DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

AMERICAN RIVER WATERSHED COMMON FEATURES PROJECT, NATOMAS BASIN REACH B CACHE CREEK BORROW SITE YOLO COUNTY, CALIFORNIA

DECEMBER 2020

US Army Corps of Engineers
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DECEMBER 2020

Prepared by the Lead Federal Agency:

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

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Acronyms and Abbreviations

ARCF	American River Common Features
BMPs	Best Management Practices
BO	Biological Opinion
CAAQS	California Ambient Air Quality Standards
CAR	Fish and Wildlife Coordination Act Report
CARB	California Air Resources Board
CCR	California Code of Regulations
CCSB	Cache Creek Settling Basin
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO_2	carbon dioxide
CO2e	carbon dioxide equivalent
Corps	U.S. Army Corps of Engineers
cy	cubic yards
CVFPB	Central Valley Flood Protection Board
dBA	A-weighted decibels
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EM	Engineering Manual
EPA	Environmental Protection Agency
°F	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
GHG	greenhouse gas
I-5	Interstate 5
ITE	Institute of Transportation Engineers
lbs	pounds
Ldn	day-night sound level
NAAQS	National ambient air quality standards
NCC	Natomas Cross Canal
NEMDC	Natomas East Main Drain Canal
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLIP	Natomas Levee Improvement Program
NMFS	National Marine Fisheries Service

NO_X	nitrogen oxides
O&M	operation and maintenance
PA	Programmatic Agreement
PGCC	Pleasant Grove Creek Canal
PL	Public Law
PM_{10}	particulate matter 10 micrometers or less
$PM_{2.5}$	particulate matter 2.5 micrometers or less
ppm	parts per million
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SAFCA	Sacramento Area Flood Control Agency
SEA	Supplemental Environmental Assessment
SHPO	State Historic Preservation Officer
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_x	sulfur oxides
SRBPP	Sacramento River Bank Protection Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TNBC	The Natomas Basin Conservancy
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
VELB	valley elderberry longhorn beetle
WRDA	Water Resources Development Act
WRRDA	Water Resources Reform and Development Act
YBCU	Western Yellow-billed Cuckoo
YSAQMD	Yolo-Solano Air Quality Management District

1.0 PURPOSE AND NEED FOR ACTION

1.1 Proposed Action

The U.S. Army Corps of Engineers (Corps) proposes to continue construction of improvements authorized in the American River Watershed Common Features, Natomas Basin Project (Project) (Water Resources Reform and Development Act [WRRDA]) 2014 (Pub. L. No. 113-121, § 7002, 128 Stat. 1193 [2014]) (Plate 1). In order to complete the authorized Project, additional borrow material is needed. Borrow material appropriate for the construction of seepage berms and other project requirements is available at the Cache Creek borrow site, located adjacent to the Cache Creek Settling Basin (Plate 2). Work to be performed in this area would include removing existing vegetation and excavating soil in two phases. Soil excavation and vegetation removal in the southern portion of the site is anticipated to begin in the winter of 2021. Vegetation removal from the northern portion of the site, to include transplantation of elderberry shrubs, is scheduled to be conducted in the winter of 2021. Soil excavation from the northern portion of the site is anticipated to begin in the spring of 2021.

The overall purpose of borrowing material from the Cache Creek borrow site is to complete construction of Project levees located in Reach B. All reaches of the Project were federally authorized under the October 2010 *Final Environmental Impact Statement/Final Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post-Authorization Change Report/Natomas Levee Important Program, Phase 4b Landside Improvements Project,* State Clearinghouse Number 200911205 (October 2010 EIS/EIR). Reach B specifically was previously described and environmentally analyzed in connection with the Sacramento Area Flood Control Agency's request for permission from USACE pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 408) for alteration of Federal project levees. This site-specific analysis for Reach B is in the *Final Environmental Impact Statement on the Natomas Levee Improvement Program, Phase 4a Landside Improvements Project*, State Clearinghouse Number 2009032097 (February 2010 EIS).

1.2 Location of the Project Area

The Cache Creek borrow site is located approximately three miles north of the city of Woodland near County Roads 17 and 103 in Yolo County, California (Plate 2). The site would be accessed via County Road 102, County Road 103, and County Road 17. Haul trucks would take borrow material from the Cache Creek borrow site to the Reach B project area, which is located approximately sixteen (16) miles from the borrow site along Garden Highway between Power Line Road and Farm Road in Sacramento, California (Plate 3).

1.3 Previous Documentation Relevant to the Natomas Basin Project

This Supplemental Environmental Assessment (SEA) supplements the October, 2010 EIS/EIR State Clearinghouse Number 200911205 (October 2010 EIS/EIR); describes the existing environmental conditions in the proposed Cache Creek borrow site; evaluates the expected environmental effects of the alternatives proposed, including a No Action alternative;

and identifies the preferred alternative through a systematic screening process. This SEA has been prepared in accordance with the requirements of the NEPA (40 CFR § 1500–1508).

The following is a list of project documentation, or documentation for related actions, which may be relevant to this SEA:

- February 2010, U.S. Army Corps of Engineers (USACE), *Final Environmental Impact Statement on the Natomas Levee Improvement Program Phase 4a Landside Improvements Project*, State Clearinghouse Number 2009032097. This document provides the full environmental analysis of Reach B.
- October 2010, USACE, *Final Environmental Impact Statement/Final Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post-Authorization Change Report/Natomas Levee Important Program, Phase 4b Landside Improvements Project*, State Clearinghouse Number 200911205. This document provides federal authorization for the Natomas Project and evaluates the remaining reaches within the Project.
- October 2010, U. S. Fish and Wildlife Service (USFWS), *Phase 4b Section 7 Appendage to the Programmatic Biological Opinion (BO) for the Natomas Levee Improvement Program, Landside Improvements Project, Sacramento and Sutter Counties, California*. 81420-2010-F-0949-1(October 2010 Biological Opinion). This document provides recommendations for conservation and mitigation measures to reduce potential impacts to Federally listed threatened and endangered species.
- June 15, 2020, USACE, *Amended Biological Assessment for the American River Common Features Natomas Basin Project, Cache Creek Borrow Site*. This document evaluates potential impacts to Federally listed threatened and endangered species that were not previously analyzed in the October 2010 Biological Opinion due to the addition of the proposed Cache Creek borrow site.

1.4 Background and Need for Action

The Natomas Basin is protected by 42 miles of levee, which almost completely encircles it. In 2006, the Central Valley Flood Protection Board (CVFPB) and the Sacramento Area Flood Control Agency (SAFCA) began levee improvement design and construction efforts on the Natomas Basin levee system in a project known as the "Natomas Levee Improvement Program" or NLIP. As part of NLIP, the CVFPB and SAFCA completed improvements, subsequently determined to be integral to the authorized Federal project, consisting of approximately two thirds of Reach B, almost all of Reach C, and almost all of Reach D. Construction of improvements to the levees located in the lower third of Reach B and downstream of Powerline Road remains to be completed, as well as various utility/encroachment locations within the NLIP.

The October 2010 EIS/EIR prepared by USACE and the CVFPB and SAFCA, as non-federal sponsors to the Federal project, supported approval of the *Post-Authorization Change Report and Interim General Reevaluation Report American River Watershed Common Features Project, Natomas Basin Sacramento and Sutter Counties, California Final Report* dated

December 2010 (PACR) and, ultimately, Congressional authorization of the Project in 2014. Following the Project's 2014 authorization, the Corps began construction of the remaining Natomas Basin levee improvements, including Reach B of the Project. Specific designs enabled a closer look at specific details pertaining to staging areas, borrow sites, and some disposal areas. The Johnson Ranch borrow site is currently being utilized for the construction of Reach B; however, this borrow source does not have sufficient material to complete the Project as designed. Other borrow sites that had been described in previous documents are either no longer available or have insufficient material for current construction needs. As a result, additional borrow sites that were not previously considered are now being considered. Specifically, the Cache Creek borrow site was not considered in the February 2010 EIS or the October 2010 EIS/EIR as other borrow sources were considered to be sufficient for the construction of the project at that time. Given the need for additional borrow material, the remainder of this document focuses on the use of the Cache Creek borrow site.

1.5 Authority

The American River Watershed Common Features, Natomas Basis Project was authorized for construction in Section 7002 of Water Resources Reform and Development Act (WRRDA) 2014 (Pub. L. No. 113-121, § 7002, 128 Stat. 1193 [2014]).

1.6 Purpose of the SEA

This SEA (1) describes the existing environmental resources in the Cache Creek borrow site area; (2) evaluates the environmental effects of the use of the Cache Creek borrow site on these resources; and (3) identifies measures to avoid or reduce any effects to a less-than-significant level where practicable. This SEA has been prepared in accordance with NEPA.

1.7 Decisions Needed

The District Engineer, commander of the Corps, Sacramento District, must decide whether the Proposed Action analyzed in this SEA qualifies for a Finding of No Significant Impact (FONSI) under NEPA or whether a supplemental EIS must be prepared due to potentially significant environmental impacts. SAFCA, the Non-Federal Sponsor serving as the Lead Agency for CEQA, previously completed Addendum No. 6 to the Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post-authorization Change Report/Natomas Levee Improvement Program Phase 4b Landside Improvements Project in May 2020 under the California Environmental Quality Act (CEQA). This document is included in Appendix A.

2.0 ALTERNATIVES

All alternatives for the Project as a whole were discussed in detail in Section 2, Alternatives, of the *Final EIS/EIR of the American River Watershed Common Features Project/Natomas Post-Authorization Change Report/Natomas Levee Improvement Program, Phase 4B Landside Improvements Project* (October 2010 EIS/EIR). Borrow sites for Reach B

construction are discussed in greater detail. in Sections 2.3.3, 2.4.3, and 4.1.3 of the February 2010 EIS.

Construction at Reach B began in August 2020 in a manner consistent with Project design as authorized in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS. If any alterations of the Reach B construction were to happen, the alterations would be evaluated as appropriate. However, no changes in significance to the Reach B construction are anticipated at this time. This document focuses on the use of the Cache Creek borrow site and analyzes two alternatives: the No Action and Action Alternative. These alternatives are defined below.

2.1 Alternative 1 - No Action

NEPA requires that the lead agency, the Corps, present a no action alternative that establishes the baseline conditions against which the action alternatives are compared. Under the no action alternative, the Corps would not use the Cache Creek borrow site for construction material, requiring material from other sources that may or may not be available at the time of construction. While the Johnson Ranch borrow site as analyzed in the October 2010 EIS/EIR is available and currently being utilized, there is not sufficient material in this borrow site to complete the Reach B Project as designed. Other alternative sources of borrow material previously discussed in the October 2010 EIS/EIR have either been purchased by other entities in the 10 years since the October 2010 EIS/EIR was finalized or are too far from Reach B to be a viable option. Additionally, other borrow sources are needed for the remainder of the work in the entire Natomas Basin, and utilizing other sources would create a deficit for other projects. Finding other new borrow sources found would require appropriate testing, documentation, and Real Estate rights. The process of obtaining alternate borrow sources may take months or years, and the lack of material for construction would further delay construction at Reach B. As a result, flood risk in the Natomas Basin would remain high due to seepage and stability issues until the eventual construction of Reach B.

2.2 Alternative 2 – Cache Creek Borrow Site Excavation

Due to borrow material requirements, the Corps proposes to excavate soil in two phases (Plate 4) from the State-owned Cache Creek borrow site in order to obtain material for the construction of seepage berms along the Reach B portion of the Project. All other reasonable alternatives were discussed in the October 2010 EIS/EIR and evaluated in greater detail in the February 2010 EIS. As described above, those alternatives are either no longer available or are too far from Reach B to be a viable option. As such, no other reasonable alternatives were considered in detail in this SEA.

2.2.1 Site Preparation

Prior to excavation at the Cache Creek borrow site, the following steps would be completed:

- Temporary construction access would be set up in designated locations on or near the borrow site. Staging areas are not anticipated to be required during excavation.
- During the preparation period, care would be taken to avoid damaging existing features such as (but not limited to) roads (either public or private), access ramps, sensitive habitats, and gates.
- For erosion control and spill control measures, a Stormwater Pollution Protection Plan (SWPPP) and Stormwater Pollution Control Plan would be completed by the Contractor prior to project construction.
- The contractor would be responsible for clearing the site of all trimmings, trash, debris, and recycling or otherwise disposing of materials in accordance with Federal, State, and local regulations.

2.2.2 Site Excavation

Excavation at the Cache Creek borrow site would begin with clearing and grubbing, which consists of the removal of approximately 6 inches of soil to clear grasses, weeds, and other vegetation. Topsoil would be stockpiled to be returned to the site upon completion of excavation. The majority of the excavation would involve large excavators placing borrow material directly into haul trucks; however, there may be bulldozers or scrapers that stockpile material onsite prior to excavators placing material in haul trucks.

2.2.3 Site Access

The Cache Creek borrow site is accessible from County Roads 102, 17 and 103 approximately three miles north of the city of Woodland, California (Plate 3). These access points connect to Interstate 5 (I-5), which then leads to the Natomas Basin and Reach B. During construction, traffic may be diverted and access restricted for the general public to those that live or work in the immediate area.

2.2.4 Construction Workers and Schedule

All workers would access the site by regional and local roadways. The Cache Creek borrow site is outside city limits, and is therefore exempt from the City of Woodland's noise policy for construction projects. Hauling within city limits would be limited to Monday through Saturday from 7:00 a.m. to 6:00 p.m., and Sunday from 9:00 a.m. to 6:00 p.m., unless given special decompensation from the City of Woodland. No hauling through city limits would take place on holidays without permission given by the City of Woodland. Excavation is anticipated to begin in the southern portion of the site as soon as environmental clearance is completed, likely in the spring of 2021. Transplantation of elderberry shrubs and other vegetation would likely occur February 2021. Excavation of the northern portion of the site is anticipated to begin in the spring of 2021, weather and other conditions permitting.

2.2.5 Restoration and Cleanup

Upon completion of excavation at the borrow site, the area would be re-graded consistent with its prior condition. All bare soil would be hydroseeded to prevent erosion and encroachment of invasive species. Any damage caused by the contractor would be the responsibility of the contractor. All trash, excess construction materials, and construction equipment would be removed.

2.2.6 Operation and Maintenance

After construction is completed, the transplanted elderberry shrubs would be periodically monitored and watered as part of a three-year maintenance contract. Upon completion of the maintenance contract, the elderberry shrubs would continue to be monitored for ten years in order to comply with the Federal Endangered Species Act. The remainder of the site would be returned to the State for regular maintenance activities, including mowing, herbicide treatments for aggressive invasive species, controlling rodents, and clearing the maintenance road.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the environmental resources in the Project work area and potential environmental impacts of the Proposed Action. The purpose of this SEA is to consider potential impacts not previously considered in the October 2010 EIS/EIR or the February 2010 EIS.

3.1 Environmental Resources Not Evaluated in Detail

Some resources were eliminated from further analysis in this SEA because the effects were estimated to be negligible or to have not been changed from the detailed analysis provided in the October 2010 EIS/EIR and the February 2010 EIS:

- Fisheries: Borrow sites previously analyzed, as well as the Cache Creek borrow site, are either entirely landlocked or separated from fish habitat by upland features.
- Recreation: Borrow sites previously analyzed, as well as the Cache Creek borrow site, have no recreational access.
- Utilities and Service Systems: Borrow sites previously analyzed, as well as the Cache Creek borrow site, would avoid utilities and service systems.
- Water Quality: Borrow sites previously analyzed, as well as the Cache Creek borrow site, are either entirely landlocked or would only be inundated in a high water event.

These resources would be unaffected. As a result, these resources were eliminated from further analysis in this SEA.

3.2 Environmental Resources Evaluated in Detail

Initial evaluation of the effects of the Project indicated that there could be the potential for impacts to several resources. Sections 3.2.1 through 3.2.10 describe the baseline conditions,

effects, and the proposed measures to avoid, reduce, minimize, mitigate, or compensate for any potential significant effects. In determining effects, the consequences of the Proposed Action are compared to the consequence of taking no action. Impacts are identified as direct, indirect, or cumulative. Cumulative impacts are addressed separately in Section 5, Cumulative Impacts. Effects are assessed for significance based on significance criteria. The significance criteria used in this document are based on factual or scientific information and data; and regulatory standards of Federal and State agencies.

3.2.1 Aesthetics and Visual Resources

Impacts to Aesthetics and Visual Resources related to the construction of Reach B were already discussed in the October 2010 EIS/EIR and analyzed in further detail in the February 2010 EIS. Vegetation removal, seepage berms, and the relocated Riverside Canal are features of the Project that will change the visual aesthetic of the area; updates to these features made during the design phase of the Project are minor and do not change the significance of the impacts to visual resources. Updates to the design of these features have not changed the character of the impacts to visual resources; therefore, the remainder of this discussion involves only those impacts caused by the proposed excavation activities at the Cache Creek borrow site.

Aesthetic resources must be considered along with other natural resources. Aesthetic resources are those natural resources, landforms, vegetation, and manmade structures in the environment that generate one or more sensory reactions and evaluations by the observer, particularly in regard to pleasurable response. These sensory reactions are traditionally categorized as pertaining to sight, sound, and smell. Aesthetic quality is the significance given to aesthetic resources based on the intrinsic physical attributes of those specific features and recognized by public, technical, and institutional sources. The identification of scenic resources in the landscape requires a process that identifies the relevant visual features and that is derived from established Federal procedures. Visual quality is influenced by many landscape features including geologic, hydrologic, botanical, wildlife, recreational, and urban characteristics.

The areas in and around the Cache Creek borrow site are rural and agricultural. The main viewer groups of the Project area are local residents on County Roads 7, 102, and 103. Much of the viewscape is typical of local rural area, consisting of scattered agricultural outbuildings, rural roads, disturbed areas of ruderal vegetation, utility poles and overhead utility lines and the existing levees. The existing levee blocks views of the work areas from Cache Creek. The levee and adjacent berms are an integral part of the visual setting to regular viewers, including farmers, recreationists, and other travelers on local county roads.

While the adjacent Cache Creek Settling Basin contains riparian vegetation, there are few trees in the borrow site itself. Trees within the borrow site are non-native; native trees on the perimeter of the site would be protected in place. Vegetation within the borrow site would either be protected in place, transplanted into a nearby area, or removed. The majority of the natural vegetation, including adjacent riparian vegetation, would be protected in place. Approximately 10-20 elderberry shrubs would be relocated into areas with other elderberry shrubs. Removal of the non-native trees and shrubs that cannot be transplanted or protected would not substantially impact the overall visual character of the site. Non-native trees do not require mitigation.

The borrow site would be excavated to a point elevation of approximately 35 feet above sea level at the lowest point. This elevation is similar to the surrounding land area, would not impact the existing drainage patterns on the site, and would be hydroseeded with native grasses to promote revegetation and minimize soil erosion. Excavation at the Cache Creek borrow site would require use of construction equipment for a portion of the year for an estimated two construction years. The presence of construction equipment at the site would have short term visual impacts; however, the site is not accessible or visible to most of the public. Views of these project areas are, therefore, of low-sensitivity.

Short-term activities would include the presence and activities of construction equipment. Long term changes to the aesthetics include the lowering of the borrow site; however, the lower elevation would remain visually consistent with the surrounding areas. There is no public access allowed in this area; therefore, impacts to aesthetics would be less than significant.

3.2.2 Agricultural Resources, Geology, and Soils

Agricultural Resources, Geology, and Soils of the Natomas Basin were discussed in detail in Sections 3.2 and 4.2, Agricultural Resources, and Sections 3.4 and 4.4, Geology, Soils, and Mineral Resources in the October 2010 EIS/EIR. Site-specific analyses for these resources in Reach B are located in Sections 3.2 and 4.2, Agricultural Resources, and Sections 3.4 and 4.4, Geology, Soils, and Mineral Resources in the February 2010 EIS. The following is a description of Agricultural Resources, Geology, and Soils in the proposed Cache Creek borrow site. No known minerals of value are known to occur in the site.

Baseline Conditions

Geology. The Natomas Basin, the Cache Creek Settling Basin, the proposed borrow site, and the surrounding areas lie in the Sacramento Valley portion of the Great Valley Geomorphic Province. The Great Valley is bounded by the Sierra Nevada, Coast Ranges, and Klamath Mountains. Section 3.4.1.3 of the October 2010 EIS/EIR discussed the geology of the Natomas Basin and its settling basins. Section 4.4.1.2 of the February 2010 EIS determined that there are no unique geologic features in the area encompassed by the Reach B analysis, which includes the Cache Creek borrow site. As the geology has not changed over the past 10 years, geology will not be discussed further in this document.

Soils. The Cache Creek borrow site is located on soils designated as laugenour very fine sandy loam, laugenour very fine sandy loam flooded, and riverwash. Nearby faults include the potentially active Dunnigan Hills fault, located approximately seven miles to the west, and the Willows fault zone, located approximately nine miles to the east (Yolo County 2009). There are no earthquake fault zones located in the vicinity of the borrow site. The project refinements would not change the previously identified impacts discussed in the October 2010 EIS/EIR Section 4.4, "Geology, Soils, and Mineral Resources," and analyzed in greater detail in the February 2010 EIS Section 4.4, "Geology, Soils, and Mineral Resources," because excavation of the site would occur in similar soil types and because geologic impacts were evaluated at a

regional scale. Potentially significant impacts were previously identified for construction related soil erosion in the October 2010 EIS/EIR, Section 4.4, "Geology, Soils, and Mineral Resources."

Agricultural Resources. The Cache Creek borrow site is zoned by Yolo County as A-N (Agriculture Intensive) and is bordered by agricultural lands to the north and east (CBI 2018) (Plate 5). There is no land zoned as forestland, timberland, or timberland zoned Timberland Production in the vicinity of the borrow site.

Environmental Analysis

Basis of Significance. Direct and indirect effects on Soils and Agricultural Resources would be considered significant if the alternatives result in any of the following:

1. Convert Important Farmland (i.e., Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;
2. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Important Farmland to nonagricultural use or conversion of forest land to non-forest use;
3. Conflict with existing zoning for agricultural use or a Williamson Act contract.

Alternative 1 - No Action. Under the No Action alternative, the Cache Creek borrow site would not be excavated to a lower elevation and would remain a swale above the floodplain. There would be no change to the geology, soils, or agricultural resources in the Project area. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the Project. Other borrow sites as discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS are either no longer available or intended to be utilized on other reaches of the Project.

Alternative 2 - Proposed Borrow Site Excavation. The Cache Creek borrow site is on state-owned land that is not currently in agricultural production. During excavation activities, the site would be unavailable for agricultural production; however, after project refinements are complete, the site could be used for different purposes, including agricultural production.

Excavation of the Cache Creek borrow site would reduce the elevation of the area by approximately three feet, and would remove up to 470,600 cubic yards of material from an area of approximately 60 acres. Excavation would take place over two seasons and graded to reduce impacts the existing drainage patterns on the site.

Avoidance, Minimization, and Mitigation Measures

A complete list of avoidance, minimization, and mitigation measures are discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS. In order to reduce impacts to soil and agricultural resources, lands required for borrow material would be reduced to the greatest extent practicable. Soil excavated during construction would be reused to

the greatest extent practicable, which would reduce wasted material and reduce the amount of borrow material required.

The use of the Cache Creek borrow site for excavation material would not result in the conversion of agricultural land to non-agricultural uses. Impacts from the project refinements on land zoned as agriculture would be short-term and temporary. Land uses adjacent to the site are anticipated to remain the same, and would be returned to pre-project uses after construction. Therefore, impacts to soils and agricultural resources would be less than significant.

3.2.3 Air Quality

Emissions calculations resulting from the construction of Reach B were included in the October 2010 EIS and analyzed in greater detail in the February 2010 EIS. Due to a longer construction season, cleaner burning engines, and improved best management practices, current air emissions from the construction of the Reach B project are lower than the original estimates. Therefore, the remainder of this discussion involves only those emissions caused by the proposed excavation activities at the Cache Creek borrow site.

Baseline Conditions

Regulatory Background. The Federal Clean Air Act establishes National Ambient Air Quality Standards (NAAQS) and delegates enforcement to the states, with direct oversight by the U.S. Environmental Protection Agency (EPA). In California, the Air Resources Board (CARB) is the responsible agency for air quality regulation.

The California Clean Air Act established California Ambient Air Quality Standards (CAAQS). These standards are more stringent than Federal standards and include pollutants not listed in Federal standards. All Federal projects in California must comply with the stricter State air quality standards. The Federal standards and local thresholds for the Yolo-Solano Air Quality Management District (YSAQMD) are shown in Table 1.

On November 3, 1993, the EPA issued the General Conformity Rule, stating Federal actions must not cause or contribute to any violation of a NAAQS or delay timely attainment of air quality standards for those areas designated as in nonattainment of Federal standards. A conformity determination is required for each pollutant where the total of direct and indirect emissions caused by a Federal action in a nonattainment area exceeds *de minimus* threshold levels listed in the Code of Federal Regulations (CFR) (40 CFR 93.153).

Table 1. Air Emission Thresholds for Federal and Local Criteria Pollutants

Criteria Pollutant	Federal Standard (tons/year)	YSAQMD Threshold (lbs/day)
NO_x	100	10
CO	100	*
SO_x	100	*
PM_{10}	100	80
ROG	100	10

NO_x = nitrogen oxides PM_{10} = particulate matter SO_x = sulfur oxides
CO = carbon monoxide ROG = reactive organic gases
* = default to State standard (see California Ambient Air Quality Standards, Appendix B)
YSAQMD = Yolo-Solano Air Quality Management District
lbs = pounds
Source: YSAQMD, 2019

Local Air Quality Management. The Sacramento Valley Air Basin encompasses several counties in northern California, including Yolo, Sacramento, and Sutter counties. The Sacramento Valley Air Basin is included in the Sacramento Federal Ozone Nonattainment Area and is also subject to regulations, attainment goals, and standards of the U.S. and California EPAs. The Yolo-Solano Air Quality Management District (YSAQMD) covers Yolo County, which encompasses the Cache Creek borrow site and surrounding areas.

Particulate matter is a term used for solid or liquid particles emitted into the air. Particulate matter less than 10 micrometers in diameter (PM_{10}) is small enough to be inhaled and can cause health problems in the respiratory system. YSAQMD is included in the Sacramento Federal Non-Attainment Area for fine particulate pollution (YSAQMD, 2019). On October 16, 2006, the EPA promulgated a new 24-hour standard for particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$). This change lowered the daily standard from 65µg/m3 to 35µg/m3 to protect the general public from short term exposure to fine particulate matter. The Sacramento Valley Air Basin does not meet the Federal standards for 24-hour attainment measures, but is in attainment for the Federal annual arithmetic mean for 12 µg/m3 and the State standards (SMAQMD, 2020).

The California Clean Air Act of 1988 requires nonattainment areas to achieve and maintain the CAAQS by the earliest practicable date and local air districts to develop plans for attaining State ozone standards. On October 1, 2015, the EPA revised the Federal 8-hour average ozone standard, lowering it from 0.075 parts per million (ppm) to 0.070 ppm (USEPA, 2015). 6). Under the new designation, Yolo County is in non-attainment for the 0.070 ppm 8-hour ozone standard.

Environmental Effects

Basis of Significance. Direct and indirect effects on air quality would be considered significant if the alternatives result in any of the following:

- Exceed any ambient air quality thresholds;
- Contribute on a long-term basis to any existing or projected air quality violation;

- Expose sensitive receptors (such as schools, residents, or hospitals) to substantial pollutant concentrations;
- Not conform to applicable Federal, State, or local thresholds on a long-term basis, or;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard.

Alternative 1 - No Action. Under the no action alternative, the Cache Creek borrow site would not be excavated. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the Project. Other borrow sites as described in the October 2010 EIS/EIR are either no longer available or intended to be utilized on other reaches of the project. Utilizing other borrow sources would increase impacts to air quality due to the greater hauling distance.

Alternative 2 - Proposed Borrow Site Excavation. The use of the Cache Creek borrow site would result in new emissions of air pollutants from worker vehicle trips, hauling, and use of construction equipment for excavation at the Cache Creek borrow site. Particulate matter (dust) emissions would also be generated from ground disturbance and hauling along unpaved segments of hauling routes. Emissions would be generated in the area of excavation, which is in the Yolo-Solano Air Quality Management District (YSAQMD) and in the Sacramento Metropolitan Air Quality Management District (SMAQMD) from transport of soil material to Reach B. Air pollutant emissions were calculated using the CalEEMod air quality emissions model and are included in the CEQA document (Appendix A).

Emissions from excavating material and transporting the material to Reach B would largely occur in YSAQMD. The haul route from the Cache Creek borrow site to Reach B is approximately 16 miles long, including 10.6 miles in Yolo County and 5.3 miles in Sacramento County. Emissions within the jurisdiction of SMAQMD would only involve the hauling of material from the borrow site to Reach B.

Table 2. Estimated Air Emissions for Cache Creek Borrow Site Excavation

	ROG	**CO**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Total emissions (lbs/day) 2020	0.3	2.0	4.9	77.8	13.8	4,976.97
Total emissions (lbs/day) 2021	0.6	3.8	8.4	77.9	13.7	5,062.37
YSAQMD thresholds (lbs/day)	10	N/A	10	80	N/A	N/A
Total (lbs/day)	**0.9**	**5.8**	**13.3**	**155.7**	**27.5**	**1212.35**
Federal standards (tons/year)	**25**	**100**	**25**	**100**	**N/A**	**N/A**

NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
CO_2 = carbon dioxide
YSAQMD = Yolo-Solano Air Quality Management District
lbs = pounds
PM_{10} = particulate matter 10 micrometers or less
$PM_{2.5}$=particulate matter 2.5 micrometers or less
ROG = reactive organic gases
Note: Estimates are rounded.

Table 2 summarizes the estimated emissions (in pounds per day) and compares them to the Federal standards and local thresholds. Based on the air quality analysis performed, the estimated emissions totals of PM_{10}, $PM_{2.5}$, NOx, and ROG for the excavation of the Cache Creek borrow site would be below the Federal conformity *de minimis* thresholds established by the EPA. Over the two construction seasons anticipated, the excavation would exceed the Federal threshold for PM_{10}; however, these emissions would be spread out over time and would be less than Federal thresholds during a single year. Mitigation measures would be implemented to reduce the anticipated emissions to the greatest extent practicable.

The excavation would not contribute on a long-term basis to existing or projected air quality violations or expose sensitive receptors to substantial pollutant concentrations. The excavation would implement all the Basic Construction Emission Control Practices (included in Appendix B) and would disturb less than 15 acres of area per day. These factors, along with mitigation, below, would ensure that air quality impacts related to implementation of the excavation would be less than significant.

Avoidance, Minimization, and Mitigation Measures

A complete list of avoidance, minimization, and mitigation measures for Sacramento County are described in the October 2010 EIS/EIR and the February 2010 EIS. Emissions would result from the use of excavation equipment, truck haul trips to and from the borrow site, and worker vehicle trips to and from the borrow site. Prior to excavation, the contractor would submit an equipment list to be used in the project for approval by the Corps and YSAQMD. YSAQMD would confirm the fleet emissions and endorse the list only if the total fleet emissions would meet a 20% reduction in NO_X and a 45% reduction in PM_{10} in comparison to the state fleet emissions average. The contractor would be required to follow the following minimization measures:

- Construction equipment exhaust emissions would not exceed Visible Emissions limitations (40 percent opacity or Ringelmann 2.0);
- The contractor would be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operations;
- Idling time would be limited to 5 minutes, per the State Idling Rule (13 CCR Chapter 10, Section 2485 and 13 CCR Chapter 9 Article 4.8 Section 2449); and
- Existing power sources or clean fuel generators would be used to the extent practicable.

Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require CARB Portable Equipment Registration with the State or a local district permit. The contractor would be responsible for arranging appropriate consultations with CARB or YSAQMD to determine registration and permitting requirements prior to equipment operation at the site.

Additionally, a Fugitive Dust Control Plan would be submitted to YSAQMD prior to the start of construction. Implementation of the BMPs listed below would reduce air quality degradation caused by dust and other contaminants:

- During construction, implement all appropriate dust control measures, such as tarps or covers on dirt piles, in a timely and effective manner.
- Periodically water all construction areas having vehicle traffic, including unpaved areas, to reduce generation of dust. Application of water would not be excessive or result in runoff into storm drains.
- Suspend all grading, earth moving, or excavation activities when winds exceed 20 miles per hour.
- Water or cover all material transported offsite to prevent generation of dust.
- Sweep paved streets adjacent to construction sites, as necessary, at the end of each day to remove excessive accumulations of soil or dust.
- Cover all trucks hauling dirt, sand, soil, or other loose material would comply with the requirements of California Vehicle Code Section 23114. This provision would be enforced by local law enforcement agencies.
- Revegetate or pave areas cleared by construction in a timely manner to control fugitive dust.

Any additional mitigation required would be offset by mitigation fees, which would be paid by the contractor to YSAQMD. As a result, the Proposed Action does not require an in-depth conformity analysis to evaluate ambient air quality concentrations and instead is presumed to conform to the region's ozone and PM_{10} State implementation plan. Impacts to air quality would be temporary, short-term, and localized. Sensitive receptors, such as schools, residences, or hospitals would not be exposed to substantial pollutant concentrations. These proposed avoidance, minimization, and mitigation measures would reduce impacts to less than significant.

3.2.4 Cultural Resources

Additional cultural resources investigations were conducted for the Cache Creek borrow site because the site is outside areas covered by previous investigation efforts conducted for the October 2010 EIS/EIR and February 2010 EIS. Cultural Resources was discussed in the October 2010 EIS/EIR in Sections 3.8 and 4.8, Cultural Resources; and Sections 3.9 and 4.9, Paleontological Resources. Cultural Resources was discussed in greater detail for Reach B in the February 2010 EIS in Sections 3.8 and 4.8, Cultural Resources; and Sections 3.9 and 4.9, Paleontological Resources.

Cultural resources include buildings, structures, objects, sites, districts, and archeological resources associated with historic or prehistoric human activity. The cultural value of these resources may be of national, state, or local significance. On the Federal level, cultural resources that are listed in, or eligible for listing in, the National Register of Historic Places (NRHP) are known as historic properties.

For a cultural resource to be determined eligible for listing in the NRHP, it must meet certain criteria. The resource has to be at least 50 years old or exhibit exceptional importance and meet one or more of the following criteria as defined in 36 CFR 60.4. It must:

- Be associated with events that have made a significant contribution to the broad patterns of our history;
- Be associated with the lives of persons significant in our past;
- Embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- Have yielded, or be likely to yield, information important in prehistory or history.

Affected Environment

Precontact and Ethnographic Setting. The Cache Creek borrow site is situated in the ethnographic territory of the Patwin (a Wintuan people). More specifically, the borrow site lies near the eastern extent of Patwin territory and near the western extent of Nisenan territory (Johnson 1978; Wilson and Towne 1978). Most Tribes in central California, including the Patwin and Nisenan, had similar subsistence-settlement patterns, material culture, and social structures (Kroeber 1929).

The Patwin and Valley Nisenan inhabited an area that included several micro-environments, including densely vegetated riverine zones, tule marshes, open grasslands, and few oak groves (Johnson 1978; Wilson and Towne 1978). Resources were taken from these areas but larger, permanent villages were placed on higher ground such as natural levees, knolls, and mounds. In the project area, settlements along major water ways were favored (Kroeber 1925, 1932; Wilson and Towne 1978). Other factors considered for settlement locations included exposure and proximity to water and other resources. Permanent villages tended to be along major waterways on low rises, from which specialized task groups would go out to harvest resources in surrounding microenvironments that villages controlled (Du Bois 1935; Johnson 1978; Kroeber 1929, 1932).

Euro-American contact with the Nisenan began with infrequent excursions by Spanish explorers and Hudson Bay Company trappers traveling through the Sacramento and San Joaquin Valleys in the early 1800s. In general, Nisenan lifeways remained stable for centuries until the early to middle decades of the 19th century. With the coming of Russian trappers and Spanish missionaries, cultural patterns began to be disrupted as social structures were stressed. An estimated 75% of the Valley Nisenan population died in the malaria epidemic of 1833 (Wilson and Towne 1978). With the influx of Europeans during the Gold Rush era, the population was further reduced by disease and violent relations with the miners. However, today the Maidu are reinvesting in their traditional culture and, through newfound political, economic, and social influence, now constitute a growing and thriving native community in California.

Historic Setting. Yolo County was one of California's original 27 counties. The City of Woodland became the permanent County seat in 1862, after the seat had moved several times (Hoover et.al. 1990: 532–533). Early settlers in the County included William and John Reid Wolfskill, William Gordon, William Knight, Juan Manuel Vaca, and Juan Felipe Armijo Pena. Horse and cattle raising and the cultivation of grain and fruit orchards were common forms of livelihood during this period (Larkey and Walters 1987: 19, 23).

The Gold Rush changed Yolo County from a rural farming community to a thriving agricultural area as disenchanted miners moved from the foothills to the Sacramento Valley to seek their fortune in ranching and farming. As more people arrived in the county, improvements were seen in local transportation. Roads were developed and rail lines were laid, including the Vaca Valley Railroad and Clear Lake Railroad (Larkey and Walters 1987: 26, 32, 49, 50–51; Olney 1902: 171).

Successful crops grown in Yolo County in the 19th century included hops, onions, beans, tomatoes, corn, sugar beets, flax, and grapes. Fruit trees such as almond, walnut, apple, orange, lemon, cherry, peach, and nectarine were also commonly grown (Olney 1902:171-172; De Pue & Company 1879b:36). By the early 20th century, improvements in irrigation allowed for varied crops to be introduced, such as rice (Hart 1978: 489). Currently, the major crops grown in the County in terms of the highest dollar value include tomatoes, almonds, grapes, sunflowers, rice, hay, wheat, safflower, and plums. Livestock raising also continues to be a major part of the local economy (Yolo County 2016).

In 1911, the California Legislature established The Reclamation Board (now the CVFPB) to exercise jurisdiction over reclamation districts and levee plans. Subsequently, the state authorized the Sacramento River Flood Control Project (SRFCP). The ambitious project included the construction of levees, weirs, and bypasses along the river to channel floodwaters away from population centers. Under the SRFCP, new reclamation districts were created, and reclamation projects were more organized and effective. In 1913, the California Reclamation Board was given the ability to approve private construction of levees while requiring that they meet the standards for the SRFCP.

Cultural Resource Investigations. A records search was requested by GEI from the Northwestern Information Center for the CCSB borrow area APE and a 0.25 mile buffer area. The records search indicated two previous investigations had been conducted within the APE and that that no previously reported resources were within the project APE. A GEI archeologist conducted a cultural resources pedestrian survey encompassing the CCSB borrow area APE on April 10, 2020. No cultural resources were identified within the CCSB borrow area APE. On May 28 and 29, 2020 GEI archaeologist Amy Wolpert, M.A. and GEI geologist Faith Moore oversaw the excavation of thirteen exploratory geoarchaeological trenches in the CCSB borrow area APE. No archaeological materials were identified. A Tribal monitor from Yocha Dehe Wintun Nation (Yocha Dehe) was also present during the excavations of the trenches.

Tribal Consultation. The Corps sent out consultation letters to the Tribes on May 5, 2020 on CCSB borrow area APE to request information for inventory purposes. Mooretown Rancheria had no comments on the APE, but wanted to be contacted if Tribal cultural items or

Native American human remains were found. Yocha Dehe communicated that they wanted to have Tribal monitors present during the excavation of the trenches. Buena Vista Rancheria of Me-Wuk Indians stated the area was sensitive and were concerned there were no Tribal monitors were present during the work. The Corps replied that a Yocha Dehe monitored the work. The Tribes did not provide any information regarding any resources of importance to Native Americans within the CCSB borrow area APE.

Significance Criteria. Title 54 U.S.C. § 300101 sets out the National Historic Preservation Act (NHPA). Title 54 U.S.C. § 306108, commonly known as Section 106 of the NHPA, requires Federal agencies to take into account the effects of their undertakings on historic properties. Undertakings are projects, activities, or programs funded in whole or in part under the direct or indirect jurisdiction of a Federal agency (54 U.S.C. § 300320). The process for implementing Section 106 of the NHPA is described at 36 CFR Part 800. The Section 106 process involves identifying historic properties in the APE for an undertaking and resolving any adverse effects on such properties through a consultative process involving the lead Federal agency, the State Historic Preservation Officer (SHPO), Indian tribes, and other consulting parties. Implementation of an action alternative that would cause an adverse effect on historic properties also would constitute a significant cultural resources impact under NEPA. An adverse effect would result if the action alternative would alter any of the characteristics of a historic property that qualify it for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR § 800.5). Examples of adverse effects include:

- Physical destruction, damage, or alteration of all or part of the historic property;
- Alteration of the property in a way inconsistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68);
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.

Environmental Consequences

There are no known historic properties located within the proposed borrow site; therefore, no known historic properties would be affected by the design changes and extended work timeframe. The Corps finds no new adverse effects to the proposed borrow area footprint, and the prior finding of *no adverse effect* for Reach B has not changed. If adverse effects to any historic properties are found during construction or use of the proposed borrow area, those effects would be mitigated as stipulated in the Programmatic Agreement between the U.S. Army Corps of Engineers and the California State Historic Preservation Officer regarding the American River Common Features Project, executed September 10, 2015.

3.2.5 Environmental Justice

Environmental Justice related to the construction of the Project was discussed in Sections 3.17 and 4.17 of the October 2010 EIS/EIR, and site-specific analyses for Reach B were discussed in Sections 3.16 and 4.16 of the February 2010 EIS. These previous documents analyzed the temporary impacts to Environmental Justice associated with the construction of the Reach B Project. Therefore, the remainder of this discussion only involves potential impacts caused by the proposed excavation activities at the Cache Creek borrow site.

Regulatory Setting

Environmental Justice is defined by the EPA's Office of Environmental Justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Executive Order 12898 directs Federal agencies to "identify and address disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law" (EPA 2020).

Additionally, the Counsel of Environmental Quality states that Environmental Justice impacts may exist if disproportionately high and adverse human health effects or disproportionately high adverse environmental effects occur as a result of a Federal action (CEQ 1997). Disproportionately high adverse health effects may include bodily impairment, infirmity, illness, or death; or if an environmental hazard is significant and appreciably exceeds the risk or rate of a hazard exposure by a minority population, low-income population, or Native American tribe to the general population or other appropriate comparison group. Disproportionately high adverse environmental effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Native American tribes when those impacts are interrelated to impacts on the natural or physical environment (February 2010 EIS).

Baseline Conditions

The Environmental Justice analysis is based on a review of relevant demographic data to define the relative proportion of minority and low-income populations in order to determine whether the Proposed Action or alternatives under consideration would result in Environmental Justice impacts on the relevant populations. According to the 2010 US Census, more than half of the population of Yolo County is minority, and approximately 20% of the population is low income (US Census, 2010).

Environmental Effects

Basis of Significance. The project would significantly affect Environmental Justice if it would:

- Cause significant and measurable health effects above the generally accepted norm;

- Expose minority, low-income, or Native American populations to a significant environmental hazard that appreciably exceeds the risk or rates to an appropriate comparison group;
- Cause an impact on the natural or physical environment that significantly and adversely affects a minority, low-income, or Native American population when those impacts are interrelated to impacts on the natural or physical environment; or
- Cause significant, adverse impacts on minority, low-income, or Native American populations that appreciably exceed or are likely to appreciably exceed those on an appropriate comparison group.

Alternative 1 - No Action. The no action alternative would have no effect on minority, low-income, or Native American populations in the Cache Creek borrow site area as the borrow site would not be used. Environmental Justice impacts for Reach B construction would remain within the Natomas Basin as originally discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the Project. Other borrow sites as discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS are either no longer available or will be utilized on other reaches of the project.

Alternative 2 - Proposed Borrow Site Excavation. The excavation of the Cache Creek borrow site would have temporary impacts on residences and businesses adjacent to the borrow site and haul routes. The nearest residence to the Cache Creek borrow site, however, is 0.5 miles away, and there are few other residences or businesses in the area. The excavation would have temporary impacts due to increased dust, traffic, and noise in Yolo County, which has a high minority and low-income population.

The presence of haul trucks and construction vehicles would lead to increased dust, traffic, and noise. These impacts, however, would not cause a disproportionately high adverse impact on minority communities, low-income communities, or Native American tribes due to mitigation measures described in Sections 3.2.3, 3.2.9, and 3.2.10.

Avoidance, Minimization, and Mitigation Measures

A complete list of avoidance, minimization, and mitigation measures for impacts to Environmental Justice within Reach B are discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS. Impacts associated with the excavation of the Cache Creek borrow site within Yolo County largely involve dust, traffic, and noise. These impacts would be reduced by mitigation measures described in Sections 3.2.3, 3.2.9, and 3.2.10 of this SEA. While impacts would occur in an area adjacent to minority and low-income populations, impacts would not have significant adverse effects, nor would they appreciably exceed those on an appropriate comparison group. Therefore, impacts to Environmental Justice would be less than significant.

3.2.6 Hazards and Hazardous Materials

Hazards and Hazardous Materials related to the construction of the Project were discussed in Section 3.16 and 4.16 of the October 2010 EIS/EIR, and site-specific analyses for Reach B were discussed in Sections 3.15 and 4.15 of the February 2010 EIS. Measures to reduce potential exposure and additional soil testing are already included in the construction of the Project, and no additional impacts are anticipated to occur. Therefore, the remainder of this discussion involves only potential impacts caused by the proposed excavation activities at the Cache Creek borrow site.

Regulatory Setting

Chemical screening limits for imported fill (borrow material) are determined by the California Department of Water Resources (DWR), the California Regional Water Quality Control Board (RWQCB), the California Code of Regulations, and the Unites States Environmental Protection Agency (USEPA). Additionally, the California Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for management of hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the state. Local agencies, including the Yolo County Environmental Health Division, administer these laws and regulations. For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined as "a substance or material that…is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8).

Baseline Conditions

To identify known hazardous materials and contaminated sites, a database search was conducted for all data sources in the Cortese List (California Gov. Code §65962.5), including: the GeoTracker database, a groundwater information management system that is maintained by the State Water Resources Control Board (SWRCB); the Hazardous Waste and Substances Site List (the EnviroStor database), maintained by the California Department of Toxic Substances Control (DTSC); and EPA's Superfund Site database (CalEPA 2016). There were no hazardous materials sites identified within 0.25 miles of the Cache Creek borrow site. There are also no known naturally occurring asbestos hazards in the vicinity of the Cache Creek borrow site (CDOC 2000).

Environmental Effects

Sediment within the broader Cache Creek Settling Basin (CCSB) contains metals from naturally occurring and mercury mining in the Coast Range. The Delta Mercury Control Program identified the CCSB as a source or mercury and methylmercury to the Yolo Bypass and set a total maximum daily load requirement for CCSB discharge. The formation of methylmercury only occurs in non-agricultural areas of the CCSB that are periodically inundated wetland habitat with poor drainage. Although the Cache Creek borrow site is adjacent to the CCSB, the borrow site has relatively low concentrations of total mercury. Soil samples collected from the excavation site in 2019 contained mercury levels ranging from 0.037 to 0.093

milligrams per kilogram (Geosyntec 2019), which are below the screening limit of 0.35 milligrams per kilogram (DWR 1995) used by NLIP for imported fill. The borrow site is not the type of environment in which methylmercury could form because the site is at a relatively higher elevation, is not periodically inundated, contains limited organic material, and drains easily due to the sandy nature of the soils. Therefore, the excavation of the Cache Creek borrow site would not increase the severity of any previously identified significant impacts related to disturbance of known hazardous materials.

There are no airports or schools located within a 0.25 mile radius of the Cache Creek borrow site. The nearest school to the borrow site is the Ramon S. Tafoya Elementary School located approximate 3.5 miles south of the borrow site. The nearest airport is the Sacramento International Airport located approximately 6.5 miles east of the borrow site. The Cache Creek borrow site is not located in a very high severity fire hazard zone (CalFire 2007).

Avoidance, Minimization, and Mitigation Measures

A complete list of avoidance, minimization, and mitigation measures are discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS. Soils must meet certain requirements in order to be excavated from the site and placed within the project footprint of Reach B.

Although sediment within the broader Cache Creek Settling Basin (CCSB) contains metals from naturally occurring and mercury mining, the Cache Creek borrow site itself has relatively low concentrations of total mercury. The formation of methylmercury generally occurs in non-agricultural areas of the CCSB that are periodically inundated wetland habitat with poor drainage; however, the excavation at the Cache Creek borrow site would not lower the elevation to a degree that drainage would reduce to cause methylation. With the testing of excavated soils and other mitigation measures as described in the February 2010 EIS and incorporated by reference in the October 2010 EIS/EIR, impacts to hazards and hazardous materials would remain less than significant.

3.2.7 Special Status Species

Impacts to Special Status Species related to the construction of Reach B were discussed in the October 2010 EIS/EIR and analyzed in greater detail in the February 2010 EIS and the Biological Opinion (BO) for the Natomas Basin Project (October 12, 2010, file no. 81420-2010-F-0949-1) (October 2010 Biological Opinion). Since 2010, the Western yellow-billed cuckoo was Federally listed as threatened. Additionally, the Federally listed as endangered Least Bell's Vireo was identified within the Yolo Bypass, which is located near the Natomas Basin. These species were discussed in the Amended Biological Opinion for the Natomas Basin Project (August 11, 2016, file no. 08ESMF00-2010-F-0949-R002) (2016 Amended Biological Opinion). The 2016 Amended Biological Opinion, as well as continued conversations with USFWS, have determined that the construction of Reach B would not have significant impacts to the Western Yellow-billed Cuckoo or the Least Bell's Vireo. In addition to these species, elderberry shrubs known to exist within the Project footprint were transplanted into a mitigation site prior to the construction of Reach B; these shrubs were previously evaluated in the February 2010 EIS and

the October 2010 Biological Opinion. There are no additional changes to the significance of impacts of the construction of the Reach B project that were not previously analyzed in the February 2010 EIS or the October 2010 Biological Opinion (and incorporated by reference in the October 2010 EIS/EIR); therefore, the remainder of this discussion involves only potential impacts to special status species that may be caused by the proposed excavation activities at the Cache Creek borrow site.

Regulatory Setting

The following Federal laws and regulations apply to the resources covered in this section. Descriptions of the laws and regulations can be found in Chapter 5 of the October 2010 EIS/EIR and Chapter 5 of the February 2010 EIS.

- Endangered Species Act (16 U.S.C. § 1531 et seq.)
- Migratory Bird Treaty Act (16 U.S.C. § 703-712)
- Bald and Golden Eagle Protection Act (16 U.S.C. § 668-668d)

Special Status Species Evaluation

Lists of Federally listed species that could exist within or near the project area were obtained on January 9, 2020 and again May 19, 2020 via the USFWS website (Appendix C). A total of 10 Federally listed species have the potential to be in the project area; however, seven of those species are not known to occur or have habitat within the project areas. These species are not discussed further in this document. Species discussed in this document include:

- Giant Garter Snake (*Thamnophis gigas*) **Threatened**
- Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus)* **Threatened**
- Western Yellow-billed Cuckoo (*Coccyzus americanus*) **Threatened**
- Least Bell's Vireo (*Vireo bellii pusillus*) **Endangered**

The October 2010 Biological Opinion provided reasonable and prudent measures and an incidental take statement for potential effects to the Federally listed as threatened giant garter snake and the Federally listed as threatened valley elderberry longhorn beetle. The 2016 Amended Biological Opinion described the Federally listed as threatened Western yellow-billed cuckoo and Federally listed as endangered least Bell's vireo. A re-initiation of consultation on impacts to special status species was sent to USFWS July 7, 2020. Revisions to this re-initiation were sent August 14, 2020 and September 21, 2020. A Final Biological Opinion is anticipated prior to the finalization of this SEA document and contract award.

The Cache Creek borrow site does not fall within designated critical habitat for any of the above listed species; however, elderberry shrubs are located within and around the Cache Creek borrow site. Additionally, there is potential habitat for the giant garter snake, as well as migration and stopover habitat for the Western yellow-billed cuckoo and least Bell's vireo adjacent to the

borrow site. The Cache Creek area as a whole meets the primary constituent elements of riparian woodlands, adequate prey base, and dynamic riverine processes. The borrow site itself is outside the main riparian area, but has the potential to be used as stopover habitat. Giant garter snakes have been identified in the Yolo Bypass, which is hydraulically connected to the Cache Creek area. Cuckoo occurrences have been documented in several places along the Sacramento River, including a site near the Fremont Weir approximately 4 miles away from the proposed borrow site. In 2011, least Bell's vireo were identified in the Yolo Bypass Wildlife Area, which is located approximately 13 miles away from the borrow site. There have not been any sightings since 2011; however, riparian habitat located adjacent to the borrow site is still considered potential least Bell's vireo habitat.

Giant Garter Snake. The giant garter snake (*Thamnophis gigas*) was Federally listed as threatened on October 20, 1993. Critical habitat has not been designated for this species. The giant garter snake inhabits marshes, ponds, and natural wetlands, as well as agricultural wetlands and associated waterways, including irrigation and drainage canals, rice fields, marshes, sloughs, ponds, low-gradient streams, and adjacent uplands. Adjacent to the Cache Creek borrow site, the Yolo Bypass provides good quality habitat to the south, and the Colusa Basin Drainage Ditch provides marginal quality habitat to the north. Giant garter snakes are believed to be most numerous in natural wetlands and marshes, persist in rice-growing regions, and are typically absent from the larger rivers, wetlands with sand, gravel, or rock substrates, and riparian areas lacking suitable basking sites or suitable prey populations (USFWS 2017). Habitually, the giant garter snake hibernates from October to March in abandoned burrows of small mammals located above prevailing flood elevations, and breeds during March and April.

Valley Elderberry Longhorn Beetle. The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB) is listed as a threatened species under the ESA (Federal Register 45:52803-52807). The VELB is endemic to the riparian habitats in the Sacramento and San Joaquin Valleys where it resides on elderberry (*Sambucus* spp.) plants. VELB are nearly always found on or close to its host plant. Throughout its range, the beetle is estimated to inhabit 20 percent of all suitable elderberry shrubs. Elderberry shrubs are found in or near riparian and oak woodland habitats. The presence of exit holes in elderberry stems indicates previous valley elderberry longhorn beetle habitat use. Exit holes are cylindrical and approximately 0.25 inch in diameter. Exit holes can be found on stems that are one or more inches in diameter as measured at ground level. The holes may be located on the stems from a few inches to about 9 to 10 feet above the ground (Barr 1991). Elderberry shrubs are present across the Sacramento River Basin, and have been identified in and around the Cache Creek borrow site.

Western Yellow-Billed Cuckoo. The Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (YBCU) was Federally listed as threatened October 3, 2014 (79 Federal Register 95551). Nesting Western yellow-billed cuckoos no longer occur on the Sacramento River south of Colusa as the river has been channelized and riprapped from that point into the Sacramento-San Joaquin River Delta. However, nesting YBCU do occur south and north of the Sacramento area, so there is some potential for migratory birds to use the riparian habitats along the American River Parkway, Sacramento River, and other riparian habitats such as the Cache Creek Settling Basin as they move between nesting habitat areas. As a result, this species has the potential to occur in the action area.

Least Bell's Vireo. The least Bell's vireo (*Vireo bellii pusillus*) was Federally listed as endangered in 1986. It is the western-most subspecies of Bell's vireo, breeding entirely within California and northern Baja California (Kus 2002). The loss of riparian habitat and susceptibility to cowbird nest parasitism reduced populations significantly until the species was extirpated from most of its range. Remaining populations in southern California have since begun expanding back into its historic range, with two documented occurrences in the Yolo Bypass Wildlife Area in 2011. This gradual expansion could eventually lead to occurrences into riparian habitats associated with the Cache Creek Settling Basin, as well as the Sacramento and American Rivers.

Environmental Effects

Basis of Significance. For this analysis, a direct or indirect effect was considered significant if it met one or more of the following significance criteria:

- Have a substantial adverse effect, either directly or indirectly, on species growth, survival, or reproductive success through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the USFWS;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Contribute to a substantial reduction or elimination of species diversity or abundance; or
- Have an adverse effect on a species' designated critical habitat, if applicable.

Alternative 1 - No-Action. Under the no action alternative, there would be no effects on existing special status species or critical habitat. There would be no substantial changes to the listed species in and around the project area and no substantial change to available habitats. Current maintenance and nearby agricultural practices would not change. The effects of these activities on special status species and their associated habitat would be the same. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the project. Other borrow sites as discussed in the October 2010 EIS and described in greater detail in the February 2010 EIS are either no longer available or intended to be utilized on other reaches of the project.

Alternative 2 - Proposed Borrow Site Excavation. The Project could result in direct and indirect effects to GGS, VELB, YBCU, and least Bell's vireo. These effects could be considered significant to these special status species unless mitigated. Although no Western yellow-billed cuckoos or least Bell's vireo have been identified on the site, there is a small chance for indirect effects on these species if previously unknown populations are present in the project area.

Effects to the Valley Elderberry Longhorn Beetle. The Cache Creek borrow site contains numerous elderberry shrubs, including at least 65 shrubs with stems greater than one inch in

diameter. A few of the shrubs documented in the site contained holes that are indicative of VELB, and it is unknown how many of the shrubs may contain VELB larvae.

Avoiding elderberry shrubs in the southern portion during the excavation activities of the site would reduce impacts to VELB to less than significant; however, transplanting the shrubs from the northern portion of the site (identified on Plate 4) into the transplant area would have direct impacts to elderberry shrubs and may have direct impacts to VELB due to the trimming required for the transplantation process. Additionally, excavation activities would have indirect effects from vibration and dust to any elderberry shrubs selected to remain in place. As a result, transplanting elderberry shrubs within the Cache Creek borrow site may affect, and is likely to adversely affect, the valley elderberry longhorn beetle.

In order to comply with the Federal Endangered Species Act, elderberry shrubs transplanted from the northern portion of the site into the potential transplant area would remain in their new locations and would be monitored for health and survival over a 10 year monitoring period. It is currently anticipated that only the elderberry shrubs within the Cache Creek borrow site would be transplanted to the transplant area. Additional associated plantings would be placed in that area. Mitigation plants, including elderberry seedlings and associated native vegetation seedlings, are anticipated to be installed in the Natomas Basin, likely in the Rio Ramaza or Atkinson mitigation sites.

Effects to Giant Garter Snake. The proposed excavation work could directly affect giant garter snakes by road strikes and crushing during excavation activities. Additionally, excavation activities that occur during the dormant period would increase impacts due to the additional potential of the destruction of overwintering dens. The potential impacts of excavation during the dormant period may affect, and is likely to adversely affect, the giant garter snake.

Effects to Western Yellow-billed Cuckoos. The project area is unlikely to support Western yellow-billed cuckoo nesting habitat. However, migrant individuals are likely to pass through the area in transit to breeding sites along the Sacramento River north of Colusa, CA. Overall, cuckoos are unlikely to occur in the action area, although potential dispersal and foraging habitat is present in the Cache Creek Settling Basin and along the Sacramento River. As a result, excavation activities associated with the Project may affect, but are not likely to adversely affect the Western yellow-billed cuckoo.

Borrow material would likely be excavated in the summer months when the cuckoo is nesting (June 1 through September 30); however, cuckoos are unlikely to be nesting in the area, so these effects would not adversely affect the species. There is a potential for Western yellow-billed cuckoos to use areas adjacent to the borrow site for migration and stopover habitat. If cuckoos are determined to be present prior to construction, the Corps would reinitiate consultation with USFWS in order to coordinate the appropriate avoidance measures in order to reduce impacts to the cuckoo.

Effects to Least Bell's Vireo. Despite the Least Bell's Vireo sightings in 2010 and 2011 in the Yolo Bypass, there are no known recent occurrences of breeding Least Bell's Vireo in the Sacramento Valley. Least Bell's Vireos are currently unlikely to be in the action area, but as the

species recovers there is an increasing possibility of occurrences within and near the action area. Least Bell's Vireo nesting habitat is assumed to exist within the understory riparian habitat of the Cache Creek Settling Basin, as well as portions of the Sacramento River. No excavation is anticipated to occur in potential nesting habitat; however, there is a potential to harass or disturb nesting Least Bell's Vireo during active construction. As a result, the Project related removal of riparian vegetation may affect, but is not likely to adversely affect, the Least Bell's Vireo.

If Least Bell's Vireos are present, there is the potential for short-term, temporary impacts during construction from dust, noise, and vibration. If nesting Least Bell's Vireos are determined to be present prior to excavation, the area would be avoided to the greatest extent practicable. If an area with an active Least Bell's Vireo nest cannot be avoided, the Corps would reinitiate consultation in order to determine the appropriate minimization measures in order to reduce impacts to the greatest extent practicable.

Avoidance, minimization, and mitigation measures to avoid these potential impacts are discussed below.

Avoidance, Minimization, and Mitigation Measures

Avoidance, minimization, and mitigation measures are discussed in the October 2010 EIS/EIR, and a complete list of avoidance, minimization, and mitigation measures are described in greater detail the February 2010 EIS and the October 2010 Biological Opinion. Prior to ground disturbance, all on-site construction personnel would be given instruction regarding the presence of sensitive species and the importance of avoiding these species and their habitats. Additional avoidance, minimization, and mitigation measures would include the following:

Valley Elderberry Longhorn Beetle: The following measures would be implemented to avoid, minimize, and compensate potential adverse effects on VELB:

- Worker awareness trainings for construction personnel would be conducted by a qualified biologist approved by the Service before the commencement of construction activities and as needed when new personnel begin work on the project. The program would inform all construction personnel about the life history and status of the beetle, the need to avoid damaging the elderberry plants, measures to avoid and minimize impacts on this species and its habitat, the conditions of relevant regulatory permits, and the possible penalties for not complying with these requirements. Written documentation of the training would be submitted to the Service within 30 days of the completion of training.
- All elderberry shrubs that are located adjacent to construction areas, but can be avoided, would be protected through establishment of a fenced avoidance area. The high-visibility fencing would be placed at least 20 feet from the dripline of the shrubs, unless otherwise approved by the Service. This fencing would prevent the encroachment of construction personnel and vehicles and protect the shrubs.
- No insecticides, herbicides, or other chemicals that might harm the beetle or its host plant would be used within 100 feet of the elderberry shrubs.

- Dirt roadways and disturbed areas within 100 feet of elderberry shrubs would be watered at least twice a day to minimize dust emissions.

Elderberry shrubs that require removal are anticipated to be transplanted into an area adjacent to the northern portion of the Cache Creek borrow site. If this area is deemed unsuitable, alternative transplantation locations, such as The Natomas Basin Conservancy (TNBC) preserves or NLIP woodland corridors, would be identified and submitted to USFWS for their approval.

The established transplant window for elderberry shrubs is November 15 through February 15 to increase the success of transplanting. Currently, elderberry shrubs are anticipated to be transplanted in February 2021. If it is not feasible to transplant elderberry shrubs during their dormant season, compensation will be increased by 2.5 times. Transplantation would not occur during the beetle's flight season (March 15-June 15). A qualified biologist would be available to monitor transplanting activity.

- Where practicable, elderberry shrubs to be transplanted would be minimally trimmed. Where not practicable, elderberry shrubs to be transplanted would be cut back 4 to 6 feet from the ground or to 50% of their height (whichever is taller) by removal of branches and stems. The trunk and all stems measuring 1 inch in diameter or greater at ground level that are removed would be replanted. All leaves on the shrubs would be removed.
- Shrubs would be removed with a truck-mounted hydraulic tree spade, backhoe, front-end loader, or other suitable equipment. When a shrub is being excavated, as much of the root ball as possible would be removed and replanted immediately at the mitigation site. Care would be taken to ensure that the soil is not dislodged from the root ball. Typically, the transplant hole is first excavated by the tree spade and deep-watered. Then the shrubs are transplanted with the same tree spade and immediately transported to the planting hole.
- The planting area would be at least 1,800 square feet (0.04 acre) for every transplanted elderberry shrub. The root ball would be planted so that the top is level with the existing ground, and the soil would be compacted so that settlement is minimized.
- A watering basin measuring at least 3 feet in diameter with a continuous berm (approximately 8 inches wide at the base and 6 inches high) would be constructed around each transplanted elderberry shrub. Upon completion of planting, soil would be saturated with water. No fertilizers or other supplements or paint would be used on the shrubs. The frequency of watering would be determined based on soil conditions present at the mitigation site. Either a drip irrigation system or watering truck would be used to provide water to the site.

Each elderberry stem measuring one inch or greater in diameter at ground level to be transplanted would also be mitigated for with elderberry seedlings and seedlings of associated species, in accordance with USFWS's Conservation Guidelines (USFWS 1999). Mitigation plantings are anticipated to be planted in an alternate mitigation site in the Natomas Basin, rather than in the Cache Creek borrow site area. Based on known elderberry transplant requirements, the Corps proposes compensatory mitigation for the loss of these 13 elderberry shrubs. Based on

available information on shrubs that are known to require relocation and estimates on shrubs that may require relocation, it is anticipated that mitigation of 172 elderberry and 237 associated native vegetation is required in 1.7 acres. Mitigation plantings would be placed in an area within the Natomas Basin. Native plants, such as coyote bush (*Baccharis pilularis*, mulefat (*Baccharis salicifolia*), buttonwillow (*Cephalanthus occidentalis californica*), and other native vegetation would be planted in association with the replacement elderberry shrub seedlings or cuttings at 1:1 (for shrubs without evidence of beetle exit holes) or 2:1 (for shrubs with evidence of beetle exit holes). Stock of seedlings and/or cuttings would be obtained from local sources. Excavation activities would have indirect effects from vibration and dust to any elderberry shrubs selected to remain in place. As a result, transplanting elderberry shrubs within the Cache Creek borrow site may affect, and is likely to adversely affect, the valley elderberry longhorn beetle. An elderberry mitigation site is anticipated to be planted within the Natomas Basin. The number of plants and acreage required would be determined prior to transplanting the shrubs. Transplanting the existing shrubs, maintaining the newly transplanted shrubs, and additional plantings in the Natomas Basin would reduce impacts to VELB to less than significant.

Giant Garter Snake. In order to reduce potential impacts to the giant garter snake, the following measures would be implemented to the greatest extent practicable:

- To the greatest extent practicable, construction activities within 200 feet from the banks of giant garter snake aquatic habitat would be avoided. Heavy equipment would be confined to existing roadways or established haul routes to minimize habitat disturbance.
- Clearing would be limited to the areas of excavation and hauling. Giant garter snake habitat within or adjacent to the project area would be flagged as Environmentally Sensitive Areas. These areas would be avoided by all construction personnel.
- Construction personnel would receive U.S. Fish and Wildlife Service (USFWS)-approved worker environmental awareness training. This training instructs workers to recognize giant garter snakes and their habitat(s).
- No worker is to handle or otherwise move giant garter snakes.
- 24-hours prior to construction activities, the project area would be surveyed for giant garter snakes or potential areas that may contain giant garter snakes. Surveys would be repeated if a lapse in construction activity of two weeks or greater occurs.
- If a snake is encountered during construction, activities would cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed. Any sightings and any incidental take would be reported to the USFWS immediately by telephone at (916) 414-6600.

It is also anticipated that some excavation would occur between February and April 30, 2021, which is the dormant period of the snake. Excavation during the dormant period includes activities done as part of the elderberry transplantation and full excavation of the southern portion of the site, possibly expanding into the northern portion of the site once the elderberry shrubs are relocated. In addition to the conservation measures listed above, the following

measures as recommended by USFWS would be implemented to minimize effects on GGS and their habitat that occurs within 200 feet of any construction activity during the dormancy period:

- In areas where an exclusionary fence cannot be established prior to the dormancy period of the snake, a buffer zone of 200 feet would be established in order to reduce potential impacts to burrowing snakes.
- A USFWS-approved biological monitor would be onsite during all excavation and earthmoving activities to determine if denning GGS are present. If GGS are uncovered during excavation, the monitor would have stop work authority to prevent additional take. USFWS would be contacted if GGS are encountered onsite.
- Prior to the start of each construction day in order to determine the presence of GGS or other sensitive species. The site inspection would include all items left onsite overnight, including equipment, vehicles, and fence lines. The inspection would also include areas within or near active soil disturbance. If no other new excavation or ground disturbing activities are planned for the rest of the day, the monitor would then be allowed to leave the site after the site and fence inspection is completed.
- Vehicle speeds would be limited to 10 miles per hour on levee roads or other areas near potential GGS habitat that do not have a posted speed limit. Contractors would be instructed to be aware of their surroundings while driving and snakes on the road will be avoided.

Mitigation measures would reduce the impacts to the greatest extent practicable; however, excavation activities that occur during the dormant period of the snake may affect, and are likely to adversely affect the giant garter snake. USACE is currently discussing mitigation requirements with USFWS and will determine the necessary amount of mitigation before finalization of this SEA document.

Western Yellow-Billed Cuckoo: The following measures would be implemented to avoid impacts to the Western yellow billed cuckoo and minimize impacts to potential nesting habitat in the project area:

- To the greatest extent practicable, vegetation removal would be completed outside of the cuckoo nesting season.
- If nesting cuckoos are determined to be present during excavation activities, the Corps would reinitiate consultation in order to coordinate the appropriate avoidance and minimization measures that should be implemented in order to reduce impacts to the greatest extent practicable.

The cuckoo is not expected to be present in the project area except for occasional stopover habitat during its migration period. As a result, excavation activities associated with the project may affect, but is not likely to adversely affect the Western yellow-billed cuckoo. Impacts to the Western yellow-billed cuckoo would be less than significant.

Least Bell's Vireo: The following measures would be implemented to avoid and minimize impacts to the least Bell's vireo and its habitat.

- If vireos are present, there is the potential for short term, temporary impacts during construction from dust, noise, and vibration. Any bank work or erosion protection could potentially impact nesting habitat for the vireos.
- If nesting vireos are determined to be present prior to construction, the Corps would reinitiate consultation in order to coordinate the appropriate avoidance and minimization measures that should be implemented in order to reduce impacts to the greatest extent practicable.

Least Bell's vireos are not expected to be present in the project area. As a result, excavation activities associated with the project may affect, but is not likely to adversely affect least Bell's vireos. Impacts would be less than significant.

Avoidance, minimization, and mitigation measures would reduce impacts to VELB, GGS, Western yellow-billed cuckoo, and Least Bell's Vireo to less than significant; therefore, there would be no change in significance to the impacts to Special Status Species as previously determined in the February 2010 EIS and the October 2010 Biological Opinion, and incorporated by reference in the October 2010 EIS/EIR.

3.2.8 Vegetation and Wildlife

Tree removal required for the construction of Reach B of the Project was conducted in the fall of 2019 through the spring of 2020. Nesting bird surveys conducted during the spring of 2020 determined that the construction of the Reach B Project would not result in take of nesting birds, eggs, or young. Trees removed as a part of the construction project would be mitigated in a woodland corridor planned to be planted upon completion of Reach B of the Project. Tree removal, mitigation, and other impacts to Vegetation and Wildlife related to the construction of Reach B were already discussed in the October 2010 EIS/EIR and analyzed in greater detail in the February 2010 EIS; therefore, the remainder of this discussion involves only those emissions caused by the proposed excavation activities at the Cache Creek borrow site.

Baseline Conditions

There are four major plant communities and cover types within and around the project area: ruderal herbaceous, fallow and active agricultural fields, riparian forest and scrub, and open water (canal). A plant community is a natural or human-influenced assemblage of plants that have common characteristics and can be easily identified by key species. Sensitive native communities are considered native-diverse communities that are regionally uncommon or of special concern to Federal, State, and local resource agencies. The riparian forest and scrub, and open water habitats are considered sensitive native communities. These communities and associated wildlife are described below.

Ruderal Herbaceous. The ruderal herbaceous community is a plant community that occurs in the project area. Ruderal species are the first to colonize disturbed lands. The disturbance in the project area originated with the construction of the levee and the presence of

agriculture. Ruderal species are fast growing species requiring little nutrition and have massive seed production. This community is located predominantly within the borrow site itself, as well as on the surrounding levees and swales.

This community is dominated by annual grasses, such as ripgut brome (*Bromus diadrus*), wild oat (*Avena fatua*), and forbs, including red stemmed filaree (*Erodium cicutarium*) and common groundsel (*Senecio vulgaris*). This community is primarily composed of non-native and invasive plants; however, the ruderal herbaceous community provides cover and foraging habitat for resident and migratory songbirds, small mammals, and reptiles.

Fallow and Active Agricultural Fields. Areas to the north and east of the Cache Creek borrow site are dominated by agricultural lands. Crops include nut crops such as pistachios and almonds, grain crops such as corn and winter wheat, and tomatoes. Agricultural fields near the excavation site exist to the north and northeast.

Riparian Forest and Scrub. Riparian forest and scrub is a native community that is located within and adjacent to the Cache Creek Settling Basin. This community includes native and nonnative trees, shrubs, vines, and brush in narrow bands along the river and canal. The majority of the species at the project site include Fremont cottonwoods (*Populus fremontii*), willow species (*Salix* spp.), and valley oak (*Quercus lobata*). Less common species include boxelder (*Acer negundo*), Oregon ash (*Fraxinus latifolia*) and poison oak (*Toxicodendron diversilobum*).

Open Water. Cache Creek and nearby irrigation canals are considered open water habitat. A number of shallow seasonal wetlands occur west of the Cache Creek Settling Basin, as well as larger seasonal wetlands within the Cache Creek Settling Basin itself. No in-water work would occur during the excavation of the Cache Creek borrow site.

In addition to plant communities, a variety of wildlife utilize the site. Nesting birds are protected under the Migratory Bird Treaty Act, and State-listed species, including the white-tailed kite (*Elanus leucurus*) and Swainson's hawk (*Buteo swainsonii*), are known to occur in and around the Cache Creek borrow site.

Swainson's Hawk. Swainson's hawks breed in open habitats and prairies in North America and over-winter in Mexico and South America. In California, Swainson's hawks migrate through and breed in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and the Mojave Desert. They usually arrive in the Central Valley between March 1 and April 1, and migrate south between September and October. Swainson's hawk nests usually occur in trees near the edges of riparian stands, in lone trees or groves of trees in agricultural fields, and in mature roadside trees.

During biological surveys conducted in the spring of 2020, nesting Swainson's hawks were identified in the Cache Creek Settling Basin approximately ¼ mile away from the proposed excavation site. Reproductive success of the nest was not determined. Additional surveys in accordance with CDFW's Swainson's Hawk Survey Protocols (CDFW, 2000) would be

conducted prior to excavation activities to ensure that the locations of nesting raptors are recorded.

White-tailed Kite. The white-tailed kite is a common to uncommon yearlong resident in coastal and valley lowlands and is rarely found away from agricultural areas. The white-tailed kite forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Nests are made of loosely piled sticks and twigs; lined with grass, straw, or rootlets; and placed near the top of a dense oak, willow, or other tree stand usually 20 to 100 feet above ground. Nests are located near open foraging areas in lowland grasslands, agricultural areas, wetlands, oak-woodland and savannah habitats, and riparian areas associated with open areas.

White-tailed kite are likely to occur in the vicinity of the project as the adjacent riparian habitat in the Cache Creek Settling Basin provides suitable nesting habitat for this species. Multiple occurrences of white-tailed kites in and around the excavation area have been reported in the CNDDB. Biological surveys would be conducted prior to excavation activities in 2020 and 2021 in order to identify potential nests to be avoided.

Environmental Effects

Basis of Significance

Direct and indirect effects on vegetation and wildlife would be considered significant if the alternatives result in any of the following:

- Substantial loss, degradation, or fragmentation of any natural communities or wildlife habitat.
- Substantial reduction in the quality or quantity of important habitat with the result that native wildlife could not live or successfully reproduce in the project area.
- Interfere substantially with the movement of any native wildlife species (habitat connectivity) or with established native resident or migratory wildlife corridors.
- Conflict with any local, state or Federal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Substantial effects on a sensitive natural community, including Federally-protected wetlands and other jurisdictional Waters of the U.S. as defined by Section 404 of the Clean Water Act.

Alternative 1 - No Action. Under the No Action alternative, the proposed borrow site would not be excavated and all current operations and maintenance activities would remain the same. There would be no change to the vegetation or wildlife in the project area. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the project. Other borrow sites as described in the October 2010 EIS/EIR and analyzed in greater detail in the February 2010 EIS are either no longer available or intended to be utilized on other reaches of the Project.

Alternative 2 - Proposed Borrow Site Excavation. The Cache Creek borrow site is bordered by mature trees, agricultural land, and mature riparian forest. The borrow site itself contains several non-native trees and shrubs that provide marginal habitat for wildlife, as well as foraging habitat for predators. Currently, only portions of the site are planned to be excavated at a time. Excavation is planned to begin in the spring of 2021.

Effects to White-tailed Kite and Swainson's Hawk. Excavation activities would not directly affect white-tailed kites or Swainson's hawks; however, indirect effects could occur due to the presence of construction vehicles and workers in the area during the nesting season. Construction activities in the vicinity of an active nest have the potential to result in forced fledging or nest abandonment by adult hawks, potentially causing significant effects due to the direct mortality and/or reduction in the success of these species. Surveys conducted during the spring of 2020 observed at least two active Swainson's hawk nests adjacent to the Cache Creek borrow site.

Trees and elderberry shrubs are anticipated to be relocated in February 2021. Excavation activities are anticipated to begin in the spring of 2021 and continue through project completion.

Avoidance, Minimization, and Mitigation Measures

Avoidance, minimization, and mitigation measures are described in the October 2010 EIS/EIR, and a complete list of avoidance, minimization, and mitigation measures are described in greater detail in the February 2010 EIS. The majority of large trees and shrubs would be either avoided or transplanted into nearby areas. Non-native trees that require removal would not require compensation. Grasses removed due to construction activities would be restored through reseeding. Areas of soil compaction would be loosened and seeded with native grasses. The seed mixture would include species such as California barley (*Hordeum californicum),* six week fescue (*Vulpina microstachys*), purple needlegrass (*Nassella pulchra*) and creeping wildrye (*Leymus triticoides*). Reseeded areas would be periodically monitored until 80 percent vegetation cover is achieved within the period established by the Corp's contracting officer.

Effects associated with the trimming and removal of trees and the temporary removal of grasses would be less than significant. If any further vegetation removal is necessary for construction of the project, mitigation measures would be coordinated with USFWS under the Fish and Wildlife Coordination Act. USFWS recommends that where feasible native trees or shrubs with a diameter of 2 inches or greater should be replaced on-site, in-kind with container plantings. Coordination with USFWS is ongoing. The mitigation measures would be conducted in or near the areas that the vegetation was removed.

To avoid potential effects to nesting migratory birds and raptors, CDFW typically requires the avoidance of nesting sites during construction activities and/or avoiding construction during the nesting season. If necessary, an on-site biologist experienced with raptor behavior would monitor active nests while construction related activities are taking place. If the nesting birds exhibit agitated behavior in response to construction related activities, the biological monitor would have the authority to stop work and would consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. The proposed

mitigation measures would reduce the effects on migratory birds, such as white-tailed kites and Swainson's hawks, to less than significant.

Avoidance and minimization measures would reduce impacts to vegetation and wildlife to less than significant; therefore, there would be no change in significance to the impacts to Vegetation and Wildlife as previously described in the October 2010 EIS/EIR and analyzed in greater detail in the February 2010 EIS.

3.2.9 Traffic and Circulation

The construction of Reach B of the Project has caused some temporary road closures and lane reductions, including the full closure of San Juan Road during the construction of the Riverside Canal realignment. Additional closures on Garden Highway are anticipated with the construction of Pumping Plant 3. These impacts were discussed in Section 3.10 and 4.10 of the October 2010 EIS/EIR and analyzed in greater detail in Sections 3.10 and 4.10 of the February 2010 EIS. Impacts to traffic due to these previously analyzed road closures and haul truck trips between borrow sites and the project area may have increased due to the increase of vehicles and development in the Natomas Basin. The February 2010 EIR determined that "Project construction would result in a temporary, but substantial, increase in traffic" from haul truck trips from various borrow sites to the different reaches of the Natomas Basin (February 2010 EIS; Impact 4.10-a). The temporary impact to traffic was evaluated as significant and unavoidable. Mitigation measures proposed in the February 2010 EIS were determined to reduce impacts, but not to a less than significant level. Due to the increase in traffic from development in the Natomas Basin, current impacts would remain significant and unavoidable. Mitigation measures would continue to reduce impacts, but not to a less than significant level.

As stated in the February 2010 EIS Section 4.10, "Transportation and Circulation," traffic impacts were analyzed using the traffic analysis methodology from the Institute of Transportation Engineers (ITE) (ITE 1989). To account for the large percentage of heavy trucks associated with a large construction project, ITE recommends that the threshold level be reduced to 50 or more new peak-direction trips. For construction projects that create temporary and short-term traffic increases, this criterion is considered conservative by ITE (ITE 1989).

Traffic impacts, including those involving accessing the borrow site with construction equipment and hauling material within Yolo County, were not evaluated in either the October 2010 EIS/EIR or the February 2010 EIS. Therefore, the remainder of this document focuses on the haul truck trips anticipated from the proposed change in borrow sites.

Baseline Conditions

Streets in the project area consist of a mix of regional highways, county-maintained roads, and levee roads. There are no sidewalks in the area and the public does not access the project area on a regular basis. County Road 103 borders the Cache Creek borrow site, and County Roads 17 and 102 are located nearby. Traffic along these roads include private automobiles and light and heavy (semi-trucks) commercial vehicles. The majority of other roads near the excavation site are unpaved maintenance and agricultural roads. There is little to no

pedestrian or bicycle traffic in the project area. The nearest highway is I-5. I-5 is a major arterial that runs through the entire state of California, linking Mexico and Canada.

Environmental Effects

Basis of Significance. The project would significantly affect traffic if it would:

- Cause an increase in traffic volume that is substantial in relation to the existing load and capacity of a roadway;
- Cause an increase in safety hazards on an area roadway; or
- Cause substantial deterioration of the physical condition of the nearby roadways.

Alternative 1 - No Action. The no action alternative would have no effect on the traffic and circulation in the Cache Creek borrow site area as the borrow site would not be used. Types of traffic, traffic volume, and circulation patterns for Reach B construction would remain within the Natomas Basin as originally discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the Project. Other borrow sites as discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS are either no longer available or intended to be utilized on other reaches of the project.

Alternative 2 - Proposed Borrow Site Excavation. The Project would temporarily affect local roads and major urban connector roads that are used as haul routes around the Cache Creek borrow site during excavation and Reach B construction. Haul trucks would cause an increase in traffic volume and reduce traffic speeds on local roads.

During construction, haul trucks would travel between the Cache Creek borrow site and the Natomas Reach B construction site. The haul route follows County Road 103 northward, west onto County Road 17, and south onto County Road 102. Once connected to County Road 102, both haul route options would connect to I-5, Airport Road, Bayou Way, Power Line Road, and Garden Highway (Plate 3).

During the height of construction, as many as 185 haul trips could be accessing the site per day, or up to 19 truck trips per hour. While this volume of construction traffic would exceed existing traffic conditions on the local unpaved roads in the area, a substantial deterioration of the physical condition of the nearby roadways is not anticipated. Pre-construction and post-construction conditions would be documented by the contractor. Any damage determined to be caused by the contractor would be repaired by the contractor.

Avoidance, Minimization, and Mitigation Measures

Avoidance, minimization, and mitigation measures are discussed in the October 2010 EIS/EIR, and a complete list of avoidance, minimization, and mitigation measures are described in the February 2010 EIS. The contractor would be required to develop a Traffic Control Plan,

which would be reviewed and approved prior to excavation activities. This plan would include the following measures:

- Do not permit construction vehicles to block any roadways or private driveways.
- Provide access for emergency vehicles at all times.
- Select haul routes to avoid schools, parks, and high pedestrian use areas, when possible.
- Obey all speed limits, traffic laws, and transportation regulations during excavation.
- Use signs and flaggers, as needed, to alert motorists, bicyclists, and pedestrians to avoid conflict with construction vehicles or equipment.
- Flaggers would be used at each roadway that crosses the levee to safely circulate traffic through the excavation site.
- Use separate entrances and exits to the excavation site.
- Prior to potential road closures, notify local residents, businesses, and schools if road closures would occur during construction, excavation, or hauling.

The excavation of the Cache Creek borrow site would result in temporary and short-term increases in traffic on local roadways. Construction-related traffic would consist of daily commute trips by construction workers and truck trips to haul earthen soil material from the Cache Creek borrow site to Reach B. Excavation at the Cache Creek borrow site would result in up to 19 additional truck trips per hour, including during peak hours, which is well below the threshold for traffic impacts. The excavation of the Cache Creek borrow site would not conflict with adopted applicable policies or plans related to the performance of the circulation system. Therefore, this impact would be less than significant.

3.2.10 Noise and Vibration

Noise associated with the construction of Reach B includes noise and vibration from construction vehicles, haul trucks, and other equipment during the installation of the levee features and the realignment of the Riverside Canal. Borrow sites that are no longer available for use will no longer be impacted by noise or vibration from the construction of Reach B. The impacts associated with the construction of Reach B in Sacramento County were discussed in the October 2010 EIS/EIR and analyzed in greater detail in the February 2010 EIS; however, noise generation, including from operating construction equipment and hauling material within Yolo County, was not evaluated in either the October 2010 EIS/EIR or the February 2010 EIS. The remainder of this section will focus on potential impacts from the addition of the Cache Creek borrow site.

Baseline Conditions

Noise is defined as unwanted sound that evokes a subjective reaction to the physical characteristics of a physical phenomenon. Ambient noise in the project area is minimal and is mostly generated by agricultural practices and traffic on County Road 102. Based on experience with similar settings, it is assumed existing noise levels in the project area are in the range of 60

to 70 decibels day-night sound level (Ldn). Noise-sensitive receptors in or near the project area include residents, agricultural workers, and wildlife.

Land uses at and adjacent to the Cache Creek borrow site are agricultural with scattered rural residences. The closest sensitive receptor/residence is located approximately 0.5 miles north of the excavation site. The primary existing noise sources at the Cache Creek borrow site and vicinity are on-road mobile sources (automobiles and truck traffic), distant aircraft over flight noise, and agricultural activities. The Yolo County 2030 General Plan Action HS-A61 states a goal of developing a comprehensive Noise Ordinance. As of preparation of this SEA, no County ordinance is in place. Existing noise conditions in Yolo County were assessed as part of the Yolo County 2030 General Plan Update and the Day/Night Average Sound Level (Ldn) along the rural, Yolo County portion of the haul route (County Road 102) range from 59.5 Ldn 100 feet from the road centerline to 70 Ldn less than 50 feet from the road centerline (Yolo County 2009).

A short segment of the haul route also passes through the City of Woodland. Woodland has established a noise policy for all construction projects in or near residential areas. The policy prohibits noise from Monday through Saturday before 7:00 a.m. and after 6:00 p.m. and on Sunday before 9:00 a.m. and after 6:00 p.m., but no maximum allowable noise levels are stated in the Woodland City Code (City of Woodland 2020).

Construction noise impacts typically occur when construction activities take place during noise-sensitive times of the day when construction activities occur immediately adjacent to noise-sensitive land uses, or when construction activities occur immediately adjacent to noise-sensitive land uses, or when construction durations last over extended periods of time. The project would temporarily generate construction noise from operation of construction equipment at the Cache Creek borrow site and from transport of construction workers, construction materials, and equipment to and from the borrow site.

Environmental Effects

Basis of Significance. Adverse effects related to noise are considered significant if an alternative would result in any of the following:

- Exposure of persons or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Substantial short-term or periodic increase in ambient noise levels in the project vicinity above existing levels existing without the project;
- Substantial long-term increase in ambient noise levels in the project vicinity above levels existing without the project;
- Vibration exceeding 0.2 inch per second within 75 feet of existing buildings.

Alternative 1 - No Action. Under the no action alternative, there would be no project-related effects to noise. Sources of noise and noise levels would continue to be determined by

local activities, agriculture, and natural sounds. While the Johnson Ranch borrow site is currently being utilized for the initial construction of Reach B, there is not sufficient material in this source to complete the Project. Other borrow sites as discussed in the October 2010 EIS/EIR and described in greater detail in the February 2010 EIS are either no longer available or intended to be utilized on other reaches of the project.

Alternative 2 - Proposed Borrow Site Excavation. Excavation of sediment and hauling would generate temporary construction noise at the Cache Creek borrow site and along the haul route. The haul route passes through rural and agricultural areas, but most of the haul route is along I-5. Haul truck noise levels would be similar to existing highway truck traffic on I-5 and would not represent a significant increase above existing noise levels. Although the beginning and end portions of the haul route are off highway and travel through agricultural areas, the operation of heavy-duty equipment associated with agricultural activities is common along these portions of the haul route. Noise levels of approximately 75 A-weighted decibels (dBA) equivalent sound level (Leq) can typically result within 50 feet of agricultural equipment. Sound levels attributable to equipment use at the Cache Creek borrow site and haul routes would also be similar to existing sound levels along County Roads 102, 17, and 103 at approximately 70 Ldn less than 50 feet from the road centerline.

Table 3 shows typical noise levels during different construction stages. Table 4 shows typical noise levels produced by various types of construction equipment.

Table 3. Typical Construction Noise Levels

Construction Phase	Noise Level (dBA, Leq)[a]
Ground Clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

[a] Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.
Source: U.S. Environmental Protection Agency, 1971.

Table 4. Typical Noise Levels From Construction Equipment

Construction Equipment	Noise Level (dBA, Leq at 50 feet)
Dump Truck	88
Portable Air Compressor	81
Concrete Mixer (Truck)	85
Scraper	88
Jack Hammer	88
Dozer	87
Paver	89
Generator	76
Backhoe	85

Source: Cunniff, Environmental Noise Pollution, 1977.

Noise from construction activities generally attenuates at a rate of 6 dBA per doubling of the distance from the reference noise source. Residences are located approximately 0.5 miles from the excavation activities; however, there are a few residences located along the haul route. During the height of excavation, the haul route may have as many as 185 haul truck trips per day, or up to 19 truck trips per hour. A receptor at 50 feet from a dump truck would experience noise levels up to approximately 88 dBA during a pass by.

Although excavation equipment may cause noticeable increase in ambient noise levels in and around the Cache Creek borrow site, any noise increases would be short term and intermittent. Excavation noise would fluctuate depending on the phase, equipment type and duration of use, distance between noise source and receptor, and presence or absence of barriers between noise source and receptor. Noise from construction activity generally attenuates at six dBA per doubling of distance. Assuming an attenuation rate of six dBA per doubling of distance, construction equipment noise in the range of 80 to 90 dBA at 50 feet would generate noise levels of 74 to 84 dBA at 100 feet from the source. The nearest residences are located approximately 0.5 miles away from the construction activities. Using the same attenuation rate of 6 dBA per doubling of distance, the noise levels would be reduced to 50 to 60 dBA based on the distance from the source.

Avoidance, Minimization, and Mitigation Measures

Avoidance, minimization, and mitigation measures were discussed in the October 2010 EIS/EIR, and a complete list of avoidance, minimization, and mitigation measures are described in the February 2010 EIS. The following measures would be implemented to further reduce the potential adverse effects related to noise and vibration:

- The Cache Creek borrow site is outside city limits, and is therefore exempt from the City of Woodland's noise policy for construction projects; however, a portion of the haul route is through city limits. Hauling within city limits would be limited to Monday through Saturday from 7:00 a.m. to 6:00 p.m., and Sunday from 9:00 a.m. to 6:00 p.m., unless given special decompensation from the City of Woodland. No hauling through city limits would take place on holidays without permission given by the City of Woodland.
- Construction equipment noise would be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools.
- Turn off all equipment, haul trucks, and worker vehicles when not in use for more than 5 minutes.
- Notify residences, schools, and businesses about the type and schedule of construction.

All construction equipment would be properly maintained and equipped with standard noise control components, such as mufflers, per manufacturer's specifications. Haul route noise associated with excavation activities would be short-term, temporary, similar to periodic noise levels caused by agricultural equipment typically operating in the project area, and similar to existing noise levels along County Roads 102, 17, and 103.

The project would generate temporary groundborne vibrations from grading and hauling and transient groundborne vibration from construction equipment use. However, the closest residences to the construction activities would be approximately 0.5 miles away, and implementation of the measures described above would minimize the exposure of residents, schools, businesses, wildlife, and recreationists to excessive noise. Therefore, the impact after mitigation is less than significant.

4.0 GROWTH-INDUCING EFFECTS

Growth-inducing impacts of the overall Natomas Basin Project were fully discussed in the October 2010 EIS/EIR. As development in the Natomas Basin continues, dependence on levee improvements surrounding the basin increases. The excavation of the Cache Creek borrow site does not add to any growth-inducing impacts within the Natomas Basin, nor does excavating the site create growth-inducing impacts within the Cache Creek or Woodland area.

The goal of the proposed excavation is to provide appropriate material for the completion of Reach B of the Project in order to meet Corps requirements for levee seepage criteria. The excavation of the borrow site and construction, operation, and maintenance of the improved levee would not result in a substantial increase in the number of permanent workers or employees.

5.0 CUMULATIVE EFFECTS

Although new NEPA regulations no longer require the evaluation of Cumulative Effects, the preparation of this SEA began before the new regulations took effect on September 14, 2020. As such, this SEA must analyze cumulative effects. The cumulative effects of the American River Watershed Common Features, Natomas Basin Project, including Reach B, were addressed in the October 2010 EIS/EIR. The excavation of the Cache Creek borrow site would have no adverse cumulative effects on fisheries, recreation, utilities, and water quality. There would be short term cumulative effects on air quality, vegetation and wildlife, environmental justice, and special-status species; however, mitigation measures would be implemented to reduce the effects to a less than significant level.

Other ongoing regional flood risk reduction projects would increase the level of flood protection provided to lands in the Sacramento Valley region, thereby reducing the risk of adverse effects related to floods. However, the projects could reduce the riparian ecosystems along the river where construction could occur. Mitigation would occur in order to result in no net loss of riparian values, but there would be temporary losses and probable changes in the specific types, quantities, and locations of the habitat.

The Natomas Basin Project involves multiple reaches over multiple phases. The construction schedule is subject to change, but is currently projected to take place as follows:

- Reach I, Contract 1: Cutoff wall with seepage berm; construction began September 2018 and was completed in the fall of 2020.
- Reach H: Cutoff wall; construction began March 2019 and is anticipated to be completed in the summer of 2021.
- Reach D: Removal of pipes at Bennett and Northern Main sites and relocation of Vestal Drain; construction began August 2018. Levee improvements were completed in the spring of 2020, and completion of this reach of the Project is anticipated to be complete with the installation of monitoring wells to be installed in the winter of 2020.
- Reach B: Adjacent levee with seepage berm; construction began June 2020 and is anticipated to be completed in 2021 or 2022.
- I-5 Window: Seepage berm; construction is anticipated to begin in 2021.
- Pump Plant 4: Pipe and pump station improvement; construction is anticipated to begin in 2021.
- Reach E: Cutoff wall and levee slope stability improvements; construction is anticipated to begin in 2022 or 2023.
- Reach A: Adjacent levee with seepage cutoff wall and seepage berm; construction proposed for 2022 through 2023.
- Reach I Contract 2: Tree removal, November 2021 through February 2022; construction of landside slope stability improvements, April through November 2022.
- Reaches F and G: Cutoff wall and levee slope stability improvements; construction proposed from May 2022 to October 2023.

Additional projects involving windows remaining from the original NLIP construction and the remaining projects associated with the comprehensive mitigation strategy for the project are planned to begin design in 2021 and begin construction in 2024.

5.1 Other Projects in Local Area

This section briefly describes other major Federal and local projects in the Sacramento area. All of these projects are required to evaluate the effects of the proposed project features on environmental resources in the area. In addition, mitigation or compensation measures must be developed to avoid or reduce any adverse effects to a less than significant level based on Federal and local agency criteria. Those effects that cannot be avoided or reduced to less than significant are more likely to contribute to cumulative effects in the area.

5.1.1 American River Common Features WRDA 2016 Project

A project for flood risk management known as the American River Common Features Project, authorized by Section 1401(2)(7) of the Water Resources Development Act of 2016 (Pub. L. No. 114-322, §1401(2)(7), 130 Stat. 1708 (2016) (ARCF 2016 Project)), is scheduled for construction from 2019 through 2024. The ARCF 2016 Project would involve construction of levee improvements along the American and Sacramento River levees as well as proposed

improvements to the NEMDC east levee and Magpie Creek. The levee improvements scheduled for implementation include the construction of cutoff walls, erosion protection, seepage and stability berms, relief wells, levee raises, and improvement of levee prisms. In addition, the Corps would widen the Sacramento Weir and Bypass. The ARCF 2016 Project would also involve construction of a number of mitigation sites in the area.

As the first action associated with the ACRF 2016 Project, the Corps, SAFCA, and the CVFPB constructed Reach D Contract 1 which included an approximately 400 foot long stability berm against the landside slope of the Sacramento River east levee along Front Street near downtown Sacramento. The following segments of the ARCF 2016 Projects are in development and are anticipated to be constructed in the near future:

Sacramento River East Levee Contract 2: April - October 2021
Sacramento River East Levee Contract 3: April - October 2022
North Area Streams Contract 1: July - October 2021 (though possibly 2022)
Sacramento Weir: April 2022 – October 2024
Sacramento River East Levee Erosion Site RM 55.2L: April – October 2021
Lower American River Erosion Contract 1: April – October 2021
Lower American River Contract 2: April 2022 to October 2023
Lower American River Contract 3: April 2023 to October 2025.

5.1.2 Lower Cache Creek Settling Basin Feasibility Study

The U.S. Army Corps of Engineers and its non-Federal sponsors, the City of Woodland, Department of Water Resources, and the State of California Central Valley Flood Protection Board, propose to reduce the overall flood risk to the City of Woodland by improving existing levees and constructing a new levee north of the City of Woodland in order to prevent floodwaters emanating from Lower Cache Creek from reaching the City of Woodland. The proposed project consists of improving existing levees and the construction of a new levee just north of the City in order to protect it from flooding emanating from Lower Cache Creek. The Corps determined the proposed height of the levee embankment north of the City and the capacity of the project features by modeling a range of flood flow magnitudes/return frequencies, then estimating the cost and benefits for four incremental heights. If authorized for construction, the earliest anticipated completion would be within the next six years. Proposed construction would be anticipated to begin as soon as April 15, 2025, and would take two full years to complete.

5.1.3 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 is a long-range program of bank protection authorized by the Flood Control Act of 1960. The SRBPP directs the Corps to provide bank protection along the Sacramento River and its tributaries, including that portion of the lower American River bordered by Federal flood control project levees. Beginning in 1996, erosion control projects at five sites covering almost two miles of the south and north banks of the lower American River have been implemented.

Additional sites at RM 149 and 56.7 on the Sacramento River totaling one-half mile have been constructed since 2001. From 2005 to 2007, 29 critical sites totaling approximately 16,000 linear feet were constructed under the Declaration of Flood Emergency by Governor Schwarzenegger. This is an ongoing project and additional sites requiring maintenance will continue to be identified until the remaining authority of approximately 24,000 linear feet is exhausted. Additionally, WRDA 2007 authorized an additional 80,000 linear feet of bank. For implementation of the 80,000 additional linear feet of bank protection, the Corps submitted a biological assessment and initiated formal consultation with USFWS and NMFS. On December 19, 2017, USFWS responded with a Programmatic Biological Opinion. On August 30, 2019, NMFS responded with a Framework Programmatic Biological Opinion.

5.1.4 Lower Elkhorn Basin Levee Setback Project

DWR is proposing the Lower Elkhorn Basin Levee Setback Project to reduce flood risk on the Sacramento River to the greater Sacramento area. DWR is requesting permission from USACE pursuant to Section 14 of the Rivers and Harbors Act of 1899, Section 408 (33 U.S.C. § 408), for the alterations of Federal flood management facilities. DWR is also seeking a Department of the Army Permit under Section 404 of the CWA for discharge of dredged or fill material in jurisdictional waters of the United States.

The project is located in Yolo County and is bounded by the Sacramento River on the east, the Tule Canal and Yolo Bypass on the west, the Sacramento Bypass on the south, and I-5 on the north. The project would widen the Yolo Bypass by constructing a setback levee east of the Tule Canal in the Lower Elkhorn Basin, widen the Sacramento Bypass by constructing a setback levee north of the existing levee, and implement improvements in the Lower Elkhorn Basin and Sacramento Bypass to mitigate project impacts. Widening of the Sacramento Bypass is also a feature of the USACE ARCF 2016 Project, as previously mentioned. The proposed Lower Elkhorn Basin Levee Setback Project would not duplicate this recommended feature, rather it would afford DWR a potential alternative means to construct the Sacramento Bypass levee setback in advance of construction of the authorized ARCF 2016 Project.

5.2 Cumulative Effects

The effects of the proposed use of the Cache Creek borrow site for the construction of Reach B of the Project would have no adverse cumulative effects on Fisheries, Recreation, Utilities and Service Systems, or Water Quality. There would be short term but negligible cumulative effects on aesthetics and visual resources, agricultural resources, air quality, Environmental Justice, cultural resources, hazards and hazardous materials, special status species, vegetation and wildlife, traffic and circulation, and noise and vibration as described below.

5.2.1 Aesthetics and Visual Resources

The use of the Cache Creek borrow site would have temporary impacts on aesthetics and visual resources due to the presence of construction and excavation vehicles and equipment during excavation activities. Other projects in the surrounding areas, including the ARCF 2016

Project, the Sacramento River Bank Protection Project, and the Lower Elkhorn Levee Setback Project may have cumulative impacts on the aesthetics on the greater Sacramento area due to concurrent construction of these Projects. It is assumed that excavation from the Cache Creek borrow site would be complete prior to the start of any work in the Lower Cache Creek Basin; however, some work may be concurrent with borrow site excavation.

Cumulative impacts to aesthetics due to the presence of construction vehicles, dust, and bare soils would be less than significant due to the distance between these projects and the temporary nature of construction. Upon completion of excavation and construction, all of the project sites would be seeded for erosion control, and in most cases returned to an aesthetic similar to the pre-construction conditions. Temporary impacts to aesthetics and visual resources are less than significant; therefore, the excavation of the Cache Creek borrow site, in combination with other projects as described above, would not result in cumulatively significant impacts to aesthetics and visual resources.

5.2.2 Agricultural Resources, Geology, and Soils

The excavation of the Cache Creek borrow site would reduce the overall elevation of the borrow site; however, the area would remain available for potential agricultural use or for the restoration of riparian habitat. The removal of soil and the lowering of the elevation of the land would not change the overall use of the area. Other projects in the surrounding areas, including the ARCF 2016 Project, the Sacramento River Bank Protection Project, Lower Elkhorn Levee Setback Project, and the Lower Cache Creek Settling Basin Feasibility Study, assuming authorization, would not alter the overall use of agricultural resources or induce development in the floodplain. Temporary impacts to agricultural resources, geology, and soils are less than significant; therefore, the excavation of the Cache Creek borrow site, in combination with other projects as described above, would not result in cumulatively significant impacts to agricultural resources, geology, and soils.

5.2.3 Air Quality

Excavation of the Cache Creek borrow site is not expected to have long-term effects on air quality since the operational activities (including inspection and maintenance) are expected to be similar to existing conditions. However, construction would result in direct, short-term effects on air quality, mainly related to combustion emissions and dust emissions. Excavation of the Cache Creek borrow site and the associated construction of Reach B of the Project coincide with the construction of the Corps' Natomas Reaches I and H; however, impacts associated with the simultaneous construction of these reaches were already considered in the October 2010 EIS/EIR and the February 2010 EIS. No Federal conformity *de minimus* thresholds would be exceeded during the construction of these projects, and only the YSAQMD threshold for PM_{10} and the SMAQMD NOx threshold (combined total) would be exceeded.

In order to reduce cumulative effects on air quality, the contractor would be required to follow the requirements of YSAQMD and SMAQMD's standard mitigation program (Appendix B) which is intended to reduce NOx emissions by 20 percent. Any remaining emissions over the NOx threshold would be reduced via a mitigation fee payment. Implementation of mitigation

measures during construction would reduce emissions to the greatest extent possible. This and other construction projects in the area would implement emissions reduction BMPs and mitigation measures that would reduce the impacts to air quality to less than significant. Therefore, the excavation of the Cache Creek borrow site, in combination with other projects as described above, would not result in cumulatively significant impacts on air quality.

5.2.4 Cultural Resources

Although no impacts to historic properties are anticipated to occur during construction, adverse impacts, particularly on precontact cultural resources discovered during construction, may still occur. Losses of cultural resources would add to a historical trend in the loss of these resources as artifacts of cultural significance and as objects of research importance. Based on current and previous investigations in the APE, there is a low probability that unknown cultural resources would be located during construction. As such, it is unlikely that that the work at the Cache Creek borrow site would result in a cumulatively significant impact on cultural resources.

5.2.5 Environmental Justice

While impacts would occur in an area adjacent to minority and low-income populations, impacts would not have significant adverse effects, nor would they appreciably exceed those on an appropriate comparison group. Other projects in the surrounding areas, including the ARCF 2016 Project, the Sacramento River Bank Protection Project, Lower Elkhorn Levee Setback Project, and the Lower Cache Creek Settling Basin Feasibility Study if authorized, would have no impacts to Environmental Justice or would mitigate impacts to less than significant. There would be no adverse or significant cumulative health or environmental impacts on minority, low-income, or Native American populations. As such, the work at the Cache Creek borrow site would not result in a cumulatively significant impact on Environmental Justice.

5.2.6 Hazards and Hazardous Materials

The removal of soil and the lowering of the elevation of the Cache Creek borrow site would not decrease the drainage of the area to a degree that methylation could occur. Other projects in the surrounding areas, including the ARCF 2016 Project, the Sacramento River Bank Protection Project, Lower Elkhorn Levee Setback Project, and the Lower Cache Creek Settling Basin Feasibility Study if authorized, would not alter hazardous materials in the soil or increase the use of hazardous materials during construction. Temporary impacts to hazards and hazardous materials would be less than significant; therefore, the excavation of the Cache Creek borrow site, in combination with other projects as described above, would not result in cumulative adverse effects to hazards and hazardous materials.

5.2.7 Special Status Species

Transplanting elderberry shrubs out from one side of the borrow site to the other would have temporary impacts to the Valley Elderberry Longhorn Beetle; however, mitigation measures would improve the connectivity of elderberry savannah habitat throughout the Natomas Basin and the surrounding areas. Cumulatively, the construction of other local projects

constructed at once would increase disturbance and possibly reduce reproductive success. However, once the construction is complete levels of disturbance would return to existing levels. No long-term impacts are anticipated to occur due to these projects. Establishment of new, additional native vegetation mitigation areas in the Natomas Basin would result in the long-term net improvement of habitat extent and connectivity. As a result, the Project, when added to other past, present, and reasonably foreseeable future projects, would not result in cumulative adverse effects on special status species.

5.2.8 Vegetation and Wildlife

The grassland and sparse vegetation habitat that currently occupies the borrow site would be disturbed during project construction. These areas would be restored and contoured for potential agricultural production; however, it is anticipated that native grasses would be seeded in the area as it is not currently being used for agricultural production. There would be short-term disturbances of wildlife habitat, but the project would not substantially reduce the connectivity or extent of natural vegetation and wildlife habitat within the entirety of the Cache Creek basin. Additional projects in the area would also have short-term effects on vegetation and wildlife associated with construction activities; however, mitigation measures for project related impacts would reestablish native vegetation through the planting of native grasses and tree species. Such measures are expected to result in a net, long-term improvement in native vegetation and wildlife habitat values in the area, primarily by restoring degraded areas at a ratio higher than what was removed. Therefore, there would be no significant cumulative adverse effects to wildlife and vegetation.

5.2.9 Traffic and Circulation

The construction of all projects in the local area would involve trucks and worker vehicles entering and exiting residential areas, potentially disrupting traffic flow and possibly posing a safety hazard to other motorists, pedestrians, and bicyclists on and along these roadways and the haul route. Large trucks transporting equipment and materials to the work areas would not be consistent with the types of residential traffic using the rural roads; however, the increases in traffic would not significantly increase traffic levels above existing levels. The projects described above would be constructed in different areas and on different schedules, and implementation of measures in the Traffic Management Plans used by each different project would minimize traffic congestion and delays. Minimization measures and BMPs at all sites would reduce adverse effects; therefore, the cumulative effects to traffic would be less than significant.

5.2.10 Noise and Vibration

This project and other local projects in the Natomas Basin and Yolo County would have temporary, short-term impacts on ambient noise and vibration levels during construction. Movement and operation of equipment, haul trucks, and worker vehicles would generate noise in the work area, as well as on neighborhood roadways that provide access through the residential area. Noise levels could reach the high 80's dBA, depending on the type of equipment or truck. The construction of the project and the hauling of materials would increase vibration in the

project area and along the haul routes; however, these impacts would be intermittent and less than significant. Other projects in the area are not proposed to occur simultaneously, and as a result, the cumulative effects related to noise and vibration would be less than significant.

6.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

6.1 Federal

Clean Air Act of 1972, as amended, 42 U.S.C. 7401, et seq. *Compliance*. The proposed action is not expected to violate any Federal air quality standards, exceed the EPA's general conformity *de minimis* threshold, or hinder the attainment of air quality objectives in the local air basin. Implementation of BMPs and adopted YSAQMD measures would reduce NO_X emissions. Thus, the Corps has determined that the proposed project would have no significant effects on the future air quality of the area.

Clean Water Act of 1972, as amended, 33 U.S.C. 1251, et seq. *Compliance*. The Clean Water Act is the primary Federal law governing water pollution. It established the basic structure for regulating discharges of pollutants into waters of the U.S. and gives the U.S. EPA the authority to implement pollution control programs, such as setting wastewater standards for industries (EPA, 2002). In some states, such as California, the EPA has delegated authority to regulate the Clean Water Act to state agencies.

The contractor would be required to obtain a National Pollution Discharge Elimination System permit from the California RWQCB, Central Valley Region, since the project would disturb one or more acres of land and involve possible storm water discharges to surface waters. As part of the permit, the contractor would be required to prepare a SWPPP identifying BMPs to be used to avoid or minimize any adverse effects of construction on surface waters. With the completion of these requested permits and documents, the Corps would be in compliance with this Act.

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531, et seq. *Partial Compliance.* In accordance with Section 7(c), the Corps obtained a list from USFWS of Federally listed and proposed species likely to occur in the project area on January 9, 2020 and again May 19, 2020 via the USFWS website Information for Planning and Consultation. The Corps formally reinitiated consultation with USFWS on June 15, 2020, with revisions sent July 7, August 14, and September 14, 2020, in order to update the Biological Opinion originally issued on October 8, 2008 (USFWS, 2008), and appended December 8, 2014, due to changes to the project description and in order to analyze effects to the Federally threatened Western yellow-billed cuckoo. The Corps has made the determination that the excavation of the Cache Creek borrow site may affect, and is likely to adversely affect the VELB and GGS; and may affect, but is not likely to adversely affect the Western yellow-billed cuckoo and the least Bell's vireo. A Revised Biological Opinion is anticipated prior to finalization of this Supplemental Environmental Assessment and contract award. Completion of the Biological Opinion and following USFWS recommendations would ensure full compliance with this Act.

The Corps has made the determination that due to the landlocked nature and lack of in-water work at the Cache Creek borrow site, there would be no effects to fisheries and consultation with NMFS is not required.

Executive Order 11988, Floodplain Management. *Compliance*. This order directs all Federal agencies to reduce the risk of flood loss, minimize the impacts of floods on human safety, health and welfare, and restore and preserve the natural and beneficial values served by floodplains. Excavation would not induce development in the Cache Creek area, nor would it increase flood risk in the surrounding areas.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. *Compliance*. This order directs all Federal agencies to identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Any impacts caused by excavation activities would not disproportionately affect minority or low-income populations.

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. *Compliance*. This order directs all Federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children. There are no schools or other facilities near the Cache Creek borrow site. The project would not have adverse or disproportionate impacts on children.

Farmland Protection Policy Act, 7 U.S.C. 4201, et seq. *Compliance*. The Cache Creek borrow site is currently not under agricultural use, and upon completion of excavation the area would be regraded and contoured to be returned to agricultural use. There would be no permanent impacts to agricultural resources.

Fish and Wildlife Coordination Act of 1958, as amended, 16 U.S.C. 661, et seq. *Compliance*. The Fish and Wildlife Coordination Act (FWCA) ensures that fish and wildlife receive consideration equal to that of other project features from projects that are constructed, licensed, or permitted by Federal agencies. The FWCA requires federal agencies that construct water resource development projects to consult with USFWS, NMFS, and the applicable state fish and wildlife agency (CDFW) regarding the project's impacts on fish and wildlife and measures to mitigate those impacts. The USFWS completed a Coordination Act Report (CAR) October 13, 2010, to be included as Appendix C to this document. USACE has followed the recommendations in the 2010 CAR, continuously coordinated with USFWS, and reinitiated consultation with USFWS to account for any new impacts. As a result of the reinitiated consultation, USFWS determined that a revised CAR is not required for the excavation of the Cache Creek borrow site.

Migratory Bird Treaty Act, 15 U.S.C 701-18h. *Ongoing.* Nest surveys would be conducted in the spring of 2021 in order to determine if nesting birds are located near the construction area. If active nests are located, an on-site biologist experienced with raptor behavior would monitor active nests while construction related activities are taking place. If the nesting raptors exhibit agitated behavior in response to construction related activities, the biological monitor would have the authority to stop work and would consult with CDFW and

USFWS to determine the best course of action necessary to avoid nest abandonment or take of individuals. Avoiding active nests would ensure full compliance with this Act.

National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321, et seq. *Ongoing.* Comments received during the public review period will be incorporated into the final SEA, as appropriate, and a comments and responses appendix will be prepared. The final SEA will be accompanied by a final FONSI if determined appropriate by the District Engineer after consideration of public comments.

National Historic Preservation Act of 1966, as amended, 54 U.S.C. 300101 et seq. *Ongoing.* Section 106 of the NHPA requires a Federal agency to take into account the effects of Federal undertakings on historic properties, following the procedures outlined in 36 CFR Part 800. The Programmatic Agreement (PA) for the American River Common Features Project (both the ARCF 2016 Project and the Natomas Basin Project) was executed September 10, 2015 between the Corps and the State Historic Preservation Officer (SHPO). Completion of the stipulations required by the PA would assure compliance with Section 106 of the NHPA. The stipulations of the PA include identification and evaluation of potential historic properties within the APE for the undertaking, determination of effects to historic properties, and resolution of adverse effects to historic properties, as necessary, and consultation with the SHPO, Native American tribes, and interested parties.

On June 1, 2017, letters were sent to the SHPO, Native American tribes, and interested parties providing a map of the APE, project description, and requesting comments on the project. In a letter dated June 30, 2017, the SHPO responded that they did not have any comments regarding the project. Consultation with Native American tribes is ongoing as the Corps continues efforts to identify historic properties within the APE. The United Auburn Indian Community of the Auburn Rancheria and Wilton Rancheria have both expressed interest in the project. Buena Vista Rancheria deferred to the Colusa Indian Community for the project. A record search, pedestrian survey and thirteen exploratory geoarchaeological trenches were carried out in in the Cache Creek borrow site; no archaeological materials were identified. On September 10, 2020, the SHPO concurred that the expansion of the APE to include the Cache Creek Borrow Site will have no additional effects to Reach B. Continued compliance with the stipulations in the PA would ensure compliance with Section 106.

6.2 State

California Clean Air Act of 1988. *Compliance.* The YSAQMD determines whether project emission sources and emission levels significantly affect air quality based on Federal standards established by the EPA and State standards set by the CARB. The project is in compliance with all provisions of the Federal and State Clean Air Acts.

7.0 COORDINATION AND REVIEW OF THE DRAFT SEA

This draft SEA will be circulated for 30 days to agencies, organizations, and individuals known to have a special interest in the project. Copies of the draft SEA will be made available for viewing online and provided by mail upon request.

8.0 FINDINGS

This draft SEA evaluated the environmental effects of the Proposed Action. Potential adverse effects to the following resources were evaluated in detail: aesthetics and visual resources; agricultural resources; air quality; cultural resources; Environmental Justice; hazards and hazardous materials; special status species; vegetation and wildlife; traffic and circulation; and noise and vibration.

Results of the draft SEA, field visits, and coordination with tribes and other agencies indicate that the Proposed Action would have no significant long-term effects on environmental resources. Short-term effects during construction would either be less than significant or mitigated to less than significant using BMPs.

SAFCA, the Non-Federal Sponsor serving as the Lead Agency for CEQA, completed Addendum No. 6 to the Environmental Impact Report on the American River Watershed Common Features Project/Natomas Post-authorization Change Report/Natomas Levee Improvement Program Phase 4b Landside Improvements Project in May 2020. The CEQA addendum is included as Appendix A of this document and can be found online at www.safca.org/protection/NR_documents/CEQA_Local_Funding_Mechanisms_NLIP_Phase4b_EIS.EIR_2020_05_FEIR_Addendum6.pdf.

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