DRAFT Final

AMERICAN RIVER WATERSHED COMMON FEATURES, WATER RESOURCES DEVELOPMENT ACT 2016 PROJECT, AMERICAN RIVER CONTRACT 3A Supplemental Environmental Assessment XII
Sacramento, CA
July 2022

Preface

The Lower American River (LAR) Contract 3A project includes the installation of levee improvements to meet erosion protection requirements along the LAR near the Business Interstate-80 Bridge in Sacramento, California. Most of the levee improvements included in LAR Contract 3A were analyzed in the 2016 American River Watershed Common Features General Reevaluation Report (ARCF GRR) and Final Environmental Impact Statement/Final Environmental Impact Report (FEIS/FEIR). This Supplemental Environmental Assessment (SEA) was prepared by the U.S. Army Corps of Engineers, Sacramento District (USACE) as the lead agency under the National Environmental Policy Act (NEPA).

USACE released the Draft SEA for public and agency review on April 13, with comments accepted to May 27, 2022. Due to updates in the NEPA regulations, the Draft SEA was circulated again between July 7 and July 23, 2022. Comments received during these review periods have been considered and responded to in Appendix G of the LAR Contract 3A Supplemental Environmental Impact Report. Updates have been made to the SEA based on these comments, design refinements that have occurred since completion of the Draft SEA, internal comments from USACE to clarify the analysis, and NEPA policy changes. The specific changes that distinguish the Final SEA from the Draft SEA are summarized in the table below. The table does not identify administrative changes to the SEA text, which do not affect the analysis contained in the SEA (for example, updates to the public review process). None of the changes identified below resulted in a new significant impact that was not analyzed in the Draft SEA.

Change	Section
Updated Title to include the supplemental document number.	Title Page
Added “paved area” to staging area locations in Sutter’s Landing Park.	Section 1.1 (page 1-12)
Updated Figure 1- 4 with refined project footprint.	Section 1.1 (page 1-15)

Change	Section
Updated Figure 1- 5 with refined project footprint and updated staging areas.	Section 1.1 (page 1-15)
Added "paved area" to staging area locations in Sutter's Landing Park.	Section 1.3 (page 1-19)
Added "paved area" to staging area locations in Sutter's Landing Park.	Section 2.3.1.2 (page 2-24)
Updated column 2 of Table 3- 1 to clarify that the significance determination is just for the ARCF GRR FEIS/FEIR and not all of the No-Action Alternative. Updated numerical impacts of Vegetation and Wildlife, Fisheries, and Special Status Species to match refined project footprint. Added footnote to column 3 explaining that NEPA descriptors are used in Sections 3.5 to 3.17 to further explain significance determinations.	Section 3.3 (page 3-30 to 3-34)
Discussed direct and indirect impacts	Section 3.3 (page 3-29)
Updated riparian habitat impact acreages to reflect the refined project footprint and described offsite mitigation location.	Section 3.6.2.2 (page 3-38 to 3-38)
Added description of offsite mitigation sites.	Section 3.6.2.2 (page 3-38 to 3-39)
Clarified that staging will be in paved and gravel areas not just parking lots at Sutter's Landing Park.	Section 3.6.2.2 (page 3-38 to 3-39)
Added discussion of possible impacts of lighting at staging sites to wildlife.	Section 3.6.2.2 (page 3-39)
Clarified that the construction methods for launchable toe will be similar enough to the construction methods of bank protection and launchable trench that there will not be any new impacts to fish from construction activities.	Section 3.7.2.2 (page 3-41)
Updated fish habitat impact acreages to reflect the refined project footprint. Clarified how habitat impacts were calculated.	Section 3.7.2.2 (page 3-41)
Updated valley elderberry longhorn beetle habitat impact acreages to reflect the refined project footprint and described	Section 3.8.2.2 (page 3-44)

Change	Section
offsite mitigation location. Clarified how habitat impacts were calculated.	
Changed the air analysis from a qualitative air analysis to a quantitative air analysis. Moved tables comparing LAR Contract 3A and LAR Contract 1 materials, equipment and staff to Section 3.12.	Section 3.10.2.2 (page 3-48 to page 3-50)
Updated language for air mitigation measure to specify contractor would only be responsible for NOx mitigation if USACE doesn't pay mitigation fee.	Section 3.10.2.2 (page 3-50)
Changed the traffic assessment from a qualitative analysis to a quantitative analysis.	Section 3.11.2.2 (page 3-52 to 3-54)
Clarified that, even though the top of levee is not an official bike trail, the public uses it for recreation and commuting.	Section 3.11.2.2 (page 3-54)
Clarified that there would not be a long term increase in greenhouse gases because no new electricity facility will be built.	Section 3.12.2.2 (page 3-55)
Added tables comparing LAR Contract 3A and LAR Contract 1 materials, equipment, and staff from Section 3.10.2.2.	Section 3.12.2.2 (page 3-55 to 3-56)
Updated the number of staging areas in Sutter's Landing Park to four locations.	Section 3.13.2.2 (page 3-58)
Clarified qualitative analysis by comparing the distance to sensitive receptors at LAR Contract 1 and LAR Contract 3A.	Section 3.15.2.2 (page 3-62 to 3-63)
Discussed impacts of Proposed Action on Environmental Justice	Section 3.17 (page 3-67 to 3-69)
Explained why cumulative impacts are now being assessed.	Chapter 4 (4-70)
Updated the cumulative analysis for Air Quality, clarifying that the Proposed Action's contribution to a cumulative Air Quality impact is mitigated and will not create an incremental contribution to a significant cumulative effect.	Section 4.2.7(page 4-77)

Change	Section
Updated cumulative analysis for Hydrology and Water Quality clarifying that the Proposed Action's contribution to a cumulative impact is mitigated and will not create an incremental contribution to a significant cumulative effect.	Section 4.2.10 (page 4-78)
Updated the cumulative analysis for Noise clarifying that the Proposed Action's contribution to a cumulative impact is mitigated and will not create an incremental contribution to a significant cumulative effect.	Section 4.2.11 (page 4-79)
Added a cumulative analysis for Environmental Justice.	Section 4.2.13 (page 4-79)
Corrected that the Report submitted to the Central Valley Regional Water Quality Control Board is a Report Type 1.	Federal Clean Water Act Section (page 5-82)

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US Army Corps of Engineers
Sacramento District
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[*Photo Courtesy of Bailey Hunter*]

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Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
ARCF	American River Watershed Common Features
ARCF GRR	American River Common Features General Re-evaluation Report
ARCF GRR FEIS/FEIR	ARCF General Reevaluation Report Environmental Impact Statement/Environmental Impact Report
BO	Biological Opinion
BOR	United States Bureau of Reclamation
BMPs	Best Management Practices
CAA	Clean Air Act
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CVFPB	Central Valley Flood Protection Board
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
cy	Cubic Yards
dBA	A-weighted Decibel
DEIR	Draft Environmental Impact Statement
DWR	California Department of Water Resources
EFH	Essential Fish Habitat
EPA	U.S Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
Ford Engineers	David Ford Consulting Engineers
EO	Executive Order
EOE	Expert Opinion Elicitation
GHG	Greenhouse Gas
GRR	American River Common Features General Re-evaluation Report
HDR	HDR incorporated
HPMP	Historic Properties Management Plan
HPTP	Historic Properties Treatment Plan
LAR	Lower American River
L_{eq}	Equivalent Continuous Level
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act

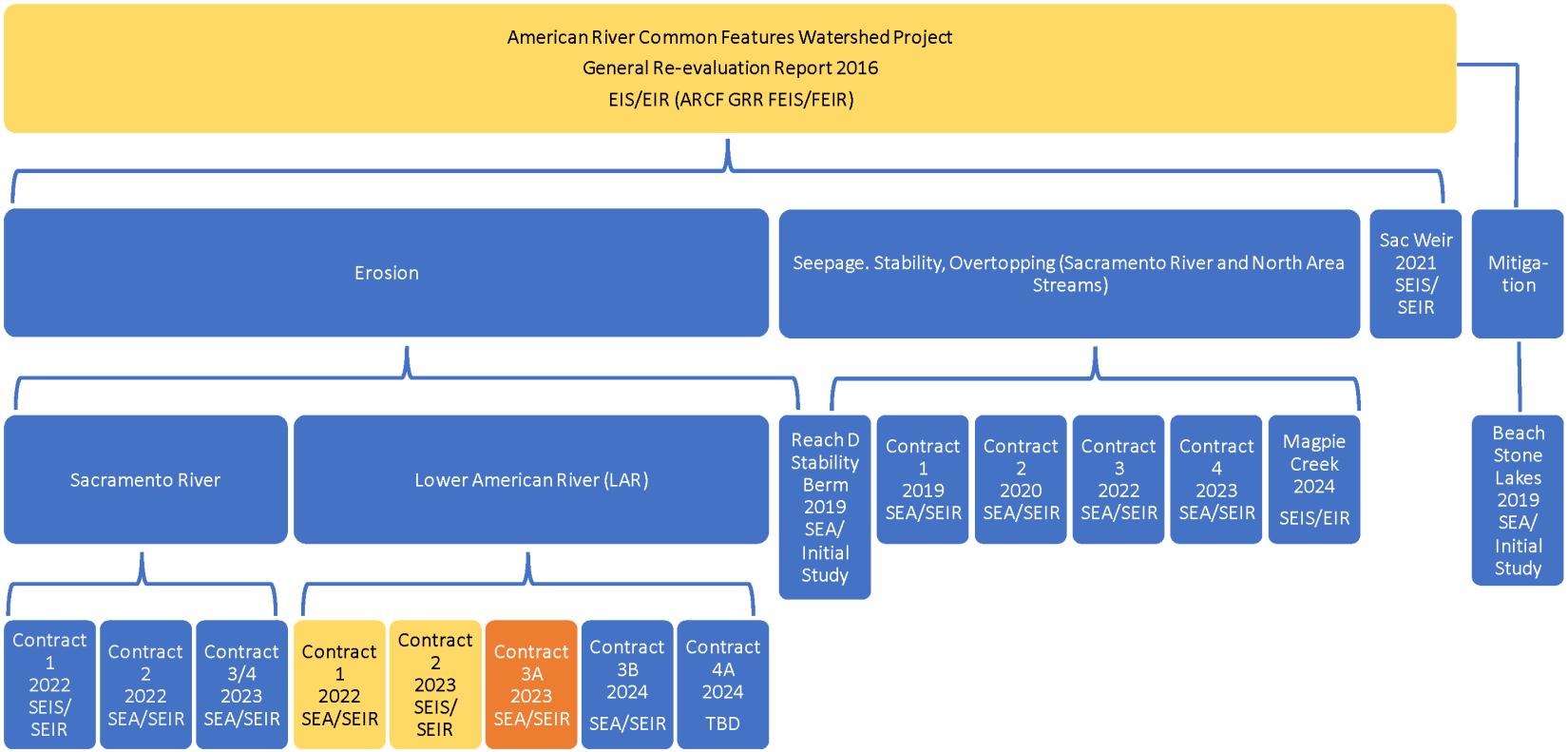
NHPA	National Historic Preservation Act
NMFS	National Oceanic and Atmospheric Administration National Marine Fisheries Service
NRHP	National Register of Historic Places
OHWM	Ordinary High Water Mark
PA	Programmatic Agreement
PED	Pre-construction, Engineering and Design
PPV	Peak Particle Velocity
ROD	Record of Decision
RM	River Mile
SAFCA	Sacramento Area Flood Control Agency
SEA	Supplemental Environmental Assessment
SEIR	Supplemental Environmental Impact Report
SEA/SEIR	Supplemental Environmental Assessment/Environmental Impact Report
SEIS/SEIR	Supplemental Environmental Impact Statement/Environmental Impact Report
SHPO	State Historic Preservation Officer
SMAQMD	Sacramento Metropolitan Air Quality Management District
SR	State Route
SRBPP	Sacramento River Bank Protection Project
SRA	Shaded Riverine Aquatic
TRAC	Technical and Resource Advisory Committee
TAC	Technical Advisory Committee
Two Rivers Project	Two Rivers Trail Phase II Project
URA	Uniform Relocation Assistance
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VELB	Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)
VdB	vibration decibels
WCM	Water Control Manual
WIIN Act	Water Infrastructure Improvements for the Nation Act
WRDA	Water Resources Development Act
Cuckoo	Western Yellow-billed Cuckoo (*Coccyzus americanus*)

Chapter 1. Introduction

1.1 Summary

The Sacramento metropolitan area is one of the most at-risk regions for flooding in the United States. To reduce this risk, Congress first authorized the American River Watershed Common Features (ARCF) Project in the Water Resources Development Act (WRDA) of 1996. The project was conceived to provide a portfolio of flood risk reduction measures to address levee seepage and instability along the Lower American River and the Sacramento River north of its confluence with the American River (west of the Natomas basin and near the City of Sacramento, California). Storms in early 1997 stressed the flood risk management system and revealed significant additional problems with the system. The U.S. Army Corps of Engineers (USACE) completed a reevaluation, the ARCF General Reevaluation Report in December 2015. The associated Environmental Impact Statement/Environmental Impact Report (ARCF GRR FEIS/FEIR) was completed in May 2016. The ARCF GRR FEIS/FEIR evaluated alternative plans for additional flood risk reduction and recommended additional improvements to the system. The American River Common Features General Re-evaluation Report (ARCF GRR) determined that seepage, stability and overtopping protection measures were needed along the Sacramento River, the east bank of the Natomas East Main Drainage Canal, and Arcade Creek. Also, it determined that overtopping protection measures were needed along the Magpie Creek Diversion Channel and erosion protection measures were needed along the American River and Sacramento River. These improvements are collectively referred to as the ARCF 2016 Project. Congress authorized these additional improvements in the WRDA of 2016 (Public Law 114-322). The specific contracts associated with the ARCF 2016 Project and their relationship to the ARCF GRR FEIS/FEIR are outlined in Figure 1- 1.

The ARCF GRR covers 11 miles of erosion protection work along Lower American River (LAR) (USACE 2016). As discussed in the 2019 Lower American River Subreach 1, 3, and 4 Tier Classification Memo that was put together by HDR Incorporated (HDR) and David Ford Consulting Engineers (Ford Engineers), an expert opinion elicitation (EOE) was held to gather estimates from experts on probabilities of levee failure due to erosion on the LAR. The EOE included members of the TAC (Technical Advisory Committee) as well as experts from USACE and the California Department of Water Resources (DWR) (HDR and Ford Engineers 2019). The findings of the EOE (HDR and Ford Engineers 2019) and the results of additional investigative work performed by the USACE engineering risk cadre have led the project team to refine the footprint of the Lower American river erosion protection sites at multiple locations along the LAR from the footprint estimated in the ARCF GRR FEIS/FEIR. These differences triggers the need for supplemental environmental analyses.



Blue is the whole project.

Yellow are related documents.

Orange is this document.

Figure 1- 1 ARCF 2016 Projects

There are 5 anticipated contracts on the LAR (seen in Figure 1- 1) which need supplemental analyses. These LAR erosion sites cover approximately 7 miles of LAR levees. The first two LAR erosion contracts, LAR Contract 1 and Contract 2, began with vegetation clearing and levee reconstruction work in February 2022. It is anticipated that erosion protection work for these projects will conclude by the end of 2023. LAR Contract 1 and LAR Contract 2 will take place immediately downstream of the H Street Bridge, with Contract 1 improvements on the left bank and Contract 2 improvements on the right bank. In March 2021 an analysis was finalized for LAR Contract 1 in a Final Supplemental Environmental Assessment/Environmental Impact Report (LAR Contract 1 SEA/SEIR) and in September 2021 an analysis for LAR Contract 2 was finalized in a Final Supplemental Environmental Impact Statement/Environmental Impact Report (LAR Contract 2 SEIS/SEIR). Information presented in the ARCF GRR FEIS/FEIR, the LAR Contract 1 SEA/SEIR and the LAR Contract 2 SEIS/SEIR is incorporated by reference (USACE and CVFPB 2021a; USACE and CVFPB 2021b). Future projects include LAR Contract 3B and LAR Contract 4A. It is anticipated that in 2024 erosion work will be done along the LAR between Howe Ave and the Mayhew drain under LAR Contract 3B. Finally, erosion protection is anticipated to be added to LAR Contract 4A in 2024 and would include work on the LAR right bank under the State Highway 160 bridge.

The contract being reviewed in this SEA is LAR Contract 3A, which is on the left bank of the LAR near the Business I-80 Bridge. For the final designs of the LAR Contract 3A site (Figure 1- 3, Figure 1- 4 and Figure 1- 5), only 700 feet of the levee reach proposed for erosion protection improvements was analyzed in the ARCF GRR FEIS/FEIR (Figure 1- 2). The 2300 feet of erosion protection upstream of the Business I-80 Bridge (Figure 1- 4) was determined to be needed during detailed design phase of the project.

In addition, the ARCF GRR FEIS/FEIR analyzed launchable trench and bank protection (Figure 1- 6) as erosion protection options. Along with bank protection, in order to meet the intent of the authorized project, the updated designs now also include launchable toe protection (Figure 1- 7) instead of launchable trench. The specific design refinements for LAR Contract 3A also include: 1) locating staging areas northwest of the Business I-80 Bridge, and at parking lots and paved areas at Sutter's Landing Park and 2) using haul routes to and from the Project Area (Figure 1- 8). These project refinements are henceforth referred to as the Proposed Action. An environmental review indicates that the Proposed Action will result in some changes to the magnitude of effects on visual resources, vegetation and wildlife, fisheries, special status species, cultural resources, air quality, transportation, climate change, recreation, hydrology, water quality, noise, and public utilities.

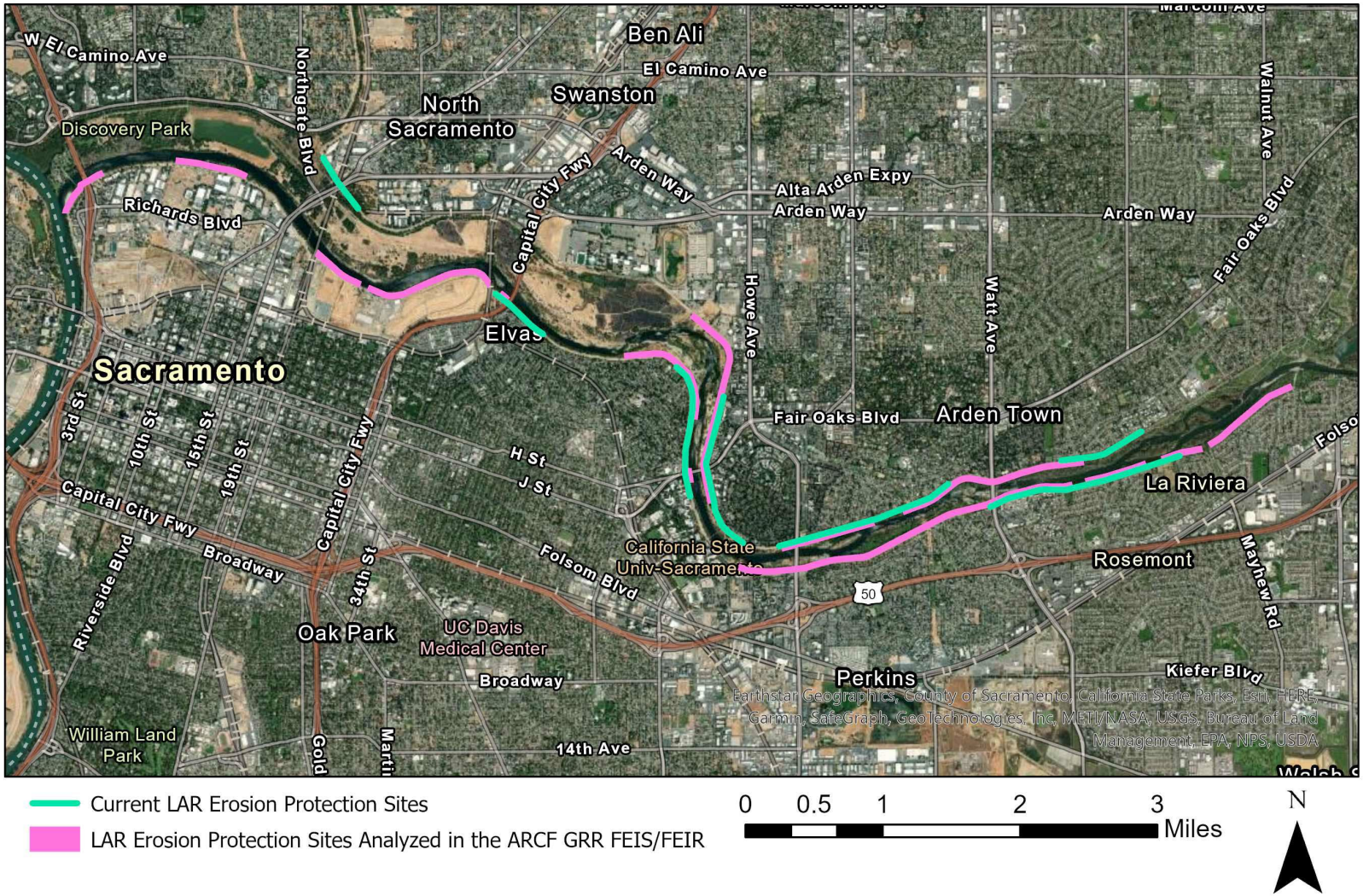


Figure 1- 2 Erosion Protection Sites Analyzed in the ARCF GRR FEIS/FEIR Compared to Current Project Locations

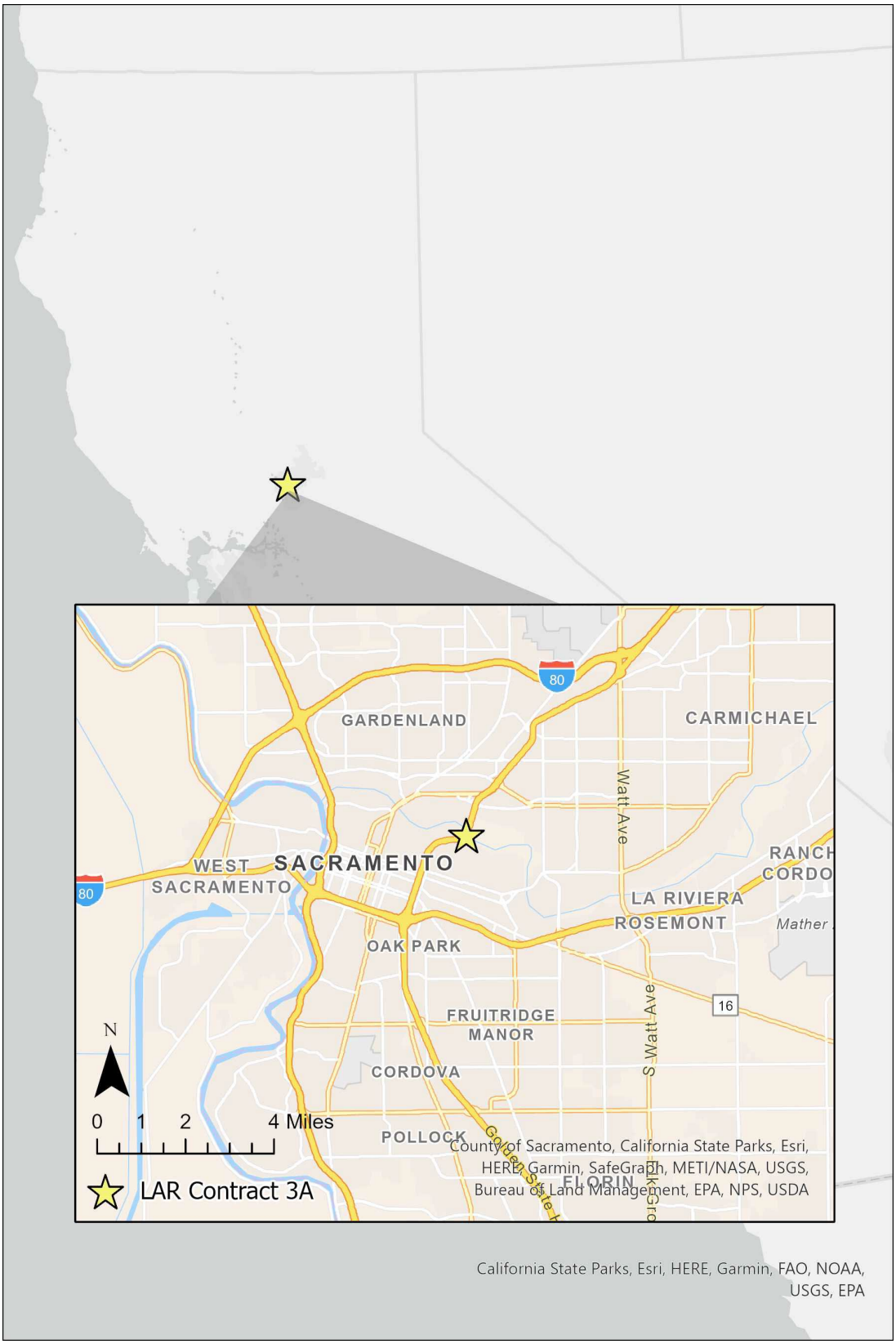


Figure 1- 3 Location of Proposed Work for LAR Contract 3A

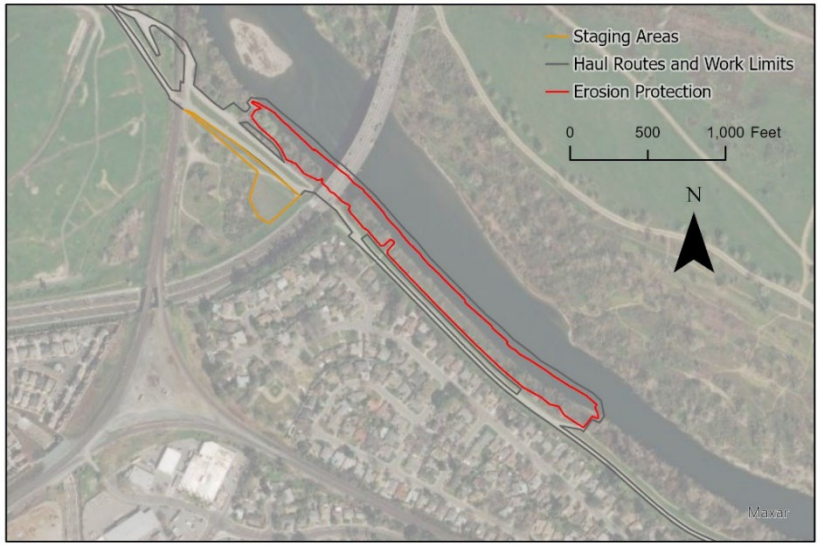


Figure 1- 4 Bank Protection and Launchable Toe Footprint

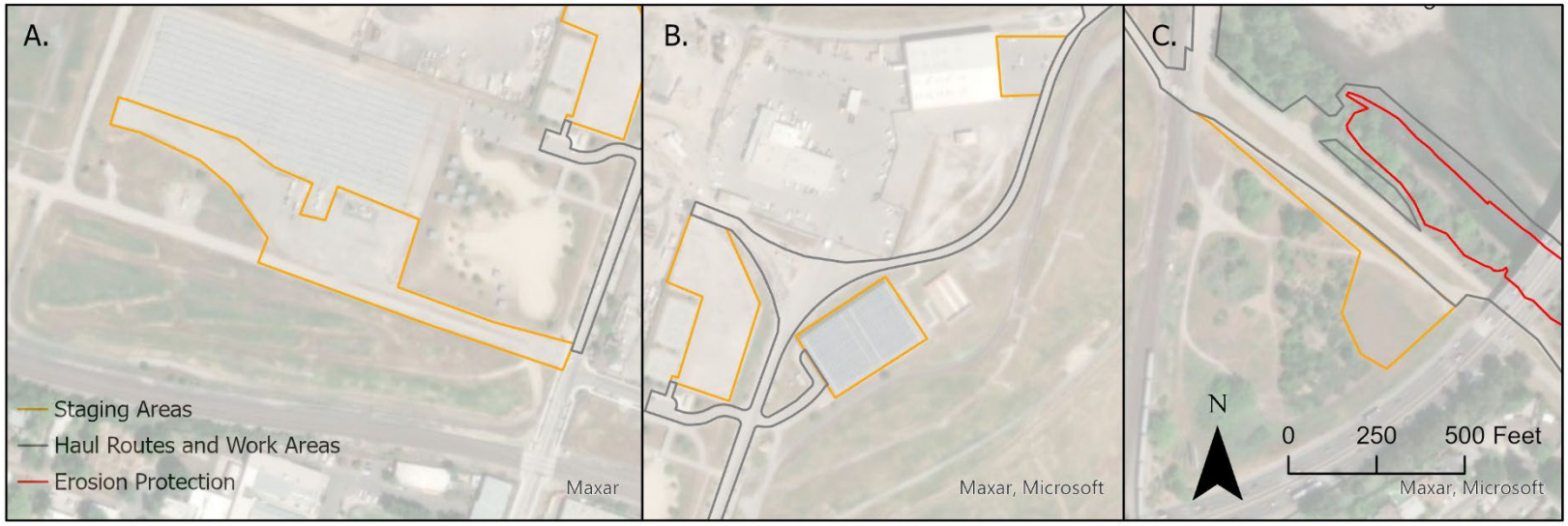


Figure 1- 5 Staging Areas at a) Paved Area at Sutter's Landing Park, b) Parking Lots at Sutter's Landing Park, and c) Northwest of the Business I-80 Bridge.

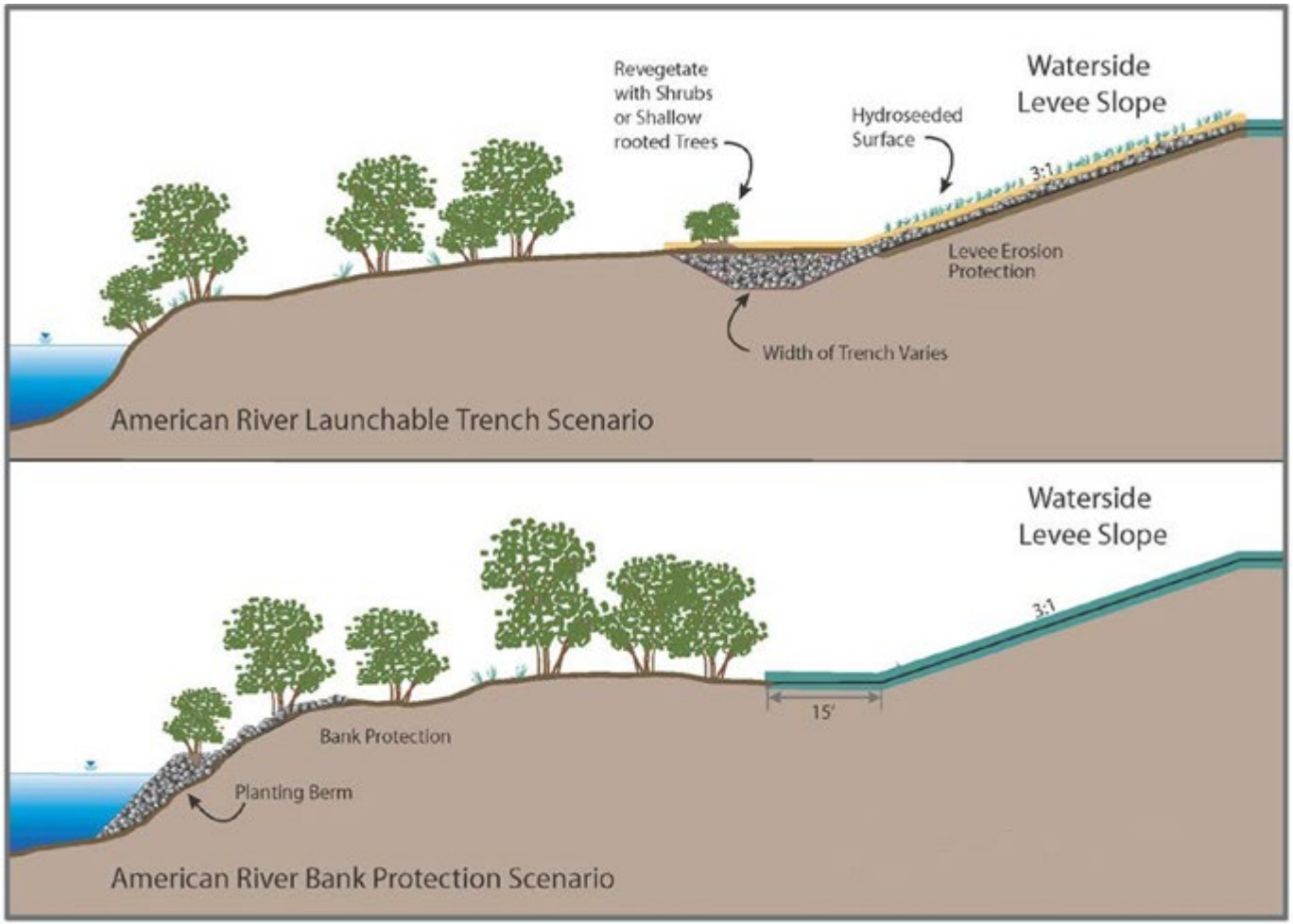


Figure 1- 6 Bank Protection and Launchable Rock Trench Typical Design

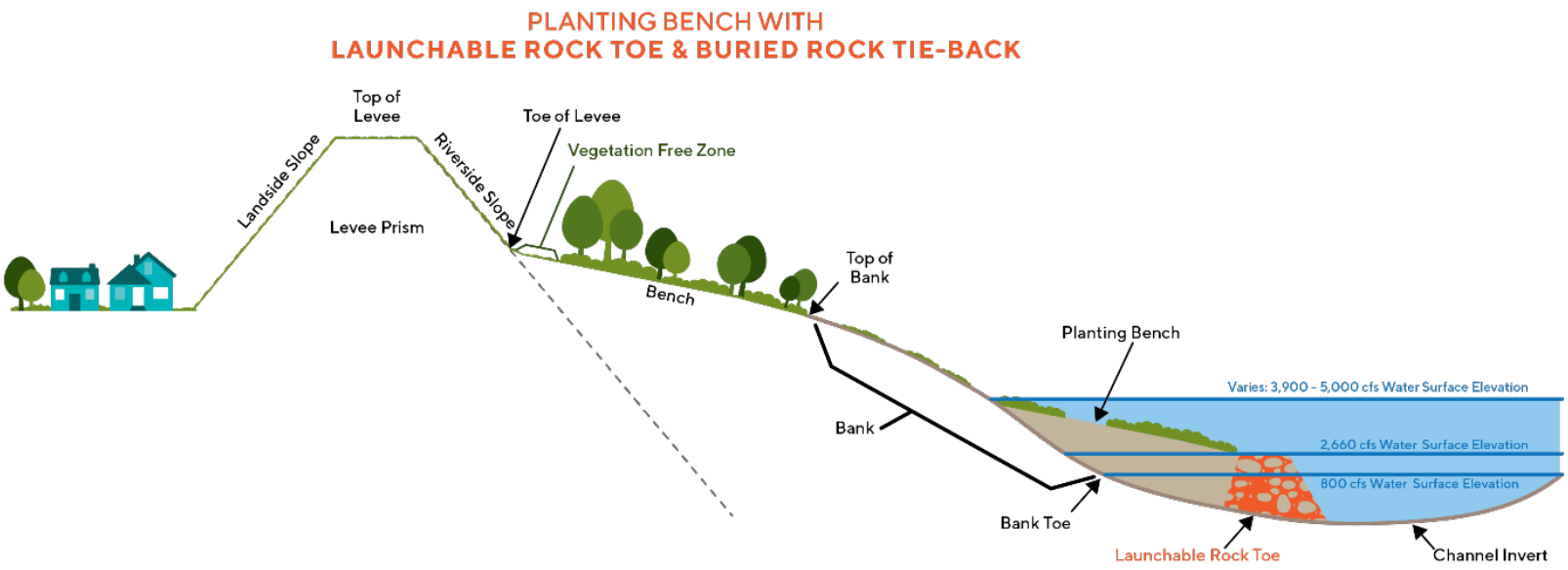


Figure 1- 7 Planting Bench with Launchable Rock Toe and Buried Rock Tie-Back

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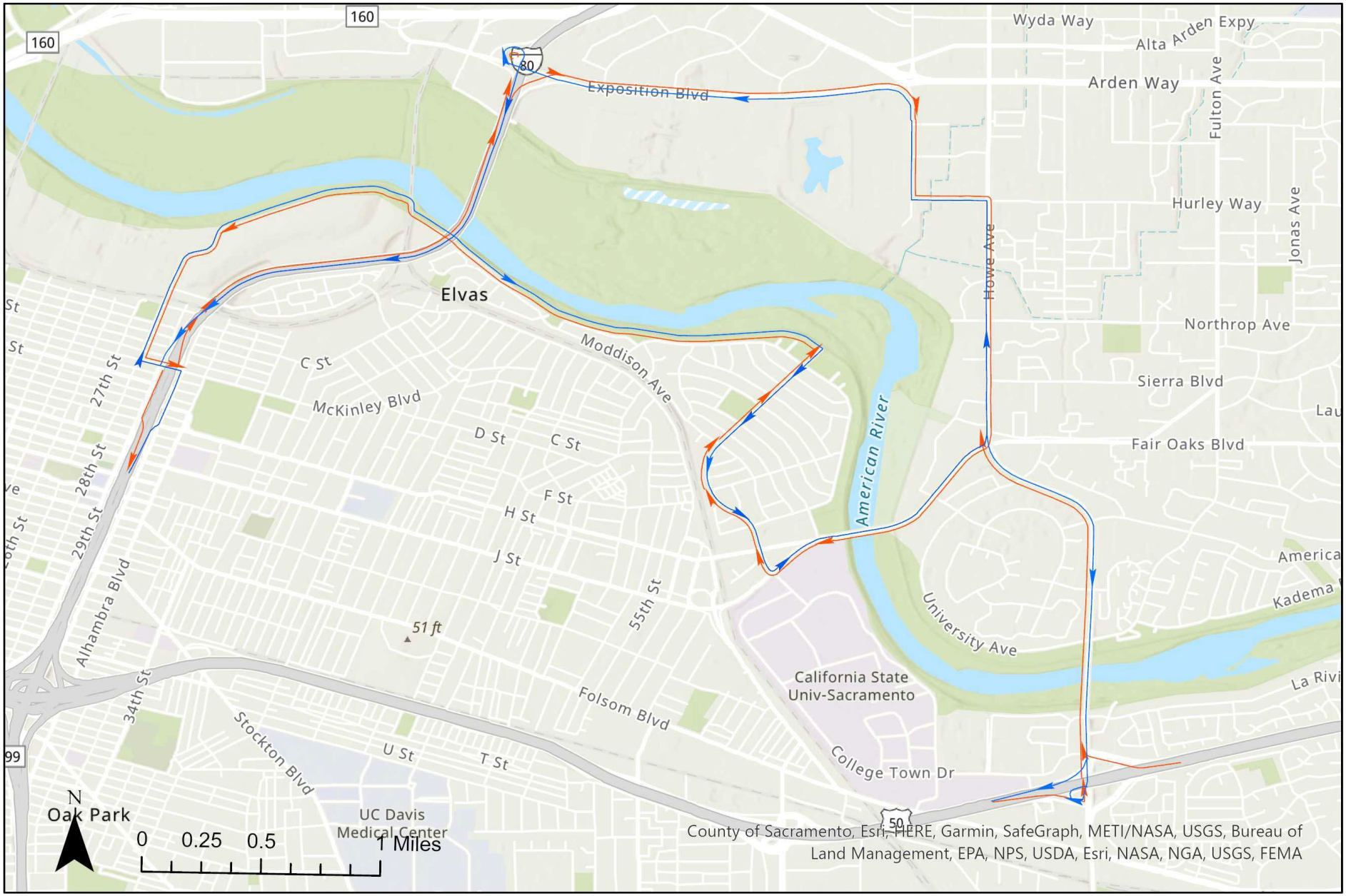

Figure 1- 8 Proposed Action Haul Route Options

1.2 Project Purpose

The purpose of the Proposed Action is to reduce the overall flood risk associated with erosion on the left bank of LAR near the Business I-80 Bridge. In conjunction with other ARCF erosion protection sub-projects along the LAR, the Proposed Action will help to reduce flood risk for the metropolitan area. Both the Sacramento and American Rivers have large watersheds producing high runoff volumes and high-risk potential for damaging flood conditions.

1.3 Project Area

The project is in the City of Sacramento and in Sacramento County, California along the left bank of the Lower American River (Figure 1- 2) on both sides and under the Business I-80 Bridge between River Mile (RM) 3.8 to RM 4.2. Staging areas are northwest of the Business 1-80 Bridge, and at parking lots and paved areas at Sutter's Landing Park.

1.4 Authority

LAR Contract 3A will address erosion risks to the LAR identified in the ARCF GRR, which was authorized by WRDA 2016, Pub. L. No. 114-322 § 1322, also known as the Water Infrastructure Improvements for the Nation Act (WIIN Act). The project was fully funded through the Bipartisan Budget Act of 2018 (Public Law 115-123).

1.5 Proposed Action

The Proposed Action includes using launchable rock toe as the erosion protection method, the location of improvements along the LAR in the LAR Contract 3A Project Area, staging areas not specified in the ARCF GRR FEIS/FEIR and haul routes not specified in the ARCF GRR FEIS/FEIR. Figure 1- 4, Figure 1- 5, and Figure 1- 8 show what is hereafter referred to as the Project Area. The ARCF GRR FEIS/FEIR analyzed the basic erosion protection measures and generally some staging areas and haul routes. Because of the generic scope of the ARCF GRR FEIS/FEIR, specific project footprints, staging areas and haul routes were not developed. This SEA bridges that gap by analyzing the additional or different environmental impacts anticipated from the increment of change between the ARCF GRR FEIS/FEIR and the project's recently completed 100% level designs. These changes constitute the Proposed Action.

1.6 Background and Need for Action

The ARCF GRR FEIS/FEIR analyzed most environmental impacts for the various elements comprising the overall ARCF 2016 Project. The purpose of this SEA is to analyze impacts that were not assessed in the ARCF GRR FEIS/FEIR associated with erosion protection upstream of the Business I-80 Bridge, the type of erosion protection, staging areas, and haul routes. The ARCF GRR FEIS/FEIR thoroughly explains the background of the ARCF 2016 Project in Section 1.3. The erosion protection locations shown in Plate 4 of the ARCF GRR FEIS/FEIR (also in Figure 1- 2 of this SEA) were selected because those locations did not have erosion protection features. The assumption was that the areas that had not been protected in the past had the highest risk of levee failure due to a lack of erosion protection features. The ARCF GRR left

it up to the designers to select final locations once more precise erosion information was available for analysis. The ARCF 2016 Projects along the American River can cover up to 11 miles within the ARCF GRR's authorized reaches.

In 2019 an EOE, made up of members of the TRAC as well as experts from USACE and DWR, estimated the probabilities of levee failure on the LAR due to erosion (HDR and Ford Engineers 2019). Using these probabilities and additional data, the USACE engineering risk cadre further refined the sites of erosion protection and the footprints along the LAR. Based on these refinements, some of the erosion protection footprints that were analyzed in the ARCF GRR FEIS/FEIR no longer met the flood protection objectives of the ARCF GRR.

For LAR Contract 3A, the area downstream of the Business I-80 Bridge was included and the area upstream of the Business I-80 Bridge was not included (Figure 1- 2). This SEA will analyze any site specific special environmental conditions for the added erosion protection footprint that were not analyzed in the ARCF GRR FEIS/FEIR for this specific action. Since the site is similarly situated, is ecologically similar and does not incrementally change the ARCF GRR authorized footprint, most of the analysis contained in the ARCF GRR FEIS/FEIR applies to LAR Contract 3A.

In addition, the ARCF GRR FEIS/FEIR analyzed launchable trench rock as the method of launchable rock erosion protection, while the 100% designs for LAR Contract 3A include a launchable rock toe approach. A launchable rock toe is placed at the waterside edge of a constructed planting bench, lower on the levee/riverbank than a launchable rock trench, to allow riparian vegetation to grow next to the water's edge. If erosion and scour occur below the launchable toe, the revetment placed in the launchable toe would launch and cover the eroded area, preventing further erosion and providing bank slope stability. The launchable rock trench analyzed in the ARCF GRR FEIS/FEIR is placed higher up the levee in the river overbank (a bench higher up on the levee slope) and rock would only launch if lateral erosion progressed during a large flood event to the overbank erosion feature. The launchable rock trench feature was found to be unsuitable at the LAR Contract 3A site.

In addition, the ARCF GRR FEIS/FEIR analyzed possible staging areas in the American River Parkway, but the staging areas ultimately chosen for the Contract 3A work are mostly located outside the American River Parkway, and therefore require analysis in this SEA. Similarly, the specific haul route selected to access Contract 3A sites has not been analyzed in any previous LAR environmental document, and therefore will be assessed in this SEA.

1.7 Project Need

The Proposed Action is needed to construct erosion protection measures at the LAR Contract 3A site in a cost-effective manner that minimizes the impact to environmental resources. LAR Contract 3A (RM 3.8 to RM 4.2) was identified as one of the levee reaches that requires remedial action immediately in order to safely convey the river's 160,000 cfs design flow (HDR and Ford Engineers 2019) while protecting levee integrity. Construction of the Contract 3A erosion protection measures will reduce the potential risk of levee failure from bank instability, reduce the potential risk of levee failure from bank erosion, and reduce the risk of catastrophic flooding of the City of Sacramento.

Additional information collected and modeled after completion of the ARCF GRR FEIS/FEIR showed that the footprint for the area should be extended upstream of the Business I-80 Bridge. Since no specific project haul route was analyzed in the ARCF GRR FEIS/FEIR and the route now identified for LAR Contract 3A is different than the LAR Contract 1 or 2 haul routes, the haul route for LAR Contract 3A must be analyzed as well. Also, the staging areas outside of the American River Parkway were chosen to limit the project's impact on Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (VELB) habitat and the Western Yellow-billed Cuckoo (*Coccyzus americanus*) (cuckoo) stopover habitat.

1.8 Related Documents

The Proposed Action is a component of a larger effort in the Sacramento region. USACE and the Central Valley Flood Protection Board (CVFPB) jointly published the Draft ARCF GRR EIS/EIR in March 2015, in accordance with the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) (SCH No. 2005072046). Section 1.6 explains more about what was analyzed in the Draft ARCF GRR EIS/EIR. A Final EIS/EIR was issued in January 2016, and comments were received between January 22 and February 22, 2016. A revised ARCF GRR FEIS/FEIR was issued in May 2016. The Record of Decision (ROD) for the ARCF GRR FEIS/FEIR was signed by the Assistant Secretary of the Army (Civil Works) on August 29, 2016. The ARCF GRR was authorized by Congress in December 2016. This Environmental Assessment supplements the ARCF GRR FEIS/FEIR. In addition to this SEA and in accordance with CEQA, the CVFPB and Sacramento Area Flood Control Agency (SAFCA) are supplementing the ARCF GRR FEIS/FEIR with a Supplemental Environmental Impact Report (SEIR) for LAR Contract 3A.

Documents which relate to the environmental review contained in this SEA include:

- December 2015 (revised May 2016), American River Watershed Common Features General Reevaluation Report, Final Environmental Impact Statement/Environmental Impact Report (ARCF GRR FEIS/FEIR);
- March 2021. American River Watershed Common Features, Water Resource Development Act of 2016, American River Contract 1. Final Supplemental Environmental Assessment/ Supplemental Environmental Impact Report. (LAR Contract 1 SEA/SEIR);
- March 2021, Reinitiation of Formal Consultation on the American River Common Features 2016 Project, Sacramento and Yolo Counties, California Biological Opinion (NMFS BO);
- May 2021, Endangered Species Act Section 7(a)(2) Biological Opinion, Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the American River Watershed Common Features General Reevaluation Report Reinitiation 2020 Biological Opinion (USFWS BO);
- June 2021, Final General Conformity Report for ARCF, Water Resources Development Act of 2016;

- September 2021. American River Watershed Common Features, Water Resource Development Act of 2016, American River Contract 2. Final Supplemental Environmental Impact Statement/ Supplemental Environmental Impact Report. (LAR Contract 2 SEIS/SEIR);

- and April 2022. American River Watershed Common Features, American River Contract 3A. Draft Supplemental Environmental Impact Report. (LAR Contract 3A SEIR).

1.9 Purpose of the Supplemental Environmental Assessment

Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508) and USACE's Procedures for Implementing NEPA (ER 200-2-2) specify that supplemental NEPA analyses are required if: (i) [USACE] makes substantial changes in the Proposed Action that are relevant to environmental concerns; or (ii) there are significant new circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts.

This SEA analyzes the anticipated environmental effects of levee reconstruction work specified in LAR Contract 3A that is outside the scope of project reconstruction work analyzed as Alternative 2 in the ARCF GRR FEIS/FEIR, and the Proposed Actions of the LAR Contract 1 SEA/SEIR and the LAR Contract 2 SEIS/SEIR. This document evaluates the anticipated environmental effects of the Proposed Action defined in Section 1.4, evaluates the anticipated environmental effects of the No Action Alternative, and identifies measures to avoid or reduce any adverse environmental effects of the Proposed Action to a less-than-significant level, where practicable. This SEA has been prepared in accordance with NEPA. This SEA fully discloses the reasonably foreseeable environmental effects of the Proposed Action to the public. A 45-day public review period took place from April 13, 2022, to May 27, 2022, alongside the Draft Environmental Impact Statement (DEIR) prepared by the CVFPB and SAFCA. An additional public review period took place from July 8, 2022, to July 23, 2022, due to the addition of Chapter 4, the cumulative effects section, in compliance with recently revised NEPA regulations. Response to comments received during both public review periods are incorporated as part of the Final SEA and are available to view in the LAR Contract 3A SEIR in Appendix G, entitled "Comments and Responses on the Draft Supplemental Environmental Impact Report/ Environmental Assessment (DSEIR/DSEA)".

1.10 Decision Needed

The District Engineer, Commander of the Sacramento District, must decide whether the proposed levee improvements and related actions constituting the Proposed Action qualify for a Finding of No Significant Impact (FONSI) under NEPA, or whether a SEIS must be prepared.

Chapter 2. Alternatives

2.1 Introduction

Two alternatives are considered in this Supplemental Environmental Assessment for LAR Contract 3A: the No Action/No Project alternative and the Proposed Action.

2.2 No Action/No Project Alternative

NEPA requires the agency to consider at a minimum a No Action Alternative and an Action Alternative for environmental assessments. The No Action Alternative assumes that erosion improvements at the locations identified, will be completed as described and analyzed under Alternative 2 of the ARCF GRR FEIS/FEIR, the Preferred Alternative and the ROD signed August 2016. Alternative 2 of the ARCF GRR FEIS/FEIR included 11 miles of erosion improvements along the LAR in the locations selected in Plate 4 of the ARCF GRR FEIS/FEIR. Alternative 2 contemplated either launchable rock trenches or bank protection (Figure 1- 6), depending on the needs of each specific site. The ARCF GRR FEIS/FEIR generally analyzed anticipated environmental impacts from levee reconstruction work, impacts from staging areas, impacts from haul routes, impacts from borrow sites, and impacts from disposal sites. The completion of the LAR Contract 3A designs triggers a need to supplement the ARCF GRR FEIS/FEIR because finished designs now include specific haul routes and staging areas not analyzed in the ARCF GRR FEIS/FEIR and includes an erosion improvement footprint that is slightly different from the Project Area defined in the ARCF GRR FEIS/FEIR. Under the No Action Alternative levee improvements downstream of the Business I-80 Bridge are assumed to have been completed, using either bank protection or launchable rock. Also, the staging areas would only be in the American River Parkway. Vegetation would be removed outside of the nesting season.

The environmental baseline for analysis of the Proposed Action includes the completion of activities described in the LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR. Contract 1 and Contract 2 began construction in 2022 and included installation of approximately 13,300 linear feet of erosion protection and on-site riparian habitat features along three LAR sites; creation of various habitat mitigation sites (Rossmoor West Mitigation Site, Rossmoor East Mitigation Site, Paradise Bend (Glenn Hall) Mitigation Site, Rio Americano West Mitigation Site, Rio Americano East Mitigation Site); associated staging areas, stockpile sites, haul routes, and reconstruction of the Campus Commons Golf Course. These nearby sites will contribute to air pollution, increased traffic, greenhouse gases (GHG), shared levee access points, biological impacts, and hydraulic impacts.

2.3 Proposed Action

2.3.1. Features of the Proposed Action

2.3.1.1. Launchable Rock

After additional analyses by the EOE (HDR and Ford Engineers 2019) and the USACE engineering risk cadre, the USACE engineering risk cadre determined that the original proposed

locations of erosion protection along LAR for Contract 3A would not meet the objectives of the ARCF GRR. To ensure the LAR can safely convey 160,000 cfs, the levee reaches that will receive erosion protection improvements under Contract 3A have been slightly shifted along the LAR and an additional 2,300 linear feet of erosion protection has been added to the LAR Contract 3A project area. The ARCF GRR FEIS/FEIR only considered 700 feet of erosion protection work along the levee reach downstream of the Business I-80 Bridge. The originally proposed 11 miles of treatment along the LAR that was analyzed in the ARCF GRR FEIS/FEIR has not increased, just the locations of some treatment sites.

The Proposed Action is along the Business I-80 Bridge (Figure 1- 2). LAR Contract 3A levee work will be conducted on the left bank of the Lower American River between RM 3.8 and 4.3 (Figure 1- 4). Under LAR Contract 3A a total of 3,000 linear feet of both launchable rock toe and bank revetment will be constructed within the Project Area. Construction of the erosion protection is anticipated to occur in 2023. A combination of soil filled bank revetment on the levee and rock riverbank revetment will be added to the project sites. Some existing levee embankments will need to be regraded as well (Figure 2- 1). Materials excavated may be used onsite if the materials are clean. In addition, materials excavated from the nearby California Department of Transportation bridge deck expansion project may be used onsite if the materials are clean.

The erosion protection layout at the LAR Contract 3A site generally includes a peaked stone pile within the river that is supporting a planting bench between the stone pile and the existing bank. Planting bench tiebacks will be placed periodically throughout the project to limit the extent of erosion and subsequent damage to a planting bench during a flood event. Most of the site is designed to have soil filled revetment that will be placed on the bank further up the slope from the planting benches (Figure 2- 2). However, the site under the Business I-80 Bridge is designed to have a rock blanket (Figure 2- 3). This rock blanket will extend past the current Business I-80 Bridge footprint to account for the expanded bridge deck that will be built by the California Department of Transportation around the same time the Proposed Action is constructed. In addition, features have been added to the design to avoid utilities. A ditch with riprap will be installed below the Elvas Pump Station outfall. Revetment placement has been designed to be at grade above the Business I-80 runoff pipe. Launchable rock toe and a planting bench have been designed around the City of Sacramento force main head wall, while a rock apron will be installed at the force main outfall. The analysis done in the ARCF GRR FEIS/FEIR for erosion protection only considered two options, launchable trench and bank protection (Figure 1- 6). The erosion treatment footprint in the ARCF GRR FEIS/FEIR also only included the Section downstream of the Business I-80 Bridge (Figure 1- 2) This additional erosion treatment does not add to the overall 11 miles of erosion treatment that was analyzed for the LAR in the ARCF GRR FEIS/FEIR and authorized by WRDA 2016.

2.3.1.2. Staging

Staging for the LAR Contract 3A contractor's vehicles, equipment and supplies will include an area northwest of the Business I-80 Bridge on the landside of the levee on the left bank of the LAR and three parking lots and one paved area at Sutter's Landing Park (Figure 1- 5). It is anticipated that the staging areas in Sutter's Landing Park will be used for employee parking, equipment parking, and possibly a construction trailer and generator. It is also not anticipated

that the area of all three parking lots will be used at the same time. The staging area near the Business I-80 Bridge will also be used for stockpiling if necessary. If offsite stockpiling is necessary, a site within 15 miles of the project will be used. The stockpile will be located on a site or sites that are disturbed or previously cleared and/or used for stockpiling and completely void of any sensitive resources on or adjacent to the site(s).

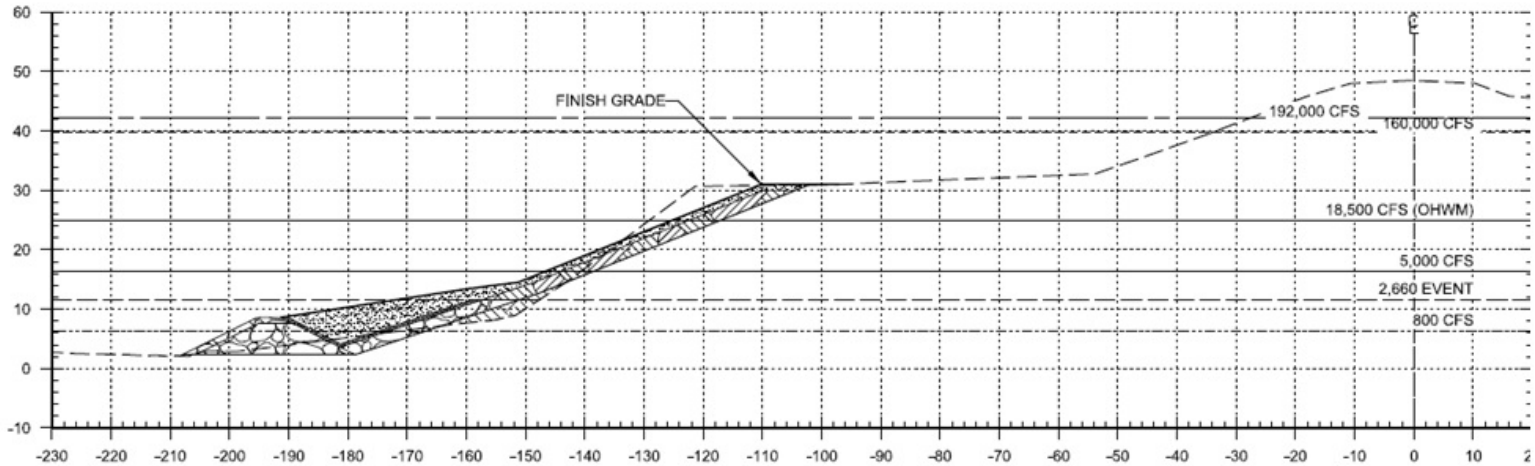

Figure 2- 1 Example of Launchable Toe and Bank Protection with Regrading.

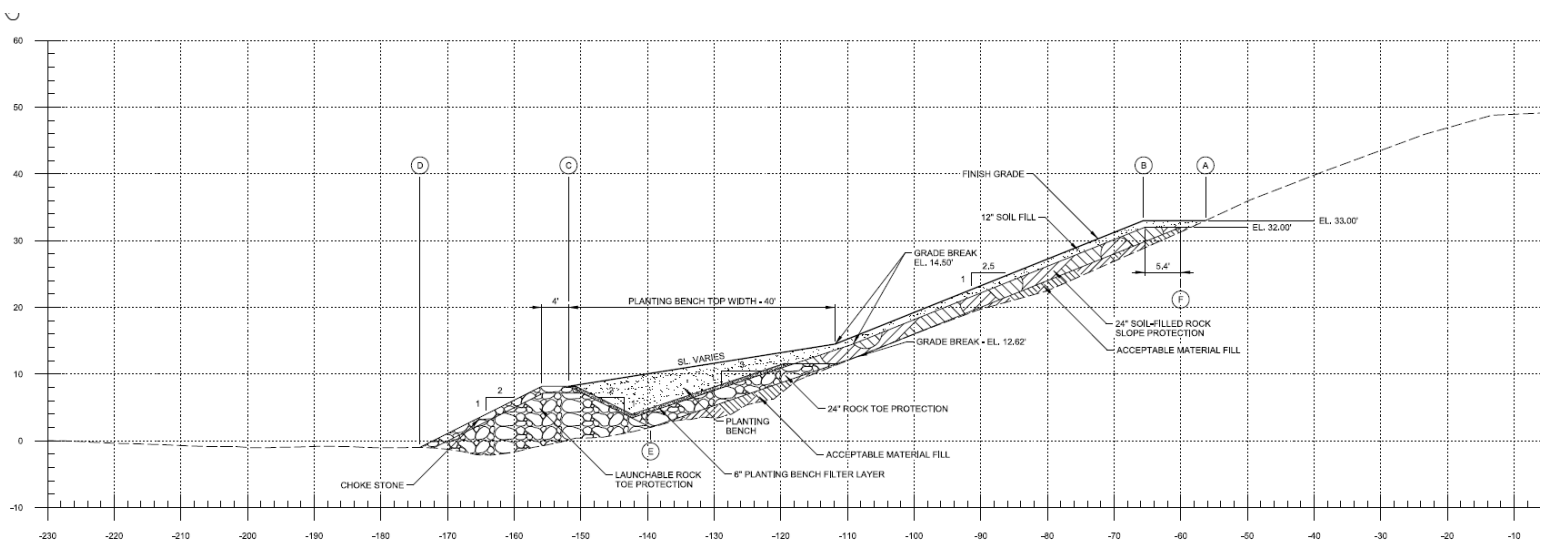

Figure 2- 2 Example of Launchable Toe and Soil Filled Rock

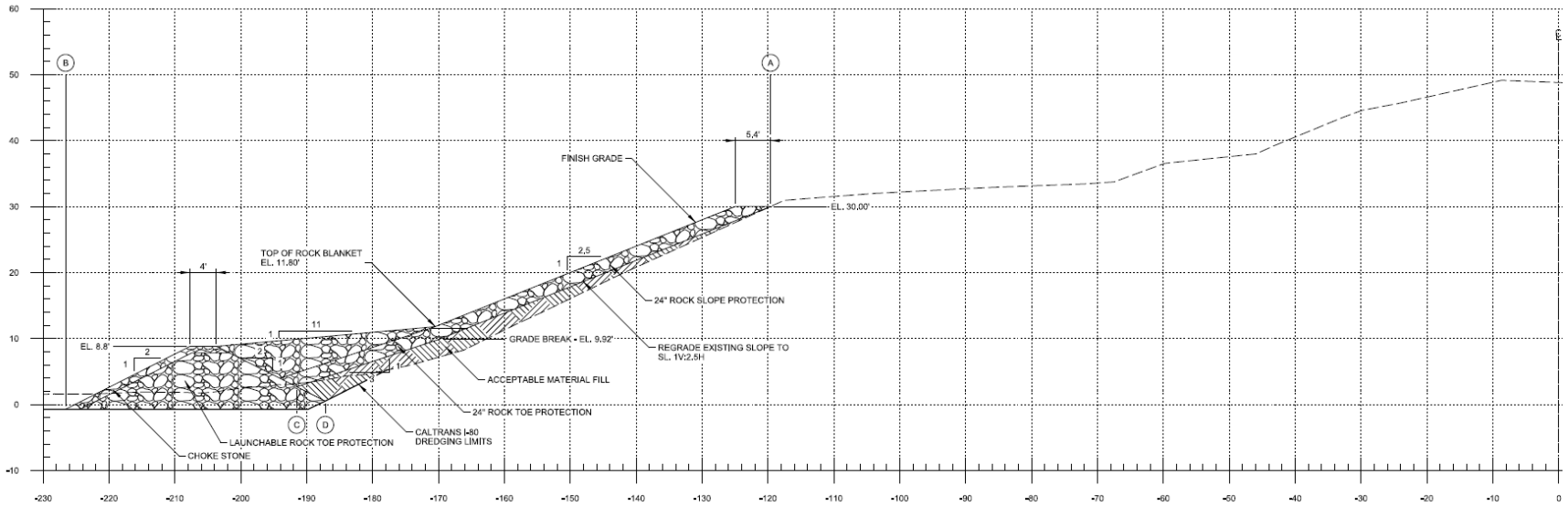

Figure 2- 3 Example of Launchable Toe, Rock Blanket and Bank Protection Under the Business I-80 Bridge

2.3.1.3. Haul Route

Access routes will include a one-way access starting from either Sutter's Landing Park going towards Glenn Hall Park on existing levee maintenance roads or starting from Glenn Hall Park going toward Sutter's Landing Park on existing levee maintenance roads. Trucks will either have to cross the Union Pacific Railroad track at grade or go under the railroad track further down the levee slope to access the construction area. Ramps will be built from levee maintenance roads down to the erosion protection sites. Haul trucks and other construction vehicles will utilize surface streets and freeways after leaving the levees (Figure 1- 8). Vehicles entering the site from Sutter's Landing Park will exit Business I-80 at 29th St and will take E St to 28th St to get into Sutter's Landing Park. Vehicles leaving the site will take Carlson Dr to Fair Oaks Blvd. Vehicles will continue to Howe Ave and drive south to reach US Hwy 50, or drive north and access Business I-80 from Exposition Blvd and Ethan Way. If vehicles enter the site from Glenn Hall Park, vehicles will either access Howe Ave directly from US-Hwy 50 or indirectly from Business I-80 through Ethan Way and Exposition Blvd. From Howe Ave vehicles will take Fair Oaks Blvd to Carlson Dr. Construction vehicles will enter the site through Glenn Hall Park and take the levee maintenance roads out to the entrance of Sutter's Landing Park on 28th St and get back on Business I-80 from 29th St. In addition, the haul routes shown on Figure 1- 8 could be used in both directions if traffic or road closures occur for unforeseen reasons (e.g., emergencies, road construction, etc.) during the construction period.

Chapter 3. Affected Environment and Environmental Consequences

3.1 Approach to the Analysis

This chapter analyzes the potential effects of the Proposed Action on those resources which the action may touch. If the ARCF GRR FEIS/FEIR has already sufficiently analyzed the project's anticipated effects on a resource, Table 3- 2 references the resource topic and the section in the ARCF GRR FEIS/FEIR where the topic was analyzed. Conversely, for those resources which are expected to experience construction effects that were not fully analyzed in the ARCF GRR FEIS/FEIR, a brief summary of the regulatory setting, environmental setting, methodology and analysis of the significance of effects is set forth below.

All avoidance, minimization, and mitigation measures from the ARCF GRR FEIS/FEIR are applicable to both the No Action Alternative and Proposed Action of this SEA, unless specifically stated otherwise. In addition, the analysis presented in the LAR Contract 3A SEIR determined that additional mitigation measures were needed to meet CEQA requirements. These mitigation measures, which are summarized in the Executive Summary Table ES-1 of the LAR Contract 3A SEIR also apply to the LAR Contract 3A Project as a whole.

3.2 Regulatory Setting

The Affected Environment and Environmental Consequences Sections (Section 3) of the ARCF GRR FEIS/FEIR sufficiently characterize the regulatory setting for the Proposed Action.

3.3 Summary of Affected Environment and Environmental Consequences

Though the environmental effects analyzed in this SEA have not been specifically defined as direct or indirect, both direct and indirect impacts were assessed. Table 3- 1 summarizes the environmental consequences of both the Proposed Action and the No Action Alternative. This information is discussed in more detail later on in this Chapter.

Table 3- 1 Summary of Environmental Consequences of the ARCF GRR FEIS/FEIR and the Proposed Action

Resource	ARCF GRR FEIS/FEIR	Proposed Action[1]	Numerical Impact of Proposed Action (if any)	Mitigation (ARCF GRR FEIS/FIER)	Mitigation (Proposed Action)
Visual Resources	Significant	Less than Significant with Mitigation	-	Trees will be planted after construction is completed on planting berms and on top of launchable rock trenches, however there will still be a temporal loss of vegetation. Disturbed areas will be reseeded with native grasses.	Lighting will be shielded or directed. Additional mitigation measures listed in Section 3.15.6 of the ARCF GRR FEIS/FEIR.
Vegetation and Wildlife	Significant Short-term / Less than Significant with Mitigation Long-Term	Less than Significant with Mitigation	From Erosion Protection: 1.09 acres of riparian woodland and 2.49 acres of riparian scrub From Construction Access and Haul Routes: 0.36 acres of riparian woodland and	When possible, in-kind compensation will be planted on planting berms, on top of launchable rock trenches, or on other lands within the Parkway. Additional mitigation sites are identified in Section 3.6.6.	Conservation measures in the USFWS BO will be followed. Surveys for migratory birds will be done if vegetation is removed during nesting season. Environmental awareness training will occur if vegetation is removed during nesting season. Additional mitigation measures listed in Section 3.6.6 of the ARCF GRR FEIS/FEIR.

[1] The "less than significant" and "less than significant with mitigation" determinations are defined in NEPA descriptive terms in the Affected Environment and Environmental Consequences Resource Sections (Section 3.5 to Section 3.17).

			4.25 acres of riparian scrub habitat		
Fisheries	Less than Significant with Mitigation	Less than Significant with Mitigation	7.03 acres of SRA habitat	Vegetation variance will allow waterside vegetation to remain and launchable rock trenches will be revegetated following construction. Best Management Practices (BMPs) will be implemented to address turbidity, and are discussed in Section 3.5.6.	Conditions of the NMFS BO will be followed. Additional mitigation measures listed in Section 3.7.6 of the ARCF GRR FEIS/FEIR.
Special Status Species	Less than Significant with Mitigation	Less than Significant with Mitigation	VELB: 1.71 acres of elderberry shrubs and 8.14 acres of adjacent VELB habitat Cuckoo: 4.25 acres of riparian habitat Salmonid Species: 7.03 acres of SRA habitat	Mitigation per the terms of the Biological Opinions. Replace habitat for species either on-site or in close proximity to lost habitat. Implement BMPs discussed in Section 3.5.6 and conservation measures in the BOs during construction to prevent mortality. .	Follow recommendations in the 2017 USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle. Additional mitigation measures listed in Section 3.8.6 of the ARCF GRR FEIS/FEIR.

Cultural Resources	Significant	Less than Significant with Mitigation	-	Preparation and implementation of a Programmatic Agreement, Historic Properties Management Plan, and Historic Properties Treatment Plans.	Resolve Adverse Effects through a Programmatic Agreement and Historic Properties Treatment Plan. Prepare an Archaeological Discovery Plan and an Archaeological Monitoring Plan. Conduct Cultural Resources Awareness Training. Implement Procedures for Discovery of Cultural Material.
Air Quality	Less than Significant with Mitigation	Less than Significant with Mitigation	-	Implementation of SMAQMD's Basic Construction Emission Control Practices and other BMPs, as listed in Section 3.11.6.	Implement dust control measures during project construction. Develop and Implement a Plan for Enhanced On-Site Exhaust Controls. To the extent available and feasible, construction equipment will be powered by electricity. Additional mitigation measures listed in Section 3.11.6 of the ARCF GRR FEIS/FEIR.
Transportation and Circulation	Significant	Less than Significant with Mitigation	-	Preparation of a Traffic Control and Road Management Plan and other BMPs listed in Section 3.10.6.	Include signs along affected pedestrian and bike pathways announcing scheduled closures. Place signal personnel at intersections of construction vehicle pathways and active bike and pedestrian pathways. Assess damages to roadways and damages to railroad crossing. Additional mitigation measures listed in Section 3.10.6 of the ARCF GRR FEIS/FEIR.
Climate Change	Less than Significant with Mitigation	Less than Significant with Mitigation	-	Implementation of SMAQMD's Basic Construction Emission Control Practices and other	Mitigation measures listed in Section 3.12.6 of the ARCF GRR FEIS/FEIR.

				BMPs, as listed in Section 3.12.6.	
Recreation	Significant	Less than Significant with Mitigation	-	Notification and coordination with recreation users and bike groups. Flaggers, signage, detours, and fencing to notify and control recreation access and traffic around construction sites.	Closure of paved trails will be noticed 14 days in advance. Provide marked detours for all bike trails and on-street bicycle routes that will be temporarily closed during construction. Provide traffic control in areas where recreational traffic will intersect with construction vehicles. Coordinate with the City of Sacramento and Sacramento County to restore access and repair any construction-related damage to recreational facilities to pre-project conditions. Additional mitigation measures listed in Section 3.14.6 of the ARCF GRR FEIS/FEIR.
Hydrology and Water Quality	Less than Significant with Mitigation	Less than Significant with Mitigation	-	Preparation of a Stormwater Pollution Protection Plan, Spill Prevention Control and Countermeasures Plan, and a Bentonite Slurry Spill Contingency Plan. Implementation of BMPs listed in Section 3.5.6.	Follow conditions listed in the ARCF Programmatic CWA Section 401 Water Quality Certification and Order. Additional mitigation measures listed in Sections 3.4.6 and 3.5.6 of the ARCF GRR FEIS/FEIR.
Noise	Less than Significant with Mitigation	Less than Significant with Mitigation	-	Coordination with local residents, compliance with noise ordinances, and other BMPs, as listed in Section 3.13.6.	Employ vibration-reducing construction practices so that vibration from construction will comply with applicable noise-level rules and regulations. Additional mitigation measures listed in Section 3.13.6 of the ARCF GRR FEIS/FEIR.

Public Utilities and Service Systems	Less than Significant	Less than Significant with Mitigation	-	Notification of potential interruptions will be provided to the appropriate agencies and to landowners.	Coordinate with applicable utility and service providers to implement the orderly relocation of utilities that need to be removed or relocated. Additional mitigation measures listed in Section 3.16.6 of the ARCF GRR FEIS/FEIR.
Environmental Justice	Less than Significant	Less than Significant	-	Federal Relocation Act compliance.	-
Geological Resources	Less than Significant with Mitigation	Resource unaffected by action	-	Minimize ground disturbances, stockpile soil on landside of levee reaches, install sediment barriers, replant sites when work is complete, Additional mitigation measures are identified in Section 3.2.6	-
Hazardous Wastes and Materials	Less than Significant with Mitigation	Resource unaffected by action	-	Borrow material will be tested prior to use to ensure that no contaminated soils are used for this project.	-
Land Use	Less than Significant with Mitigation	Resource unaffected by action	-	Complete -	-
Socioeconomics, Population	Less than Significant	Resource unaffected by action	-	Federal Relocation Act compliance.	-

3.4 Resource Topics Not Discussed in Detail

The following resources were eliminated from analysis in this SEA because Contract 3A construction effects on these resources will be negligible, or the project refinements described in the Proposed Action will not create additional impacts beyond those impacts already analyzed in the ARCF GRR FEIS/FEIR: Hazards and Hazardous Materials, Geological Resources, Land use, and Socioeconomics and Population. The Section of the ARCF GRR FEIS/FEIR where analysis of these resources was presented is shown in Table 3- 2, below. In compliance with 40 CFR 1501.12, the ARCF GRR FEIS/FEIR is being incorporated by reference to cut down on excess bulk information.

Table 3- 2 Resources Not Assessed in This SEA

	Section of ARCF GRR FEIS/FEIR
Hazards and Hazardous Materials	3.17
Land use	3.3
Geological Resources	3.2
Socioeconomics and Population	3.18

Since the effects were determined not to be adequately described in the ARCF GRR FEIS/FEIR the following resources will be analyzed in more detail: visual resources, vegetation and wildlife, fisheries, special status species, cultural resources, air quality, transportation, climate change, recreation, hydrology and water quality, noise, environmental justice, and public utilities.

3.5 Visual Resources

3.5.1. Existing Conditions

The environmental and regulatory framework described in Section 3.15.1 of the ARCF GRR FEIS/FEIR covering visual resources is generally applicable to the analysis in this SEA and therefore is not repeated here.

3.5.2. Environmental Effects

3.5.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. This includes bank protection or launchable trench erosion protection only in the area downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation

sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken.

Section 3.15.5 of the ARCF GRR FEIS/FEIR analyzed the impacts on visual resources. Construction activities would result in short-term significant and unavoidable impacts on the visual tranquility of the American River Parkway. Loss of vegetation due to removal and construction of levee improvements would result in significant and unavoidable short-term effects on visual resources of the mature vegetation, but a minor long-term impact with mitigation once vegetation has been reestablished.

3.5.2.2. Proposed Action

3,000 linear feet of launchable toe will be constructed on the water side of the levee in the American River Parkway. This erosion protection will be placed in a similar location on the levee that bank protection will have been placed as analyzed under the ARCF GRR FEIS/FEIR in section 3.15.5. The additional footprint past the Business I-80 Bridge is adjacent to a residential neighborhood but will not be in view of those residents because of a privacy wall around the neighborhood. Those using the bike trail and recreating on the American River will be able to see the work and the loss of vegetation at these locations. Even though the erosion protection locations upstream of the Business I-80 Bridge was not analyzed in the ARCF GRR FEIS/FEIR, the Project Area is similarly situated and visually similar to the sites that were analyzed. In addition, the erosion protection added to the levee does not increase the overall 11 miles of erosion protection analyzed in the ARCF GRR FEIS/FEIR. Consequently, the visual analysis already provided in the ARCF GRR FEIS/FEIR that found significant unavoidable impacts to visual resources is deemed applicable to the Proposed Action.

The trucks using the top of the levee to haul materials to and from the site will be visible to those residences adjacent to the levee since the levee is taller than the privacy wall surrounding the neighborhood. The location of this work is similarly situated and visually similar to the 11 miles that was analyzed in the ARCF GRR FEIS/FEIR. The ARCF GRR FEIS/FEIR determined that the impact of this effect will be short-term.

Additional analysis is needed for parts of the Proposed Action that were not included in the ARCF GRR FEIS/FEIR analysis. Due to topography and distances to neighborhoods, staging areas will be located out of view from residents on the land side of the levees. The staging areas at Sutter's Landing Park will be in view of those using the bike trail and those recreating at Sutter's Landing Park. The staging area near the Business I-80 Bridge will be in view of those driving on Business I-80. The ARCF GRR FEIS/FEIR already determined that staging areas will have a significant effect on the visual tranquility of the Parkway; the visual effect of the staging areas selected for the Proposed Action will be similar to those assessed in the ARCF GRR FEIS/FEIR.

The ARCF GRR FEIS/FEIR did not consider the impacts of project lighting on visual resources. During construction of the Proposed Action, staging areas will have security lighting to protect construction equipment and stored materials. This will result in new sources of nighttime light that will be visible by anyone commuting on the bike path, recreating at Sutter's Landing Park and vehicles passing near the staging areas. These light sources will in some cases

be adjacent to existing bright lights (e.g., at the skate park parking lot). Night lighting of staging areas will result in a short-term temporary significant impact. However, implementing the mitigation measures set forth in Section 3.15.6 of the ARCF GRR FEIS/FEIR and listed in the mitigation section below will reduce the impact of nighttime lighting to a minor level.

Largely as addressed in the ARCF GRR FEIS/FEIR, the Proposed Action will cause significant unavoidable impacts to visual resources, but adverse impacts from lighting will become minor after implementation of mitigation measures in the ARCF GRR FEIS/FEIR and the mitigation measure set forth below.

Additional Avoidance, Minimization and Mitigation Measures

- USACE and CVFPB shall require its construction contractors to ensure that all temporary lighting used for security of the staging areas is shielded or directed to avoid or minimize any direct illumination onto light-sensitive receptors located outside of the Project Area.

3.6 Vegetation and Wildlife

3.6.1. Existing Conditions

The environmental and regulatory framework described in Section 3.6.1 of the ARCF GRR FEIS/FEIR is generally applicable to the analysis in this SEA and therefore is not repeated here. Detailed habitat maps are included in Appendix C of the ARCF GRR FEIS/FEIR. In addition, updated site-specific maps of habitats and wetlands can be found in Appendix A, B and C of the LAR Contract 3A SEIR.

In 2021 USACE reinitiated consultation with the US Fish and Wildlife Service (USFWS) for the ARCF 2016 Projects. The resulting Biological Opinion (BO) (08ESMF00-2014-F-0518-R003) was issued on March 31, 2021.

3.6.2. Environmental Effects

3.6.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented, including bank protection or launchable trench erosion protection only in the area downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. Section 3.6.4 of the ARCF GRR FEIS/FEIR estimated 65 acres of riparian habitat impact for launchable trench protection on the American River. Approximately 28.89 acres of riparian habitat would be impacted from activities associated with LAR Contracts 1 and 2. The removal of riparian habitat would be mitigated at a 2:1 ratio (or at a 3:1 ratio if the area is also considered VELB habitat) by planting new riparian habitat onsite and at the Rossmoor West, Rossmoor East, Paradise Bend (formally Glenn Hall Mitigation Site), Rio Americano West, or Rio Americano East Mitigation Site.

The removal and replanting of vegetation on the sites would cause significant short term temporal loss of habitat. These impacts would be minor in the long term once newly planted vegetation is established. In addition, vegetation removal and construction activities may impact birds nesting in trees within the Project Area. Any impacts would be minor once mitigation measures listed in Section 3.6.6 of the ARCF GRR FEIS/FEIR were implemented.

3.6.2.2. Proposed Action

Even though the erosion protection locations upstream of the Business I-80 Bridge were not analyzed in the ARCF GRR FEIS/FEIR, the Project Area is similarly situated and ecologically similar to the sites that were analyzed. In addition, the erosion protection added to the levee is well within the 11 miles of erosion protection analyzed in the ARCF GRR FEIS/FEIR and authorized for the overall ARCF 2016 Project work on the American River. Site specific surveys and analyses on haul routes, erosion protection areas, and staging areas (see Figure 1- 4 and Figure 1- 5 for the project locations) were completed in the LAR Contract 3A SEIR. This analysis found that under the Proposed Action, impacts from installation of erosion protection will include the loss of 1.09 acres of riparian woodland and 2.49 acres of riparian scrub in the footprint of the Project Area. Riparian habitat will also be damaged and removed within construction access areas and haul routes, resulting in removal of 0.36 acre of riparian woodland and 0.31 acre of riparian scrub habitat. Overall, a total of 4.25 acres of riparian habitat (including some VELB habitat, which is discussed in Section 3.8 of this SEA) will be impacted by the Proposed Action. The total impacts to riparian habitat from LAR Projects (28.89 acres was impacted by LAR Contract 1 and LAR Contract 2) is still below the 65 acres of impact that was forecasted in the ARCF GRR FEIS/FEIR. Consequently, the impact analysis already presented in the ARCF GRR FEIS/FEIR that anticipated significant unavoidable impacts on vegetation and wildlife from project construction is deemed applicable to the impacts expected from the Proposed Action. The impacted riparian habitat will be mitigated at a 2:1 ratio (or at a 3:1 ratio if the area is also considered VELB habitat) by planting new riparian habitat onsite and offsite following the USFWS BO. It is anticipated that impacts to riparian habitat will be mitigated for on-site and off-site at a large privately owned site on the Lower American River. Any further analyses or revisions will be considered in future NEPA and CEQA environmental documents as needed. The privately owned mitigation site is currently in the early designs phase. On-site habitat would be created in accordance with the ARCF GRR Habitat Mitigation, Monitoring, and Adaptive Management Plan, which includes conceptual mitigation proposals, performance standards, and adaptive management tasks.

Removing vegetation only outside the nesting season forces vegetation removal into the rainy season and the flood season. If the vegetation removal were to occur during a wet year, it might be necessary to perform some of the vegetation removal during the nesting season. If trees must be removed during nesting season, the mitigation measures listed below and in the ARCF GRR FEIS/FEIR will be followed to ensure that there are only minor impacts to nesting birds, including the use of onsite biological monitors and pre-construction surveys. These steps will reduce possible impacts to nesting birds from vegetation removal.

The impacts of specific haul routes and staging areas planned for the Proposed Action were not analyzed in the ARCF GRR FEIS/FEIR. Use of Sutter's Landing Park for staging will cause no additional adverse impacts to vegetation or wildlife since the staging areas are paved or have gravel. The staging area downstream of the Business I-80 Bridge is disturbed ruderal herbaceous

habitat. No trees will be removed from this staging area. The haul route through Glenn Hall may require trimming trees within the park. In addition, vegetation will need to be removed for the haul routes just upslope from the erosion protection work and at the ramps leading to the erosion protection work. In addition, if offsite stockpiling is needed, no trees will be removed from the stockpiling location. Most trees in the Project Area are considered to be either VELB habitat or riparian habitat and impacts to these habitats will be mitigated at a 3:1 or 2:1 ratio respectively on and offsite. With mitigation measures, the impacts from the Proposed Action on vegetation will be adverse in the short-term but minor in the long-term once vegetation is reestablished.

The ARCF GRR FEIS/FEIR did not consider the impacts of project lighting on visual resources. During construction of the Proposed Action, staging areas will have security lighting to protect construction equipment and stored materials. This will result in new sources of nighttime light that could adversely affect wildlife. The mitigation measure already listed in Section 3.5.2 to shield or focus light would also reduce the impact on wildlife from a temporary significant impact to a temporary but minor impact.

In addition, consultation with USFWS was reinitiated in 2020 and a revised BO was received in 2021. The resulting BO has outlined additional conservation measures that need to take place in order to protect sensitive plants and animals. An additional mitigation measure has been listed below will be implemented to ensure compliance with the BO.

Overall, the Proposed Action will cause some short-term adverse impacts to vegetation and wildlife. These impacts will be minor in the long-term after vegetation is reestablished and after implementation of other mitigation measures. In addition, once mitigation measures are implemented, there may be minor impacts on nesting birds if vegetation clearing occurs during nesting season.

Additional Avoidance, Minimization and Mitigation Measures

- The conservation measures relevant to the Proposed Action that are listed in the 2021 USFWS Biological Opinion (08ESMF00-2014-F-0518-R003) will be followed. Following this BO will require coordination with USFWS throughout the project. These conservation measures supersede any associated mitigation measures listed in the ARCF GRR FEIS/FEIR.

- Before ground disturbance, all construction personnel will participate in a USFWS-approved worker environmental awareness program. A qualified biologist will inform all construction personnel about the life history of nesting birds, as well as the importance of nest sites and foraging habitat.

- Migratory bird nest surveys will be conducted if work occurs in nesting season, with at least one survey to be conducted no more than 48 hours from the initiation of project activities to confirm the absence of nesting. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removal or pruning of trees and shrubs, could commence without any further mitigation. If at any time during the nesting season construction stops for a period of 2 weeks or longer, pre-construction surveys will be conducted before construction resumes. If nesting birds have been identified within or adjacent to the construction

footprint, USACE will establish avoidance buffers (100 feet for passerines; 300 feet for raptors; 200 feet for heron or egret rookeries). Reduced buffers may be implemented if recommended by the monitoring biologist and approved by USFWS. Buffers will be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers.

- Mitigation measures in Section 3.5.2 are also relevant here.

3.7 Fisheries

3.7.1. Existing Conditions

The ARCF GRR FEIS/FEIR identified fish habitats present in the Lower American River as aquatic vegetation and Shaded Riverine Aquatic (SRA) habitat. A more detailed description of regional and local fisheries can be found in Section 3.7.1 of the ARCF GRR FEIS/FEIR.

In 2021, Environmental Science Associates biologists conducted aquatic vegetation and SRA habitat surveys in the Project Area. A map of areas determined to be SRA habitat are in Appendix A and B of the LAR Contract 3A SEIR. Also, in 2021, USACE reinitiated consultation with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) and NMFS issued a new BO (WCRO-2020-03082) on May 12, 2021.

3.7.2. Environmental Effects

3.7.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR (Alternative 2) would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. Section 3.7.5 of the ARCF GRR FEIS/FEIR estimated that a total of 31,000 linear feet of SRA habitat would be impacted by LAR Projects. Due to updates from the 2021 NMFS BO, the impacts to SRA habitat were calculated in acres, not in linear feet, for LAR Contract 1 in Section 3.5.3 of the LAR Contract 1 SEA/SEIR and for LAR Contract 2 in Section 3.5.3 of the LAR Contract 2 SEIS/SEIR. A total of 13.94 acres would be impacted by these projects. Approximately 3,403 linear feet of SRA habitat is present within the project site for LAR Contract 1 and approximately 8,148 linear feet is present within the project site for LAR Contract 2. Thus, a total of 11,551 linear feet of SRA habitat could have been impacted by these contracts, well within the overall total estimate set forth in Section 3.7.5 of the ARCF GRR FEIS/FEIR.

There are some anticipated impacts that may occur directly to fish. Rock placement below the water line during erosion protection activities would likely disturb resident fish by increasing noise, water turbulence, and turbidity, causing them to move away from the area of rock placement and putting them at a slightly increased risk of predation. In addition, construction of

bank protection would disturb soils and lead to increased turbidity in the nearshore aquatic habitat, notwithstanding runoff protection measures the contractor would be required to follow. The increase in suspended solids and turbidity would generally be short term, but sedimentation and heightened turbidity may affect fish physiology, behavior, and habitat.

Direct effects on fish habitat would be limited because existing conditions would not be worsened by project construction, which include creating planting berms to provide shade and instream woody material, elements of SRA habitat. A temporary short-term loss of SRA habitat would occur, but over the long-term the erosion repair sites would support higher quality SRA habitat than under existing conditions.

3.7.2.2. Proposed Action

Even though the erosion protection locations upstream of the Business I-80 Bridge were not analyzed in the ARCF GRR FEIS/FEIR, the Project Area is similarly situated and ecologically similar to the sites that were analyzed. In addition, the erosion protection added to the levee does not increase the overall 11 miles of erosion protection analyzed in the ARCF GRR FEIS/FEIR.

Consultation with NMFS has been reinitiated since the ARCF GRR FEIS/FEIR analysis. The new 2021 NMFS BO updated the method for calculating SRA from linear feet to acres. An analysis of the haul routes, erosion protection area, and staging areas (see Figure 1- 4 and Figure 1- 5 for the project locations) in the LAR Contract 3A SEIR determined that a total of 7.03 acres of SRA habitat will be impacted by the Proposed Action. Direct habitat impacts to salmonids were calculated using the slope area of the existing conditions below the OHWM. Only areas with permanent construction impacts were included in the slope calculations. Existing conditions were represented by the CAD surface files generated from the November-December 2019 and January 2020 surveys. Slope areas of the existing conditions within the construction impact areas were calculated using the true surface area tool in the MicroStation InRoads software. In order to ensure that the Proposed Action does not impact more SRA habitat on the LAR then the 31,000 linear feet that was analyzed in the ARCF GRR FEIS/FEIR, the linear feet of the whole Project Area will be used to judge the impact. The LAR Contract 3A Project Area contains approximately 3,000 linear feet of toe erosion protection, meaning that up to 3,000 linear feet of SRA habitat might be impacted. The LAR Contract 1 and Contract 2 work sites include a total of 11,551 linear feet of SRA habitat. Thus, under a worst-case scenario, a total of 14,551 linear feet of SRA habitat could be impacted by LAR Projects, well under the estimated 31,000 linear feet of SRA habitat analyzed in the ARCF GRR FEIS/FEIR. Consequently, the original impact analysis for fisheries in the ARCF GRR FEIS/FEIR fully covers the anticipated impacts from the Proposed Action.

The ARCF GRR FEIS/FEIR considered impacts to fish from construction and operation of launchable rock trenches as the project's erosion protection method, not the launchable rock toe methodology that the revised design for LAR Contract 3A will employ. The construction methods for launchable toe will be similar enough to the construction methods of bank protection and launchable trench that there will not be any new impacts to fish from construction. However, because of how the erosion protection functions, there could be new impacts. At extreme flood flows, when the rock would launch, the mobilized large rock could physically hurt fish in the channel. However, it is assumed that if no rock were to be launched the levee would overtop or

breach, causing fish to be transported out of the floodway where they would most likely die. In addition, if the launchable toe would launch, there would not be structure to maintain the planting bench, impacting SRA habitat over the life of the erosion protection. Planting bench tiebacks have been included in the final LAR Contract 3A design to reduce loss of the planting benches if erosion does occur so these impacts will be minor compared to the impacts if launchable trench were used. The whole riverbank would have to erode during high flows before the launchable trench is launched, causing a loss to all of the habitat on the riverbank, not just a portion of the planting bench, which will be the case when the launchable rock toe approach is used. In addition, placing bank protection, the other erosion protection method analyzed in the ARCF GRR FEIS/FEIR, on the bank would not provide as high quality of SRA habitat as compared to what the planting benches will be able to provide. The launchable toe provides structure to hold a large planting bench that will provide more habitat for SRA and riparian vegetation than what a berm on the riverbank would be able to provide. Overall, there will be only minor impacts to fisheries resources from the Proposed Action.

Staging areas and haul routes are not near the waterways and will not have an impact on fisheries. Mitigation measures already listed in Section 3.5.6 of the ARCF GRR FEIS/FEIR will protect the river from stormwater runoff from haul routes and staging areas, safeguarding water quality and fisheries and ensuring that at most insignificant, short-term minor impacts could occur.

Finally, the reinitiated NMFS BO from 2021 imposes additional conditions that need to be followed during project construction to minimize the impacts to protected fish species. This BO outlines the onsite mitigation and offsite mitigation plans and options. A mitigation measure will be implemented and is listed below to ensure the Proposed Action is in compliance with the BO and will ensure only minor impacts occur to fisheries.

After required mitigation measures are implemented, short-term minor impacts to fisheries could occur during project construction or in the event the launchable rock toe actually launches during a flood. However, the structure of the launchable toe provides the ability to hold planting benches. The planting benches allow for deeper soil and will provide better habitat than what will be created using bank protection and a planting berm (the No Action Alternative).

Additional Avoidance, Minimization and Mitigation Measures

- Mitigation measures in Section 3.6.2.2 are also relevant here.
- The conditions relevant to the Proposed Action that are listed in the 2021 NMFS Biological Opinion will be followed. (WCRO-2020-03082). These conditions supersede any associated mitigation measures listed in the ARCF GRR FEIS/FEIR.

3.8 Federal Status Species

3.8.1. Existing Conditions

The environmental and regulatory framework described in Section 3.8.1 of the ARCF GRR FEIS/FEIR is generally applicable to the Proposed Action and therefore is not repeated here. Detailed habitat maps are included in Appendix C of the ARCF GRR FEIS/FEIR. In addition,

site specific surveys were completed for VELB and elderberries in 2019 and 2020 by Environmental Science Associates. The location of federal status species habitat found by the survey in the Project Area is provided in Appendix A and B of the LAR Contract 3A SEIR.

In 2021 USACE reinitiated consultation with USFWS for the ARCF 2016 Projects. The USFWS issued a new BO on March 31, 2021. Also, as mentioned above, USACE reinitiated consultation with NMFS, which issued its new BO on May 12, 2021. In addition, *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* was published by USFWS in 2017. Under this framework and the USFWS BO, VELB habitat is defined to include elderberry clusters. In addition, areas within 82 feet of elderberry clusters and above the Ordinary High Water Mark (OHWM) are considered VELB habitat.

3.8.2. Environmental Effects

3.8.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. A thorough summary of specific impacts can be found in Section 3.8.5 of the ARCF GRR FEIS/FEIR, Section 3.6.3 of the LAR Contract 1 SEA/SEIR, and Section 3.6.3 of the LAR Contract 2 SEIS/SEIR. A summary of these impacts is listed below.

Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)

The ARCF GRR FEIS/FEIR estimated a total of 3,129 stems of elderberry plants, habitat to VELB, would be impacted by projects on the LAR. LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR were calculated to impact a total of 1.63 acres of elderberry shrubs and 8.14 acres of adjacent VELB habitat, or 9.77 acres overall. Additional VELB habitat would be planted and elderberry bushes would be transplanted to mitigate the VELB impact at a 3:1 ratio offsite at the Rossmoor West, Rossmoor East, Paradise Bend (formally Glenn Hall) Mitigation Site, Rio Americano West, or Rio Americano East Mitigation Site. Future levee maintenance activities may require trimming of elderberries and could impact VELB. Any impacts that could jeopardize the survival of VELB as a species would be reduced by implementing the mitigation measures listed in the ARCF GRR FEIS/FEIR, but the No Action/No Project Alternative (Alternative 2 in the ARCF GRR FEIS) would adversely affect VELB as take would occur.

Western Yellow-Billed Cuckoo (Coccyzus americanus)

The LAR riparian corridor provides suitable stopover and potential foraging habitat for the Federally listed cuckoo. While the Project Area is outside the nesting range of the cuckoo, which requires large blocks of riparian habitat with dense understory foliage for nesting, transient individuals could use the project area during migration. Riparian habitat is considered cuckoo stopover habitat. Impacts to riparian habitat were discussed in Section 3.6.2.1, above. Impacts to riparian habitat is a proxy to potential take of cuckoo as riparian habitat is considered suitable stopover and foraging habitat for cuckoo in the LAR. As such, the No Action/No Project Alternative (Alternative 2 in the ARCF GRR FEIS) would adversely affect cuckoo.

Federally Listed Fish Species

Central Valley Steelhead (*Oncorhynchus mykiss*) may be present in the Project Area. In addition, the Project Area is within designated critical habitat for Central Valley spring-run Chinook salmon and California Central Valley steelhead. The environmental impacts listed in Section 3.7.2.1 of this SEA are also applicable here. The No Action/No Project Alternative (Alternative 2 in the ARCF GRR FEIS/FEIR) would have a temporary, adverse effect on suitable habitat (the area below the OHWM of the river) for steelhead in the LAR during construction of the bank protection features.

3.8.2.2. Proposed Action

Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)

The impacts discussed in Section 3.6.2.2, above, are also relevant here. In addition, a *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* was published by USFWS in 2017, after the ARCF GRR FEIS/FEIR was finalized, and provides additional guidance measures to protect VELB when working around elderberries. In addition, a new USFWS BO was reinitiated in 2021 to meet the updated needs of the ARCF 2016 Projects, which provides new conservation measures that need to be implemented to reduce the risk of impact to VELB.

An analysis of the haul routes, erosion protection area, and staging areas (see Figure 1- 4 and Figure 1- 5 for the project locations) in the LAR Contract 3A SEIR determined that a total of 1.71 acres of elderberry shrubs and nearby habitat (riparian habitat within 82 feet of the shrub) will be impacted by the Proposed Action. This calculation was made by mapping elderberries in the erosion protection construction area and adding an 82 feet buffer around each elderberry shrub or elderberry group. Elderberry canopy or any shrubby or tree vegetation within this 82 feet buffer was considered an elderberry impact. Even though the loss of shrubs and habitat will be an adverse impact, consultation with USFWS determined that it will not be detrimental to the species if conservation measures are followed. The conservation measures listed in the reinitiated 2021 USFWS BO will be followed in order to minimize impacts to VELB below a significant level. This includes transplanting elderberries to an offsite location and planting offsite mitigation at a 3:1 ratio. It is anticipated that elderberries will be transplanted to the Paradise Bend Mitigation Site (formally called Glenn Hall), which was already analyzed in the LAR Contract 1 SEA. Paradise Bend will be replanted with other vegetation as well and will serve as VELB mitigation for the Proposed Action.

The impacts of the specific haul routes and staging areas within the Proposed Action were not analyzed in the ARCF GRR FEIS/FEIR. The staging area near the Business I-80 Bridge and the haul routes on the levee are within 100 feet of elderberry shrubs. Any impacts to VELB will be reduced by implementing the mitigation measures listed in the mitigation section below, but Contract 3A will adversely affect VELB as take will occur. In addition, if offsite stockpiling is needed, only locations free of elderberries will be used.

Future levee maintenance activities may require trimming of elderberries and could impact VELB. The USFWS BO will be followed to ensure that only minor impacts occur to VELB from these activities.

Mitigation measures listed below will be implemented to ensure that the Proposed Action is in compliance with these two documents in order to minimize impacts to VELB from significant impacts to adverse and minor impacts.

Western Yellow-Billed Cuckoo (Coccyzus americanus)

Impacts to riparian habitat, which is cuckoo stopover habitat, has already been discussed in Section 3.6.2.2 of this SEA. Impacts to riparian habitat is a proxy to potential take of the cuckoo as riparian habitat is considered suitable stopover and foraging habitat for cuckoo in the LAR. As such, Contract 3A will adversely affect cuckoo. In addition, if offsite stockpiling is needed, only locations free of cuckoo habitat will be used.

Federally Listed Fish Species

Central Valley Steelhead may be present in the Project Area. Central Valley Fall/Late Fall-Run Chinook are also present and are the primary fish raised at Nimbus Hatchery, but are not federally listed. The Project Area is also within designated critical habitat for Central Valley spring-run Chinook salmon and California Central Valley steelhead. The impacts discussed in Section 3.7.2.2 of this SEA will also be relevant to the federally listed fish species. It is anticipated that Contract 3A will have a temporary, adverse effect on suitable habitat (the area below the OHWM of the river) for steelhead in the LAR during temporary access to the river and placement of the rock slope protection.

Additional Avoidance, Minimization and Mitigation Measures

- Mitigation measures in Sections 3.6.2.2 and 3.7.2.2 are also relevant here.
- The recommendations listed in the 2017 USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* relevant to the Proposed Action will be followed. These recommendations supersede any associated mitigation measures listed in the ARCF GRR FEIS/FEIR.

3.9 Cultural Resources

3.9.1. Existing Conditions

ARCF GRR FEIS/FEIR Section 3.9.1 adequately describes the regional and local cultural resources setting in the vicinity of the Project Area.

3.9.2. Environmental Effect

3.9.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR (alternative 2) would be implemented. The ARCF GRR FEIS/FEIR concluded that mitigation measures would reduce potential impacts of the project to cultural resources under NEPA and Section 106 of the National Historic Preservation Act (NHPA) to a less-than-significant level as any adverse effects would be resolved by implementing requirements contained in the ARCF Section 106 Programmatic Agreement (PA).

3.9.2.2. Proposed Action

Erosion protection measures will include substantial ground disturbance, including bank excavation and riprap placement, use of staging areas, and habitat mitigation. These earthmoving activities could damage or destroy unknown subsurface historic-period sites, prehistoric-period archaeological sites, and properties with significance to Native American tribes. If offsite stockpiling is needed, all proposed stockpile areas will be inventoried for cultural resources and assessed for effects to historic properties under the PA and ARCF GRR Historic Properties Management Plan (HPMP).

One potential historic property is located within the Proposed Action APE that was not discussed in the ARCF GRR FEIS/FEIR: P-34-005121 American River Railroad Bridge, a 1910 stationary truss railroad bridge associated with the Central Pacific Railroad. In accordance with the ARCF PA, confirmation of National Register of Historic Places (NRHP) eligibility and findings of effect and appropriate mitigation will be made through consultation between USACE, the California State Historic Preservation Officer (SHPO), and other ARCF PA Parties, as appropriate, prior to initiating construction of the Proposed Action. USACE has initiated consultation with the SHPO and Tribes regarding the definition of the Area of Potential Effects (APE) for the Proposed Action and consultation regarding identification of historic properties and finding of effect for the proposed action will continue in the coming months. Correspondence regarding the APE consultation is attached in Appendix A.

Avoidance, Minimization, and Mitigation Measures

The following mitigation measures augment the mitigation identified in the ARCF GRR FEIS/FEIR, including actions to address adverse effects to historic properties and discovery of archaeological resources. If the Proposed Action is undertaken, USACE and the CVFPB will implement the measures as described.

- **Resolve Adverse Effects through a Programmatic Agreement and Historic Properties Treatment Plan.**
    - A Programmatic Agreement has been executed for the ARCF 2016 Project. A Historic Properties Treatment Plan (HPTP) will be developed if the proposed action is found to result in adverse effects to historic properties.

- **Prepare an Archaeological Discovery Plan and an Archaeological Monitoring Plan.**
    - In accordance with the procedures described in Section 9.2 of the ARCF HPMP, an archaeological discovery plan will be developed for the Proposed Action. The discovery plan will specify what actions must be taken by the contractor in the event of an archaeological discovery and describe what actions USACE may take in the event of a discovery.

    - In accordance with the procedures described in Section 9.3.9 of the ARCF HPMP, an archaeological monitoring plan will be developed for the Proposed Action. This plan will identify the locations of known Historic Properties as well as sensitive areas designated for archaeological monitoring and will include methods

and procedures for monitoring and the procedures to be followed in the event of a discovery of archaeological materials.

- **Conduct Cultural Resources Awareness Training.**
  - In accordance with the procedures described in Section 9.1 of the ARCF HPMP, USACE will require the contractor to provide a cultural resource sensitivity and awareness training program for all personnel involved in project construction, including field consultants and construction workers. The training will 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. USACE may invite Native American representatives from interested culturally affiliated Native American tribes to participate.

- **Implement Procedures for Discovery of Cultural Material.**
  - If the discovery of cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains), sacred sites, or landscapes is made at any time during project-related construction activities, USACE in consultation with the CVFPB and other interested parties will develop appropriate protection and avoidance measures where feasible. These procedures will be developed in accordance with the ARCF PA and ARCF HPMP, which specifies procedures for post-review discoveries. Additional measures, such as development of HPTPs prepared in accordance with the PA and HPMP, may be necessary if avoidance or protection is not possible.

3.10 Air Quality

3.10.1. Existing Conditions

The ARCF GRR FEIS/FEIR Section 3.11.1 adequately describes the regional and local air quality setting in the Project Area and surrounding vicinity.

3.10.2. Environmental Effects

3.10.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR (Alternative 2) would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. The ARCF GRR FEIS/FEIR determined in Section 3.11.5 that Alternative 2 would exceed Sacramento Metropolitan Air Quality Management District (SMAQMD)'s mass daily emission threshold for NOx, PM10, and PM2.5 (Table 3- 3) (SMAQMD 2020a). In addition, USACE released a conformity determination for public notice in March 2020, and the final report was posted in June 2021. The total NOx emissions of the overall ARCF 2016 Project are

expected to exceed the EPA's General Conformity de minimis thresholds during several of the ARCF 2016 Project's construction years, including 2023 when construction of the erosion protection, including LAR Contract 3A work, is expected to occur. USACE expects to purchase offsets for NOx emissions from SMAQMD to mitigate these exceedances.

In addition, mitigation measures listed in Section 3.11.6 of the ARCF GRR FEIS/FEIR would be implemented to reduce other air quality impacts, including dust emissions, lowering this adverse effect to an insignificant level. Because the public's exposure to toxic air contaminants produced by the ARCF 2016 Project construction contractors' equipment would persist for a relatively short duration compared to the time needed for chronic exposure, the increased air quality health risks caused by the project would be minor. Construction of the No Action Alternative would not result in any major source of odor, and the project would not involve operation of any of the common types of facilities that are known to produce odors. After project construction is complete, any emissions that result from long-term operational activities would not exceed SMAQMD or *de minimis* thresholds and would be minor.

3.10.2.2. Proposed Action

The ARCF GRR FEIS/FEIR's air analysis cannot be directly compared to the LAR Contract 3A project since some of the project area was not included in the initial analysis and since the ARCF 2016 Project timeline has been condensed (requiring more projects and more emissions each year). Results of an air quality analysis available in Appendix D of the LAR Contract 3A SEIR and listed in Table 3- 3 and Table 3- 4 show that air emissions from the Proposed Action would not cause a significant adverse effect to air quality.

Table 3- 3 LAR Contract 3A Daily Air Analysis Results

	Contract 3A (lbs/day)	SMAQMD Threshold (lbs/day)
ROG	4	N/A
NOX	176	85
CO	20	N/A
PM10	47	0*
PM2.5	6	0*

*SMAQMD has a zero pound per day threshold of PM, when best available controls are not implemented but threshold with incorporated controls are 80 lb/day for PM_{10} and 82 lb/day for PM_2.

Table 3- 4 LAR Contract 3A Annual Air Analysis Results

Maximum Construction Activity	ROG Emissions (tons/year)	NO_X Emissions (tons/year)	CO Emissions (tons/year)	PM_{10} Emissions (tons/year)	$PM_{2.5}$ Emissions (tons/year)
2022	<1	<1	<1	<1	<1
Exceed De Minimis Level?	No	No	No	No	No
2023	0.27	9.76	3.22	<1	<1

Maximum Construction Activity	ROG Emissions (tons/year)	NO_X Emissions (tons/year)	CO Emissions (tons/year)	PM_{10} Emissions (tons/year)	$PM_{2.5}$ Emissions (tons/year)
Exceed De Minimis Level?	No	No	No	No	No
De Minimis Level	25[1]	25[1]	100	100[2]	100[3]

NOTES:
1. VOCs/NOx levels for serious nonattainment areas for ozone
2. PM_{10} levels for all maintenance areas
3. $PM_{2.5}$ (2012) standard in attainment; thus higher de minimis level for moderate nonattainment areas used.

Overall, the daily NOx emissions from the Proposed Action will be higher than the threshold set by SMAQMD. In addition annual emissions are not expected to exceed *de minimis* thresholds for the Proposed Action. USACE has already released a conformity determination for public notice in March 2020, and the Final General Conformity Determination for the American River Watershed Common Features 2016 Project was posted in June 2021. The General Conformity Report looked at the entirety of the ARCF 2016 Project and its associated emissions. The total NOx emissions of the overall ARCF 2016 Project were expected to exceed the EPA's General Conformity *de minimis* thresholds during several of the ARCF 2016 Project's construction years, including 2023, when the LAR Contract 3A Proposed Action is anticipated to be constructed. USACE expects to purchase offsets for NOx emissions from SMAQMD, which is a mitigation measure already implemented by the ARCF GRR FEIS/FEIR. The Proposed Action's increased NOx emissions will be minor with the purchases of NOx offsets.

In addition, mitigation measures listed in the ARCF GRR FEIS/FEIR and listed below will be implemented so that controls are in place for PM 10 and PM 2.5. SMAQMD changes the threshold level to 80 lb/day for PM 10 and 82 lb/day for PM2.5 when controls for PM 10 and PM 2.5 are in place. The PM 10 level of the Proposed Action is 47 lbs/day and the PM2.5 level of the Proposed Action is 6 lbs/day. Since both controls are in place and the emissions are below the updated threshold levels, there is only a minor impact from the Proposed Action on PM10 and PM 2.5 emissions.

Section 3.11.4 of the ARCF GRR FEIS/FEIR analyzed impacts of erosion protection on fugitive dust, toxic air contaminants, odors, and operation and maintenance. Even though the type of erosion protection selected for the Proposed Action has changed from the type of erosion protection analyzed in the ARCF GRR FEIS/FEIR, the same construction activities analyzed in the ARCF GRR FEIS/FEIR, such as excavation, placement of revetment, and hauling of revetment, will be needed to complete the Proposed Action. This means that the Proposed Action would have similar impacts to fugitive dust, toxic air contaminants, and odors as the effects forecast in the ARCF GRR FEIS/FEIR. In addition, the erosion protection of the Proposed Action will involve similar operation and maintenance activities to those analyzed in the ARCF GRR FEIS/FEIR. Due to these similarities, the analysis presented in the ARCF GRR FEIS/FEIR and the mitigation measures listed in the ARCF GRR FEIS/FEIR are applicable to the Proposed Action. There will be no new impacts on fugitive dust, toxic air contaminants, odors, and operation and maintenance from what was already analyzed in the ARCF GRR FEIS/FEIR.

Individually, LAR Contract 3A will cause only minor levels of emissions after mitigation measures are implemented. In addition, impacts of erosion protection on fugitive dust, toxic air contaminants, odors, and operation and maintenance will be minor. Together with other ARCF 2016 Project activities occurring in 2023, the ARCF 2016 Project as a whole will exceed general conformity *de minimis* thresholds for that year.

Additional Avoidance, Minimization and Mitigation Measures

The following mitigation measure from Section 3.11.6 of the ARCF GRR FEIS/FEIR will not be implemented because it is not a practical measure for a linear construction project consisting of multiple multi-thousand-foot construction areas.: *Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas.*

All other mitigation measures for Air Quality listed in the ARCF GRR FEIS/FEIR will be implemented. In addition, the following mitigation that were not included in the ARCF GRR FEIS/FEIR will be implemented.

- USACE will implement the following control measures during project construction:
    - Control fugitive dust as required by District Rule 403 and enforced by District staff.
    - Limit vehicle speeds on unpaved roads to 15 miles per hour.
    - Maintain all construction equipment in proper working condition according to the manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
- USACE will ensure that Water exposed soil with adequate frequency for continued moist soil; however, do not overwater to the extent that sediment flows from the site.
- Develop and Implement a Plan for Enhanced On-Site Exhaust Controls.
    - Actual emissions of nonattainment and maintenance pollutants will be tracked monthly using tools acceptable to SMAQMD (e.g., construction mitigation calculator, SMAQMD's Equipment List). USACE shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment (50 horsepower or more) to be used 8 hours or more during project construction. The tracking data will be used to verify that all pollutants remain below the daily thresholds, General Conformity de minimis thresholds, or are fully mitigated and offset if emissions exceed either.
    - The initial report will include all the following details:
        - Information about the project information and the construction company.
        - The equipment type, horsepower rating, engine model year, projected hours of use, and California Air Resources Board (CARB) equipment identification number for each piece of equipment in the plan.

        - All owned, leased, and subcontracted equipment to be used.

    - Updated reports will be submitted monthly to demonstrate continued project compliance.

    - SMAQMD may conduct periodic site inspections to determine compliance. Nothing in this mitigation will supersede other air district, state, or federal rules or regulations.

- To the extent available and feasible, construction equipment will be powered by electricity, rather than diesel fuel, which will reduce construction-related criteria air pollutants, Total Air Contaminants, and tailpipe GHG emissions associated with diesel fuel combustion.

- The contractor will pay the appropriate SMAQMD-required NOx mitigation fee to offset the project's NOx emissions when they exceed SMAQMD's threshold of 85 lb/day only if USACE does not pay the mitigation fee through the General Conformity Determination during the year of construction. The NOx mitigation fee will apply to all emissions from the project: on-road (on- and off-site), off-road, portable, stationary equipment, and vehicles.

3.11 Transportation and Circulation

3.11.1. Existing Conditions

Section 3.10.1 of the ARCF GRR FEIS/FEIR describes the regional and local setting in the vicinity of the Project Area, but additional information specific to the Project Area is provided below.

The contractor's vehicles will access the Project Area from the state highway system via Business I-80. The nearest highway interchanges to the Project Area include the freeways, highways and local roads around Business I-80 near Exposition Blvd and E St.

3.11.2. Environmental Effects

3.11.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken.

Section 3.10.5 of the ARCF GRR FEIS/FEIR analyzed the impacts to transportation and circulation associated with construction of levee improvements throughout the Sacramento area, including construction of levee improvements in the Project Area. The ARCF GRR FEIS/FEIR transportation and circulation impact analysis identified that construction of proposed levee improvements would intermittently generate substantial volumes of traffic, due to the amount

earthwork involved and the need for material deliveries, resulting in significant temporary and short-term impacts. In addition, construction of levee improvements on the American River would require trucks to enter the American River Parkway, and the increased traffic in the American River Parkway would result in significant temporary and short-term impacts on recreational users, bicycle commuters, and residents adjacent to the levee structure. Outside of the American River Parkway, hauling on residential roads to access the American River Parkway would result in significant temporary and short-term impacts to residents along the selected routes.

3.11.2.2. Proposed Action

Even though the erosion protection locations upstream of the Business I-80 Bridge were not analyzed in the ARCF GRR FEIS/FEIR, access to the Project Area is the same. In addition, the erosion protection added to the levee does not increase the overall 11 miles of erosion protection analyzed in the ARCF GRR FEIS/FEIR. Consequently, the transportation and circulation analysis already presented in the ARCF GRR FEIS/FEIR is applicable to the transportation and circulation impacts from the Proposed Action.

The ARCF GRR FEIS/FEIR did not analyze specific haul routes because haul routes were unknown at the time. Because of this, the traffic analysis done in the ARCF GRR FEIS/FEIR was limited and brief. However, Section 3.10.5 of the ARCF GRR FEIS/FEIR determined that the increase in traffic due to project-related construction activities will be temporarily significant and unavoidable for the overall ARCF 2016 Project.

The timeline for the ARCF 2016 Projects has been expedited from 10 years to 5 years, so there is a risk that impacts to traffic will be greater than the level estimated in the ARCF GRR FEIS/FEIR. To determine whether additional transportation impacts from the specific haul routes recently identified in the final design for the LAR Contract 3A sub-project will occur, the possible traffic effects of the Proposed Action need to be re-evaluated. The specific routes haul trucks will take are shown in Figure 1- 8. These haul routes have been chosen to avoid sensitive receptors as much as possible. However, in a few places trucks need to drive through neighborhoods (such as River Park), near neighborhoods (such as McKinley Village), or by a school to access the construction sites. Table 3- 5, below, shows the estimated trips per day expected to occur, based on material quantities and truck sizes for the different construction sites.

Table 3- 5 Anticipated Construction Traffic Volumes LAR Contract 3A

Schedule	Materials	Total Imported Materials (CY or Trees)	Total Haul Trips	Return/Unloaded Trips	Total Truck Trips	Scheduled Delivery Days	Trips/Day	Trips/Hr
May 2023 through October 2023	Excavated Soil	3,500 cy	360	360	720	12	60	5.5
	Bedding Material	7,520 cy	750	750	1500	12	125	11.4
	Riprap	23,400 cy	2,700	2,700	5,400	34	159	14.4

	Soil-filled Riprap	10,000 cy	1,500	1,500	3,000	14	214	19.5
	Planting Bench Soil	21,000 cy	2,090	2,090	4,180	26	161	14.6
November 2023	Aggregate Base	4,100 cy	455	455	910	9	101	9.2
	IWM	160 Trees	40	40	80	20	4	0.4
Total	**69,520 cy and 160 Trees**		**7,895**	**7,895**	**15,790**	**Peak Trips**	**214**	**19**

NOTES:
1 CY: Cubic Yards
2 Truck Volume

Excavated Soil	9.72 cy
Bedding Material	10.03 cy
Riprap	8.67 cy
Soil-filled Riprap	6.67 cy
Planting Bench Soil	10.05 cy
Aggregate Base	9.01 cy
IWM	4 trees

3 Construction Day (Hours) 11

Source: USACE, 2022; ESA, 2021.

Overall, a peak of 214 trips per day is estimated. This level of traffic will cause a temporary significant and unavoidable impact to local traffic in the nearby neighborhoods and along local roads. However, the ARCF GRR FEIS/FEIR already determined that the overall project would cause a temporary significant and unavoidable impact to local traffic, so the impact of the Proposed Action is already covered in the ARCF GRR FEIS/FEIR.

In addition, it was determined that with implementation of mitigation measures listed in Section 3.10.6 of the ARCF GRR FEIS/FEIR the impacts related to public safety hazards resulting and inadequate emergency access from construction activities will only be minor. Also implementing these mitigation measures will ensure that impacts related to substantial deterioration of the physical condition of nearby roadways will be minor. Implementing all these mitigation measures for the LAR Contract 3A Proposed Action will similarly decrease these impacts to a minor level for the LAR Contract 3A Proposed Action. Parking lots or paved areas in Sutter's Landing Park will be used as staging areas and for employee parking. This would decrease parking availability for those wanting to visit Sutter's Landing Park. Presumably fewer people will visit the area during construction work under LAR Contract 3A, but mitigation measures already listed in the ARCF GRR FEIS/FEIR will minimize impacts of the Proposed Action on parking availability. Impacts will be reduced with implementation of these mitigation measures but will be short-term and moderate for those wanting to recreate in the area.

Another impact that was not discussed in the ARCF GRR FEIS/FEIR was crossing the Union Pacific Railroad tracks at grade to get to the site. Union Pacific Railroad regulations will be followed around the railroad to reduce the temporary impacts on safety and railroad infrastructure to a minor level.

Because the overall timeframe of ARCF 2016 Projects has been compressed from 10 years to 5 years, more projects will be under construction at the same time than what was anticipated in the ARCF GRR FEIS/FEIR. LAR Contract 2 has been delayed from the time frame analyzed in the ARCF GRR FEIS/FEIR, with the result that parts of LAR Contract 2 and LAR Contract 3A will likely occur at the same time. Some of the haul routes for LAR Contract 2 and LAR Contract 3A are the same. As noted in the ARCF GRR FEIS/FEIR, construction related traffic

impacts were already determined to be significant at the ARCF 2016 Project level and changes in temporary use areas including haul routes for LAR Contract 3A will not result in a new significant impact.

In addition to the impacts discussed above, the top of the levee will be closed during construction to allow for truck access to the site. There is not currently a designated bike trail in this area, but the public utilizes the top of levee for recreation and commuting. Mitigation measures already listed in Section 3.10.6 of the ARCF GRR FEIS/FEIR and listed below will help reduce the impact of this closure to those using the top of levee for recreation or commuting. In addition, the mitigation measure listed below will ensure that all impacts to those using the top of levee will be minor.

Overall, the ARCF GRR FEIS/FEIR already determined that ARCF 2016 Projects will cause significant unavoidable impacts to traffic and circulation in the area. Individually after mitigation measures are implemented, Contract 3A will have minor impacts on public safety hazards, emergency access, and the physical condition of roads. In addition, moderate impacts on parking availability at Sutter's Landing Park will occur.

Additional Avoidance, Minimization and Mitigation Measures

- The contractor will prepare a Traffic Control and Road Maintenance Plan that will include, but not be limited to, the following provisions related to bicycle and pedestrian access:
    - Provide signs along affected pedestrian and bicycle pathways announcing scheduled closures and recommended detour routes.
    - Place signal personnel at intersections of construction vehicle pathways and active bicycle and pedestrian facilities.
- The construction contractor will assess damage to roadways used during construction and the UPRR at-grade railroad crossing and will repair all potholes, fractures, or other damages.

3.12 Climate Change

3.12.1. Existing Conditions

The ARCF GRR FEIS/FEIR Section 3.12.11 adequately describes the regional and local climactic setting in the Project Area and surrounding region.

3.12.2. Environmental Effects

3.12.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with

LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. The ARCF GRR FEIS/FEIR Section 3.12.5 analyzed GHG emissions and determined that construction activities would exceed the GHG threshold and increase fuel consumption. However, with implementation of mitigation measures listed in Section 3.12.6 of the ARCF GRR FEIS/FEIR, this impact would be reduced to a minor level. The EOE determined that the preferred alternative from the ARCF GRR FEIS/FEIR would not provide adequate flood protection within the LAR C3A footprint area. This would leave the area at risk for climate change induced floods.

3.12.2.2. Proposed Action

The ARCF GRR FEIS/FEIR's GHG analysis cannot be directly compared to the LAR Contract 3A project since some of the project area was not included in the initial analysis and since the timing of the construction activities of that ARCF 2016 Projects have changed. A separate analysis is needed to ensure that there will not be a significant impact. As mentioned in Section 3.10.2.2 of this SEA, a qualitative analysis is applicable in this situation because the types of construction activities in LAR Contract 1 are similar to those in the LAR Contract 3A Proposed Action. Also, the amount of materials hauled for LAR Contract 1 and the amount of equipment needed for LAR Contract 1 is significantly more than what is expected for LAR Contract 3A. The analysis done for the LAR Contract 1 SEA/EIR determined that GHGs released will be over the SMAQMD threshold, but that the impact will be minor with the purchase of GHG offset credits as mitigation. These mitigation measures are the same as those listed in the ARCF GRR FEIS/FEIR and consequently are already incorporated into this SEA by reference. Because there is significantly less materials and equipment being used for work for LAR Contract 3A than LAR Contract 1 (Table 3- 6 and Table 3- 7), there will also be less GHG emissions. Consequently, the impacts from the LAR Contract 3A Proposed Action should be less than what was analyzed for LAR Contract 1 and will also be minimized to a minor level through implementing the same mitigation measures listed in LAR Contract 1. Similar to LAR Contract 1, the LAR Contract 3A Proposed Action also does not create facilities that require electricity. Because there is no new permanent facility requiring electricity, there will be no new long term source of GHG from the Proposed Action. In addition the levee upgrades will not generate operation and maintenance activities besides what activities will be happening already at the site. Because of both factors, there will not be anticipated longer term or indirect GHG emissions caused by the Proposed Action.

Table 3- 6 Materials needing to be hauled for LAR Contract 3A and LAR Contract 1

	LAR Contract 3A	**LAR Contract 1**
Material	**Quantity**	**Quantity**
Instream Woody Materials	160 trees	300 trees
Excavated Soil	3,500 cubic yards (cy)	-
Riprap	23,400 cy	179,100 cy
Soil-filled Riprap	10,000 cy	-
Bedding Material	7,520 cy	-
Planting bench soil	21,000 cy	57,000 cy
Aggregate Base	4,100 cy	-

Total	**69,520 cy**	**236,100 cy**

Table 3- 7 Equipment and Staff Needed for LAR Contract 3A and LAR Contract 1

	LAR Contract 3A			**LAR Contract 1**		
Type of Equipment	Max. Number Used per Day	Total Operation Days	Number of Workers	Max. Number Used per Day	Total Operation Days	Number of Workers
Excavator	2	80	2	26	120	65
Dozer	2	60	2	1	60	1
Skid Steers	3	80	3	-	-	-
Roller or grader	1	30	1	1	60	1
Dump Truck	20	60	20	48	120	48
55-ton Crane	1	15	1	-	-	-
Pickup Trucks	5	80	5	-	-	-
Flatbed Truck	1	20	1	1	60	1
Sheepsfoot Roller	2	40	2	-	-	-
4” pump	-	-	-	4	60	
Front End Loader	-	-	-	5	120	5
Transfer Dump Truck	-	-	-	46	120	46
Water truck	1	80	1	1	120	1
Total	**38**	**545**	**38**	**133**	**840**	**168**

After the ARCF GRR FEIS/FEIR was finalized, the Council on Environmental Quality released additional guidance on how to do climate change analyses for NEPA documents.

Since the ARCF GRR FEIS/FEIR analysis, an additional analysis prepared by the EOE determined that the LAR Contract 3A Project Area is at high risk for levee failure due to erosion. Implementation of the Proposed Action will increase the resiliency of the LAR to flooding events caused by climate change, as compared to the No-Action Alternative. Also, the USACE design team prepared a site-specific Climate Change Assessment (USACE 2021a) to determine how climate change will likely impact the project and to design alterations that may be needed to reduce possible future impacts from climate change. This assessment determined that climate

and sea level change could impact the design of this project in several ways including, higher water surface elevations, increased high flow/stage duration, changes in velocity and flood wave characteristics. In the analysis, overtopping of planting benches from elevated floodwaters that could destabilize planted vegetation was identified as the most likely risk due to climate change. Planting benches have been designed to be variable in height in relation to the OHWM. This variability will provide added resilience to potential changes in the OHWM caused by climate change. Finally, existing vegetation will be removed in order to place the erosion protection features, then replaced with new plantings. This necessity will lead to a temporary decrease in possible carbon sequestration by vegetation at the site and will release some of the carbon now stored onsite by trees and shrubs that must be removed. This impact is temporary and will be minor with implementation mitigation of measures listed in Section 3.6.6 of the ARCF GRR FEIS/FEIR and Section 3.6.2.2 of this SEA. Most of this vegetation removed from the Project Area is VELB or riparian habitat and will be mitigated through planting of replacement shrubs and trees at a 2:1 or 3:1 ratio, ultimately increasing carbon sequestration offsite.

Overall, construction and subsequent operation and maintenance of the project features planned for Contract 3Awill have no net adverse effects on climate change conditions in the area that are not already covered in the ARCF GRR FEIS/FEIR document. Impacts from GHG emissions from the Proposed Action and impacts on carbon sequestration in the area will be minor after GHG offsets are purchased and mitigation sites are established. The Proposed Action will have a beneficial impact on the area's resiliency to possible effects of climate change.

3.13 Recreation

3.13.1. Existing Conditions

The ARCF GRR FEIS/FEIR Section 3.14.1 accurately describes the current regional and local setting in the vicinity of the Project Area, including descriptions of the recreational facilities, uses, and access to the Project Area. These include descriptions of the American River Parkway and Sutter's Landing Park. In addition to these previously described recreational resources, the City of Sacramento's Glenn Hall Park and Glenn Hall Pool facilities are located on the landside of the levee near Paradise Beach. Glenn Hall Park and Pool facilities parking area will provide construction equipment and haul trucks access to the levee. These recreational facilities presently offer swimming, baseball, soccer, and other fitness related opportunities to the public.

3.13.2. Environmental Effects

3.13.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. The ARCF GRR FEIS/FEIR Section 3.14 analyzed impacts to recreation that are relevant to the Project Area. The ARCF GRR FEIS/FEIR concluded that the detours and disruptions caused by closure of portions of the top of levees during project construction would conflict with the requirements

of the Wild and Scenic Rivers Act, significantly impacting tranquility of river areas with the project footprint causing significant unavoidable impacts.

3.13.2.2. Proposed Action

Construction of the LAR Contract 3A's 3,000 feet of launchable rock toe will result in detours, top of levee closures, construction work, construction noise, and less vegetation at the site. This will have an impact to the tranquility of those recreating in the area both on the levee and in the river. This work, however, will not cause more disruption than forecasted in the ARCF GRR FEIS/FEIR. Consequently, the impact analysis contained in the ARCF GRR FEIS/FEIR, finding significant unavoidable, although temporary, impacts to recreational resources within the project area remains applicable to the impacts anticipated from the Proposed Action. Additional mitigation measures related to bikers (listed below) have been added below to try to limit this impact, but the intensity of effect is still considered significant and unavoidable. Additional analysis is provided below for those features of the Proposed Action not included in the ARCF GRR FEIS/FEIR analysis.

The overall ARCF 2016 Project timeline has been compressed from 10 years to 5 years. This will decrease the impacts of the ARCF 2016 Project on recreational resources, since the overall closures, delays, and detours for those recreating throughout the Parkway persist for a shorter timeframe. Even so, these impacts will remain significant and unavoidable, as analyzed in the ARCF GRR FEIS/FEIR.

Under the Proposed Action, four locations for staging areas (Figure 1- 5) have been identified that were not discussed in the ARCF GRR FEIS/FEIR. Four of these staging areas will be in parking lots and paved areas near the skate park at Sutter's Landing Park. The other location is just upstream of Sutter's Landing Park between the Union Pacific Railroad tracks and the Business I-80 Bridge. The staging area near the Business I-80 Bridge will be visible to those using the top of levee for recreation, but during the project, the top of levee would be closed. The staging areas next to the skate park and basketball courts will not block access to the skate park or basketball court. Only portions of each of the three parking lots will be used for staging. In addition, impacts related to parking will be decreased to short-term and moderate with implementation of mitigation measures listed in the ARCF GRR FEIS/FEIR.

Specific haul routes were also not addressed in the ARCF GRR FEIS/FEIR. The haul routes outlined in the Proposed Action will require that the road on top of the levee to be closed for site access. This will mean that those who utilize the top of levee for recreation will not get to utilize that area during construction. The ARCF GRR FEIS/FEIR has already analyzed closure of the top of levees for construction access and work for this site is still within the 11 miles of work analyzed in the ARCF GRR FEIS/FEIR, so impacts are already covered in the ARCF GRR FEIS/FEIR. The haul routes will also increase traffic at entry routes for Sutter's Landing Park and Glenn Hall Park. This may cause traffic delays to those trying to access Sutter's Landing Park or Glenn Hall Park and could cause a significant temporary impact. The ARCF GRR FEIS/FEIR identified this traffic impact and so the haul routes chosen for the Proposed Action still fall under the ARCF GRR FEIS/FEIR. The haul route access point at Glenn Hall Park is very congested. Work will need to be done at or near the parking lot area to ensure that trucks can fit through the area. This may require closing parking spots, trimming back trees, regrading

areas, removing gates, and working around utilities at the park. Use of parking areas for staging and for construction vehicle access may cause disruptions for residents who wish to park in these lots and use the adjacent recreation facilities. Mitigation measures already listed in Section 3.14.6 of the ARCF GRR FEIS/FEIR, also listed below and in Section 3.11.2.2 of this SEA, will decrease this short-term impact to a moderate level.

As already determined in the ARCF GRR FEIS/FEIR, the Proposed Action will cause unavoidable impacts to recreational resources in the area. Specific impacts from LAR Contract 3A haul routes and staging areas that were not analyzed in the ARCF GRR FEIS/FEIR will be short-term and moderate after mitigation measures are implemented.

Additional Avoidance, Minimization and Mitigation Measures

In addition to the mitigation measures listed in the ARCF GRR FEIS/FEIR, the following mitigation measures will be implemented for the benefit of public recreation during project construction:

- USACE and the CVFPB will implement the following measures to reduce temporary, short-term construction effects on recreational facilities in the Project Area:
    - Closures of paved trails will be noticed 14-days in advance via signage at the detour locations.
    - Post signs at major entry points for parks and recreation facilities clearly indicating closures and estimated duration of closures. Information signs will notify the public of alternate parks and recreation sites, including boat launch ramps, and provide a contact number to call for questions or concerns.
    - Provide flaggers and post warning signs and signs restricting access before and during construction to ensure public safety.
    - Provide marked detours for all bike trails and on-street bicycle routes that will be temporarily closed during construction. Detours will be developed in consultation with the City of Sacramento Bicycle and Pedestrian Coordinator at least 10 days before the start of construction activities, as applicable. Signs that clearly indicate closure routes will be posted at major entry points for bicycle trails, information signs will be posted to notify motorists to share the road with bicyclists where necessary, and a contact number will be provided to call for questions or concerns. Fences will be erected to prevent access to the Project Area.
    - Provide traffic control in areas where recreational traffic will intersect with construction vehicles.
    - Upon completion of levee improvements, coordinate with the City of Sacramento and Sacramento County to restore access and repair any construction-related damage to recreational facilities to pre-project conditions.

3.14 Hydrology and Water Quality

3.14.1. Environmental Setting

3.14.1.1. Existing Conditions

Section 3.4.1 and Section 3.5.1 of the ARCF GRR FEIS/FEIR adequately describe current hydrological and water quality conditions within the Project Area.

In January of 2021, USACE submitted an application for a Programmatic Clean Water Act (CWA) Section 401 Water Quality Certification for the ARCF 2016 Projects to the Central Valley Regional Water Quality Control Board (CVRWQCB). LAR Contract 3A falls under this certification. The CWA Section 401 Water Quality Certification and Order was received in July of 2021.

3.14.2. Environmental Effects

3.14.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. A launchable rock trench or bank protection would be constructed along the LAR Contract 3A area downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. Since completion of the hydraulic analysis provided in Section 3.4.6 of the ARCF GRR FEIS/FEIR, additional information has been gathered and additional models have been run. It was determined by the EOE that the location upstream of the Business I-80 Bridge has a high risk for erosion and is subject to an immediate threat of erosion during high flows. Levee failure may be caused from erosion undermining the levee embankment and levees eroding themselves. This consequent failure would lead to significant flooding and its adverse effects on hydrology and water quality.

3.14.2.2. Proposed Action

Even though the erosion protection locations upstream of the Business I-80 Bridge were not analyzed in the ARCF GRR FEIS/FEIR, the Project Area is similarly situated and hydrologically similar to the sites that were analyzed. The erosion protection added to the levee does not increase the overall 11 miles of erosion protection analyzed in the ARCF GRR FEIS/FEIR. Consequently, the hydrologic and water quality analysis presented in the ARCF GRR FEIS/FEIR applies equally to the impacts anticipated from the Proposed Action. However, additional analysis is needed for the erosion protection method, haul routes and staging areas. The following includes an evaluation of those effects.

The erosion protection method for LAR Contract 3A includes launchable toe (Figure 1- 7), which was not considered in the ARCF GRR FEIS/FEIR. Placing launchable rock toe at the end of planting benches at the bank toe requires adding more material below the OHWM than placing rock just on the bank. The addition of rock at or below the water line tends to narrow the channel and raise the stage level of waters flowing through the area, slightly increasing the risk

of overtopping. A hydraulic analysis done by the design team determined that stage increases due solely to the addition of LAR Contract 3A's project features are estimated to be approximately 0.05 feet (USACE 2021b). Preliminary findings from the Sacramento District Cumulative Modeling Team suggest that stage impacts for LAR Contract 3A and LAR Contract 3B could be as high as 0.2 feet without impacting the probability of overtopping (USACE 2021b). Since the impact of 0.05 feet is significantly under the 0.2 feet threshold, it has been determined that the final design for LAR Contract 3A will not have a significant impact on the risk of flooding in the area.

Placement of revetment in the water could result in a temporary sediment plume during construction, generated from the channel bottom and levee side, becoming suspended in the water and could generate turbidity levels above those identified as acceptable by the CVRWQCB's Sacramento and San Joaquin River Basin Plan (CVRWQCB 2019). Revetment will be placed and stacked in the water for construction of the launchable rock toe (Figure 1- 7). The ARCF GRR FEIS/FEIR analyzed how bank protection could impact water quality. Bank protection will include placing revetment but not necessarily stacking rock as high as needed for construction of the launchable toe (Figure 1- 6) Nevertheless, placement of stone for the launchable toe during construction will likely cause similar water quality impacts as those analyzed for bank protection in Section 3.5.5 of the ARCF GRR FEIS/FEIR. Best management practices listed in Section 3.5.6 of the ARCF GRR FEIS/FEIR will similarly reduce these short-term impacts to a minor level. In addition, since launchable toe is the structure holding the planting benches in place, if the toe launches during a flood, soil in the planting bench will likely be released into the water. However, planting bench tiebacks have been included in the designs and will limit soil loss so there will be only minor impacts, with an anticipated insignificant net impact to water quality.

In 2021 a Programmatic CWA Section 401 Water Quality Certification and Order was received from the CVRWQCB in July of 2021 for the ARCF 2016 Projects. Some excavated soil could be used on site immediately adjacent to excavation under Clean Water Act Section 401 permit conditions and approval by the CVRWQCB. This Certification and Order included additional Measures, such as a requirement to obtain a Construction General Permit for disturbing more than an acre to address stormwater/erosion effects under the National Pollutant Discharge Elimination System. Accordingly, the mitigation measure listed below will be incorporated to ensure compliance with CWA Section 401 and ensuring that impacts associated with stormwater runoff will be minor.

Specific haul routes and staging areas were not addressed in the ARCF GRR FEIS/FEIR, but Contract 3A haul routes and staging areas are not near waterways and are very unlikely to cause any impact to hydrology and water quality. Moreover, mitigation measures listed in Section 3.5.6 of the ARCF GRR FEIS/FEIR and listed below will prevent risks associated with stormwater runoff from haul routes and staging areas to water quality and fisheries.

In summary, the Proposed Action will cause a negligible and insignificant decrease in channel carrying capacity through the project area, imperceptibly raising the river stage and increasing flood risk, but this adverse effect will be completely offset by the added erosion protection afforded by the launchable rock toe, planting bench and other features of the Contract

3A project. In addition, impacts to water quality from direct construction work and stormwater runoff will be short-term and minor with the implementation of mitigation measures.

Additional Avoidance, Minimization and Mitigation Measures

The mitigation measure within the ARCF GRR FEIS/FIER that states the timeframe for conducting earthwork has been updated to the following: Conduct earthwork during low-flow periods (e.g., approximately May 1 through November 30). In addition, the following mitigation measure has been added:

- The conditions listed in the ARCF Programmatic CWA Section 401 Water Quality Certification and Order will be followed. These conditions supersede any associated mitigation measures listed in the ARCF GRR FEIS/FEIR

3.15 Noise and Vibration

3.15.1. Existing Conditions

The ARCF GRR FEIS/FEIR Section 3.13.1 accurately describes the regional and local noise setting within the ARCF GRR FEIS/FEIR Project Area.

3.15.2. Environmental Effects

3.15.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. A noise analysis was prepared in Section 3.13.5 of the ARCF GRR FEIS/FEIR. The potential exists for significant effects to sensitive receptors within 500 feet or less from the construction site. Impacts from noise would be short term and minor after implementation of mitigation measures listed in Section 3.13.6 of the ARCF GRR FEIS/FEIR.

3.15.2.2. Proposed Action

The ARCF GRR FEIS/FEIR found the potential for significant effects to sensitive receptors within 500 feet of the construction site, but implementing mitigation measures listed in Section 3.13.6 of the ARCF GRR FEIS/FEIR will reduce these impacts to an adverse, but less than significant level. The results of a qualitative noise analysis conducted for the LAR Contract 1 SEA/SEIR are applicable to the Proposed Action because the construction activities undertaken during performance of LAR Contract 1 are similar to those anticipated for the LAR Contract 3A Proposed Action, and because the locations of sensitive receptors are also similar. Erosion protection work at both LAR Contract 1 and LAR Contract 3A would be conducted closer to sensitive receptors than the 500-foot threshold that the ARCF GRR FEIS/FEIR listed for having potential significant impacts. Also, a large portion of the haul routes are the same for LAR Contract 1 and LAR Contract 3A. The routes through Carlson Drive are as close as 30 feet from

some homes along this route. Since the type of construction work will be similar, noise levels along these haul routes should also be similar. In addition, the amount of material hauled for LAR Contract 1 and the equipment needed was significantly greater than the quantities expected for LAR Contract 3A, see Table 3- 6 and Table 3- 7. This means that impacts from the LAR Contract 3A Proposed Action should be less adverse than those analyzed for LAR Contract 1 and will be minimized through implementation of the same mitigation measures listed in LAR Contract 1.

The mitigation measures in the ARCF GRR FEIS/FEIR limit construction activity to hours between 7:00 a.m. and 7:00 p.m.; however, the Proposed Action will limit construction activity to City of Sacramento daytime construction hours, from 7:00 a.m. to 6:00 p.m. on Mondays through Saturday and 9:00 a.m. to 6:00 p.m. on Sundays.

The study determined that for LAR Contract 1, heavy-duty construction equipment at all work sites, as well as peak-hourly haul truck activities, will exceed City and County of Sacramento daytime noise standards of 55 A-weighted decibel (dBA) equivalent continuous level (L_{eq}), causing a significant, temporary short-term construction noise impact. However, this impact will be reduced to a less-than-significant level with mitigation. In addition, the LAR Contract 1 SEA/SEIR determined that the ARCF GRR FEIS/FEIR did not adequately analyze vibration generated during construction. The use of heavy-duty construction equipment could cause vibration impacts depending on the final location of staging areas and work areas, as well as the proximity to existing vibration-sensitive land uses. Further, frequent hauling activities could exceed FTA recommended guidelines for frequent events of 72 vibration decibels (VdB) at some receptors. This will result in significant impacts, but implementing new mitigation measures listed in Section 3.11.3 of the LAR Contract 1 SEA/SEIR and also listed below will reduce the impact. Further, implementation of mitigation measures listed in LAR Contract 1 will decrease noise and vibration impacts for the LAR Contract 3A Proposed Action to a short-term minor level.

Impacts from the Proposed Action to noise, similarly to LAR Contract 1, will be minor once mitigation measures are put in place. In addition, impacts from vibration from construction equipment will be minor with implementation of mitigation measures.

Additional Avoidance, Minimization and Mitigation Measures

The following mitigation measures not included in the ARCF GRR FEIS/FEIR will be added.

- Coordinate with local residents, comply with noise ordinances, and implement BMPs.
    - To the extent feasible and practicable, the primary construction contractors will employ vibration-reducing construction practices so that vibration from construction will comply with applicable noise-level rules and regulations, including the construction vibration standards of the City or County of Sacramento, depending on the jurisdictional location of the affected receptor(s). Project construction specifications will require the contractor to limit vibrations to less than 0.2 inch per second Peak Particle Velocity (PPV), and less than 72 VdB for frequent events or 80 VdB for infrequent events (i.e., heavy-duty construction activities). If construction or truck hauling activity will occur within 75 feet of any occupied building, the contractor will prepare a vibration control

plan prior to construction. The plan will include measures to limit vibration, including but not limited to the following:

- Avoid vibratory rollers and packers near sensitive areas. Alternatives may include pad foot rollers drum rollers, or similar non-vibratory equipment.

- Route heavily loaded trucks away from residential streets, if possible. If no alternatives are available, select the streets with the fewest homes. Depending on the specific truck type that will be used, the contractor could demonstrate with substantial evidence, to the City of Sacramento, that trucks will not exceed applicable thresholds mentioned above.

- Prior to construction activities, notify each residence within 75 feet of construction with contact information to request pre- and post-construction surveys to assess potential architectural damage from levee construction vibration. The survey will include visual inspection of the structures that could be affected and documentation of structures by means of photographs and video. This documentation will be reviewed with the individual owners prior to any construction activities. Post-construction monitoring of structures will be performed to identify (and repair, if necessary) damage, if any, from construction vibration. Any damage will be documented with photographs and video. This documentation will be reviewed with the individual property owners.

- Place vibration monitoring equipment at the property line adjacent to large equipment and, with owner approval, at the back of the residential structures adjacent to the large equipment. Record measurements daily.

3.16 Public Utilities and Services, Including Emergency Services and Human Safety

3.16.1. Existing Conditions

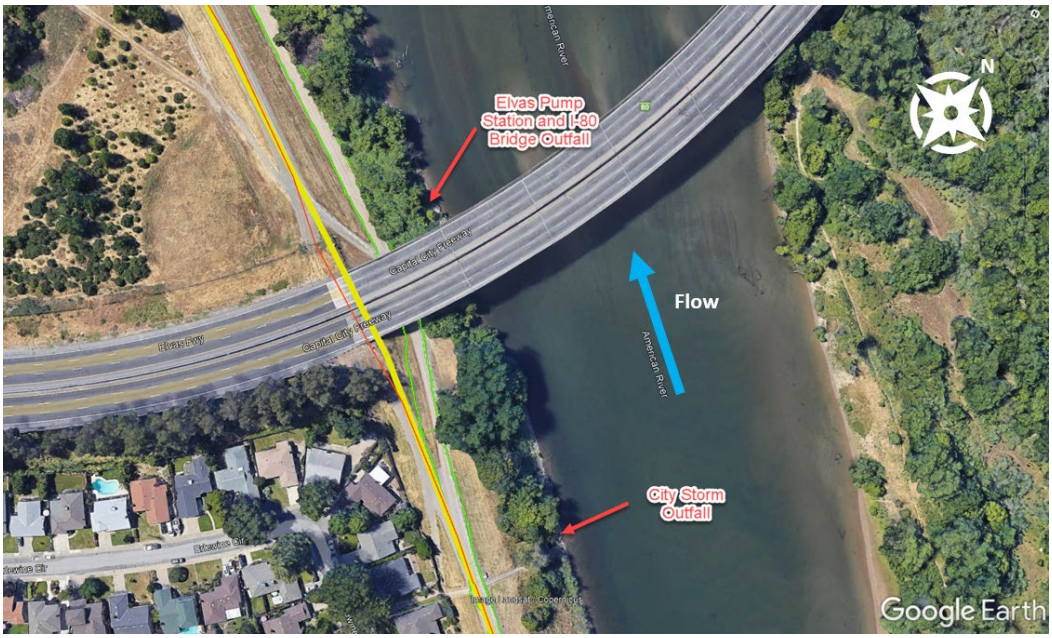

Figure 3- 1 Known Utilities in the Project Area

Section 3.16.1 of the ARCF GRR FEIS/FEIR accurately describes the current regional and local setting with regard to utilities within and adjacent to the Project Area. The following provides additional information specific to the Project Area.

Three known utilities not listed in the ARCF GRR FEIS/FEIR traverse the project area: the Elvas Pump Station outfall pipe, the Business I-80 Bridge runoff pipe, and a City of Sacramento force main outfall and headwall (Figure 3- 1).

3.16.2. Environmental Effects

3.16.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Proposed Action from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. Section 3.16.5 of the ARCF GRR FEIS/FEIR analyzed the impacts to public utilities and service systems and determined that construction-related activities could adversely affect existing overhead power lines, telecommunication facilities, stormwater infrastructure facilities and wastewater infrastructure facilities that are buried, penetrate, or protrude from the levee. These facilities would have to be identified and may have to be removed or relocated prior to or during project

construction. Project-related traffic congestion and access limitations within the project footprint could hamper fire and police services, but it is unlikely for construction and operational activities associated with the project to necessitate increased fire or police protection services.

3.16.2.2. Proposed Action

Even though the erosion protection locations upstream of the Business I-80 Bridge were not analyzed in the ARCF GRR FEIS/FEIR, the Project Area is similarly situated and has similar land uses as the sites that were analyzed. In addition, the erosion protection added to the levee does not increase the overall 11 miles of erosion protection analyzed in the ARCF GRR FEIS/FEIR. Consequently, the public utilities and service systems analysis already done in the ARCF GRR FEIS/FEIR is deemed applicable to the impacts from the Proposed Action. However, additional analysis is needed for parts of the Proposed Action that were not considered in the ARCF GRR FEIS/FEIR analysis.

Specific utility locations were not analyzed in the ARCF GRR FEIS/FEIR. However, the LAR Contract 3A erosion protection features have been designed to avoid adjacent utilities. A ditch with riprap will be installed below the Elvas Pump Station outfall. Revetment placement has been designed to be at grade above the Business I-80 runoff pipe. The launchable rock toe and planting bench features have been designed around the City of Sacramento force main head wall, while a rock apron will be installed at the force main outfall. Since the project will be designed to avoid these resources, it will cause only minor impacts to nearby utilities.

There are also likely utilities at some of the staging areas in Sutter's Landing Park. Know utilities at the staging areas include gas wells, gas piping, monitoring equipment, and solar panels. In addition, the access point through Glenn Hall Park also has utilities such as electrical lines, electrical infrastructure and water pipes that may interfere with project construction, depending on how contractor access through the area is configured. The implementation of mitigation measures listed in Section 3.16.6 of the ARCF GRR FEIS/FEIR and listed below will reduce any impacts from the Proposed Action to these utility facilities to a less than significant level.

The extent and intensity of proposed construction activities, including road closures and traffic circulation patterns associated with the Proposed Action, could increase the need for first responders to quickly respond to emergency situations in the Project Area due to the increased traffic and the increased construction equipment near a recreational facility. This could result in a temporary significant impact on the capacity of emergency response services. Implementation of mitigation measures provided in Section 3.16.6 of the ARCF GRR FEIS/FEIR will reduce impacts on associated emergency response services, because USACE will prepare and implement a response plan to streamline access points and reduce response times and will notify first responders of the potential for disruptions in the Project Area. With the implementation of these measures, impacts to utilities and public services are anticipated to be short-term and minor.

A few homeless encampments are currently present near or within the erosion protection footprint. The Proposed Action may cause temporary displacement of people and their property. To ensure the safety of all those involved, if homeless people are present in areas where construction will occur as part of the project, USACE, CVFPB, and the construction contractor

will work with the City and County of Sacramento and the City of Sacramento's Police Department to notify and remove homeless camps while construction occurs. Additional information on the homeless population is discussed in section 3.17 of this SEA.

Overall, impacts to known utilities from construction activities will be minor due to avoidance in the designs. In addition, impacts to utilities from haul routes and staging areas will be minor after mitigation measures are implemented. The impact of the Proposed Action on the ability of first responders to respond to emergencies in the area will also be minor after mitigation measures are implemented.

Additional Avoidance, Minimization and Mitigation Measures

- USACE and the CVFPB will coordinate with applicable utility and service providers to implement the orderly relocation of utilities that need to be removed or relocated.

3.17 Environmental Justice

3.17.1. Existing Conditions

Section 3.18.1 of the ARCF GRR FEIS/FEIR has been updated below in this SEA to address the most up to date information.

According to the 2020 census, Sacramento County had a population of approximately 1.6 million. The population projection for Sacramento County is 1.7 million people by 2025. Expected population growth is likely to occur outside the project area, where vacant land could be developed.

According to the 2020 Census data, of the 1.6 million people in Sacramento County, 46.35% are white, 18.88% are Asian, 13.18% are African American, and the remaining 11.69% are of other ethnic backgrounds. The median household income is $70,684, slightly less than the State average of $77,358. There are 12.5% of the people below poverty level, which is slightly less than the statewide average of 16.4%. In 2022, the median value of homes is $540,000, lower than the forecasted State average of $834,400.

In 2016 there were approximately 2,232 individuals and families experiencing homelessness, in 2019 that number had risen to approximately 5,500 individuals and families, 2022 numbers are not yet available. California has one of the highest populations of unhoused people in the Nation. Sacramento County currently has seven shelters, and more than 20 food distribution sites. As part of the Fiscal Year 2021/22 budget, the Sacramento County Board of Supervisors increased their annual commitment of funding by more than $15 million to expand outreach, shelter and housing services for people living unsheltered in encampments and in vehicles. They also have established sanctioned encampment sites, a.k.a. Stay Safe Community to assist unhoused individuals.

3.17.2. Environmental Effects

3.17.2.1. No Action/No Project Alternative

Under the No Action/No Project Alternative, the Preferred Alternative from the ARCF GRR FEIS/FEIR would be implemented. Bank protection or launchable rock trench would be installed at the site downstream of the Business I-80 Bridge. Vegetation removal would take place outside of nesting season and the sites would be replanted. In addition, the erosion protection, vegetation removal activities, regreening activities, and construction of mitigation sites associated with LAR Contract 1 SEA/SEIR and LAR Contract 2 SEIS/SEIR would be undertaken. Section 3.18.5 of the ARCF GRR FEIS/FEIR analyzed the impacts to environmental justice and stated that the benefits of the ARCF 2016 Project would extend to all of the Sacramento Metropolitan area; therefore it would not provide disproportionate benefits or effects to any minority or low income populations. Therefore, the effect would be less than significant.

3.17.2.2. Proposed Action

The Proposed Action would occur within the general area that was analyzed for environmental justice in Section 3.18.5 of the ARCF GRR FEIS/FEIR. The ARCF GRR FEIS/FEIR determination that the implementation of the ARCF 2016 Project will not provide disproportionate effects to any minority or low-income populations still applies to the Proposed Action, given the reduction of flood risk is beneficial across the region. Consequently, the environmental justice analysis already done in the ARCF GRR FEIS/FEIR and the determination that the impact from the ARCF 2016 Project on environmental justice is less than significant is deemed applicable to the impacts from the Proposed Action.

However, the ARCF GRR FEIS/FEIR did not address the overall project's potential effects on homeless populations within the proposed construction footprint. A few homeless encampments are currently present near or within the erosion protection footprint. The Proposed Action may cause temporary displacement of people and their property. To ensure the safety of all those involved, if homeless people are present in areas where construction will occur as part of the project, USACE, CVFPB, and the construction contractor will work with the City and County of Sacramento and the City of Sacramento's Police Department to notify and remove homeless camps while construction occurs. Additionally, to ensure the safety of the homeless population, a Transient Population Safety Plan will be developed before construction. This plan will depict proposed phasing, signage, fencing, and other protective measures to provide for the safety of the public and homeless community.

A recent On March 15, 2022 USACE released a guidance memo entitled 'Implementation of Environmental Justice and the Justice 40 Initiative' states that if adverse effects of Civil Works programs and services are identified, USACE will take steps to avoid, minimize, or mitigate those impacts to the greatest extent reasonable. This memo instructs USACE to utilize CEQ's Climate and Economic Justice Screening Tool. This tool was unavailable when the ARCF GRR FEIS/FEIR's environmental justice section was drafted, but its directives are followed here by applying CEQ's screening tool to the Proposed Action. The result is shown in Figure 3-2. In addition the EPA's EJScreen Tool was used to identify census tracts with high percentages of low income and high percentages of people of color. The outcome of the tool and maps of these census tracts are in Appendix B.

Figure 3- 2 Results of the CEQ Climate and Economic Justice Screening Tool

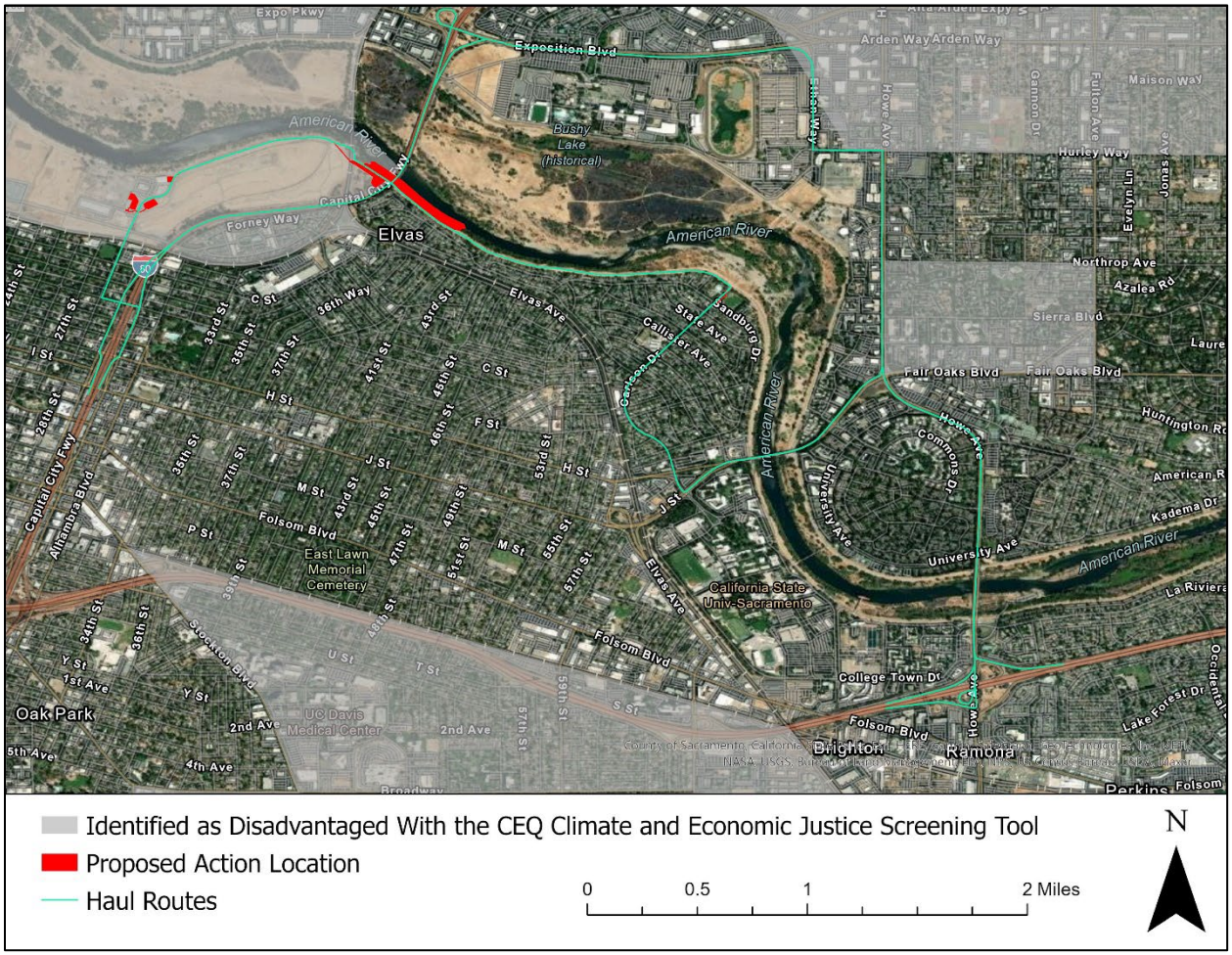

Figure 3- 2 shows one census tract within the project area that is categorized by the Climate & Economic Justice Screening Tool as disadvantaged. However, a freeway separates the erosion protection work area from the closest neighborhood in this census tract. Because of this, there should not be disproportionate impacts to this neighborhood as the freeway will block most of the environmental impacts. The census tracts along the haul routes that were identified as disadvantaged (Figure 3- 2 and Appendix B) are already busy streets, and the additional traffic from the Proposed Action shouldn't disproportionately impact traffic and noise within these neighborhoods because the baseline condition is a high level of traffic. Based on the Climate and Economic Justice Screening Tool, the Proposed Action would cause negligeable environmental justice impacts.

Chapter 4. Cumulative

On May 19, 2022 the Assistant Secretary of the Army for Installations, Energy and Environment distributed formal guidance for implementation of the Council on Environmental Quality's 2020 update to NEPA regulations. The guidance applies to "[a]ny NEPA analyses not finalized and approved before 20 May 2022," and re-imposes the "obligation to ensure that NEPA analyses will consider direct, indirect, and cumulative effects." See SAI-ZA (AR 200-1) Memorandum dated 19-May-2022, para. 4(c)(1). CEQ defines effects to include cumulative effects, which are the impacts on the environment resulting from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions (40 C.F.R. § 1508.1). The ARCF GRR FEIS/FEIR summarizes many Projects and Cumulative Impacts that may occur. The following includes projects that were not included in the ARCF GRR FEIS/FEIR or updates to projects that were included in the ARCF GRR FEIS/FEIR.

4.1 Related Projects with Potential Cumulative Effects

4.1.1. Projects Contributing to Potential Cumulative Effects

This section briefly describes other similar or related projects, focusing on flood-risk reduction and habitat restoration projects that have similar effect mechanisms and affect similar resources as the Proposed Action.

Past and present projects and activities have contributed on a cumulative basis to the existing environment within the Project Area via various mechanisms, such as the following:

- conversion of natural vegetation to a disturbed state, to an agricultural use, or to a developed use;
- increased traffic congestion near the Project Area;
- additional noise sources near the Project Area;
- prolonged recreational impacts along the American River and;
- alteration of riverine hydrologic and geomorphic processes by flood management, water supply management, and other activities.

Several major past, present, and foreseeable future projects are considered in this cumulative effects analysis. For elements of these projects proposed for future implementation, the construction timing and sequencing is highly variable and may depend on uncertain funding sources. However, each of these past, present, and probable future projects must be considered in the context of environmental effects from the Proposed Action to properly evaluate the cumulative effects of this action and these other similar projects on the environment.

4.1.1.1. American River Common Features 2016 Project

The greater ARCF 2016 Project is scheduled for construction from 2019 through 2024. The project would involve construction of levee improvements along the American River levees. The levee improvements scheduled for implementation include construction of erosion protection and mitigation sites. Rossmoor West Mitigation Site, Rossmoor East Mitigation Site, Rio Americano East Mitigation Site, Rio Americano West Mitigation Site, Paradise Bend (formally called Glenn Hall) Mitigation Site, LAR Contract 1 regreening, LAR Contract 2 erosion protection work, LAR Contract 2 regreening, and LAR Contract 3B tree clearing may overlap temporally with LAR Contract 3A erosion protection work. Other LAR projects that would occur at a different time but nearby include LAR Contract 1 (tree clearing, erosion protection, and regreening), LAR Contract 3B (erosion protection, and regreening), and LAR Contract 4A (tree clearing, erosion protection, and regreening).

4.1.1.2. Sacramento River Bank Protection Project

The Sacramento River Bank Protection Project (SRBPP) was authorized to protect the existing levees and flood control facilities of the Sacramento River Flood Control Project. The SRBPP directs the Corps to provide bank protection along the Sacramento River and its tributaries, including the portion of the lower American River bordered by Federal flood control project levees. The SRBPP was authorized in 1960 to be constructed in phases. Bank protection has generally been constructed on an annual basis and work has occurred on both the Sacramento and American Rivers. WRDA 2007 authorized an additional 80,000 linear feet of bank protection. This additional work will be implemented under the SRBPP Post Authorization Change Report, which received approval in June 2020. This project is ongoing as of the date of this SEA. The specific location of the 80,000 linear feet of levee protection work is unknown at this time, but there is a chance that work will occur on the American River.

4.1.1.3. Folsom Dam Water Control Manual Update

The Folsom Dam Water Control Manual (WCM) was updated in 2019 to reflect authorized changes to the flood management and dam safety operations at Folsom Dam to reduce flood risk in the Sacramento area. The WCM Update utilizes existing and authorized physical features of the dam and reservoir, specifically the recently completed auxiliary spillway. Along with evaluating operational changes to utilize the additional capabilities created by the auxiliary spillway, the WCM Update assessed the use of available technologies to enhance the flood risk management performance of Folsom Dam to include a refinement of the basin wetness parameters and the use of real time forecasting. The WCM Update evaluated options for the inclusion of creditable flood control transfer space in Folsom Reservoir in conjunction with Union Valley, Hell Hole, and French Meadows Reservoirs (also referred to as Variable Space Storage). The WCM has a flood performance goal of routing 1/100 and 1/200 annual exceedance probability events at 115,000 and 160,000 cfs respectively (USACE, BOR, CVFPB, and SAFCA 2019).

4.1.1.4. Folsom Dam Raise

Now that the Joint Federal Project is completed, construction of the Folsom Dam Raise Project has begun. The Dam Raise Project includes raising the Right- and Left-wing Dams, Mormon Island Auxiliary Dam, and Dikes 1-8 around Folsom Reservoir by 3.5 feet. The Dam Raise project authorization also includes three ecosystem restoration projects (automation of the temperature control shutters at Folsom Dam and restoration of the Bushy and Woodlake sites downstream). The temperature control shutters are in early designs. New operation rules that will utilize the operational flexibilities provided by the dam raise will require an additional update to the WCM. Any flood risk management operation changes required to implement the Folsom Dam Raise Project will be analyzed in detail in a subsequent WCM Update and accompanying environmental document when proposed changes to operation rules have been developed to a sufficient level of detail to be evaluated.

Construction started with Dike 8 which began in 2019 and was completed in 2020. It is anticipated that the Main Dam and the Right- and Left-wing Dams will begin construction in 2022 and will take approximately 4 years to complete. Dikes 1-6 are anticipated to start construction in 2023 and will take approximately 2 years to complete. Mormon Island Auxiliary Dam is anticipated to start construction in 2023 and will take approximately 1 year to complete. Dike 7 is anticipated to start construction in 2023 and will take approximately 1 year to complete.

4.1.1.5. Lower American River Anadromous Fish Habitat Restoration Project

The City of Sacramento and the U.S. Bureau of Reclamation (BOR) proposes to replenish spawning gravel, to create/enhance side channel, floodplain habitat and in-stream habitat structures between RM 13 and 23 of the LAR (City of Sacramento and BOR 2019). This would involve a maximum 30,000 tons of gravel placed in the LAR yearly, not to exceed a total of 450,000 tons over the 16-year duration of the project (City of Sacramento and BOR 2019).

4.1.1.6. Sump Station Facilities Improvement Project

The City of Sacramento is proposing to improve Sump 089, Sump 151, Sump 155, Sump 058 and Sump 102. Work is anticipated to last 5 months and may occur in 2023 at the same time as the Proposed Action. Sump 155 is the only Sump near the Proposed action and is located near the H street Bridge. The work done at Sump 155 includes: replacement of welded steel pipes, replacement of corrugated metal pipe, installation of a vault, installation of a gate riser structure, replacement of asphalt, installation of a retaining wall, installation of stairs, and installation of a common outfall structure.

4.1.1.7. U.S. Highway 50 Multimodal Corridor Enhancement and Rehabilitation Project

Caltrans District 3 is working on constructing High Occupancy vehicle lanes and rehabilitating pavement on US 50 from I-5 to Watt Ave. This project will include activities such as adding a carpool lane to each direction of U.S. 50, replacing pavement, constructing retaining

walls, improving ramps, widening bridges, raising bridges, replacing signs, and replacing lighting (Caltrans 2022). This work has required lane closures, lane shifts and speed limit reductions on U.S. 50 (Caltrans 2022). Work will require pile driving and other loud construction activities (Caltrans 2022). Construction for this work is scheduled to be finished by the end of 2024 or early 2025 (Caltrans 2022).

4.1.1.8. City of Sacramento Two-River Trail Phase II Project

The Two Rivers Trail Phase II Project (Two Rivers Project) is a City of Sacramento Project that will connect Sutter's Landing to H Street with a paved multiuse trail. The trail would include an 8 feet wide path with a 2 feet wide shoulder on the land side of the trail and a 6 feet wide shoulder on the water side of the trail (City of Sacramento 2019). This trail will be paved and will be engineered to be load bearing (City of Sacramento 2019). Construction for this project has been proposed to occur in 2023. The new trail would go through the LAR Contract 3A project site. Construction of this project will occur in the vicinity of LAR Contract 3A.

4.1.1.9. American River Bridge Deck Improvement Project

The California Department of Transportation (Caltrans) plans to rehabilitate the American River Bridge along State Route (SR) 51 in Sacramento County from post mile 2.0 to 3.5. The project would remove and replace the existing concrete deck, remove and replace the steel girder post-tensioning systems in spans 1 and 2, modify the existing soundwall, install sheet piling around piers for scour mitigation, construct concrete catcher blocks, widen the bridge to accommodate traffic during construction, add a Class I bike/pedestrian path, and plan for future transportation needs on SR 51 (Caltrans 2020). This project requires removal of materials in the American River and requires vegetation removal. Part of this project is in the same area as LAR Contract 3A. Construction of this project has been proposed to begin in 2022 and will last until 2025.

4.2 Cumulative Effects

4.2.1. Recreation

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that though multiple projects occurring in the same vicinity could impact recreationalists, there were no heavy construction impacts occurring in the American River Parkway, so there will be no activities to create a cumulative effect. However, this is no longer the case.

Since the ARCF GRR FEIS/FEIR was finalized, additional work in the American River Parkway has been planned. Specifically, the LAR Contract 1 Project, Two Rivers Project and the American River Bridge Deck Improvement Project will occur in the American River Parkway near the Proposed Action. LAR Contract 1 work has required closure of the top of levee between just upstream of the H Street Bridge to Glenn Hall Park. This closure lasted from January to February of 2022 for vegetation removal and the construction portion of the project will last between May and November of 2022. A detour has been provided to minimize recreational impacts to those who use the top of levee to recreate. Two additional projects will also be utilizing the top of levee for construction access. The Two Rivers Project will include work on

top of the levee that requires closure of the levee and the American River Bridge Deck Improvement Project might require access to the Business I-80 bridge using the top of levee. The Proposed Action will close the top of levee at some points in fall of 2022 or winter of 2023 for tree removal and during erosion protection construction between May and November of 2023 because high truck traffic adjacent to recreational users will create safety issues. The Two Rivers Project would have a soft closure of the top of the levee from H street to the UPRR tracks from approximately April to November. Caltrans could also have soft closures as well from January to August of 2023, however truck traffic would be very light for Caltrans work so closures may not occur. Overall, between the Proposed Action, the Two Rivers Project, and the American River Bridge Deck Improvement Project there could be some sort of closures of the top of levee from May 2022 to the end of 2023. In addition the Sump Station Facilities Improvement Project will have work on the top of the levee upstream of the Proposed Action. This could cause a temporary significant unavoidable impact to those wanting to walk or ride their bikes in the area. However, additional measures will be implemented to lessen the impact to recreation. Caltrans, the City of Sacramento and USACE will coordinate detours of the top of levee. The bike detour for the Proposed Action will also detour the Sump Station Facilities Improvement Project. In addition, outreach signage will be placed at the beginning and end of closures so those wanting to use the top of levee can know alternative routes. Outreach will also be provided to the neighborhoods so those who typically recreate in the area can know when closures will be occurring. All Glenn Hall Park recreational facilities and Paradise Beach will be open during this time so there are still recreational options in the area for those wanting to recreate in the area. Because of coordination, outreach and recreational facilities in the area remaining open, the temporary significant impact to recreation will be decreased to a temporary less than significant, but adverse impact.

In addition, LAR Contract 1, the Two Rivers Project, Mitigation Projects at Paradise Bend and Caltran's American River Bridge Deck Improvement Project may all need to access the levee from Glenn Hall Park over a 2-3 year period. To minimize this impact to the park, an entrance point has been installed through the eastern row of parking spots at Glenn Hall Park, but all other recreational facilities at the site will remain open. This entrance point will remain open for up to 2 years to allow a smooth transition between projects. Outreach signs will be provided at Glenn Hall Park showing which recreational resources are still open and how to access the resources. In addition to local signage, the local neighborhoods will be notified of the closures via mailers. Because outreach will be provided to the public, and only a few parking spots to Glenn Hall will be impacted from the new entrance, and all other recreation facilities will remain open, there will only be temporary adverse impacts to recreation that will be less than significant.

4.2.2. Visual Resources

LAR Contracts 1, 2, 3A, 3B, and 4A will require removal of vegetation at the project sites. The ARCF GRR FEIS/FEIR determined that implementation of the ARCF 2016 Project, when combined with other future projects in the vicinity, will result in a significant cumulative impact on visual resources, primarily from removal of vegetation. In addition, the ARCF GRR FEIS/FEIR determined that the long time period for replanted vegetation to reach a size similar to the vegetation removed as a result of construction will be considered a cumulatively

significant effect on visual resources along the LAR. These determinations are consistent with the LAR Contract 3A Proposed Action so there are no new impacts to visual resources based on the changes from what was already analyzed in the ARCF GRR FEIS/FEIR.

4.2.3. Vegetation and Wildlife

LAR Contracts 1, 2, 3A, 3B and 4A will require removal of vegetation at the project sites. In addition, the American Bridge Deck Improvement Project and the Two Rivers Project required removal of vegetation in the American River Parkway. The ARCF GRR FEIS/FEIR determined that potential cumulative adverse effects on biological resources will be significant due to the amount of habitat being removed to construct the project and the time lapse before the new plantings will mature to the level of those removed. Once all the mitigation and compensation plantings have matured to the level of those removed, the cumulative effects to biological resources will be less than significant because the new habitat will be similar to those removed over the 50-year life of the project. In addition, any future projects on the levees would be complying with the Corps' vegetation policy and could result in the removal of vegetation along waterways for projects that do not receive a vegetation variance. These determinations will be applicable to the LAR Contract 3A Proposed Action as well, so there are no new impacts based on the changes from what was already analyzed in the ARCF GRR FEIS/FEIR.

4.2.4. Fisheries

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that implementation of the ARCF 2016 Project will result in direct loss of fish habitat from construction from projects like the Sacramento River Bank Protection Project. However, the ARCF GRR FEIS/FEIR determined that projects will mitigate their impacts, improving long term fish habitats. The Water Control Manual Update for Folsom Dam would likely benefit downstream fish species on the American River as well. The ARCF GRR FEIS/FEIR determined that there will be short-term significant cumulative impacts but long term cumulative benefits. In addition to what was discussed in the ARCF GRR FEIS/FEIR, the American River Bridge Deck Improvement Project could impact fish habitat, but will mitigate the impacts creating a net cumulative benefit. Also, the Lower American River Anadromous Fish Habitat Restoration Project would add to this cumulative benefit. The cumulative impacts from the Proposed Action on fisheries would be the same as what was already analyzed in the ARCF GRR FEIS/FEIR. There will be no new cumulative impacts from the Proposed Action on fisheries.

4.2.5. Federal Status Species

Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that because elderberries will be transplanted in close proximity to sites and because planting native plants near transplanted elderberries will create connectivity, the transplanting of shrubs and compensation within the same area as the potential impacts will result in adverse effects to the VELB but not result in jeopardy to VELB. The work for LAR Contract 3A will mitigate for impacts to VELB, so even if nearby projects cause adverse impacts to VELB, the impacts of the Proposed Action are being mitigated. In addition, impacts to VELB are coordinated with

USFWS to ensure the project in conjunction with other projects does not put VELB in jeopardy. Consequently, the Proposed Action, after mitigation, will only cause a short-term adverse impact to VELB.

Western Yellow-Billed Cuckoo (Coccyzus americanus)

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that planting seedlings and native trees in the Project Area will provide some habitat connectivity, filling in gaps in the riparian canopy, so there will be short-term significant impacts while the vegetation grows. Over the long term the impacts will be less than significant once vegetation establishes and grows. LAR Contract 3A will be replanting vegetation, replanting trees, and saving some trees onsite. Because of this, the determination made by the ARCF GRR FEIS/FEIR still applies, so the LAR Contract 3A Proposed Action will be consistent with the ARCF GRR FEIS/FEIR. There are no new impacts based on the changes from what was already analyzed in the ARCF GRR FEIS/FEIR.

Federally Listed Fish Species

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that implementation of the ARCF 2016 Project will have the potential to contribute to the loss or degradation of sensitive habitats and to adversely affect salmonids, especially because finding waterside riparian habitat for offsite mitigation will be difficult. There would be a slight improvement to overall salmonid habitat in the area since the Lower American River Anadromous Fish Habitat Restoration Project will be improving spawning habitat for salmonids just upstream of the Project Area. However, the loss of waterside habitat would still occur for the American River Bridge Deck Improvement Project, LAR Contract 1, LAR Contract 2, and LAR Contract 3B. In addition, if Sacramento Bank Protection Projects occur on the LAR, additional waterside habitat would be lost as well. Because LAR Contract 3A is still impacting waterside riparian habitat to a degree that does not exceed the impacts analyzed in the ARCF GRR FEIS/FEIR, and because other projects will similarly impact waterside riparian habitat, the same determination still applies for the LAR Contract 3A Proposed Action in a similar manner to what was discussed in the ARCF GRR FEIS/FEIR. There are no new cumulative impacts to federally listed fish species based on the changes from what was already analyzed in the ARCF GRR FEIS/FEIR.

4.2.6. Cultural Resources

The ARCF GRR FEIS/FEIR determined that cumulative impacts to cultural resources will be primarily related to individual ground disturbance locations, with potential regional implications for individual properties if they are considered as part of a historic district, landscape, or multiple properties that may be ethnographically significant. Additionally, the ARCF GRR FEIS/FEIR determined that cumulative impacts could be related to other construction projects that could occur during the same timeframe as those considered for the ARCF 2016 Projects and within the same vicinity as the ARCF 2016 Projects. The ARCF GRR FEIS/FEIR determined that although mitigation will minimize these impacts, there is still likely a significant cumulative effect to cultural resources. LAR Contract 3A work will include ground disturbing activities and nearby projects such as the Two Rivers Project and the American River Bridge Deck Improvement Project could additionally create ground disturbing activities nearby that could create a

cumulative impact to cultural resources. Because of this, the ARCF GRR FEIS/FEIR's cumulative analysis also applies to the LAR Contract 3A Proposed Action. There are no new impacts to cultural resources based on the changes from what was already analyzed in the ARCF GRR FEIS/FEIR.

4.2.7. Air Quality

Emissions from projects within the same air district risk causing impacts to air quality in the region. USACE has released a conformity determination for public notice in March 2020, and the Final General Conformity Determination for the American River Watershed Common Features 2016 Project was posted in June 2021. The General Conformity Report looked at the entirety of the ARCF 2016 Project and the possible associated emissions. The total NOx emissions of the overall ARCF 2016 Project are expected to exceed the EPA's General Conformity *de minimis* thresholds during several of the ARCF 2016 Project's construction years, including 2023, when the LAR Contract 3A Proposed Action is anticipated to be constructed. The proposed project without mitigation would result in a cumulatively considerable incremental contribution to a significant cumulative effect related to regional air quality; however, the proposed project's contribution would be mitigated through implementation of mitigation measures described in Section 3.11 of the ARCF GRR FEIS/FEIR and in Section 3.10.2.2 of this SEA. Therefore, with mitigation, the proposed project does not create an incremental contribution to the significant cumulative effect.

4.2.8. Transportation and Circulation

The ARCF GRR FEIS/FEIR did not assess the cumulative impacts of transportation and circulation. Six projects are proposed to occur in the American River Parkway near the Proposed Action: The Proposed Action, the Two Rivers Project, the American River Bridge Deck Improvement Project, the LAR Contract 1 Project, the Sump Station Facilities Improvement Project, and the Paradise Bend Mitigation Project. The majority of the truck traffic will be coming from LAR Contract 1 and Contract 3A. The Two Rivers Project, the American Bridge Deck Improvement Project, Sump Station Facilities Improvement Project, and Paradise Bend Mitigation Project would only have minimal vehicle traffic through the area. There will be approximately 10 round trips per day for the Two Rivers Project and there could be 10 round trips per day for the American Bridge Deck Improvement Project. In addition most of the traffic from the Sump Station Facilities Improvement Project would only be workers driving to the site each day. Paradise Bend Mitigation Project would only have pickup truck traffic that would be accessing the site a few times a day. The truck traffic from LAR Contract 1 and LAR Contract 3A will cause multi-year construction, traffic, and detours that will increase traffic congestion to those living nearby and to those wanting to access Glenn Hall Park and Paradise Beach. USACE, Caltrans, and the City of Sacramento continue to attend a bi-weekly coordination meeting to ensure that construction, construction traffic, and staging of the different projects will overlap as little as possible. In addition, there has already been outreach for work done for LAR Contract 1: signs have been placed at Glen Hall Park, notification letters were mailed to the neighborhood, and coordination has been done with the nearby school. Similar mitigation measures will also be implemented for LAR Contract 3A and through signage and public outreach to ensure that

impacts to the neighborhood is minimal and the public is aware of the work that will occur. Due to project coordination and public outreach, impacts to local traffic will be decreased to a temporary and adverse, but less than significant impact.

If other projects occur in the general area and if vehicles for those projects will use Business 80 and U.S. 50, there could be a temporary significant cumulative impact on traffic on those highways. In particular the U.S. Highway 50 Multimodal Corridor Enhancement and Rehabilitation Project involves lane shifts, lane closures, and speed reductions on U.S. 50, which is part of the haul route for the Proposed Action. This work is scheduled to finish in 2024 or early 2025. Because this project will overlap with the Proposed Action, there could be a temporary significant impact on traffic on these major roads. However, the Proposed Action and the U.S. Highway 50 Multimodal Corridor Enhancement and Rehabilitation Project both include Traffic Control and Road Maintenance Plans as mitigation measures. The implementation of these plans will prevent temporary cumulative transportation impacts from becoming significant.

4.2.9. Climate Change

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that GHG emissions from multiple projects throughout the world could result in a cumulative impact in respect to climate change. The mitigation measure to purchase carbon credits, however, will decrease this impact to minor for LAR Contract 3A, limiting its cumulative impact on climate change through GHG emissions. The ARCF GRR FEIS/FEIR determined that because the ARCF 2016 Project is related to flood risk management, the work will have the potential to reduce potential emissions that will be associated with flood fighting and emergency actions. As LAR Contract 3A, LAR Contract 1, LAR Contract 2, LAR Contract 3B, LAR Contract 4A and SRBPP are being constructed to reduce flood risk. There is a potential for a beneficial cumulative effect from the Proposed Action on climate change.

4.2.10. Hydrology and Water Quality

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that other construction projects that occur in the same timeframe as the ARCF 2016 Project could result in increased turbidity. However, any project impacting the water will have to coordinate work with the CVRWQCB on overall water quality to meet Basin Plan objectives, as required by the receiving water limitations in the CWA 401 Water Quality Certification. This is still applicable for LAR Contract 3A. Following the requirements of the CWA 401 Water Quality Certification and mitigation measures listed in Section 4.2 of the ARCF GRR FEIS/FEIR will reduce the incremental impacts from the Proposed Action. Therefore, with mitigation, the proposed project does not create an incremental contribution to the significant cumulative effect on water quality.

The ARCF GRR FEIS/FEIR determined that there will not be a cumulative impact on hydrology. Construction projects on the banks of the LAR have the chance of increasing the stage level of water levels as water flows through the area by altering the hydraulics of the river. These risks may result in over topping of levees if all the proposed actions are not considered properly by the USACE cumulative modeling team. All USACE Projects will be considered by

this cumulative risk team, so the SRBPP, Folsom Dam WCM Update, Folsom Dam Raise and other ARCF 2016 Projects will be assessed by the cumulative risk team to ensure that the projects are designed in a manner that will limit the risk of overtopping.

The Lower American River Anadromous Fish Habitat Restoration Project would involve placing gravel upstream of the Proposed Action. The addition of gravel was modeled to not affect the streambed elevation downstream of RM 12 (City of Sacramento and BOR 2019). The model run for the Lower American River Anadromous Fish Habitat Restoration Project determined that adding 30,000 tons per year would not affect the capacity of the LAR channel due to a sediment trap between RM 10.5 and 13.5. (City of Sacramento and BOR 2019). Because the USACE projects will be assessed for stage increased and because the Lower American River Anadromous Fish Habitat Restoration Project model showed that the project was not anticipated to impact the streambed elevation below RM 12, there will not be a significant cumulative impact on hydrology.

4.2.11. Noise

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that cumulative impacts to noise will result from multiple construction projects being near one another. If the Two Rivers Project and the American River Bridge Deck Improvement Project occur the same time as the Proposed Action, there could be temporary significant cumulative impacts for noise near the Proposed Action as multiple large construction projects are in the area. With the current schedule the American Bridge Deck Improvement Project would be occurring at the same time as the Proposed Action. The American Bridge Deck Improvement Project, which is further away from sensitive receptors than the Proposed Action, determined that there would be a less than significant impact to noise. In addition, the Proposed Action includes mitigation measures to reduce impacts from noise to a less than significant level. These mitigation measures are listed in Section 4.2.4 of the ARCF GRR FEIS/FEIR and in Section 3.15.2.2 of this SEA. Therefore, due to mitigation measures, the Proposed Action does not create an incremental contribution to the significant cumulative effect.

4.2.12. Public Utilities and Services, Including Emergency Services and Human Health

The ARCF GRR FEIS/FEIR determined in its cumulative impacts analysis (Section 4.2.4) that cumulative impacts to Public Utilities and Services was not significant. Any impacts to utilities for the Proposed Action will be minor and isolated from impacts caused by other projects. The Proposed Action will not cause any significant cumulative impacts on Utilities. In addition, impacts to emergency responders have been reduced to less than significant by the Proposed Action and are not anticipated to interfere with impacts from other projects.

4.2.13. Environmental Justice

As discussed in Section 3.17.2.2, there would be negligible impacts to Environmental Justice from the Proposed Action. There is a freeway blocking the only disadvantaged neighborhood from the project footprint and the haul routes near disadvantaged communities

already have a baseline of high volumes of traffic. Because impacts from the Proposed Action on Environmental Justice are negligible, the Proposed Action is not expected to incrementally contribute to a significant cumulative impact.

Chapter 5. Compliance with Federal Laws and Regulations

5.1 Federal Laws and Regulations

Certain Federal laws and regulations require issuance of permits before project implementation; other laws and regulations require agency consultation but may not require issuance of any authorization or entitlements before project implementation. For each of the laws and regulations addressed in this Section, the description indicates either full compliance (indicated the term "Compliance") or partial compliance (indicated by the term "Partial Compliance"); if partial compliance is indicated, full compliance will be achieved prior to issuance of a NEPA decision document.

Clean Air Act of 1963, as amended, 42 USC 7401, et seq.

Compliance. The Federal Clean Air Act (CAA) requires the U.S Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS). EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, PM10, PM2.5, CO, NO2, SO2, and lead. The primary standards protect the public health, and the secondary standards protect public welfare. The CAA also requires each state to prepare an air quality control plan, referred to as a State Implementation Plan.

USACE released a conformity determination for public notice in March 2020, and the final report was posted in June 2021. Total NOx emissions of the overall ARCF 2016 Projects are expected to exceed the EPA's General Conformity *de minimis* thresholds during several of the ARCF 2016 Project's construction years, including 2023. USACE expects to purchase a sufficient quantity of offsets for NOx emissions from SMAQMD.

Endangered Species Act of 1973, as amended, 16 USC 1531, et seq.

Compliance. Pursuant to the Endangered Species Act (ESA), USFWS and NMFS have regulatory authority over Federally listed species. Under the ESA, a permit to "take" a listed species is required for any Federal action that may harm an individual of that species. Take is defined under ESA Section 9 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Under Federal regulation, take is further defined to include habitat modification or degradation where it would be expected to result in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. ESA Section 7 outlines procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitat.

Section 7(a)(2) requires Federal agencies to consult with USFWS and NMFS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species. A list of threatened and endangered species that may be affected by the Proposed Action was obtained using the online Information for Planning and Consultation database in 2021. This list can be found in Section 3.6 of the LAR Contract 3A SEIR. USACE formally consulted with USFWS on the ARCF 2016 Project and received a Biological Opinion on September 11, 2015 (USFWS No: 08ESMF00-2014-F-0518). USACE formally consulted with NMFS on the ARCF 2016 Project and received a Biological Opinion on September 9, 2015 (NMFS No: WCRO-2014-1377). Re-initiation of Formal Consultation on the ARCF 2016 Project with USFWS was completed on March 31, 2021 (USFWS No: 08ESMF00-2014-F-0518-R003) and with NMFS on May 12, 2021 (NMFS No: WCRO-2020-03082).

Executive Order 11988, Floodplain Management.

Compliance. The Proposed Action, as an element of the ARCF 2016 Project, will help to mitigate flood risks by improving levees to meet engineering standards associated with the National Flood Insurance Program; it will not alter protection for the 100-year event, nor does it transfer any such risk to other areas. Because the Proposed Action will not directly or indirectly support development in the base floodplain, it will comply with Executive Order (EO) 11988.

Executive Order 11990, Protection of Wetlands.

Compliance. The purpose of EO 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, EO 11990 requires Federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. EO 11990 applies to: a) acquisition, management, and disposition of Federal lands and facilities construction; b) improvement projects which are undertaken, financed, or assisted by Federal agencies; and c) Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities. Forested wetlands are located within the footprint of the Proposed Action and will be impacted during construction activities. However, impacts to forested wetlands will be minimized to the greatest extent feasible. Where feasible, forested wetlands will be restored onsite and additional forested wetlands will be created within the American River and other offsite locations to ensure no net loss of wetlands as a result of implementation of the Proposed Action.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

Compliance. The purpose of EO 12898 is to identify and address the disproportionate placement of adverse environmental, economic, social, or health effects from Federal actions and policies on minority and/or low-income communities. EO 12898 requires that adverse effects on minority or low-income populations be considered during preparation of environmental and socioeconomic analyses of projects or programs that are proposed, funded, or licensed by Federal agencies.

Section 2-2 of EO 12898 requires all Federal agencies to conduct programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons the benefits of, or subjecting persons to discrimination because of their race, color, or national origin. Section 1-101 of EO 12898 requires Federal agencies to identify and address, as appropriate, disproportionately high, and adverse human health, or environmental effects of programs on minority and low-income populations.

The Proposed Action will reduce the risk of flooding to existing residential, commercial, and industrial development protected by LAR levees. The neighborhood nearest the Contract 3A reach of the LAR levee that will be most affected by levee reconstruction work is called River Park. River Park is not considered a low-income or a minority community. Therefore, the Proposed Action is not anticipated to have disproportionately high adverse environmental effects on any minority or low-income population, as disclosed in the ARCF GRR FEIS/FEIR.

Executive Order 13112, Invasive Species.

Compliance. EO 13112 directs Federal agencies to take actions to prevent the introduction of invasive species, provide for control of invasive species, and minimize the economic, ecological, and human health impacts that invasive species cause. EO 13112 also calls for the use of native plants and tree species for site stabilization and restoration. Project construction activities have potential to introduce new invasive plants or spread existing invasive plants at the Project Area. Temporarily disturbed areas will be hydroseeded with a native seed mix that may include sterile non-native species for erosion protection and to prevent colonization of exotic vegetation. In addition, once the project is over, native riparian plants, such as Box elder (*Acer negundo*), Valley Oak (*Quercus lobata*), Willow (*Salix spp.),* grape (*Vitis californica),* Toyon (*Heteromeles arbutifolia*), and rushes (*Juncus spp.*) will be used to replant the site.

Federal Clean Water Act as amended, 33 USC 1251, et seq.

Partial Compliance. EPA is the lead Federal agency responsible for water quality management. The CWA of 1972, as amended (33 USC 1251 et seq.), is the primary Federal law that governs and authorizes water quality control activities by EPA, as well as the State. The Proposed Action will involve construction activities and/or the placement of fill materials near and within Waters of the United States and must comply with permit requirements of Sections 401 and 404 of the CWA. A consistency review per Section 404(b)(1) of the CWA analysis, has been conducted; see Appendix J of the LAR C3A SEIR. USACE obtained a programmatic Water Quality Certification from the CVRWQCB on July 13, 2021. USACE will request authorization from the CVRWQCB to start construction of the Proposed Action under the Programmatic General Permit, Report Type 1 Request for Individual Project Authorization. Prior to construction, the contractor will be required to obtain a Construction General Permit for potential effects on stormwater discharge, including preparation of a Storm Water Pollution Prevention Plan. With implementation of these permits, the Proposed Action will comply with the CWA.

Fish and Wildlife Coordination Act of 1958, as amended, 16 USC 661, et seq.

Compliance. The Fish and Wildlife Coordination Act ensures that fish and wildlife receive consideration equal to that of other project features for projects that are constructed, licensed, or permitted by Federal agencies. It requires that the views of USFWS, NMFS, and the applicable State fish and wildlife agency (CDFW) be considered when effects are evaluated, and mitigation needs are determined.

In 2015, during preparation of the ARCF GRR FEIS/FEIR, USACE coordinated with USFWS to consider potential effects to vegetation and wildlife from implementation of the overall ARCF 2016 Project. On October 5, 2015, the USFWS issued a Final Coordination Act Report that provided mitigation recommendations (USFWS File # 08ESMF00-20 13-CPA-0020). USACE considered all recommendations and responded to them in the ARCF GRR FEIS/FEIR. The affected habitats are considered suitable for federally listed species and therefore will be mitigated as described in the BOs. There is overlap of Fish and Wildlife Coordination Act Mitigation with the requirements of the BOs to replace riparian habitats associated with cuckoo and VELB. There are no other non-ESA habitats that will be affected by the Proposed Action that has been required under the Coordination Act Report.

Magnuson-Stevens Fishery Conservation and Management Act.

Compliance. The Magnuson-Stevens Act requires that all Federal agencies consult with NMFS regarding actions or proposed actions permitted, funded, or undertaken that may adversely affect essential fish habitat. Essential fish habitat is defined as "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The American River is designated as essential fish habitat (EFH) for salmon (winter, fall/late fall, and spring-run) and steelhead. The potential effects of the ARCF 2016 Project on EFH are being coordinated with the NMFS under the Magnuson-Stevens Act, and USACE received EFH conservation recommendations from NMFS on September 9, 2015. On September 24, 2015, USACE transmitted a letter to NMFS responding to the recommendations from NMFS. Additional Consultation was completed with NMFS on May 12, 2021 and the project, including the Proposed Action, was included.

Migratory Bird Treaty Act of 1936, as amended, 16 USC 703 et seq.

Compliance. The Migratory Bird Treaty Act (MBTA) domestically implements a series of international treaties that provide for migratory bird protection. The MBTA regulates the taking of migratory birds; the act provides that it would be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird …" (USC Title 16, Section 703). This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA includes several hundred species and essentially includes all native birds. Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health and safety and personal property. The Proposed Action incorporates mitigation measures, as detailed in the ARCF GRR FEIS/FEIR

and Section 3.5.2.2 of this SEA, that minimize the potential for the take of migratory birds because of project work.

National Historic Preservation Act of 1966, as amended.

Compliance. Section 106 of the NHPA and its implementing regulations (36 CFR 800, as amended in 2004) require Federal agencies to consider the potential effects of their proposed undertakings on historic properties. Historic properties are cultural resources that are listed on, or are eligible for listing on, the NRHP (36 CFR 800.16[l]). Undertakings include activities directly carried out, funded, or permitted by Federal agencies. Federal agencies must also allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the proposed undertaking and its potential effects on historic properties.

Because the ARCF 2016 Project is being implemented in phases which may have varying effects on historic properties, USACE executed a Programmatic Agreement (PA) with the CA SHPO to ensure Section 106 compliance. The PA is included in the ARCF GRR FEIS/FEIR as Appendix C, Enclosure 1. The Historic Properties Management Plan (HPMP) is Attachment 3 of Appendix C, Enclosure 1. The PA establishes the process USACE must follow for compliance with Section 106, taking into consideration the views of the signatories and concurring parties and interested Native American Tribes.

In accordance with the PA and the HPMP for the ARCF 2016 Project, USACE has initiated ongoing consultation with Native Americans who attach religious or cultural significance to historic properties, artifacts and human remains that may be affected by the proposed undertaking. In accordance with the PA, USACE will consult with the SHPO, requesting comments on the delineation of the Section 106 Area of Potential Effects (APE), on the adequacy of historic property identification efforts, the methods of cultural investigations, the determinations of eligibility, and on the finding of effect for the Project's phases. USACE has initiated consultation with SHPO and Native American tribes regarding the delineation of the APE for LAR Contract 3A. Consultation is ongoing regarding identification and evaluation of historic properties, and the finding of effect for this Project phase and will be completed prior to award of LAR Contract 3A. Accordingly, the Proposed Action will comply with Section 106 of the NHPA.

Determinations of the specific measures to be implemented to resolve adverse effects to known Historic Properties will be made by USACE, in consultation with the SHPO and Consulting Parties to the PA, as required by the PA and as described in detail in the HPMP for the ARCF 2016 Project. Should USACE make a finding of adverse effect to an historic property for LAR Contract 3A, specific measures that are consistent with the PA and the HPMP will be addressed in an HPTP. Other mitigation and minimization efforts that may be implemented are identified in the ARCF GRR FEIS/FEIR to address potential impacts to unknown cultural resources that could be discovered during construction.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 USC 4601 et seq.

Compliance. Federal, State, regional, and local government agencies, and others receiving Federal financial assistance for public programs and projects that require the acquisition of real property, must comply with the policies and provisions set forth in the Uniform Relocation Assistance (URA) and Real Property Acquisition Policies Act of 1970, as amended in 1987 (the URA), and implementing regulation, 49 CFR Part 24. Relocation advisory services, moving costs reimbursement, replacement housing, and reimbursement for related expenses and rights of appeal are provided in the URA. All or portions of some parcels within the LAR Contract 3A footprint will need to be acquired for project construction. All property acquisitions will comply with the URA and will be conducted by the Central Valley Flood Protection Board and the Sacramento Area Flood Control Agency, partners on the ARCF 2016 Project.

Wild and Scenic Rivers Act (16 U.S.C. 1217, et seq.)

Partial Compliance. This act was enacted to preserve selected rivers or sections of rivers in their free-flowing condition in order to protect the quality of river waters and to fulfill other national conservation purposes. The Lower American River, below Nimbus Dam, has been included in the Federal Wild and Scenic Rivers system since 1981. The values for which the Lower American River were designated include anadromous fishery resources and recreation. The Proposed Action is consistent with the land use management, flood risk reduction, and levee protection policies of the American River Parkway Plan, the management plan for the Wild and Scenic Rivers Act. These policies require that flood management agencies maintain and improve the existing flood control system and manage vegetation in the American River Parkway to maintain the structural integrity and conveyance capacity of the flood control system, consistent with the need to provide a high level of flood risk reduction (Sacramento County 2008). However, the significant impacts of the Proposed Action to recreation facilities within the American River Parkway will cause direct and adverse effects to the recreational outstandingly remarkable value of the river, as designated under the Wild and Scenic Rivers Act. Similarly, construction-related impacts will cause a direct but temporary adverse effect to the extraordinary fisheries value, and the fisheries habitat will improve over the baseline condition after completion of construction due to the planting berms and additional SRA habitat of the Proposed Action, enhancing bank shading and protection over the long term. A letter was sent to the National Park Service in September of 2020 initiating discussion on the ARCF 2016 Project in relation to the Wild and Scenic Rivers Act (USACE 2020). A consistency determination is being coordinated with the National Park Service and will be in place before the Proposed Action designs are finalized.

Chapter 6. Coordination of the Supplemental Environmental Assessment

This Draft SEA was initially circulated for 45 days (April 13, 2022 to May 27, 2022) to agencies, organizations, and individuals known to have a special interest in the project. Due to the addition of the foregoing cumulative effects analysis, the Draft SEA was circulated for an additional 15 days (July 8, 2022 to July 23, 2022). Copies of this Draft SEA and the previous Draft SEA were posted on the USACE website and were made available by mail upon request due to COVID-19 restrictions. This project was coordinated with all appropriate Federal, State, and local governmental agencies including USFWS, SHPO, CDFW, and DWR prior to finalization of this document.

Chapter 7. Findings

This SEA evaluates the expected environmental effects of the Proposed Action. Potential adverse effects to the following resources were analyzed in detail: visual resources, vegetation and wildlife, fisheries, special status species, cultural resources, air quality, transportation, climate change, recreation, hydrology and water quality, noise, and public utilities. The analysis presented in this SEA, as well as related field visits and coordination with other agencies, indicate that the Proposed Action will have no new significant adverse effects on environmental resources beyond those already addressed in the ARCF GRR FEIS/FEIR.

As described in 40 CFR, Section 1508.13, a FONSI may be prepared when an action will not have a significant adverse effect on the human environment, and for which an Environmental Impact Statement will not be prepared. Based on this evaluation and the CFR definition, the Proposed Action analyzed in this SEA qualifies for a FONSI.

Chapter 8. Report Writers and Reviewers

This SEA was prepared by USACE, Sacramento District.

The following individuals prepared the SEA, provided important background materials, or provided project description engineering clarifications:

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Appendix A

Cultural Resources
Correspondence

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision (COE120203C)

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Ms. Polanco:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

We are writing to consult on a revision of the Area of Potential Effects (APE) for the upcoming Lower American River Erosion Contract 3 (LAR C3). This project phase was previously comprised of three discontinuous segments of the American River north and south banks in Sacramento, California, between Interstate 80 Business (Capital City Freeway) and Rio Americano High School, upstream of Watt Avenue. The revisions to this APE include adding a fourth segment and splitting the phase into two separate construction contracts, C3A and C3B. C3A includes one segment, 1-1. C3B includes three segments, 3-1, 4-1, and 4-2 as depicted in the enclosed maps (Enclosure 1). Additionally, each contract will now include a Valley Elderberry Longhorn Beetle (VELB) mitigation area.

LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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for C3A measures approximately 19 acres, and the APE for C3B is approximately 80 acres; vertical APE measures approximately 20 feet. Staging areas are included in the APE polygons on the enclosed maps; access will take place on public roads and established levee maintenance roads.

The VELB Mitigation area sites that will be used for C3A and C3B are Glenn Hall, Rossmoor West, and Rossmoor East. Maps of the 3 proposed VELB mitigation areas are enclosed (Enclosure 1). It is not yet known what areas of these mitigation sites will be used for each contract; therefore, the entirety of the mitigation sites has been included in the APE's for C3A and C3B. Once project design is finalized, each APE will be refined to reflect the exact locations of mitigation plantings.

Consulting Parties have also been provided with the enclosed maps and description of project features for concurrent review. If you would like to comment on the APE of LAR C3A and C3B, please respond to Jessica Tudor Elliott by email at: Jessica.L.TudorElliott@usace.army.mil or by phone at 916-557-7133.

Sincerely,

Jessica Phelps
Acting Chief, Cultural, Recreational, and Social Assessment Section

Enclosure

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State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

December 24, 2021 In reply refer to: COE120203C

VIA ELECTRONIC MAIL

Jessica Phelps
Acting Chief,
Cultural, Recreational, and Social Assessment Section
Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814-2922

RE: Consultation for the Lower American River Erosion phase of the American River Common Features Project (ARCF), Sacramento County – Area of Potential Effects (APE) Revision for LAR C3A and C3B.

Dear Jessica Phelps,

The U.S. Army Corps of Engineers (COE) is consulting with the State Historic Preservation Officer (SHPO) pursuant to Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the *Programmatic Agreement among the U.S. Army Corps of Engineers and the California, State Historic Preservation Officer Regarding the American River Common Features Project, Sacramento, Sacramento and Yolo Counties, California* (PA). Executed September 10, 2015. By letter received on December 2, 2021, the COE is seeking comments on their proposal to revise the Area of Potential Effects (APE) to the LAR C3 phase of the ARCF. This Contract phase was comprised of three discontinuous segments of the American Riverbanks in Sacramento between Interstate 80 Business and Rio Americano High School, upstream of Watt Avenue. The proposed APE revision consists of adding a fourth segment and splitting C3 into two areas, C3A and C3B. C3A includes one segment, 1-1, while C4 includes three segments, 3-1, 4-1, and 4-2.

Project activities within LAR C3A and C3B include bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches, and planting in the VELB mitigation areas (Glenn Hall, Rossmoor West, and Rossmoor East, established as part of the LAR C1 and C2 APE). The C3A APE is defined

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as 19-acres with a vertical extent of 20-feet below surface. The C3B APE is defined as approximately 80-acres with a vertical extent of 20-feet below surface.

The COE submitted the following document to illustrate the APE revision:

- *Lower American River Erosion Contract 3 (Figures 1-6)* (USACE n.d.)

The COE reports that the current submission is being concurrently provided to interested Native American Tribes and any comments received will be considered.

- If any of the contacted Native American Tribes or other parties to the PA issue comments to the COE for this construction phase, please convey those comments and how the COE has addressed the received comments to the SHPO.

- Ensure the provided figures are correct in their legends, captions/titles, and labeled figures.

- Please provide a map of the LAR phase marked with each contract in order to place the proposed APE modification within the context of the larger phase and the other associated contracts.

If you require further information, please contact Elizabeth Hodges of my staff at (916) 445-7017 or Elizabeth.Hodges@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

January 6, 2022

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE (COE120203C)

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Ms. Polanco:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

We are writing to provide additional documentation regarding our revision of the Area of Potential Effects (APE) for the Lower American River Erosion Contract 3 (LAR C3) project phase. We previously provided you with an APE description and maps of the C3 APE. In a response letter dated 27 December 2021 you requested a map of the entire LAR project. This map is enclosed for your reference (Enclosure 1). Additionally, a correction has been made to one previously submitted map for Contract 3A Site 1-1 (Enclosure 2). Finally, this letter provides a summary of Native American consultation efforts for the LAR C3A and C3B phases to date.

USACE held a meeting with the United Auburn Indian Community (UAIC) and the Shingle Springs Band of Miwok Indians on November 16th to go over all ARCF upcoming or ongoing project phases and provide updates on the phases, APE descriptions, identification efforts, and construction monitoring plans. Additionally, both UAIC and Shingle Springs were sent emails on 1 December 2021 regarding the initial results of the pedestrian survey of C3A and C3B and to plan for the canine forensics

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survey within these project phases. On 8 December 2021 USACE provided additional information via email to UAIC and Shingle Springs on some potholing depressions that were observed within the river during a site visit and were further investigated during the pedestrian survey. On 16 December USACE provided GIS Shapefiles of C3A and B 65% design footprints.

In response to the information that USACE provided in meetings and emails, the following responses were received. On 17 December 2021 Melodi McAdams from UAIC indicated via email that they had determined in consultation with Shingle Springs that UAIC would be monitoring on LAR Contracts 1 and 2, while Shingle Springs would monitor on LAR C3A and B. UAIC provided desired locations for the canine forensics survey locations within C3B in an email dated 21 December 2021.

On 3 December 2021 a revised APE letter was sent to the following tribes: Buena Vista Rancheria, Colfax-Todds Valley Consolidated Tribe, Colusa Indian Community Council Cachil Dehe Band of WinTun Indians, Ione Band of Miwok Indians, Kletsel Dehe Band of Wintun Indians, Mechoopda Indian Tribe of Chico Rancheria, Mooretown Rancheria of Maidu Indians, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, Southern Sierra Miwuk Nation, Shingle Springs, Strawberry Valley Rancheria, and UAIC. No responses have been received to date.

If you would like to comment on the APE of LAR C3A and C3B, please respond to Jessica Tudor Elliott by email at: Jessica.L.TudorElliott@usace.army.mil or by phone at 916-557-7133.

Sincerely,

Jessica Phelps
Acting Chief, Cultural, Recreational, and Social Assessment Section

Enclosures

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State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

January 20, 2022 In reply refer to: COE120203C

VIA ELECTRONIC MAIL

Jessica Phelps
Acting Chief,
Cultural, Recreational, and Social Assessment Section
Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814-2922

RE: Continuing Consultation for the Lower American River (LAR) Erosion phase of the American River Common Features Project (ARCF), Sacramento County – Area of Potential Effects (APE) Revision for LAR C3A and C3B.

Dear Jessica Phelps,

The U.S. Army Corps of Engineers (COE) is continuing consulting with the State Historic Preservation Officer (SHPO) pursuant to Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the *Programmatic Agreement among the U.S. Army Corps of Engineers and the California, State Historic Preservation Officer Regarding the American River Common Features Project, Sacramento, Sacramento and Yolo Counties, California* (PA). Executed September 10, 2015. By letter received on January 6, 2022, the COE is addressing comments on their proposal to revise the area of potential effects (APE) to the LAR C3 phase of the ARCF to add a fourth segment to the LAR contract (C4) and split the existing C3 contract into two areas, C3A and C3B.

Project activities within LAR C3A and C3B include bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches, and planting in the VELB mitigation areas (Glenn Hall, Rossmoor West, and Rossmoor East, established as part of the LAR C1 and C2 APE). The C3A APE is defined as 19-acres with a vertical extent of 20-feet below surface. The C3B APE is defined as approximately 80-acres with a vertical extent of 20-feet below surface.

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By letter issued on December 24, 2021, the SHPO requested to be informed of any comments from other parties to the PA, that the COE ensure the provided figures are correctly captioned and labeled, and that the COE provide a map of the LAR phase marked with each contract in order to place the proposed APE modification within the context of the overall LAR phase. On January 6, 2022, the COE reported that no comments have been received from other parties of the PA, provided a map of the overall LAR phase with the four contract areas marked, and a corrected version of the map for C3A.

I have no further comments on the proposed APE modification for LAR C3/APE establishment for LAR C4. If you require further information, please contact Elizabeth Hodges of my staff at (916) 445-7017 or Elizabeth.Hodges@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Ms. Rhonda Morningstar Pope
Chairperson
Buena Vista Rancheria of Me-Wuk Indians
1418 20th Street, Suite 200
Sacramento, CA 95811

Dear Ms. Pope:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

We are writing to consult on a revision of the Area of Potential Effects (APE) for the upcoming Lower American River Erosion Contract 3 (LAR C3). This project phase was previously comprised of three discontinuous segments of the American River north and south banks in Sacramento, California, between Interstate 80 Business (Capital City Freeway) and Rio Americano High School, upstream of Watt Avenue. The revisions to this APE include adding a fourth segment and splitting the phase into two separate construction contracts, C3A and C3B. C3A includes one segment, 1-1. C3B includes three segments, 3-1, 4-1, and 4-2 as depicted in the enclosed maps (Enclosure 1). Additionally, each contract will now include a Valley Elderberry Longhorn Beetle (VELB) mitigation area.

LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. Clyde Prout III
Chairperson
Colfax-Todds Valley Consolidated Tribe
P.O. Box 4884
Auburn, CA 95604

Dear Mr. Prout:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. Daniel Gomez
Chairperson
Colusa Indian Community Council Cachil Dehe Band of WinTun Indians
3730 State Highway 45 #B
Colusa, CA 95932

Dear Mr. Gomez:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Ms. Elizabeth Lydell
Chairperson
Ione Band of Miwok Indians
P.O. Box 699
Plymouth, CA 95669

Dear Ms. Lydell:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. Charlie Wright
Chairperson
Kletsel Dehe Band of Wintun Indians
570 6th St
Williams, CA 95987

Dear Mr. Wright:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

We are writing to consult on a revision of the Area of Potential Effects (APE) for the upcoming Lower American River Erosion Contract 3 (LAR C3). This project phase was previously comprised of three discontinuous segments of the American River north and south banks in Sacramento, California, between Interstate 80 Business (Capital City Freeway) and Rio Americano High School, upstream of Watt Avenue. The revisions to this APE include adding a fourth segment and splitting the phase into two separate construction contracts, C3A and C3B. C3A includes one segment, 1-1. C3B includes three segments, 3-1, 4-1, and 4-2 as depicted in the enclosed maps (Enclosure 1). Additionally, each contract will now include a Valley Elderberry Longhorn Beetle (VELB) mitigation area.

LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. Dennis Ramirez
Chairperson
Mechoopda Indian Tribe of Chico Rancheria
125 Mission Ranch Blvd
Chico, CA 95926

Dear Mr. Ramirez:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

We are writing to consult on a revision of the Area of Potential Effects (APE) for the upcoming Lower American River Erosion Contract 3 (LAR C3). This project phase was previously comprised of three discontinuous segments of the American River north and south banks in Sacramento, California, between Interstate 80 Business (Capital City Freeway) and Rio Americano High School, upstream of Watt Avenue. The revisions to this APE include adding a fourth segment and splitting the phase into two separate construction contracts, C3A and C3B. C3A includes one segment, 1-1. C3B includes three segments, 3-1, 4-1, and 4-2 as depicted in the enclosed maps (Enclosure 1). Additionally, each contract will now include a Valley Elderberry Longhorn Beetle (VELB) mitigation area.

LAR C3A and C3B features include minimal bank cutting and grading, placement of soil-filled rock revetments, buried launchable rock trenches, and construction of planting benches in order to reduce risk from erosion along the American River levee system, as well as planting and transplanting native plants in the VELB mitigation banks. The APE

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. Gary Archuleta
Chairperson
Mooretown Rancheria of Maidu Indians
#1 Alverda Drive
Oroville, CA 95966

Dear Mr. Archuleta:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. Cosme Valdez
Interim Chief Executive Officer
Nashville Enterprise Miwok-Maidu-Nishinam Tribe
P.O. Box 580986
Elk Grove, CA 95758

Dear Mr. Valdez:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
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SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Ms. Regina Cuellar
Chairperson
Shingle Springs Band of Miwok Indians
P.O. Box 1340
Shingle Springs, CA 95682

Dear Ms. Cuellar:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Mr. William Leonard
Chairperson
Southern Sierra Miwuk Nation
P.O. Box 186
Mariposa, CA 95338

Dear Mr. Leonard:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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December 2, 2021

Environmental Resources Branch

SUBJECT: Continuing National Historic Preservation Act (NHPA) Section 106 Compliance for American River Common Features Project: Lower American River Erosion Contracts 3A and 3B APE revision

Ms. Tina Goodwin
Chairperson
Strawberry Valley Rancheria
P.O. Box 984
Marysville, CA 95901

Dear Ms. Goodwin:

The U.S. Army Corps of Engineers, Sacramento District (USACE) is writing to continue consultation under Section 106 of the National Historic Preservation Act in compliance with Stipulation I (Time Frames and Review Procedures), Stipulation II (Area of Potential Effects), and Stipulation IV (Identification and Evaluation) of the Programmatic Agreement (PA) for the American River Common Features Project (Project), executed September 10, 2015. USACE is authorized to reduce flood risk to the City of Sacramento, areas along the north and south banks of the American River, and the east bank of the Sacramento River, pursuant to the Water Resources Development Act (WRDA) of 1996 with additional authority provided in WRDA 1999, WRDA 2014, and WRDA 2016.

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Appendix B

EJScreening Tool Results

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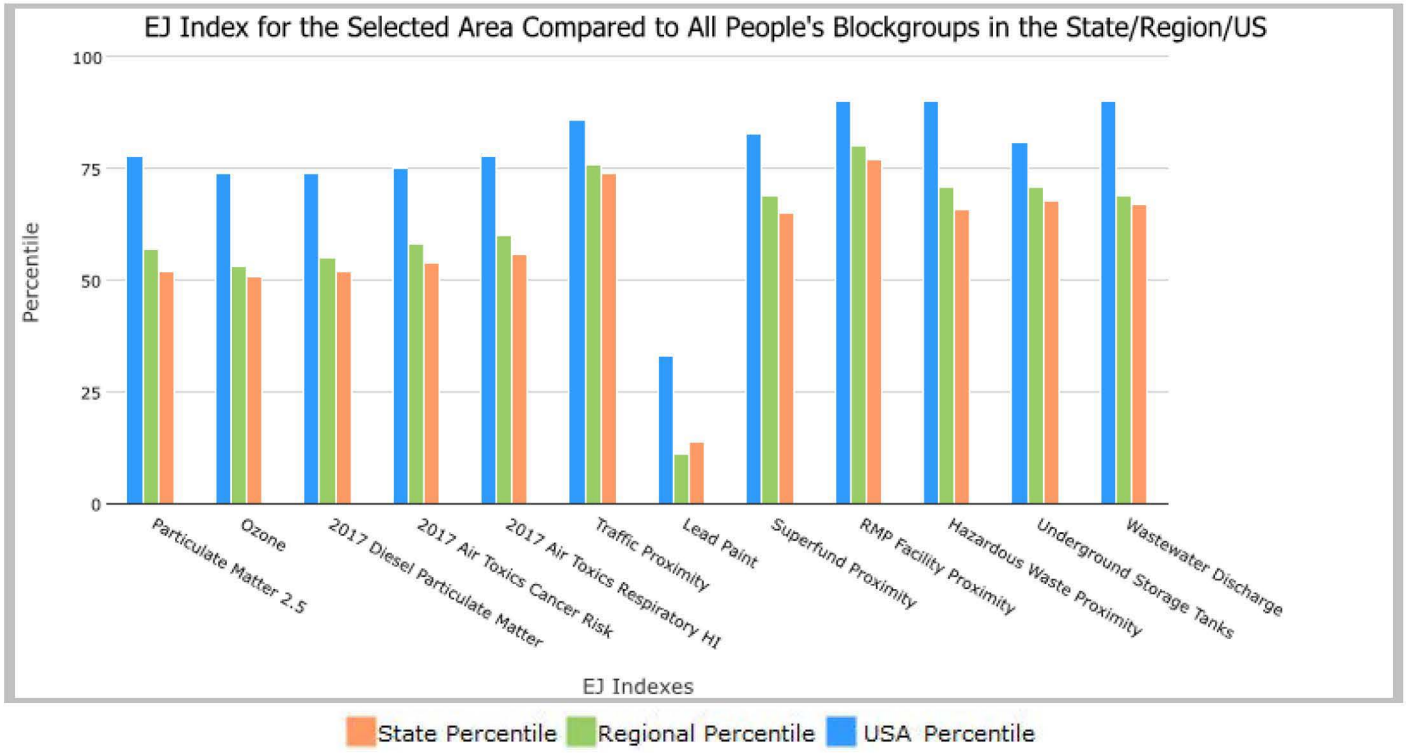
EJScreen Report (Version 2.0)

the User Specified Area, CALIFORNIA, EPA Region 9

Approximate Population: 27,155

Input Area (sq. miles): 7.08

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	52	57	78
EJ Index for Ozone	51	53	74
EJ Index for 2017 Diesel Particulate Matter*	52	55	74
EJ Index for 2017 Air Toxics Cancer Risk*	54	58	75
EJ Index for 2017 Air Toxics Respiratory HI*	56	60	78
EJ Index for Traffic Proximity	74	76	86
EJ Index for Lead Paint	14	11	33
EJ Index for Superfund Proximity	65	69	83
EJ Index for RMP Facility Proximity	77	80	90
EJ Index for Hazardous Waste Proximity	66	71	90
EJ Index for Underground Storage Tanks	68	71	81
EJ Index for Wastewater Discharge	67	69	90



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

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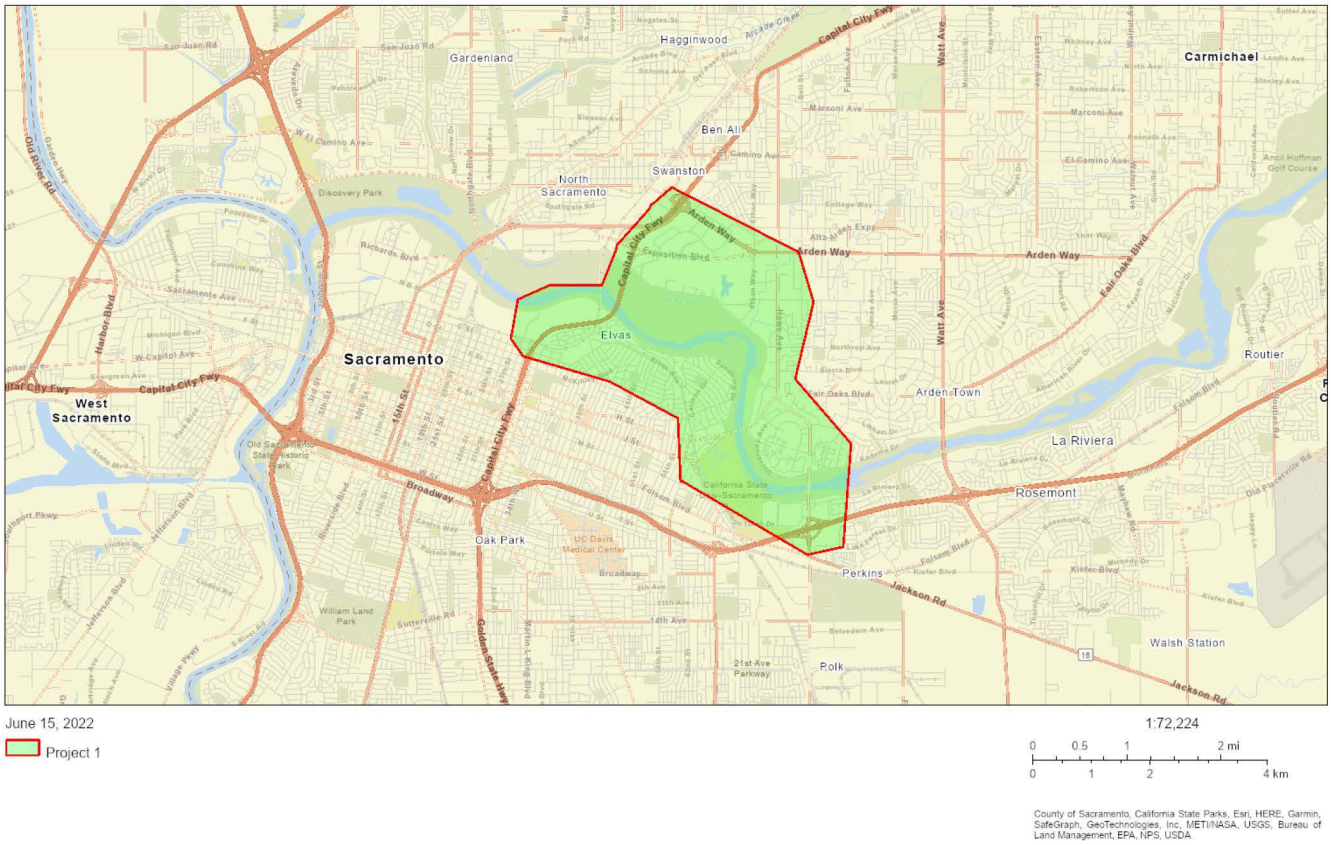
EJScreen Report (Version 2.0)

the User Specified Area, CALIFORNIA, EPA Region 9

Approximate Population: 27,155

Input Area (sq. miles): 7.08



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	3

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EJScreen Report (Version 2.0)

the User Specified Area, CALIFORNIA, EPA Region 9

Approximate Population: 27,155

Input Area (sq. miles): 7.08

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 (µg/m^3)	14	11.7	88	10.8	91	8.74	98
Ozone (ppb)	49.7	48.1	57	49.6	46	42.6	87
2017 Diesel Particulate Matter* (µg/m^3)	0.342	0.33	56	0.33	50-60th	0.295	70-80th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	40	31	98	30	95-100th	29	95-100th
2017 Air Toxics Respiratory HI*	0.6	0.43	98	0.41	95-100th	0.36	95-100th
Traffic Proximity (daily traffic count/distance to road)	1200	1300	74	1300	76	710	86
Lead Paint (% Pre-1960 Housing)	0.3	0.29	58	0.23	65	0.28	63
Superfund Proximity (site count/km distance)	0.17	0.18	77	0.15	80	0.13	82
RMP Facility Proximity (facility count/km distance)	2.7	1.1	89	1	90	0.75	94
Hazardous Waste Proximity (facility count/km distance)	7.3	5.2	74	4.4	79	2.2	92
Underground Storage Tanks (count/km^2)	2.6	3.7	57	3.3	61	3.9	64
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.045	74	53	59	54	12	79
Socioeconomic Indicators							
Demographic Index	45%	47%	47	46%	50	36%	69
People of Color	48%	63%	32	60%	36	40%	64
Low Income	40%	31%	68	31%	67	31%	68
Unemployment Rate	7%	6%	66	6%	67	5%	72
Linguistically Isolated	3%	9%	33	8%	38	5%	63
Less Than High School Education	6%	17%	27	16%	29	12%	34
Under Age 5	5%	6%	39	6%	39	6%	41
Over Age 64	15%	14%	63	15%	62	16%	53

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

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Appendix C

404(b)(1)

(See Appendix J to the Final SEIR)

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Appendix D

Comments and Response
to Comments

(See Appendix G to the Final SEIR)

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