered a federal non-attainment area for ozone and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and as an attainment-maintenance area for the federal carbon monoxide (CO) and particulate matter less than ten microns in diameter (PM_{10}) standards (CARB, 2018).

The YSAQMD's primary means of implementing air quality plans is by adopting rules and regulations (YSAQMD, 2007). District rules that would be applicable to the proposed project include limits on emissions of visible air contaminants, PM, sulfur compounds, as well as prohibition of pollutant discharge that may be considered a nuisance. The proposed project would comply with all applicable YSAQMD rules and regulations; therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans and the impact would be considered **less than significant**.

b) The YSAQMD has developed thresholds of significance for criteria air pollutant emissions to be used for determining significant impacts under the California Environmental Quality Act (CEQA). The thresholds of significance are based on the Air Quality environmental checklist included in Appendix G of the CEQA Guidelines. The YSAQMD has determined that projects with criteria pollutant emissions below the thresholds of significance would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction of the proposed project would generate emissions of criteria air pollutants, including ozone precursors (reactive organic compounds [ROG] and nitrous oxides [NO_x]) and particulate matter (PM) from construction equipment and vehicle trips that would generate fugitive dust and diesel exhaust. The YSAQMD recommends that all projects, even those that do not exceed the YSAQMD PM threshold, implement Best Management Practices to reduce dust emissions. Therefore, during construction, the proposed project would implement the YSAQMD Best Management Practices to reduce PM emissions, discussed below. Furthermore, emissions of criteria air pollutants from the proposed project would be temporary and would cease at the conclusion of the construction activities. Construction emissions that would be generated from construction of the proposed project, before implementation of mitigation, are summarized in **Table 3.3-7** in the EA.

As discussed above, the proposed project would implement the YSAQMD Best Management Practices to reduce PM emissions. Therefore, PM emissions associated with construction of the proposed project would be reduced and less than the emissions presented in **Table 3.3-7** in the EA.

Operational activity currently associated with maintenance of the existing YBEL generates emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ from vehicle trips associated with routine maintenance which may include clearance of access roads, rodent control, vegetation maintenance, management of graffiti, annual testing, pump station maintenance and performance of periodic inspections. Maintenance activity would not increase as a result of the implementation of the proposed project; therefore, the proposed project is not expected to generate increased operational emissions. Operational emissions from the proposed project would be considered **less than significant**. Although impacts would be less than significant, mitigation measures would be included to further reduce impacts.

c) The nearest sensitive receptors to the project site are residents at the Valhalla Mobile Home Club, which is located approximately 1,350 feet southeast of the project site.

As discussed above, the nearest sensitive receptor is located at the Valhalla Mobile Home Club which is not in the vicinity of the project site. Therefore, impacts from construction activity would be minimal. Furthermore, the YSAQMD has established health risk thresholds of significance from stationary sources; however, operation of the proposed project would not include stationary sources of TACs. The YSAQMD has not established thresholds of significance for mobile source TACs and no threshold is proposed at this time (YSAQMD, 2007). Therefore, the proposed project would be considered to have a less **than significant impact** with respect to health risk.

d) As described in Section 3.3 of the EA, the YSAQMD CEQA Handbook identifies common types of facilities that are known producers of odors including wastewater treatment facilities, chemical manufacturing, sanitary landfills, fiberglass manufacturing, transfer stations, painting/coating operations, composting facilities, food processing facilities, petroleum refineries, feed lots/dairies, asphalt batch plants, and rendering plants

(YSAQMD, 2007). The proposed project does not include any of the land use types identified by the YSAQMD to be associated with odor impacts. In addition, the proposed project would not generate an increase in operational activity compared to those associated with the existing Yolo Bypass East Levee. Therefore, the proposed project would have **no impact** with respect to odors.

Mitigation

Mitigation Measure AQ-1:

- Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure;
- Haul trucks shall maintain at least 2 feet of freeboard;
- Cover all trucks hauling dirt, sand, or loose materials;
- Apply non-toxic binders to exposed areas after cut and fill operations and hydroseed area;
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);
- Plant tree windbreaks on the windward perimeter of the construction projects if adjacent to open land;
- Plant vegetative ground cover in disturbed areas as soon as possible;
- Cover inactive storage piles;
- Sweep streets if visible soil material is carried out from the construction site;
- Treat accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips or mulch;
- Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.

Mitigation AQ-2: Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The project proponent would provide clear signage that posts this requirement for workers at the entrances to the site.

References

California Air Resources Board (CARB), 2018. Area Designation Maps. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed December 2020.

El Dorado County Air Quality Management District (EDCAQMD), et al., 2017. Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan. July 24, 2017. Available: http://www.ysaqmd.org/wp-content/uploads/Planning/Sac-Regional-2008-NAAQS-Attainment-and-RFP-Plan.pdf. Accessed December 2020.

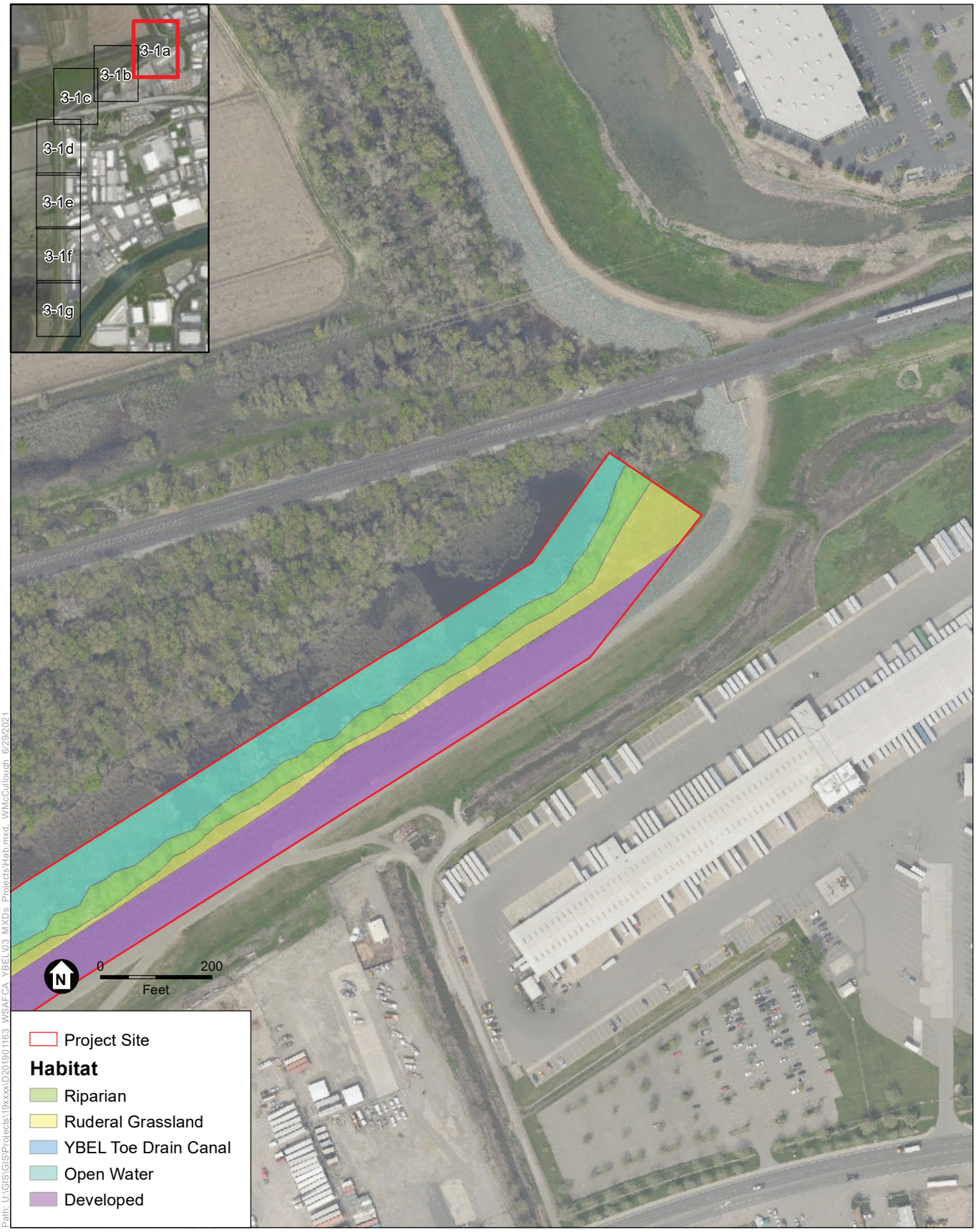
3.2.4 Biological Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV.	**BIOLOGICAL RESOURCES —** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

Section 3.4 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for biological resources. Biological communities within the project area include developed, ruderal grassland, riparian, and the YBEL Toe Drain Canal as shown in **Figures 3-1a-g**.

a) As described in Section 3.4 of the EA, the proposed project would have the potential to impact several special status species including, giant garter snake (GGS), western pond turtle, and special status fish, including California Central Valley DPS steelhead, Central Valley ESU spring-run chinook salmon, longfin smelt, Sacramento perch, Sacramento River ESU winter-run Chinook salmon, and Sacramento splittail. The proposed project could also result in impacts to nesting raptors and other migratory birds, including burrowing owl, purple martin, song sparrow ("Modesto" population), Swainson's hawk, and white-tailed kite. However, with implementation of Mitigation Measure BIO-2a-f, described in the EA, impacts to special-status species would be less than significant.

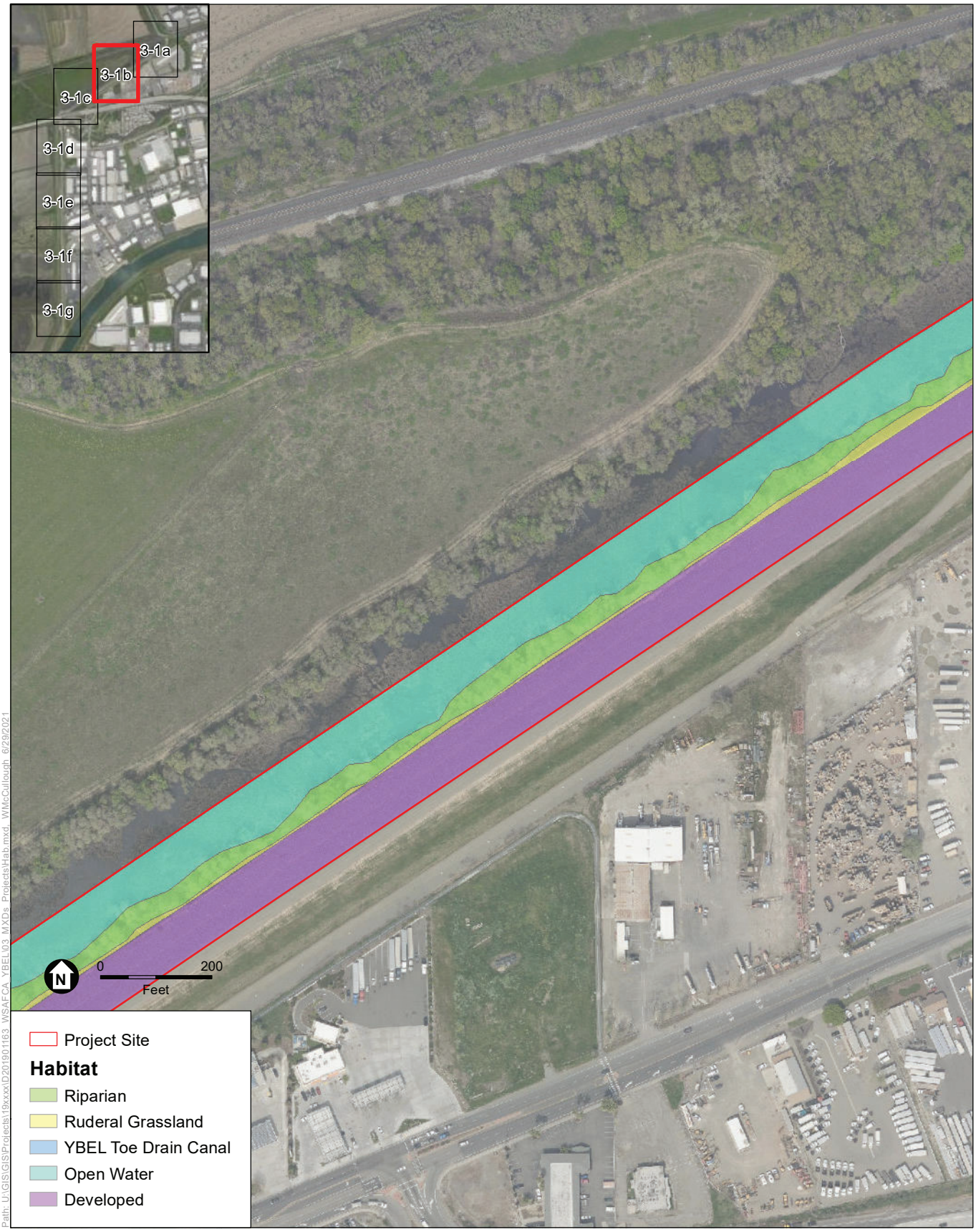


SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1a
Habitat Types

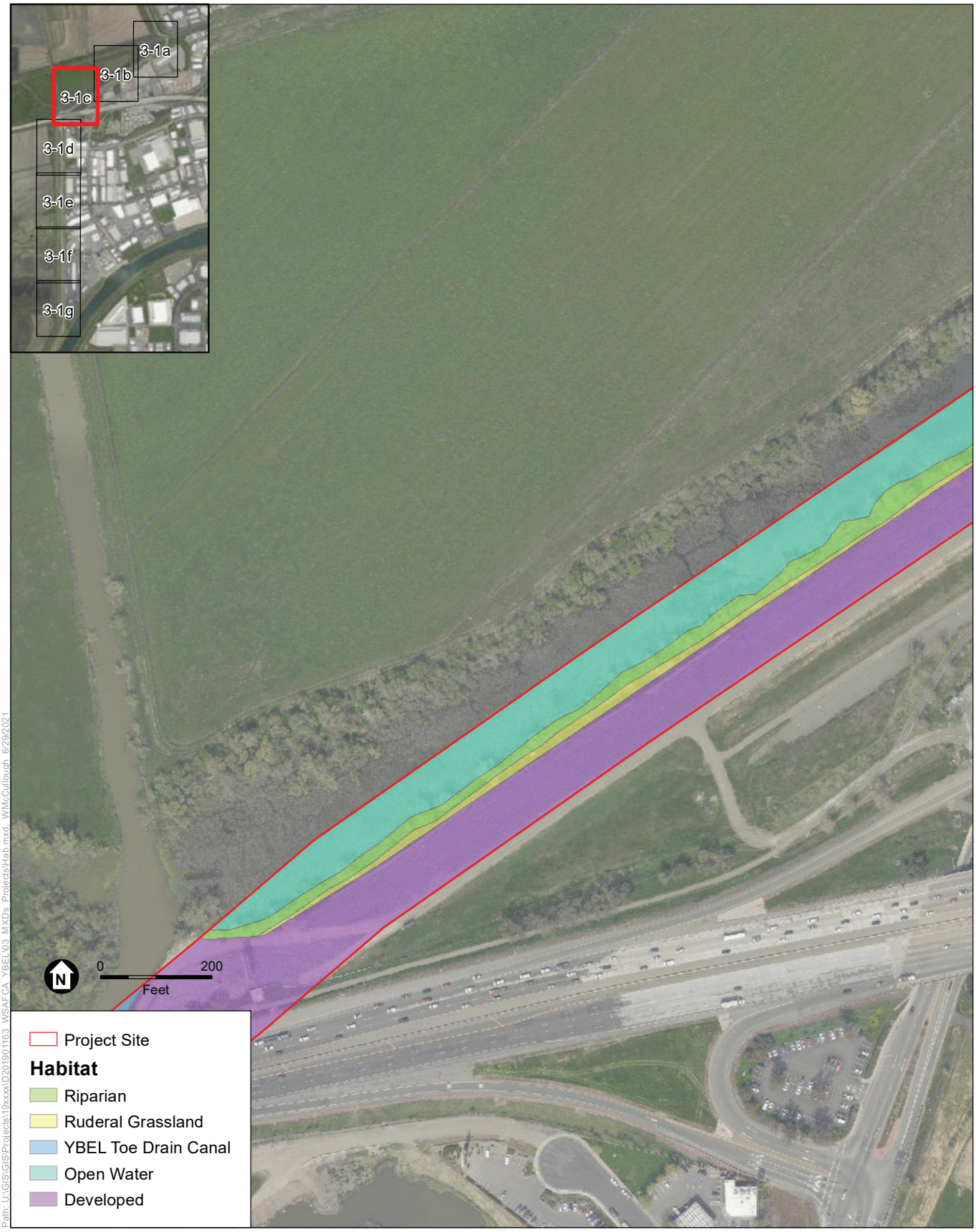
ESA



SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1b
Habitat Types



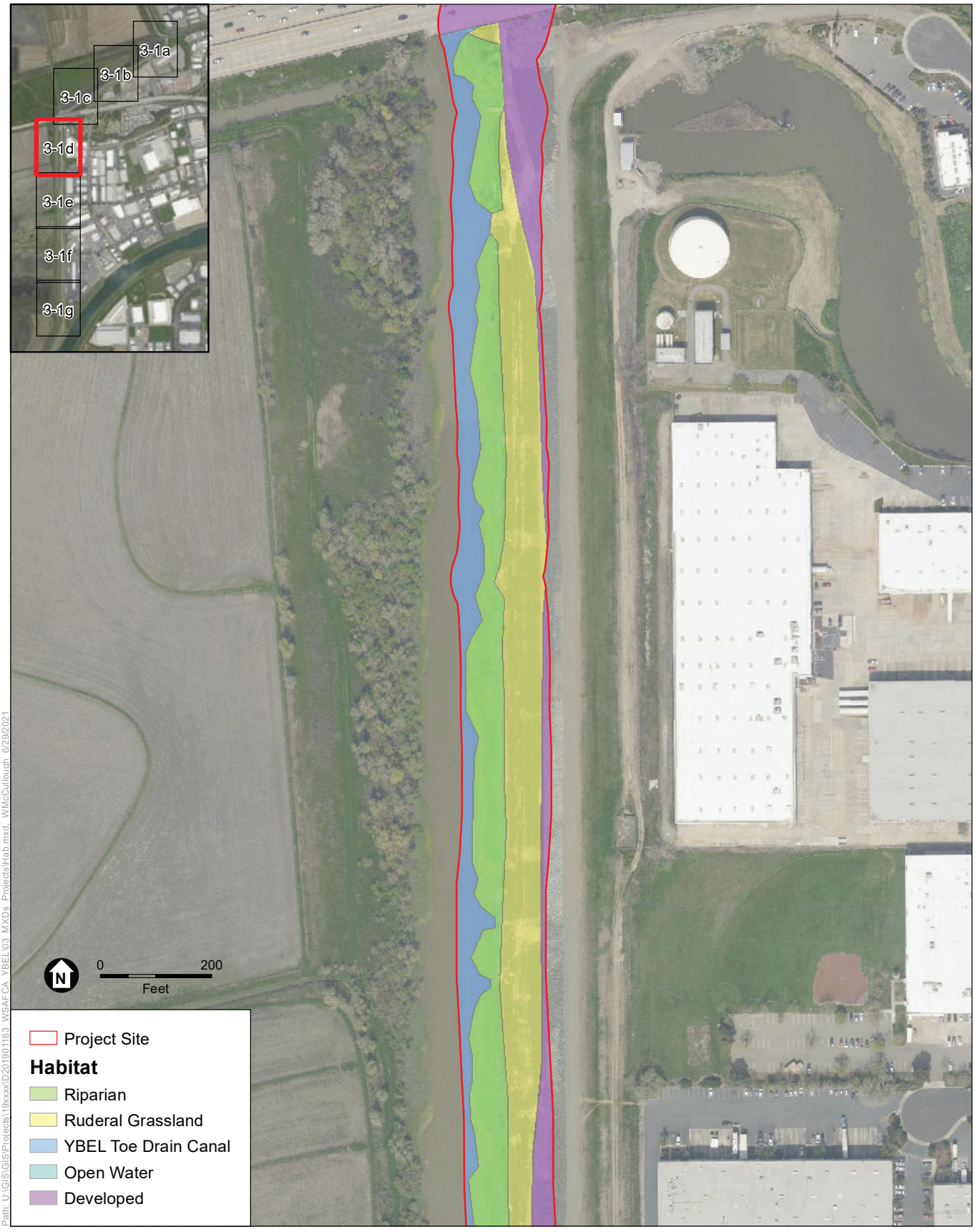
Path: U:\GIS\GIS\Projects\19xxxx\D2019011163_WSAFCA_YBEL\03_MXDs_Projects\Hab.mxd WMcCullough 6/29/2021

SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1c
Habitat Types

ESA

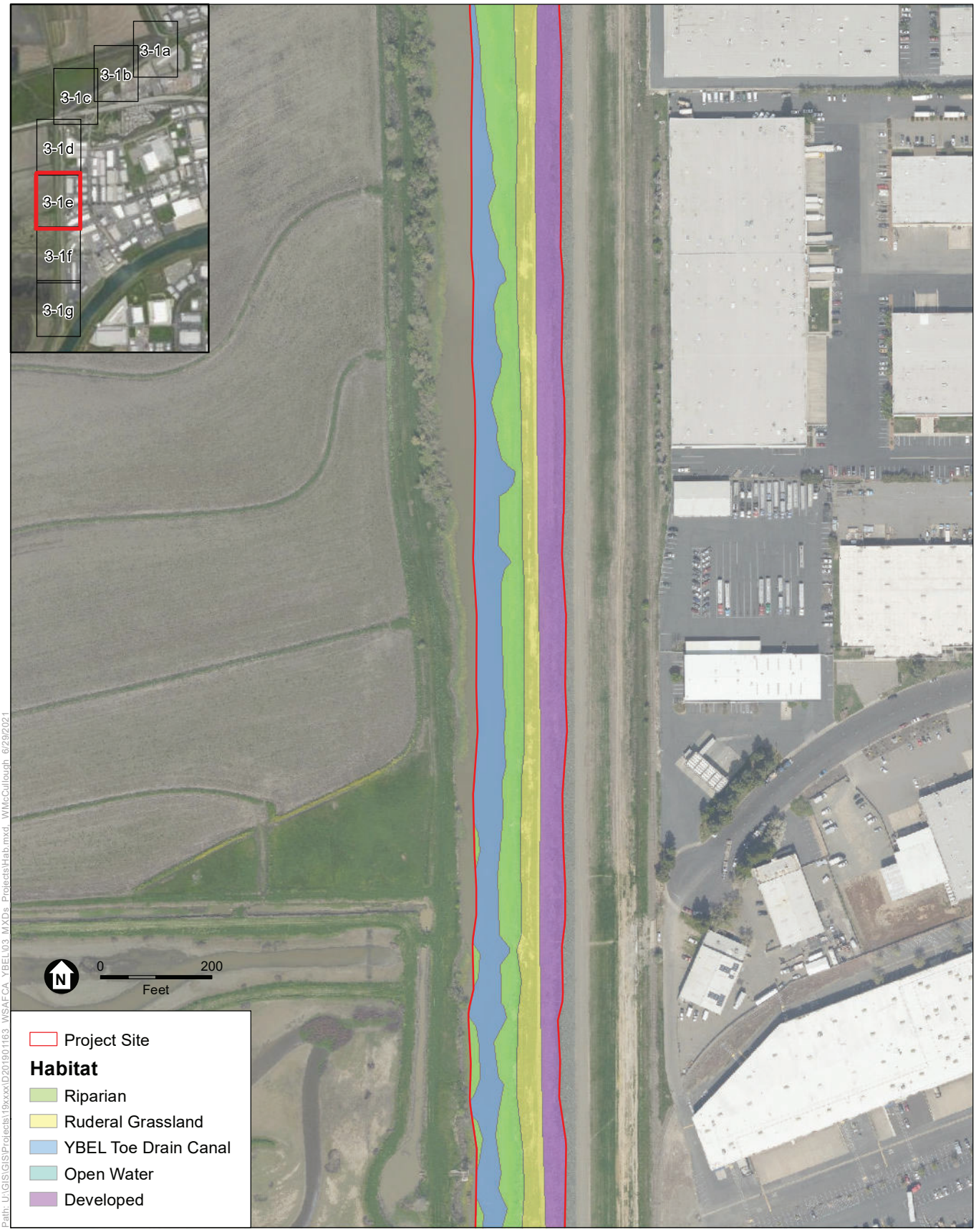


SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1d
Habitat Types

ESA

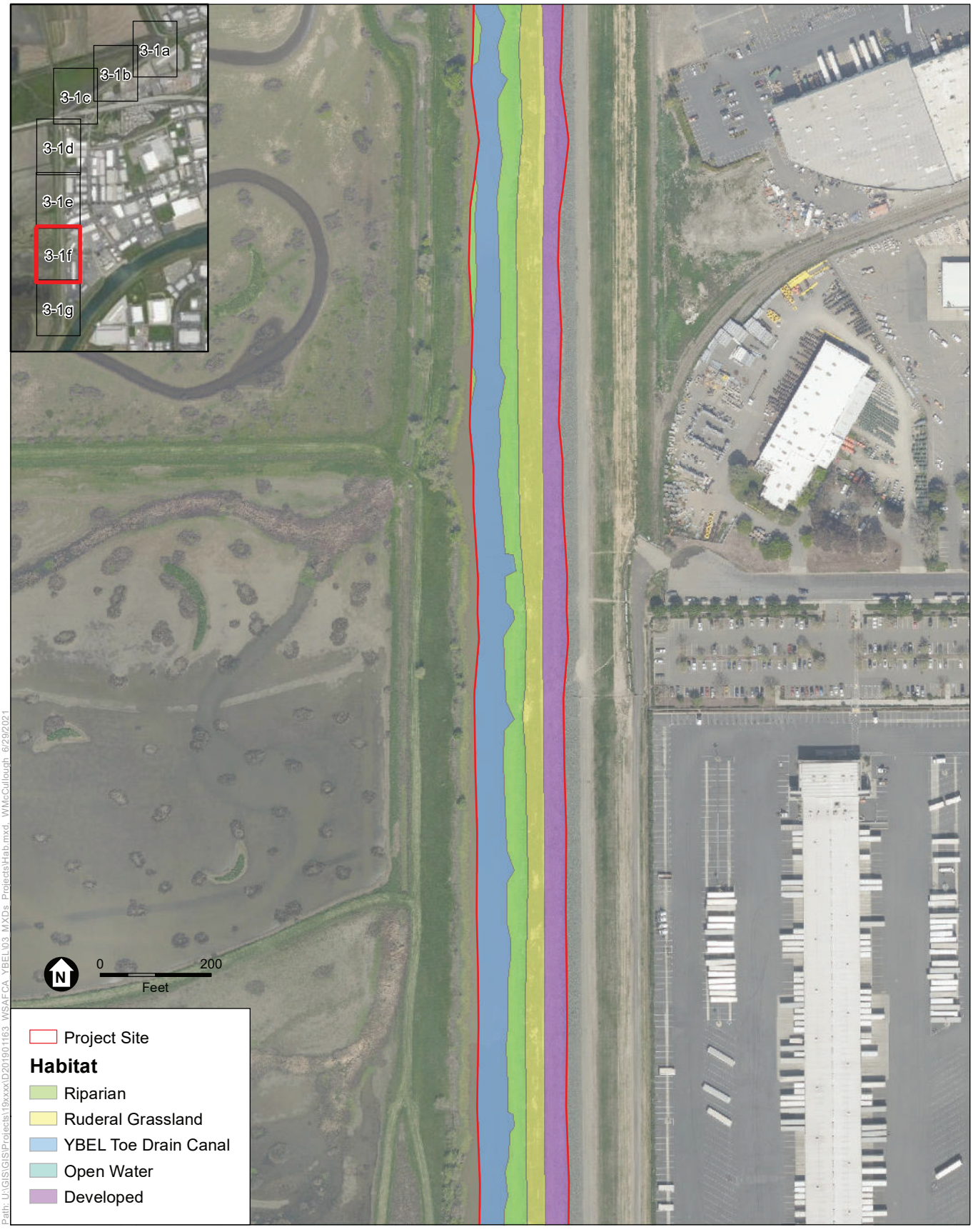


SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1e
Habitat Types

ESA

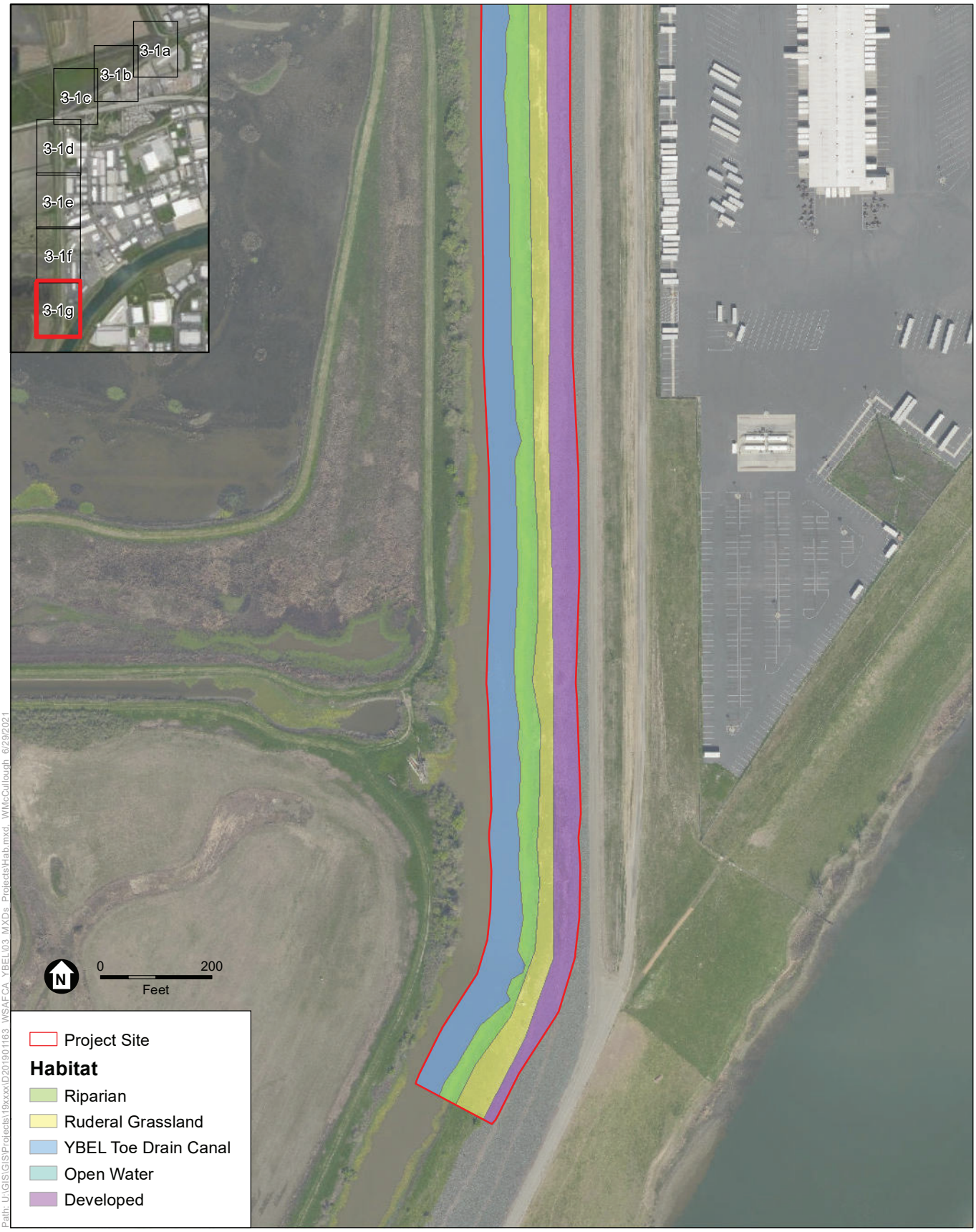


SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1f
Habitat Types

ESA



SOURCE: ESA, 2020

Yolo Bypass East Levee Environmental Assessment

Figure 3-1g
Habitat Types

ESA

b) As described in the EA, construction of the proposed project would not result in the removal of any riparian habitat within the project area. 15 acres of developed and ruderal grassland would be impacted. After construction the disturbed areas would be reseeded with native grasses and forbs. However, with implementation of Mitigation Measure BIO-1, impacts to native habitat would be less than significant.

c) There are no wetlands within the project site. Therefore, construction of the proposed project would not result in the loss of seasonal wetlands and there would be no impact.

d) The YBEL Toe Drain Canal provides for the movement of resident and migratory fish. In addition, the riparian corridor surrounding the canal provides a wildlife migration corridor for a variety of common and special-status species. As designed, the proposed project would avoid these habitats. **Figures 3-1a-g** show the habitats and the Toe Drain Canal. While some local disturbance would occur in the vicinity of these habitat types as a result of project construction, these activities would be limited to a small area on a temporary basis. Construction activities are not expected to permanently interfere with any movement corridors or the movement of any wildlife or native resident or migratory fish species through the area. Therefore, impacts would be temporary and **less than significant**.

e) The proposed project would comply with all local policies or ordinances protecting biological resources. As described under Environmental Checklist Item 4b, no riparian habitat would be removed. Because the project would comply with applicable local policies or ordinances protecting biological resources, this would be **a less than significant** impact.

f) The proposed project is not located within any habitat conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the proposed project would have **no impact**.

Mitigation

Mitigation Measure BIO-1: Native Habitat

Any ruderal grassland temporarily impacted by construction would be restored by reseeding the affected area with native grasses and forbs following construction.

Mitigation Measure BIO-2a: Special-Status Species - Special-Status Fish

Implementation of the hydrology and water quality mitigation measures under Section 3.9.3 would reduce potential indirect effects to special-status fish.

Mitigation Measure BIO-2b: Special-Status Species - Giant Gartersnake

In addition to implementation of the hydrology and water quality mitigation measures under Section 3.9.3, the following measures would be implemented to minimize potential effects on giant gartersnake. These measures are based on USFWS guidelines for restoration and standard avoidance measures included as appendices in the USFWS Programmatic Consultation with the USACE (1997).

- Unless approved otherwise by USFWS, construction will be initiated only during the giant gartersnakes' active period (May 1–October 1, when they are able to move away from disturbance).
- Construction personnel will participate in a USFWS-approved worker environmental awareness program.
- A giant gartersnake survey will be conducted 24 hours prior to construction in potential habitat. Should there be any interruption in work for greater than two weeks, a biologist would survey the project area again no later than 24 hours prior to the restart of work.
- Giant gartersnakes encountered during construction activities will be allowed to move away from construction activities on their own.
- Movement of heavy equipment to and from the construction site will be restricted to established roadways. Stockpiling of construction materials will be restricted to designated staging areas, which will be located more than 200 feet away from giant gartersnake aquatic habitat.
- Since construction will occur within 200 feet of suitable aquatic habitat, wildlife exclusion fencing will be installed along the perimeter of the construction footprint as follows; north to south along the western boundary, parallel to the YBEL Toe Drain Canal; and from the western boundary fencing eastward to the base of the riprap. Similarly, wildlife fencing will be installed around any staging areas within 200-feet of the YBEL Toe Drain Canal. A biological monitor will be present during the installation of the fencing.

Mitigation Measure BIO-2c: Special-Status Species - Western Pond Turtle

In addition to implementation of the hydrology and water quality mitigation measures under Section 3.9.3, the following measures would be implemented to reduce potential effects on western pond turtle:

- Construction personnel will participate in a worker environmental awareness program (concurrently with the training identified for giant gartersnake).
- A preconstruction survey will be conducted for western pond turtle 24 hours prior to the start of construction (concurrently with the survey identified for giant gartersnake).
- If any western pond turtles are observed during construction in the immediate project area, the biologist will relocate the individual(s) at least 200 feet up- or downstream of the project area to similar habitat within or adjacent to the YBEL Toe Drain Canal, if feasible. If the western pond turtles cannot be captured, no work will occur in the immediate vicinity of the western pond turtle until the biologist confirms that the western pond turtle has left the immediate vicinity and would not be harmed by construction activities. If the western pond turtle does not move out of the immediate project area in a reasonable time and cannot be easily moved at the biologist's discretion CDFW may be consulted to determine the best course of action to continue construction activities associated with the proposed action.
- The wildlife exclusion fencing identified for giant gartersnake will ensure that no western pond turtles enter the construction footprint.

Mitigation Measure BIO-2d: Special-Status Species - Burrowing Owl

The following measures would be implemented to reduce the potential effects on burrowing owl:

- Pre-construction surveys for burrowing owls will be conducted by a qualified biologist within 30 days prior to the start of work activities at the project area. If construction activities are delayed for more than 30 days after the initial preconstruction survey, then a new preconstruction survey will be conducted. Surveys will be conducted in accordance with the following methods, as described within the Staff Report on Burrowing Owl Mitigation (CDFW, 2012).

- If burrowing owls are discovered in the project area vicinity during the preconstruction surveys or during construction, the biologist will be notified immediately. Occupied burrows will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

- Occupied burrows during the nesting season will be avoided by establishment of a no-work buffer of 250-foot around the occupied/active burrow. Where maintenance of a 250-foot no-work buffer zone is not practical, coordination with CDFW will be conducted to determine appropriate avoidance measures. Burrows occupied during the breeding season (February 1 to August 31) will be closely monitored by the biologist until the young fledge/leave the nest. The biologist will have the authority to stop work if it is determined that construction related activities are disturbing the owls.

- If approved by CDFW, the biologist may undertake passive relocation techniques by installing one-way doors in active and suitable burrows (that currently do not support eggs or juveniles). This would allow burrowing owls to escape but not re-enter. Owls should be excluded from the immediate impact zone and within a 160-foot buffer zone by having one-way doors placed over the entrance to prevent owls from inhabiting those burrows.

Mitigation Measure BIO-2e: Special-Status Species - Swainson's Hawk

The following measures would be implemented to reduce the potential effects to Swainson's hawk:

- If construction activities are anticipated to commence during the Swainson's hawk nesting season (March 1 to September 15), a qualified biologist will conduct a minimum of two preconstruction surveys during the recommended survey periods, in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk TAC 2000). All potential nest trees within 0.25 miles of the proposed project footprint will be visually examined for potential Swainson's hawk nests, as accessible.

- If active Swainson's hawk nests are found within 0.25 miles of construction activities, a survey report will be submitted to the CDFW and the CNDDB, and an avoidance and minimization plan will be developed for approval by the CDFW prior to the start of construction. The avoidance plan will identify measures to minimize

impacts to the active Swainson's hawk nest depending on the exact location of the nest. These measures may include, but are not limited to:

- Establishing a buffer zone and work schedule to avoid impacting the nest during critical periods. If possible, no work will occur within 600 feet of the nest while it is in active use. If work will occur within 600 feet of the nest, then construction will be monitored by a qualified biologist to ensure the nest is not disturbed and that the that no work occurs within 150 feet of the nest during incubation or within ten days after hatching;
- Having a biological monitor conduct regular monitoring of the nest during construction activities; and
- Allowing the biologist to halt construction activities until the CDFW is consulted if the biologist determines that construction activities are disturbing the nest.

Mitigation Measure BIO-2f: Special-Status Species - Nesting Birds and Raptors (Excluding Swainson's Hawk)

The following measures would be implemented to reduce the potential effects to nesting birds and raptors:

- For any construction activities that will occur between February 1 and August 31, a qualified biologist will conduct preconstruction surveys for nesting birds and raptors within 7 days prior to commencement of construction activities. The survey area will include a 500-foot buffer around the construction area, where feasible. If no active nests are observed, no additional measures are required unless construction halts for 7 days. A subsequent preconstruction survey would be required within 7 days prior to re-commencement of construction activities.
- If active nests are found during the preconstruction survey, the applicant will implement appropriate mitigation measures to ensure that the species will not be adversely affected, which will include establishing a no-work buffer zone, as approved by CDFW, around the active nest. Measures will include, at minimum:
  - Establishing a 500-foot no-work buffer around active raptor nests (excluding Swainson's hawk nests) and a 100-foot no-work buffer around active migratory bird nests, if feasible. If infeasible, the biologist may determine that a reduced buffer is acceptable based on several factors including the sensitivity of the species nesting, the construction activities proposed within the buffer area, and the proximity of the construction activities to the nest.
  - If the biologist determines that a reduced buffer acceptable, the active nest(s) will be monitored by a qualified biologist during all construction activities occurring between the reduced buffer area and the originally established buffer area. If, in the professional opinion of the monitor, the project would impact the nest, the biologist will immediately inform the construction manager. The construction manager will stop construction activities occurring between the reduced buffer area and the originally established buffer area until the biologist determines that normal nesting activities have recommenced or when the biologist confirms that the nest is no longer active.

Mitigation Measure BIO-3: Sensitive Natural Communities

Implementation of the hydrology and water quality mitigation measures under Section 3.9.3 would reduce potential indirect effects to sensitive natural communities.

Mitigation Measure BIO-4: Federally Protected Waterways

Implementation of the hydrology and water quality mitigation measures under Section 3.9.3 would reduce potential indirect effects to federally listed waterways.

3.2.5 Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Discussion

Section 3.5 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for cultural resources.

a) CEQA Guidelines Section 15064.5 requires the lead agency to consider the effects of a project on historical resources. A historical resource is defined as any building, structure, site, or object listed in or determined to be eligible for listing in the California Register, or determined by a lead agency to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The following discussion focuses on architectural and structural resources. Archaeological resources, including those that are potentially historical resources according to CEQA Guidelines Section 15064.5, are addressed below under issue b).

Two historic-era built environment resources were identified in the project area and evaluated for historical significance: segments the West Sacramento Unit 2 North Levee and the DWSC Navigation Levee (GEI, 2021a and 2021b). Both resources have been evaluated and recommended to be eligible for the National Register of Historic Places (National Register) and the California Register of Historical Resources (California Register) as contributors to a larger district within the context of flood management and association with the Sacramento River Flood Control Project and the Yolo Bypass. The resources are therefore considered to be historical resources for the purposes of this analysis.

When originally constructed, the levees were designed to be maintained and strengthened, which was the purpose of the Sacramento River Flood Control Project. The proposed modifications would not alter the character-defining features or the integrity of the levees, which include their overall design and form. In addition, the materials, workmanship, and general physical characteristics that convey the significance of the levees would remain in place. The levees would continue to serve their intended purpose within the context of flood management. Therefore, the project would have no impact on the West Sacramento Unit 2 North Levee and the DWSC Navigation Levee. No mitigation is required.

b) CEQA Guidelines Section 15064.5 requires the lead agency to consider the effects of a project on archaeological resources. A significant impact would occur if a project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

GEI archaeologists conducted an archaeological pedestrian survey of all portions of the project area on September 29 to October 1, 2020. Tribal monitors from the Yocha Dehe Wintun Nation were also present. The surveys were conducted to intensive standards (pedestrian transects spaced no more than 15 meters apart). No pre-contact Native American or historic-era archaeological resources were identified during the survey effort. The cultural resources analysis and survey did not identify archaeological resources in the project area. Despite the negative survey results, there remains the possibility that previously unknown cultural materials could be discovered during project construction and inadvertently damaged. This could be a potentially significant impact. Implementing Mitigation Measures CR-1 and CR-2 would reduce the potential for a significant impact resulting from inadvertent damage to or destruction of previously undocumented cultural materials to a less-than-significant level, because these measures would require that if cultural materials are discovered prior to or during project-related construction activities, appropriate treatment and protection measures would be implemented.

c) There are no known human remains discoveries in the project area and the vicinity. However, Native American human remains could be encountered during earthmoving activities associated with the project. This would be a potentially significant impact. Implementing Mitigation Measure CR-3 would reduce the potential for a significant impact resulting from inadvertent damage to or destruction of previously undocumented human remains to a less-than-significant level because it requires that if human remains are discovered during project-related construction activities, disturbances in the area of the find must be halted and appropriate treatment and protection measures must be implemented, in consultation with the Native American Heritage Commission, the Most Likely Descendant (MLD), and WSAFCA, in compliance with California Health and Safety Code Section 7050 and PRC Section 5097.9.

Mitigation Measure CR-1: Cultural Resources Awareness Training.

WSAFCA shall provide a cultural resources and tribal cultural resources sensitivity and awareness training program for all personnel involved in project construction, including field consultants and construction workers. The training shall be developed in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology, as well as culturally affiliated Native American tribes. WSAFCA may invite Native American representatives from interested culturally affiliated Native American tribes to participate. The training shall be conducted before any project-related construction activities begin in the project area and shall include relevant information regarding sensitive cultural resources and tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating federal and state laws and regulations.

The training shall also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that could be located in the project area and shall outline what to do and who to contact if any potential cultural resources or tribal cultural resources are encountered. The training shall emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and shall discuss appropriate behaviors and responsive actions, consistent with Native American tribal values.

Mitigation Measure CR-2: Inadvertent Discovery of Cultural Materials.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains); tribal cultural resources; sacred sites; or landscapes is made at any time during project-related construction activities, USACE in consultation with WSAFCA and other interested parties, in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology and culturally affiliated Native American tribes, shall develop appropriate protection and avoidance measures where feasible. These procedures shall be developed in accordance with the GRR PA and Historic Properties Management Plan (HPMP), which specifies procedures for post-review discoveries. Additional measures, such as development of a Historic Properties Treatment Plan prepared in accordance with the GRR PA and Historic Properties Management Plan (HPMP) may be necessary, if avoidance or protection is not possible.

Mitigation Measure CR-3: Inadvertent Discovery of Human Remains.

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, WSAFCA shall immediately halt potentially damaging excavation in the area of the burial and notify the County coroner and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, they must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). After the coroner's findings have been made, the archaeologist and the NAHC-designated MLD, in consultation with WSAFCA, shall determine the ultimate treatment and disposition of the remains.

Upon the discovery of Native American human remains, USACE in coordination with WSAFCA, shall require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations to the WSAFCA after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that WSAFCA shall employ:

- Record the site with the NAHC and the appropriate California Historical Resources Information System center.

- In consultation with the coroner and MLD proper recordation of the discovery will be properly documented and filed with the County.

If agreed to by the MLD, WSAFCA or WSAFCA's authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. If the NAHC is unable to identify an MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site, WSAFCA or WSAFCA's authorized representative may also reinter the remains in a location not subject to further disturbance. If WSAFCA rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to WSAFCA, WSAFCA shall implement mitigation for the protection of the burial remains. Construction work in the vicinity of the burials shall not resume until the mitigation is completed.

References

GEI Consultants, Inc., *Cultural Resources Inventory Report West Sacramento Project Yolo Bypass East Levee Repair.* Prepared for the U.S. Army Corps of Engineers, Sacramento District Cultural, Recreation, and Social Assessment Section (CESPK-PD-RC). April 2021a.

GEI Consultants, Inc., *Cultural Resources Evaluation Report West Sacramento Project Yolo Bypass East Levee Repair.* Prepared for the U.S. Army Corps of Engineers, Sacramento District Cultural, Recreation, and Social Assessment Section (CESPK-PD-RC). April 2021b.

3.2.6 Energy

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VI.	**ENERGY —** Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion

a-b) Construction of the proposed project would require temporary energy use to power construction equipment. During construction, the proposed project would comply with state and local requirements designed to minimize idling and associated emissions, which also minimizes fuel use. Specifically, construction activities would comply with Title 13, Section 2485 of the California Code of Regulations and Title 13, Section 2449 of the California Code of Regulations, which limit idling of commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower to two minutes. Therefore, energy use during construction would not be wasteful, inefficient, or use unnecessary resources.

Operational activity associated with maintenance of the existing YBEL consumes energy from employee vehicle trips associated with routine maintenance; however, maintenance activity would not increase from current conditions as a result of the proposed project and operation of the proposed project would not result in an increase in energy-use. Therefore, operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The proposed project would have **no impact** with regard to energy resources.

3.2.7 Geology and Soils

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VII. GEOLOGY AND SOILS — Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Discussion

Section 3.7 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for geology and soils.

a.i) The proposed project is not within an Earthquake Fault Zone (EFZ), as delineated on the most recent Earthquake Zone of Required Investigation Map (EZRIM) for the project area. As such, the proposed project would have **no impact**.

a.ii-iv,c) While the project site is not within an EFZ, proximity to Holocene-active and Pre-Holocene faults in the project area could result in strong seismic ground shaking at the project site. Strong seismic ground shaking can induce secondary seismic-related ground failures, such as landslides, liquefaction, and lateral spreading. Unstable soils at the project site can also contribute to the risks posed by seismic ground shaking and subsequent ground failures. However, as stated in Section 2.2, *Proposed Action – West*

Sacramento Project Yolo Bypass East Levee Reach, the proposed project would include structural modifications to the levee to address seepage, levee stability, erosion, and overtopping concerns.

Blackburn Consulting performed the geotechnical analysis to address the geotechnical engineering aspects of the proposed project and to provide requirements and recommendations to inform the structural modifications and provide seismic design criteria. Adherence to the seismic design requirements and other recommendations included in the Geotechnical Data Report, as well as any future recommendations included in the geotechnical report to be completed at the 95 percent design phase, would prevent any impacts caused by seismic ground shaking and any secondary seismic-ground failures (i.e., liquefaction, landslide, lateral spreading, etc.). Therefore, this impact would be **less than significant**.

b) The proposed project would include ground-disturbing construction activities that could increase the risk of erosion or sediment transport. Total ground disturbance would be more than 1.0 acre, and construction would have the potential to result in soil erosion during excavation and grading. As such, the contractor would be required to comply with the Construction General Permit, described in Chapter 5, *Compliance with Environmental Laws and Regulations*. The Construction General Permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which requires applying specific best management practices (BMPs) to control run-on and runoff from construction work sites to avoid or minimize soil erosion. The BMPs would include but not be limited to physical barriers to prevent erosion and sedimentation; construction of sedimentation basins; limitations on work periods during storm events; and a variety of other measures that would substantially reduce or prevent erosion from occurring during construction. Compliance with these independently enforceable existing requirements would reduce the potential impacts of the proposed project associated with soil erosion and loss of topsoil during construction. As such, the impact from the proposed project would be **less than significant**.

d) According to NRCS Web Soil Survey data, the soils underlying the project site have a moderate expansion potential. The geotechnical investigation performed by Blackburn Consulting does not specifically identify any expansive soils within the project site. Soil that is required to construct the seepage/stability berm and to modify the landside drainage ditch to a buried pipe within Segment AA, and soil required for levee fill for slope mitigation in Segment AD, would be required to undergo analysis before use. Because the proposed project would not involve exposing any infrastructure to the moderately expansive soils, there would be no adverse effect associated with expansive soils and there would be **no impact**. Additionally, any potential risk associated with expansive soils would be identified and remedied in the forthcoming 95 percent design geotechnical documents

e) The proposed project would not include the use of septic tanks or alternative wastewater disposal systems. As such, the proposed project would have **no impact**.

f) The proposed project would include structural improvements to Segments AA and AD, such as installation of a stability berm, reconstruction of an existing maintenance road, installation of piping, construction of a pumping station, and other grading activities. Ground disturbance in the younger Holocene-age deposits has a low potential to uncover paleontological resources; however, disturbance of older Holocene and Pleistocene-age deposits, including the Riverbank Formation, has a moderate potential to uncover paleontological resources. This is due to the presence of vertebrate fossils within the Pleistocene-age deposits in Yolo County, as well as within the Riverbank Formation.

As the project site has been previously disturbed by past construction and earthmoving activities, it is unlikely that any construction activities associated with the proposed project would disturb or destroy any paleontological resources. Without more precise data regarding the maximum depth of ground disturbance it would not be prudent to assume that there would be no impact to paleontological resources, however unlikely. In the event that significant paleontological resources are encountered during ground disturbing activities, **Mitigation Measure GEO-1** would be implemented to avoid adverse effects to paleontological resources and to reduce the impact to less than significant.

Mitigation

Mitigation Measure GEO-1:

In the event of an unanticipated fossil discovery during construction, the severity of the impact would be reduced to a less-than-significant level with implementation of the following mitigation. Details of this mitigation include:

- Halting all earthwork or other types of ground disturbance within 100 feet of the find until a qualified paleontologist (meeting the standards of the Society of Vertebrate Paleontology [SVP]) can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site.
- If treatment and salvage is required, recommendations will be consistent with SVP guidelines (SVP, 2010) and currently accepted scientific practice. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds.

3.2.8 Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VIII. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion

Section 3.8 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for greenhouse gases.

a-b) As discussed in Section 3.8 of the EA, CO2 would be the predominant greenhouse gas (GHG) produced from the construction of the proposed project and no major sources of other greenhouse gases would exist. Construction of the proposed project is estimated to produce CO2 levels well below the EPA Reporting Rule. In addition, emissions generated by the proposed project would be temporary in nature and would not result in a permanent increase in long-term GHG emissions. Therefore, effects on climate change associated with construction and operation of the proposed project would be **less than significant**. Although not required, implementation of Mitigation Measures AQ-2 would further reduce GHG emissions associated with the proposed project efficiency of equipment to reduce emissions.

Mitigation

Mitigation Measure AQ-2:

The proposed project would minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The USACE would provide clear signage that posts this requirement for workers at the entrances to the site.

3.2.9 Hazards and Hazardous Materials

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Discussion

Section 3.9 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for hazards and hazardous materials.

a-d) Construction of the proposed project would involve the routine use of small quantities of hazardous materials commonly used during construction activities such as fuels, lubricants and oil for construction equipment. Storage and use of hazardous materials at the site during routine use could result in the accidental release of small quantities of hazardous materials, which could degrade soil and/or surface water within the project area. In compliance with state and federal regulations, a hazardous materials business plan and a spill prevention and countermeasures plan would be prepared as part of the proposed project.

The contractor would be required under the General Construction Permit to prepare a SWPPP identifying specific BMPs to avoid or minimize soil erosion. BMPs would be implemented to minimize the risk of a hazardous materials release during construction activities. These are further discussed under Section 3.9 of the EA. The use, storage,

transport, and disposal of hazardous materials during construction of the proposed project would be carried out in accordance with federal, state, and county regulations. These requirements would ensure that hazardous materials used for construction would be stored in appropriate containers, with secondary containment to prevent a potential release. Additionally, project-related spills of hazardous materials would be required to be reported to appropriate regulatory entities, including but not limited to the city of West Sacramento; U.S. Fish and Wildlife Service (USFWS); California Department of Fish and Wildlife (CDFW); and the Central Valley Regional Water Quality Control Board (CVRWQCB). Hazardous materials spills would be cleaned up immediately, and contaminated soils would be excavated and transported to approved disposal areas, consistent with state and local requirements.

Additionally, the contractor would be required to transport all contaminated soil to a licensed, permitted facility that meets all Federal and State standards and requirements. This will ensure that no contaminated material would be introduced into the site. Excavated material from the project would be temporarily stored and would be disposed of at an appropriate waste site authorized to accept such waste.

Mitigation Through Compliance

The proposed project would temporarily increase the transport of materials generally regarded as hazardous that are used in construction activities. It is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, and other similarly related materials would be brought onto the project site, used, and stored during the construction period. However, transportation of hazardous materials on roadways would be regulated by the CHP and Caltrans. Storage and use of hazardous materials would be performed in accordance with applicable Federal, State and local regulations. Compliance with required law and regulations regarding the use, storage, disposal, and transportation of hazardous materials would reduce this impact to less than significant. As a result, adverse effects related to hazards and hazardous materials would be considered temporary and less than significant, and no additional mitigation would be required. There is one school in proximity to the project area: Western Truck School, approximately 0.15-mile south of Segment AD. As stated above, required compliance with the numerous existing laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for hazardous emissions and/or hazardous materials to impact nearby schools. Compliance with required law and regulations regarding the use, storage, disposal, and transportation of hazardous materials during construction would reduce this impact to **less than significant**.

e) As stated above, there are no public or private airports within two miles of the proposed project, however the California Highway Patrol (CHP) Academy is approximately 1 mile to the northeast of Segment AD. The nearest airports to the project site are the Sacramento Executive Airport (approximately 5.8 miles to the southeast of the project site), and the Yolo County Airport (approximately 14.5 miles to the west of the project

site. The noise contour and safety zone maps for both airports indicate that the project site is not within any of these delineated zones (ALUC, 1999a; ALUC, 1999b). Therefore, it is not anticipated that any nearby airports would cause a safety hazard or excessive noise for people working in the project area, and the proposed project would result in a **less than significant** impact.

f) The project does not propose road closures or road work associated with the proposed project. Therefore, there would be no interference with an emergency evacuation or response plan, and this would result in **no impact**.

g) Based on mapping by the California Department of Forestry and Fire Protection (CAL FIRE) Forest Resource Assessment Program (FRAP) the project site is not within a Very High Fire Hazard Severity Zone (CAL FIRE, 2008). The use of construction equipment and the possible temporary on-site storage of fuels and/or other flammable construction chemicals could pose an increased fire risk resulting in injury to workers or the public during construction. However, contractors would be required to comply with hazardous materials storage and fire protection regulations, which would minimize potential for fire creation, and ensure that the risk of wildland fires during construction and would result in a **less than significant** impact.

3.2.10 Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
X. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒	☐	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐
iv) impede or redirect flood flows?	☐	☒	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Discussion

Section 3.10 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for hydrology and water quality.

a, c.i-c.iv) Levee bank construction would consist of structural improvements to the YBEL to address seepage, erosion and overtopping concerns. The proposed project would involve the use of heavy equipment during construction resulting in approximately 15 acres of ground disturbance, which could result in potentially adverse effects to water quality in the vicinity of the proposed project, specifically the t adjacent Toe Drain Canal and the Deep Water Ship Channel and the Sacramento River. Identified direct and indirect effects include increased potential for runoff of exposed soils, mobilization of silt and sediments leading to increased conditions of turbidity in waterways during bank protection construction. In the absence of measures to prevent water contamination, cement, slurry, or fuel spills could also occur, having the potential to compromise the water quality of the Sacramento River or Deep Water Ship Channel. In compliance with state and federal regulations, as described in

Section 3.9 of the EA, a hazardous materials business plan and a spill prevention and countermeasures plan would be prepared as part of the proposed project. The proposed project would also be required to comply with the good housekeeping practices, BMPs, and measures described in the County of Yolo Improvement Standards. These measures contain specific requirements for the use of cement and paint near waterways, as well as specifications to control erosion and prevent sedimentation of waterways. Implementation of the requirements stipulated in these plans and provided as mitigation for the protection of water quality would minimize release of contaminants.

As described in Section 3.9 of the EA, ground disturbance would consist of an area greater than one-acre in size and the contractor would be required to prepare a SWPPP as part of the Construction General Permit. The proposed project would not be constructed during the winter rainy season; therefore, risks of release of pollutants during a flood would be minimal. With implementation of measures described in Section 3.8, and in this section and BMPs as part of the SWPPP, water quality impacts would be less than significant. Impact avoidance and mitigation measures are provided below. In the event that measures are redundant or requirements overlapping, the measure(s) more protective of water quality shall apply.

The YBEL performs a critical function as the primary effective flood control structure for West Sacramento. Thus, maintaining the structural integrity of the levee is critical to providing flood protection and alleviating flood risk to the community of West Sacramento, located to the east of the levee, and the surrounding agricultural lands to the west. Implementation of the proposed pump station and drainage infrastructure would alleviate existing flood risk. As such, operation, and maintenance of the proposed project would result in **less than significant impacts** with respect to flooding.

b, e) There is currently no adopted groundwater sustainability plan in the project area; however, it is anticipated that the proposed project would not generate conflicts with future groundwater sustainability planning efforts because the proposed project would utilize minimal water resources during construction and would not require ongoing groundwater resources for operation and maintenance. There would be **no impact** with respect to the groundwater sustainability.

d) The City of West Sacramento is in a levee flood protection zone, as determined by the Central Valley Flood Protection Board or DWR. The project site is approximately 80 miles west of the Pacific coast, and therefore not located in a region subject to tsunamis. A seiche is a standing wave in an enclosed or partially enclosed water body, such as a lake or reservoir brought on by changes in atmospheric pressure. Seiches tend to occur in large or isolated water bodies. The project site is not in a location that would be typically subject to a seiche. The proposed project would be constructed during the dry season (summer and fall); therefore, risks of release of pollutants into waterways during construction would be **less than significant**.

Mitigation

Mitigation Measure HYD-1: Prepare SWPPP

- The contractor would be required to obtain a NPDES permit, since the project would disturb one or more acres of land and involve possible storm water pollutant discharges to surface waters. In addition, the contractor would prepare a SWPPP identifying BMPs to be used to avoid or minimize any adverse effects. Implementation of the following BMPs would act as mitigation as they would ensure that the effects on water quality would remain at less-than-significant levels. Identify all stormdrains, drainage swales, and creeks located near the construction site and provide pre-construction training to make sure contractors and subcontractors are aware of their responsibilities regarding stormwater requirements to prevent pollutants from entering stormdrains or waterways.

- Dispose of wastes properly; remove litter from the site daily; materials that cannot be reused or recycled must be taken to an appropriate landfill; dispose of hon hazardous construction wastes in covered dumpsters or recycling receptacles; recycle materials whenever possible.

- Conduct earthwork during low flow periods for the adjacent waterways (generally July 1–November 30).

- To the extent possible, stage construction equipment and materials on the landside of the levee reaches in previously disturbed areas.

- Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations. In order to minimize the mobilization of contaminated sediments (e.g., mercury) soil below the mean summer waterline shall not be disturbed, to the extent feasible.

- Stockpile soil on the landside of the levee reaches and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion.

- Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from migrating from the project site and entering nearby surface waters.

- Install (native or ecologically appropriate) plant materials to stabilize cut and fill slopes and other disturbed areas once construction is complete. Plant materials could include an erosion control seed mixture or shrub and tree container stock. Temporary structural BMPs, such as sediment barriers, erosion control blankets, mulch, and mulch tackifier, could be installed as needed to stabilize disturbed areas until vegetation becomes established.

- Fuel, maintain, and clean vehicles at a minimum of 175 feet distance from any riparian habitat or water body and prepare a spill response plan. All workers shall be informed of the importance of preventing spills and of the appropriate measures to follow should a spill occur. Training materials for spill prevention and response measures shall be prepared in adherence with state and federal regulations.

- Locate portable toilets a minimum of 25 feet away from drain inlets, water courses and traffic circulation; portable toilets shall be secured to prevent overturning; regular service shall be provided.

- Water utilized for dust control shall not be allowed to result in conditions of runoff. Care shall be taken to not overwater causing sediment-laden runoff. Earthwork operations shall cease when wind speeds exceed 20 mph for one hour or more.

Mitigation Measure HYD-2: Acquire Waste Discharge Requirements

- Before discharging any dewatered effluent to surface water, a Low Threat Discharge and Dewatering NPDES permit shall be obtained from the Central Valley RWQCB. Depending on the volume and characteristics of the discharge, coverage under the Central Valley RWQCB's NPDES Waste Discharge Requirements may be applied for and obtained. As part of the permit, the permittee would develop and implement measures as necessary so that the discharge limits identified in the relevant permit are met. As a performance standard, these measures would be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. Various measures that could be used include the retention of dewatering effluent until particulate matter has settled before it is discharged, use of infiltration areas, and/or other BMPs.

3.2.11 Land Use and Planning

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion

Section 3.1.2 of the EA describes land use effects of the proposed project.

a) The proposed project does not include the construction of any buildings or other large-scale features that would physically divide or create a barrier between any existing communities in the project area. Therefore, the proposed project would not divide an established community **no impact**.

b) The proposed project is zoned agriculture by the City of West Sacramento. The proposed project would reduce flood risk in and around West Sacramento by improving infrastructure and does not propose changes to land use designations. Construction activities would be temporary and would not conflict with land use designations in the City of West Sacramento General Plan. There would be **no impact**.

3.2.12 Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XII. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion

a-b) The project area is situated on vast alluvial deposits that have slowly accumulated over the last 100 million years. The materials have been derived from igneous, metamorphic, and sedimentary parent rock materials from the Sierra Nevada to the east, transported by major streams, and deposited in successive clay, silt, sand, and gravel layers on the valley floor. Late Pleistocene and Holocene alluvia deposits now cover the area. Due to the limited size and scope of the proposed project, there would be **no impact** on the geologic features in the project area.

The proposed project is located in an area classified MRZ-1 and is not considered to contain significant mineral deposits (CDC, 2018). The proposed project is not located on or near a mineral extraction site and would not result in the loss of availability of mineral resources or otherwise prevent the extraction of important mineral resources. Therefore, the proposed project would not result in the loss or availability of mineral resources and there would be **no impact**.

References

California Department of Conservation (CDC), 2018. Mineral Land Classification Map of Concrete Aggregate in the Greater Sacramento Area Production-Consumption Region. Available: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_245-MLC-Plate01-SECURED.pdf. Accessed November 18, 2020.

3.2.13 Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIII. NOISE — Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

Section 3.11 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for noise.

a-b) As described in subsection 3.11 of the EA, noise levels in the proposed project area are attributed to traffic on area roadways, train traffic, occasional planes and helicopters, residential and recreational activities, and natural background noise (wind, wildlife, etc). Noise sensitive receptors in the project area include residential uses which are approximately 0.8 miles east of the project site. As described in the EA, construction activities would result in short-term increases in noise levels. Anticipated noise levels at sensitive receptors are estimated to be 36 dBA or less based on the type of equipment used. Construction activities would occur during the times established in the City of West Sacramento Noise Ordinance to minimize effects to nearby residents. As such, impacts would be **less than significant**.

c) The proposed project is not located within 2 miles of a private airstrip, public airport, or is located within an airport land use plan. The nearest airports to the project site are the Sacramento Executive Airport (approximately 5.8 miles to the southeast of the project site), and the Yolo County Airport (approximately 14.5 miles to the west of the project site. Therefore, implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels from airport activity, and **no impact** would occur.

3.2.14 Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIV. POPULATION AND HOUSING — Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a-b) The proposed project would provide flood control improvements to the YBEL; as such the proposed project would not result in direct or indirect population growth, displacement of existing housing, construction of new housing, or the displacement of people such that construction of replacement housing would be necessary. As a result, the proposed project would have **no impact** on population and housing.

3.2.15 Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XV. PUBLIC SERVICES —				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

Discussion

a.i-v) The proposed project could temporarily increase the potential need for police and fire protection services because of the general hazards associated with construction activities. The proposed project would be designed and scheduled so that construction would not close any roadways or block any travel lanes and would not interfere with emergency access. Construction activities would follow the public service guidelines outlined in the City of West Sacramento General Plan and coordinate with local public service jurisdictions to alleviate potential conflicts with emergency access routes. It is not likely that implementation of the proposed project would potentially increase the additional services or require the construction of new or physically altered government facilities. The proposed project would reduce flood risk in and around West Sacramento by improving the flood control capabilities of the YBEL. The proposed project would not result in a substantial increased demand for fire protection, police protection, schools, parks or other public facilities and no new or physically altered facilities would be needed. Impacts would be **less than significant**.

3.2.16 Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVI. RECREATION —				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a-b) A bike commuter corridor is crosses the levee along I-80 and Roland Hensley Park is located adjacent to the project site. However, the bike corridor and park are not located within segments AA or AD and there would be no impact.

Additionally, the proposed project would not result in an increase in population as such, the City of West Sacramento would not need to upgrade or build new recreation facilities. Therefore, there would be **no impact** on recreation in the project area.

3.2.17 Transportation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVII. TRANSPORTATION — Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☒	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

Discussion

Section 3.12 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for transportation.

a-b) As discussed in section 3.12 of the EA, construction of the proposed project would have temporary effects to traffic around the project area resulting from an increase in haul trucks and construction workers' personal vehicles accessing the project area via the described haul routes. The haul trucks would be spaced out during the day and would not interfere with commuter traffic in the morning and evening, but would increase the number of vehicles accessing the project area. The construction plan for the proposed project would be designed and scheduled so that construction would not require the closure of any roadways or block any travel lanes. There would be an increase in vehicle traffic around the project area during construction; however, these effects would be short-term and temporary (less than 100 days), and the vehicle trips would be limited to predesignated routes to minimize the contribution of project construction traffic to roadway congestion in the project area.

Mitigation Measure Trans-1 would require the development and implementation of a traffic control plan prior to construction, and would coordinate all use of public roads with the City of West Sacramento, or other responsible agencies. The traffic control plan would also identify and manage potential intersections with pedestrian and bicycle facilities, managing construction traffic to maintain access to existing pedestrian and bicycle facilities or provide alternative routes for pedestrian and bicycle traffic.

With the implementation of Mitigation Measures Trans-1 construction traffic would be managed to minimize contributions to local roadway congestion and adverse impacts to pedestrian and bicycle travel associated with temporary construction traffic, resulting in a **less-than-significant** impact.

c) The proposed project is a levee improvement project on key segments of the YBEL and does not include constructing new roadways. As a result, the proposed project would not introduce unsafe design features or incompatible uses into the area. The physical and operational characteristics of area transportation facilities (e.g., traffic signal and stop-control, and sidewalks) would safely accommodate traffic related to construction activities to and from the project site. For this reason, there would be **no impact** related to an increase in hazards resulting from the introduction of the proposed project.

d) The proposed project would be designed and scheduled so that construction would not close any roadways or block any travel lanes and would not interfere with emergency access. There would be an increase in vehicle traffic around the project area during project construction, but since these effects would be temporary and the vehicle numbers are limited, the proposed project is not expected to substantially increase roadway congestion in the project area to the extent that emergency access would be hindered. Therefore, transportation impacts related to emergency access would be considered **less than significant**.

Mitigation

Mitigation Measure Trans-1: Develop Traffic Control Plan

The contractor would be required to develop a Traffic Control Plan prior to construction, and coordinate all use of public roads with the City of West Sacramento, or other responsible agencies. This plan would include the following measures:

- Construction vehicles would not be permitted to block any roadways or driveways.
- Access will be provided for emergency vehicles at all times.
- Signs and flagmen would be used, as needed, to alert motorists, bicyclists, and pedestrians to the presence of haul trucks and construction vehicles at all access points.
- Vehicles would be required to obey all speed limits, traffic laws, and transportation regulations during construction. Vehicles would not exceed 15 miles per hour on unpaved levee roads.
- Construction workers would be encouraged to carpool and park in designated staging areas.
- Closure of levee roads, staging areas, and construction sites would be clearly fenced and delineated with appropriate closure signage.
- The contractor would be required to repair any roads damaged by construction.

3.2.18 Tribal Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVIII. TRIBAL CULTURAL RESOURCES —				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources. Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion

Section 3.6 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for tribal cultural resources.

a.i/ii) Tribal cultural resources are: 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing in the California Register of Historical Resources (California Register), or local register of historical resources, as defined in PRC Section 5020.1(k); or, 2) a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). For a cultural landscape to be considered a tribal cultural resource, it must be geographically defined in terms of the size and scope of the landscape (PRC Section 21074[b]). A historical resource, as defined in PRC Section 21084.1, unique archaeological resource, as defined in PRC Section 21083.2(g), or non-unique archaeological resource, as defined in PRC Section 21083.2(h), may also be a tribal cultural resource.

Through background research at the North Central Information Center of the California Historical Resources Information System, no known archaeological resources that could be considered tribal cultural resources, listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC Section 5020.1(k), pursuant to PRC Section 21074(a)(1), would be impacted by the proposed project.

In accordance with PRC Section 21080.3(b), WSAFCA sent certified letters to tribes listed on the Native American Heritage Commission list for the project vicinity: Yocha Dehe Wintun Nation, United Auburn Indian Community, and Wilton Rancheria. The letters were sent in coordination with the USACE, who sent separate letters to the same tribes to comply with National Historic Preservation Act Section 106 consultation requirements. WSAFCA received one response from the Yocha Dehe Wintun Nation. The tribe indicated they have concerns that the project could impact known cultural resources and recommended cultural monitors during development and ground disturbance as well as cultural resources sensitivity training. Tribal monitors from Yocha Dehe Wintun Nation were present during the survey effort completed for the project (GEI, 2021a).

The cultural resources analysis and survey, as well as consultation with Native American tribes, did not identify any specific tribal cultural resources in the project area. However, there remains the possibility that previously unknown cultural materials, that could be considered tribal cultural resources, could be discovered during project-related construction. Impacts to tribal cultural resources would be a potentially significant effect. Implementing Mitigation Measures CR-1, CR-2, and CR-3 (see Section 3.5) would reduce the potential for a significant impact resulting from inadvertent damage to or destruction of previously undocumented tribal cultural resources to a less-than-significant level. These measures would require a cultural resources sensitivity training and that if cultural materials are discovered prior to or during project-related construction activities, appropriate treatment and protection measures would be implemented.

In addition, if a tribal cultural resource were discovered during project-related construction, implementation of Mitigation Measure TCR-1 would ensure that resource is avoided and/or appropriate treatment and protection measures are implemented in consultation with the Native American tribes.

Mitigation Measure TCR-1: Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.

If tribal cultural resources are identified in the project area prior to or during construction, the following performance standards shall be met before proceeding with construction and associated activities that may result in damage to or destruction of tribal cultural resources:

Each identified tribal cultural resource will be evaluated for California Register eligibility through application of established eligibility criteria (CCR 15064.636), in consultation with interested Native American tribes.

If a tribal cultural resource is determined to be eligible for listing on the California, USACE, in consultation with WSAFCA, will avoid damaging the resource in accordance with PRC Section 21084.3, if feasible. If WSAFCA determines that the project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation steps capable of avoiding or substantially lessening potential significant impacts to a

tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource. These measures may be considered to avoid or minimize significant impacts and constitute the standard by which an impact specifically address inadvertent discovery of human remains may be reached:

i. Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

ii. Treat the resource with culturally appropriate dignity, taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following:

   a. Protect the cultural character and integrity of the resource.

   b. Protect the traditional use of the resource.

   c. Protect the confidentiality of the resource.

   d. Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.

   e. Protect the resource.

References

GEI Consultants, Inc., *Cultural Resources Inventory Report West Sacramento Project Yolo Bypass East Levee Repair.* Prepared for the U.S. Army Corps of Engineers, Sacramento District Cultural, Recreation, and Social Assessment Section (CESPK-PD-RC). April 2021a.

3.2.19 Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

Section 3.13 of the EA presents a description of the existing conditions, environmental effects and mitigation measures, as appropriate for utilities and service systems.

a-c) As described in Section 3.13 of the EA there would be no long-term interruption of utilities or service systems. Construction activities may require temporarily access to existing potable water supply, drainage systems, and sanitary sewer. The proposed project would not result in an increase in population that would result in an increase demand for utilities and service systems. As a result, the proposed project would avoid permanent impacts on existing service systems in the area. Furthermore, the proposed project would not result the permanent relocation or construction of new water, sanitary sewer, natural gas, or wastewater facilities.

As discussed in Section 3.13 of the EA, PG&E owns and operates a 12 kv power line that is located in Segments AA and Z. The existing 12 kv power line is supported by two power poles, located within the project area at stations 6+90 and 38+00. The proposed project construction activities would require relocation of the power pole located at station 38+0 and the other would be replaced with a longer pole that would raise the power line to meet CVFPB Title 23 requirements. As the owner and operator, PG&E will be responsible for complying with Title 23 requirements, as such, they are preparing the design and engineering documents and will be working on the power line and power pole

relocation prior to construction of the proposed project. As such, relocation of the power lines or the poles would have a **less-than-significant impact** with respect to the utility services in the area.

d-e) To the extent practical, the proposed project would use any overburden soils and excavated material for backfill, rough and final grading purposes. Any excess soils not used on-site is expected to be minimal; in the event excess material exists, it would be disposed of at a designated facility that can accept suitable soils for fill and grading purposes; these minimal quantities are not expected to exceed the facility's capacity. Furthermore, the proposed project would comply with all federal, state, and local statutes and regulations related to solid waste Therefore, the proposed project would have a **less-than-significant impact** on solid waste disposal.

3.2.20 Wildfire

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

a) Construction of the proposed project could result in a minimal temporary increase in traffic levels arterial roads. Workers could access the project area from I-80 via Harbor Boulevard and Enterprise Boulevard to an access driveway accessible from West Capitol Avenue The proposed project would be designed and scheduled so that construction would not close any roadways or block any travel lanes and would not interfere with emergency access. Therefore, the proposed project is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan, and this would be a **less-than-significant** impact.

b-d) The project site is not located within a State Responsibility Area (SRA)[1] and is not classified as a Very High Fire Hazard Severity Zone (VHFHSZ). As a result, the project site fire responsibility is zoned as a Local Responsibility Area (LRA)[2] by California Department of Forestry and Fire Protection (CAL FIRE) and is classified as a Non-VHFHSZ (CAL FIRE, 2020; CAL FIRE, 2008). Additionally, the project site would be located on relatively flat terrain within seasonal and permanent wetland and riparian woodland habitat along the YBEL. Due to the lack of slope, substantial dry vegetation, and

[1] State Responsibility Area is a legal term defining the area where the State has financial responsibility for wildland fire protection. Incorporated cities and federal ownership are not included. The prevention and suppression of fires in all areas that are not state responsibility areas are primarily the responsibility of local or federal agencies (CAL FIRE, 2007a).

[2] Local Responsibility Areas include incorporated cities, cultivated agriculture lands, and portions of the desert. Local responsibility area fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government (CAL FIRE, 2007a).

CAL FIRE hazard severity zone designation, the current risk of a fire to occur at the project site is relatively low.

Construction activities caused by the proposed project would consist of structural modifications to the levee to address seepage, levee stability, erosion, and overtopping concerns. Vehicle trips would be the only source of ignition from the project and vehicles would not be parked or operated on or near dry vegetation. Therefore, due to the nature of the proposed project and the existing conditions of the project site, impacts related to wildfire risk caused by the project would be negligible to **no impact**.

3.2.21 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XXI. MANDATORY FINDINGS OF SIGNIFICANCE —				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) As identified and discussed under Environmental Checklist Items Biological and, Cultural Resources, Geology and Soils, and Hydrology and Water Quality implementation of the proposed project could result in potentially significant impacts that could have the potential to degrade the quality of the environment, and impact biological and cultural resources. Implementation of mitigation measures presented in each section would be incorporated into the proposed project to reduce the identified impacts to a **less-than-significant level**.

b) CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of a project when the project's incremental contribution to a significant cumulative effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed along with the effects of past, current, and reasonably foreseeable future projects. An incremental, project-specific contribution to a cumulative impact is less than cumulatively considerable, and thus is not significant, if, for example, the project is required to implement mitigation measures designed to alleviate the cumulative impact.

Consistent with CEQA Guidelines Section 15130(b), the environmental analysis presented in this document includes an evaluation of past, present, and reasonably anticipated future projects that could produce related or cumulative impacts, including those projects outside the control of the CEQA Lead Agency and also considered regional planning documents to evaluate potential effects of the proposed Project's implementation within a regional context. Existing conditions within the cumulative impacts area of effect reflect a combination of the natural condition and the effects of

past actions in the affected area. The following factors also were used to determine an appropriate list of projects to be considered in this cumulative analysis:

Similar Environmental Impacts—A relevant project is defined as a "reasonably foreseeable" project that would contribute to effects on resources also affected by the proposed Project. For the purpose of this analysis, relevant projects with potential similar environmental impacts include, for example, other public utility-related projects.

Geographic Scope—The appropriate geographic area of cumulative consideration is identified on a resource-by-resource basis as dictated by relevant physical and/or environmental boundaries (such as the extent of the groundwater basin or the roadways traveled by Project vehicles).

Timing and Temporal Scope—Incremental impacts of the proposed Project could combine with the incremental impacts of other projects to cause or contribute to cumulative effects if the proposed Project's construction, operation, and maintenance periods coincide in terms of timing with the effects of the other projects.

As discussed in Section 3.14 of the EA, the proposed project would not cause long term adverse effects on the resources discussed in Chapter 3 of the EA. However, some of the resources have the potential to incur temporary, short-term effects during construction. An initial assessment of potential cumulative effects indicated that air quality, climate change, transportation, and biological resources have the potential to contribute to significant cumulative effects; however, implementation of mitigation measures incorporated into this IS would reduce the projects project's contribution to potentially significant cumulative impacts to less than considerable. Therefore, cumulative impacts would be **less than significant**.

c) As discussed in this IS implementing the proposed project would result in less-than-significant impacts associated with aesthetics, agriculture and forestry resources, energy, hazards and hazardous materials, water quality, land use, population and housing, public services, recreation, utilities and service systems, and wildfire.

As described within the Air Quality, Cultural Resources, Hazards and Hazardous Materials, Noise, Transportation, Tribal Cultural Resources sections, potentially significant impacts have been identified throughout the document that could affect human beings either directly or indirectly. However, as described throughout this Initial Study/Mitigated Negative Declaration, compliance with federal, state, Yolo County, and local agency standards and regulations are necessary and would be implemented along with the mitigation measures identified herein to reduce these potential impacts to **less-than-significant levels.**

This page intentionally left blank

CHAPTER 4
Report Preparers

U.S. Army Corps of Engineers, Sacramento District –

David Colby, Biological Sciences Environmental Manager/Fisheries Biologist

Mariah Brumbaugh, NEPA Regional Technical Specialist

Lorena Guerrero, Environmental Manager

Andrew Ugan, Archaeologist

Caitlin Clinton-Selin, Historian

Dan Artho, Deputy Chief of Planning

WSAFCA

Brian Brown, PE, CFM

Greg Fabun, General Manager

Mark Zollo, Senior Administrative Analyst, Flood Projects

ESA

Dave Beauchamp, Project Manager

Brandon Carroll, Geology/Soils, Hazards and Hazardous Materials

Laura Dodson, Deputy Project Manager, Aesthetics, Agricultural/Forestry Resources, Biological Resources, Land Use/Planning, Population/Housing, Public Services, Recreation, Utilities/Service Systems

Kelly Bayne, Biological Resources

Maria Hensel, Hydrology and Water Quality

Heidi Koenig, Cultural Resources, Tribal Cultural Resources

Bailey Setzler, Air Quality, Greenhouse Gases, Energy

Kristine Olsen, Word Processing

Ally Sung-Jereczek, Noise, Wildfire

Jonathon Teofilo, Transportation

Eric Zigas, QA/QC Review

This page intentionally left blank

CHAPTER 5
Mitigation Monitoring and Reporting Program

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
Aesthetics			
Agriculture and Forestry Resources			
Air Quality			
	Mitigation Measure AQ-1: • Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure; • Haul trucks shall maintain at least 2 feet of freeboard; • Cover all trucks hauling dirt, sand, or loose materials; • Apply non-toxic binders to exposed areas after cut and fill operations and hydroseed area; • Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days); • Plant tree windbreaks on the windward perimeter of the construction projects if adjacent to open land; • Plant vegetative ground cover in disturbed areas as soon as possible; • Cover inactive storage piles; • Sweep streets if visible soil material is carried out from the construction site; • Treat accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips or mulch; • Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.	WSAFCA/USACE	During Construction
	Mitigation AQ-2: Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The project proponent would provide clear signage that posts this requirement for workers at the entrances to the site.		

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
Biological Resources			
	Mitigation Measure BIO-1: Native Habitat Any ruderal grassland temporarily impacted by construction would be restored by reseeding the affected area with native grasses and forbs following construction.	WSAFCA/USACE	After Construction
	Mitigation Measure BIO-2a: Special-Status Species - Special-Status Fish Implementation of the hydrology and water quality mitigation measures under Section 3.9.3 would reduce potential indirect effects to special-status fish.	WSAFCA/USACE	During Construction
	Mitigation Measure BIO-2b: Special-Status Species - Giant Gartersnake In addition to implementation of the hydrology and water quality mitigation measures under Section 3.9.3, the following measures would be implemented to minimize potential effects on giant gartersnake. These measures are based on USFWS guidelines for restoration and standard avoidance measures included as appendices in the USFWS Programmatic Consultation with the USACE (1997). • Unless approved otherwise by USFWS, construction will be initiated only during the giant gartersnakes' active period (May 1–October 1, when they are able to move away from disturbance). • Construction personnel will participate in a USFWS-approved worker environmental awareness program. • A giant gartersnake survey will be conducted 24 hours prior to construction in potential habitat. Should there be any interruption in work for greater than two weeks, a biologist would survey the project area again no later than 24 hours prior to the restart of work. • Giant gartersnakes encountered during construction activities will be allowed to move away from construction activities on their own. • Movement of heavy equipment to and from the construction site will be restricted to established roadways. Stockpiling of construction materials will be restricted to designated staging areas, which will be located more than 200 feet away from giant gartersnake aquatic habitat. • Since construction will occur within 200 feet of suitable aquatic habitat, wildlife exclusion fencing will be installed along the perimeter of the construction footprint as follows; north to south along the western boundary, parallel to the YBEL Toe Drain Canal; and from the western boundary fencing eastward to the base of the riprap. Similarly, wildlife fencing will be installed around any staging areas within 200-feet of the YBEL Toe Drain Canal. A biological monitor will be present during the installation of the fencing.	WSAFCA/USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	Mitigation Measure BIO-2c: Special-Status Species - Western Pond Turtle In addition to implementation of the hydrology and water quality mitigation measures under Section 3.9.3, the following measures would be implemented to reduce potential effects on western pond turtle: • Construction personnel will participate in a worker environmental awareness program (concurrently with the training identified for giant gartersnake). • A preconstruction survey will be conducted for western pond turtle 24 hours prior to the start of construction (concurrently with the survey identified for giant gartersnake). • If any western pond turtles are observed during construction, the biologist will relocate the individual(s) at least 200 feet up- or downstream of the project area to similar habitat within or adjacent to the YBEL Toe Drain Canal, if feasible. If the western pond turtles cannot be captured, no work will occur in the vicinity of the turtle until the biologist confirms that the turtle has left the immediate vicinity and would not be harmed by construction activities. • The wildlife exclusion fencing identified for giant gartersnake will ensure that no western pond turtles enter the construction footprint.	WSAFCA/USACE	During Construction
	Mitigation Measure BIO-2d: Special-Status Species - Burrowing Owl The following measures would be implemented to reduce the potential effects on burrowing owl: • Pre-construction surveys for burrowing owls will be conducted by a qualified biologist within 30 days prior to the start of work activities at the project area. If construction activities are delayed for more than 30 days after the initial preconstruction survey, then a new preconstruction survey will be conducted. Surveys will be conducted in accordance with the following methods, as described within the Staff Report on Burrowing Owl Mitigation (CDFW, 2012). • If burrowing owls are discovered in the project area vicinity during the preconstruction surveys or during construction, the biologist will be notified immediately. Occupied burrows will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. • Occupied burrows during the nesting season will be avoided by establishment of a no-work buffer of 250-foot around the occupied/active burrow. Where maintenance of a 250-foot no-work buffer zone is not practical, coordination with CDFW will be conducted to determine appropriate avoidance measures. Burrows occupied during the breeding season (February 1 to August 31) will be closely monitored by the biologist until the young fledge/leave the nest. The biologist will have the authority to stop work if it is determined that construction related activities are disturbing the owls.	WSAFCA/USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	• If approved by CDFW, the biologist may undertake passive relocation techniques by installing one-way doors in active and suitable burrows (that currently do not support eggs or juveniles). This would allow burrowing owls to escape but not re-enter. Owls should be excluded from the immediate impact zone and within a 160-foot buffer zone by having one-way doors placed over the entrance to prevent owls from inhabiting those burrows.		
	Mitigation Measure BIO-2e: Special-Status Species - Swainson's Hawk The following measures would be implemented to reduce the potential effects to Swainson's hawk: • If construction activities are anticipated to commence during the Swainson's hawk nesting season (March 1 to September 15), a qualified biologist will conduct a minimum of two preconstruction surveys during the recommended survey periods, in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk TAC 2000). All potential nest trees within 0.25 miles of the proposed project footprint will be visually examined for potential Swainson's hawk nests, as accessible. • If active Swainson's hawk nests are found within 0.25 miles of construction activities, a survey report will be submitted to the CDFW and the CNDDB, and an avoidance and minimization plan will be developed for approval by the CDFW prior to the start of construction. The avoidance plan will identify measures to minimize impacts to the active Swainson's hawk nest depending on the exact location of the nest. These measures may include, but are not limited to: – Establishing a buffer zone and work schedule to avoid impacting the nest during critical periods. If possible, no work will occur within 600 feet of the nest while it is in active use. If work will occur within 600 feet of the nest, then construction will be monitored by a qualified biologist to ensure the nest is not disturbed and that the that no work occurs within 150 feet of the nest during incubation or within ten days after hatching; – Having a biological monitor conduct regular monitoring of the nest during construction activities; and – Allowing the biologist to halt construction activities until the CDFW is consulted if the biologist determines that construction activities are disturbing the nest.	WSAFCA/USACE	During Construction
	Mitigation Measure BIO-2f: Special-Status Species - Nesting Birds and Raptors (Excluding Swainson's Hawk) The following measures would be implemented to reduce the potential effects to nesting birds and raptors: • For any construction activities that will occur between February 1 and August 31, a qualified biologist will conduct preconstruction surveys for nesting birds and raptors within 7 days prior to commencement of construction activities. The survey area will	WSAFCA/USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	include a 500-foot buffer around the construction area, where feasible. If no active nests are observed, no additional measures are required unless construction halts for 7 days. A subsequent preconstruction survey would be required within 7 days prior to re-commencement of construction activities. • If active nests are found during the preconstruction survey, the applicant will implement appropriate mitigation measures to ensure that the species will not be adversely affected, which will include establishing a no-work buffer zone, as approved by CDFW, around the active nest. Measures will include, at minimum: – Establishing a 500-foot no-work buffer around active raptor nests (excluding Swainson's hawk nests) and a 100-foot no-work buffer around active migratory bird nests, if feasible. If infeasible, the biologist may determine that a reduced buffer is acceptable based on several factors including the sensitivity of the species nesting, the construction activities proposed within the buffer area, and the proximity of the construction activities to the nest. – If the biologist determines that a reduced buffer acceptable, the active nest(s) will be monitored by a qualified biologist during all construction activities occurring between the reduced buffer area and the originally established buffer area. If, in the professional opinion of the monitor, the project would impact the nest, the biologist will immediately inform the construction manager. The construction manager will stop construction activities occurring between the reduced buffer area and the originally established buffer area until the biologist determines that normal nesting activities have recommenced or when the biologist confirms that the nest is no longer active.		
	Mitigation Measure BIO-3: Sensitive Natural Communities Implementation of the hydrology and water quality mitigation measures under Section 3.9.3 would reduce potential indirect effects to sensitive natural communities.	WSAFCA/USACE	During Construction
	Mitigation Measure BIO-4: Federally Protected Waterways Implementation of the hydrology and water quality mitigation measures under Section 3.9.3 would reduce potential indirect effects to federally listed waterways.	WSAFCA/USACE	During Construction
Cultural Resources			
	Mitigation Measure CR-1: Cultural Resources Awareness Training. WSAFCA shall provide a cultural resources and tribal cultural resources sensitivity and awareness training program for all personnel involved in project construction, including field consultants and construction workers. The training shall be developed in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology, as well as culturally affiliated Native American tribes. WSAFCA may invite Native American representatives from interested culturally affiliated Native American tribes to participate. The training shall be conducted before any project-related construction activities begin in the APEproject area and shall include relevant information	WSAFCA/USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	regarding sensitive cultural resources and tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating federal and state laws and regulations. The training shall also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that could be located in the APEproject area and shall outline what to do and who to contact if any potential cultural resources or tribal cultural resources are encountered. The training shall emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and shall discuss appropriate behaviors and responsive actions, consistent with Native American tribal values. **Mitigation Measure CR-2: Inadvertent Discovery of Cultural Materials.** If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains); tribal cultural resources; sacred sites; or landscapes is made at any time during project-related construction activities, USACE in consultation with WSAFCA and other interested parties, in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology and culturally affiliated Native American tribes, shall develop appropriate protection and avoidance measures where feasible. These procedures shall be developed in accordance with the GRR PA and Historic Properties Management Plan (HPMP), which specifies procedures for post-review discoveries. Additional measures, such as development of a Historic Properties Treatment Plan prepared in accordance with the GRR PA and Historic Properties Management Plan (HPMP) may be necessary, if avoidance or protection is not possible. **Mitigation Measure CR-3: Inadvertent Discovery of Human Remains.** In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, WSAFCA shall immediately halt potentially damaging excavation in the area of the burial and notify the County coroner and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, they must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). After the coroner's findings have been made, the archaeologist and the NAHC-designated MLD, in consultation with WSAFCA, shall determine the ultimate treatment and disposition of the remains. Upon the discovery of Native American human remains, USACE in coordination with WSAFCA, shall require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations to the WSAFCA after being granted access to		

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that WSAFCA shall employ: • Record the site with the NAHC and the appropriate California Historical Resources Information System center. • In consultation with the coroner and MLD proper recordation of the discovery will be properly documented and filed with the County. If agreed to by the MLD, WSAFCA or WSAFCA's authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. If the NAHC is unable to identify an MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site, WSAFCA or WSAFCA's authorized representative may also reinter the remains in a location not subject to further disturbance. If WSAFCA rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to WSAFCA, WSAFCA shall implement mitigation for the protection of the burial remains. Construction work in the vicinity of the burials shall not resume until the mitigation is completed.		
Energy			
Geology and Soils			
	Mitigation Measure GEO-1 In the event of an unanticipated fossil discovery during construction, the severity of the impact would be reduced to a less-than-significant level with implementation of the following mitigation. Details of this mitigation include: • Halting all earthwork or other types of ground disturbance within 100 feet of the find until a qualified paleontologist (meeting the standards of the Society of Vertebrate Paleontology [SVP]) can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. • If treatment and salvage is required, recommendations will be consistent with SVP guidelines (SVP, 2010) and currently accepted scientific practice. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they	USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	can be housed in an appropriate museum or university collection, and may also include preparation of a report for publication describing the finds.		
Greenhouse Gas Emissions			
	Mitigation Measure AQ-2 The proposed project would minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes, as required by the California Code of Regulations, Title 13, sections 2449(d)(3) and 2885. The USACE would provide clear signage that posts this requirement for workers at the entrances to the site.	WSAFCA/USACE	During Construction
Hazards and Hazardous Materials			
Hydrology and Water Quality			
	Mitigation Measure HYD-1: Prepare SWPPP • The contractor would be required to obtain a NPDES permit, since the project would disturb one or more acres of land and involve possible storm water pollutant discharges to surface waters. In addition, the contractor would prepare a SWPPP identifying BMPs to be used to avoid or minimize any adverse effects. Implementation of the following BMPs would act as mitigation as they would ensure that the effects on water quality would remain at less-than-significant levels. Identify all stormdrains, drainage swales, and creeks located near the construction site and provide pre-construction training to make sure contractors and subcontractors are aware of their responsibilities regarding stormwater requirements to prevent pollutants from entering stormdrains or waterways. • Dispose of wastes properly; remove litter from the site daily; materials that cannot be reused or recycled must be taken to an appropriate landfill; dispose of hon hazardous construction wastes in covered dumpsters or recycling receptacles; recycle materials whenever possible. • Conduct earthwork during low flow periods for the adjacent waterways (generally July 1–November 30). • To the extent possible, stage construction equipment and materials on the landside of the levee reaches in previously disturbed areas. • Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations. In order to minimize the mobilization of contaminated sediments (e.g., mercury) soil below the mean summer waterline shall not be disturbed, to the extent feasible.	WSAFCA/USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
	• Stockpile soil on the landside of the levee reaches and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion. • Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from migrating from the project site and entering nearby surface waters. • Install (native or ecologically appropriate) plant materials to stabilize cut and fill slopes and other disturbed areas once construction is complete. Plant materials could include an erosion control seed mixture or shrub and tree container stock. Temporary structural BMPs, such as sediment barriers, erosion control blankets, mulch, and mulch tackifier, could be installed as needed to stabilize disturbed areas until vegetation becomes established. • Fuel, maintain, and clean vehicles at a minimum of 175 feet distance from any riparian habitat or water body and prepare a spill response plan. All workers shall be informed of the importance of preventing spills and of the appropriate measures to follow should a spill occur. Training materials for spill prevention and response measures shall be prepared in adherence with state and federal regulations. • Locate portable toilets a minimum of 25 feet away from drain inlets, water courses and traffic circulation; portable toilets shall be secured to prevent overturning; regular service shall be provided. • Water utilized for dust control shall not be allowed to result in conditions of runoff. Care shall be taken to not overwater causing sediment-laden runoff. Earthwork operations shall cease when wind speeds exceed 20 mph for one hour or more.		
	Mitigation Measure HYD-2: Acquire Waste Discharge Requirements • Before discharging any dewatered effluent to surface water, a Low Threat Discharge and Dewatering NPDES permit shall be obtained from the Central Valley RWQCB. Depending on the volume and characteristics of the discharge, coverage under the Central Valley RWQCB's NPDES Waste Discharge Requirements may be applied for and obtained. As part of the permit, the permittee would develop and implement measures as necessary so that the discharge limits identified in the relevant permit are met. As a performance standard, these measures would be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. Various measures that could be used include the retention of dewatering effluent until particulate matter has settled before it is discharged, use of infiltration areas, and/or other BMPs.	WSAFCA/USACE	During Construction
Land Use and Planning			

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
Mineral Resources			
Noise			
Population and Housing			
Public Services			
Recreation			
Transportation			
	Mitigation Measure Trans-1: Develop Traffic Control Plan The contractor would be required to develop a Traffic Control Plan prior to construction, and coordinate all use of public roads with the City of West Sacramento, or other responsible agencies. This plan would include the following measures: • Construction vehicles would not be permitted to block any roadways or driveways. • Access will be provided for emergency vehicles at all times. • Signs and flagmen would be used, as needed, to alert motorists, bicyclists, and pedestrians to the presence of haul trucks and construction vehicles at all access points. • Vehicles would be required to obey all speed limits, traffic laws, and transportation regulations during construction. Vehicles would not exceed 15 miles per hour on unpaved levee roads. • Construction workers would be encouraged to carpool and park in designated staging areas. • Closure of levee roads, staging areas, and construction sites would be clearly fenced and delineated with appropriate closure signage. • The contractor would be required to repair any roads damaged by construction.	USACE	During Construction

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
Tribal Cultural Resources			
	Mitigation Measures CR-1, CR-2, and CR-3 **Mitigation Measure TCR-1: Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.** If tribal cultural resources are identified in the APEproject area prior to or during construction, the following performance standards shall be met before proceeding with construction and associated activities that may result in damage to or destruction of tribal cultural resources: Each identified tribal cultural resource will be evaluated for California Register eligibility through application of established eligibility criteria (CCR 15064.636), in consultation with interested Native American tribes. If a tribal cultural resource is determined to be eligible for listing on the California, USACE, in consultation with WSAFCA, will avoid damaging the resource in accordance with PRC Section 21084.3, if feasible. If WSAFCA determines that the project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation steps capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource. These measures may be considered to avoid or minimize significant impacts and constitute the standard by which an impact specifically address inadvertent discovery of human remains may be reached: I. Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria. II. Treat the resource with culturally appropriate dignity, taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following: a. Protect the cultural character and integrity of the resource. b. Protect the traditional use of the resource. c. Protect the confidentiality of the resource. d. Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places. e. Protect the resource.		

TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM

Resource Area	Mitigation Measures Proposed in this IS/MND	Implementing Actions/ Responsible Party	Timing
Utilities and Service Systems			
Wildfire			