Meeting Date: 12/08/21
Application Number: A2610
Staff: S. Avila

Staff Report 31

APPLICANT:

Central Valley Flood Protection Board

PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use

AREA, LAND TYPE, AND LOCATION:

Approximately 9.68 acres of sovereign land located along the west bank of the Sacramento River, adjacent to 22568 Old River Road, West Sacramento, Yolo County.

AUTHORIZED USE:

Construction, use, and maintenance of erosion control and levee.

TERM:

20 years, beginning December 8, 2021.

CONSIDERATION:

Public use and benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

SPECIFIC LEASE PROVISIONS:

- Lessee shall place warning signage or buoys, or both, clearly visible from the shore and in the water, both upstream and downstream of the construction site, to provide notice of the Project and to advise the public to exercise caution. Lessee shall place and maintain such signage during the term of the Project and shall notify the California Department of Parks and Recreation's Division of Boating and Waterways of the location, description, and purpose of such signage upon the installation and removal.
- Provisions requiring Lessee to comply with certain safety and construction standards.

BACKGROUND:

The Sacramento Weir was built in 1916 to protect Sacramento from catastrophic flooding. The Sacramento Wier is undergoing the first major upgrade since its installation. Weirs are lowered sections of levees that allow flood flows in excess of the downstream channel capacity to escape into a bypass channel or basin.

The proposed Sacramento Weir Widening Project (Project) consists of construction of approximately 1,500-foot-long passive weir with associated levee, roadway, rail, and fish passage improvements. The weir and bypass widening are proposed under the American River Common Features (ARCF) 2016 Project.

The original ARCF General Reevaluation Report Final EIS/EIR did not include the revised modifications of the widening of the Sacramento Weir, including modification to the railroad and roadway alignments, fish passage structure, and passive weir design. The additional information was analyzed in the August 2021 Supplemental EIS/EIR.

PROJECT DESCRIPTION:

The Project proposes to widen the Sacramento Weir and Bypass by constructing a new weir structure extending approximately 1,500 feet upstream from the existing weir, with associated levee, roadway, rail, and fish passage improvements. The majority of the Project would be conducted on lands outside of the Commission's jurisdiction. Only the erosion control adjacent to the Sacramento River and the levee under the erosion control component of the Project is subject to the Commission's jurisdiction.

Erosion countermeasures would be included to address high velocities and erosion potential and may include concrete surfacing, riprap, or interlocking concrete blocks. Erosion countermeasures would be incorporated into the design along the Sacramento River right bank adjacent to the weir, upstream and downstream of the weir.

Riprap may be placed, using an excavator, in the channels for erosion protection. The fish passage structure would likely include two mechanical gates and a control system. The mechanical gates would likely require a crane for installation. No in-water work is anticipated for the construction of the fish passage structure itself, but the exit channel connecting the weir and the gates to the Sacramento River, and the connection from the fish passage channel to the Tule Canal, may require in-water work. If feasible, installation of a temporary cofferdam, or sheet pile is possible.

For the erosion protection, quarry stone riprap, or another acceptable alternative (buried rock, articulated concrete blocks, erosion-control mat) would be transported to the project site by trucks from a source within 50 miles and stockpiled at the project site, or transported by barge from up to 100 miles away. This material would be applied to protect against erosion at the new weir.

Excavators would be used to place the embankment protection material from the levee crown or the waterside of the levee as per design. For waterside erosion protection on the bank of the Sacramento River, embankment protection material could be placed from barge-mounted equipment.

Construction would occur over three construction seasons, beginning approximately around April 15, 2022, with vegetation removal occurring earlier. Erosion protection is expected to occur during year three of construction.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

In May 2020, the Applicant applied for a General Lease – Public Agency Use for the construction, use and maintenance of an approximately 1,500-foot-long passive weir with associated levee, roadway, and fish passage improvements in an area located on sovereign land, along the west bank of the Sacramento River, adjacent to 22568 Old River Road, West Sacramento, Yolo County.

The purpose of the ARCF 2016 Project is to reduce the overall flood risk within the vulnerable urban areas of Sacramento south of the weir on the Sacramento River. An unacceptably high risk of flooding from levee failure threatens the safety of approximately 530,000 people, including property and critical infrastructure throughout the vicinity. Additionally, the State Capitol and many state agencies are located within the area. Past flooding events have caused loss of life and extensive economic damage within the subject area over the last century. Approximately 83,000 structures throughout the subject area are at risk of flooding in a 100-year event (1 percent annual chance of flooding). The State has established a standard for urban flood protection in California which applies to cities with populations greater than 10,000 inhabitants. The ARCF 2016 Project objectives include:

- Reduce the chance of flooding, and damages once flooding occurs, and improve public safety preparedness and emergency response.
- Reduce maintenance and repair requirements by modifying the flood management system in ways that are compatible with natural processes.
- Integrate the recovery and restoration of key physical processes, self-sustaining ecological functions, native habitat, and species.
- Ensure that technically feasible and cost-effective solutions are implemented to maximize the flood risk reduction benefits given the practical limitations of applicable funding sources.

The current levee does not meet modern engineering standards. Inaction would constrain Sacramento Weir and Bypass flood conveyance capacities to existing levels, and substantially reduce flexibility to implement future flood system improvements to collectively improve public safety for the region. If a flood event were to occur, the Sacramento area would remain at a higher risk of a possible levee failure due to seepage, slope stability, erosion, or overtopping, and levee failure would be more likely to occur, potentially resulting in the collapse of several miles of levee slopes and alteration of regional and local flows that could result in substantial flooding and widespread inundation of urban, suburban, and agricultural areas around Sacramento.

The portion of the Project under the Commission's jurisdiction involves the west bank of the Sacramento River for erosion control purposes and the associated levee under the erosion control. This is a critical component to protect the proposed infrastructure improvements associated with the larger Project.

Overall, the proposed Project seeks to protect public safety and the region's water conveyance system by ensuring the integrity of the Sacramento weir and Bypasses. These activities preserve Public Trust resources and are consistent with the Public Trust Doctrine and is in the best interests of the State.

CLIMATE CHANGE:

Climate change impacts, including sea level rise, more frequent and intense storm events, and increased flooding and erosion affect both open coastal areas and inland waterways in California. The subject activities are located adjacent to the Sacramento River in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea level rise.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea

level rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea level rise scenario for the region as listed in Table 1.

Table 1. Projected Sea Level Rise for San Francisco

Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	6.9

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update
Note: Projections are with respect to a 1991 to 2009 baseline.

Rising sea levels can lead to more frequent flood inundation in low lying areas and larger tidal events and could increase the inundation levels within and adjacent to the lease area. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding and storms (especially when coupled with sea level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate-change induced droughts could decrease river levels and flow for extended periods of time. Climate change and sea level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

The proposed Project activities are specifically to improve flood control on the Sacramento River by removing the Sacramento River right bank levee and associated vegetation for the purpose of construction of a new weir structure and fish passage ladder. This work also includes the placement of rock slope protection to help guard against erosion. This project will support the broader purpose of reducing flood risk associated with the Sacramento River. Activities on state lands would be short-term and consist of in-water work to improve existing facilities. The Sacramento Weir and Bypass would be widened to divert more flows into the Yolo Bypass, and the levees along the Sacramento River would be improved to address identified seepage, stability, and erosion concerns, reducing the potential for future impacts from climate change to occur.

Regular maintenance, as referenced in the lease, may reduce the likelihood of severe structural degradation or dislodgement. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises are located in an area that may be subject to the effects of climate change, including sea level rise.

CONCLUSION:

For all the reasons above, staff believes the proposed lease will not substantially interfere with Public Trust needs at this location, at this time, and for the foreseeable term of the proposed lease; is consistent with the common law Public Trust Doctrine; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law.

2. This action is consistent with the "Meeting Evolving Public Trust Needs" and "Leading Climate Activism" Strategic Focus Area of the Commission's 2021-2025 Strategic Plan.

3. The CVFPB analyzed the environmental impacts associated with the Project in a Final Environmental Impact Statement/Report (EIS/EIR) (State Clearinghouse [SCH] No. 2005072046), American River Watershed Common Features General Reevaluation Report and, on June 9, 2016, certified the EIS/EIR and adopted a Mitigation Monitoring and Reporting Program (MMRP), Findings, and a Statement of Overriding Considerations. The CVFPB then prepared a Supplemental EIS/EIR (American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento Weir Widening). The lead agency certified the Supplemental EIS/EIR on August 27, 2021, and adopted a MMRP, Findings, and a Statement of Overriding Considerations. Commission staff reviewed these documents prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, § 21081.6) and adopted by the lead agency, and prepared an independent Mitigation Monitoring Program (attached, Exhibit C) incorporating the CVFPB's document and recommends its adoption by the Commission.

   Findings made in conformance with the State CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15091, 15096) are contained in the attached Exhibit D.

A Statement of Overriding Considerations made pursuant to the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15093) is contained in the attached Exhibit D.

4. Mitigation Measure CR-2 (Cultural Resources) was amended from the lead agency suggested mitigation measures with respect to resources found on state sovereign land to read "Title to all archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the Commission. Commission staff shall be notified of any cultural resources or paleontological specimens discovered on lands under the jurisdiction of the Commission. The final disposition of archaeological and historical resources or paleontological specimens from such lands must be approved by the Commission. In addition, if requested by a Tribe, a Native American Monitor shall remain onsite during Project construction."

5. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands and through the CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

California Department of Fish and Wildlife
Central Valley Flood Protection Board
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
National Marine Fisheries Service
Sacramento Area Flood Control Agency

EXHIBITS:

A. Land Description
B. Site and Location Map
C. Mitigation Monitoring Program
D. Findings and Statement of Overriding Considerations

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an EIR/EIS State Clearinghouse No. 2005072046, was prepared for this Project by CVFPB and certified on June 9, 2016; and a Supplemental EIR/EIS was prepared and certified on August 27, 2021, and that the Commission has reviewed and considered the information contained therein.

Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit C.

Adopt the Findings, made in conformance with California Code of Regulations, title 14, sections 15091 and 15096, subdivision (h), as contained in the attached Exhibit D.

Adopt the Statement of Overriding Considerations made in conformance with California Code of Regulations, title 14, section 15093, as contained in the attached Exhibit D.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the issuance of the proposed lease will not substantially impair the public rights to navigation and fishing or substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; is consistent with the Public Trust Doctrine; and is in the best interests of the State.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

Authorize issuance of a General Lease – Public Agency Use to the Applicant, beginning December 8, 2021, for a term of 20 years, for the construction, use, and maintenance of erosion protection along the west bank of the Sacramento River, as described in Exhibit A (for reference purposes only) and shown in Exhibit B (for reference purposes only) attached and by this reference made a part hereof; consideration being the public use and benefit, with the State reserving the right, at any time, to set a monetary rent as specified in the lease if the Commission finds such action to be in the State's best interests.

EXHIBIT A

A 2610

LAND DESCRIPTION

A parcel of tide and submerged land situate in the bed of the Sacramento River, lying adjacent to projected fractional Section 20, Township 9 North, Range 4 East, Mount Diablo Meridian, as shown on Official Township Plat approved January 28, 1871, County of Yolo, State of California and more particularly described as follows:

Bounded on the northwest by the northeasterly prolongation of the of the southeasterly line of that certain 15.030 acres parcel as shown on Record of Survey "Portion of Swamp Land Survey No. 303" filed on March 5, 1969 in Book 10 of Maps and Surveys at Page 54, Yolo County Recorder Office;

Bounded on the southeast by the line 280 feet northwesterly of and parallel with the southeasterly line and its northeasterly prolongation of Swamp and Overflowed Land Survey 924 patented May 5, 1870, County of Yolo, State of California;

Bounded on the southwest by the ordinary high water mark of the right bank of the Sacramento River;

Bounded on the northeast by the line 150 feet northeasterly of and parallel with the ordinary high water mark of the right bank of the Sacramento River.

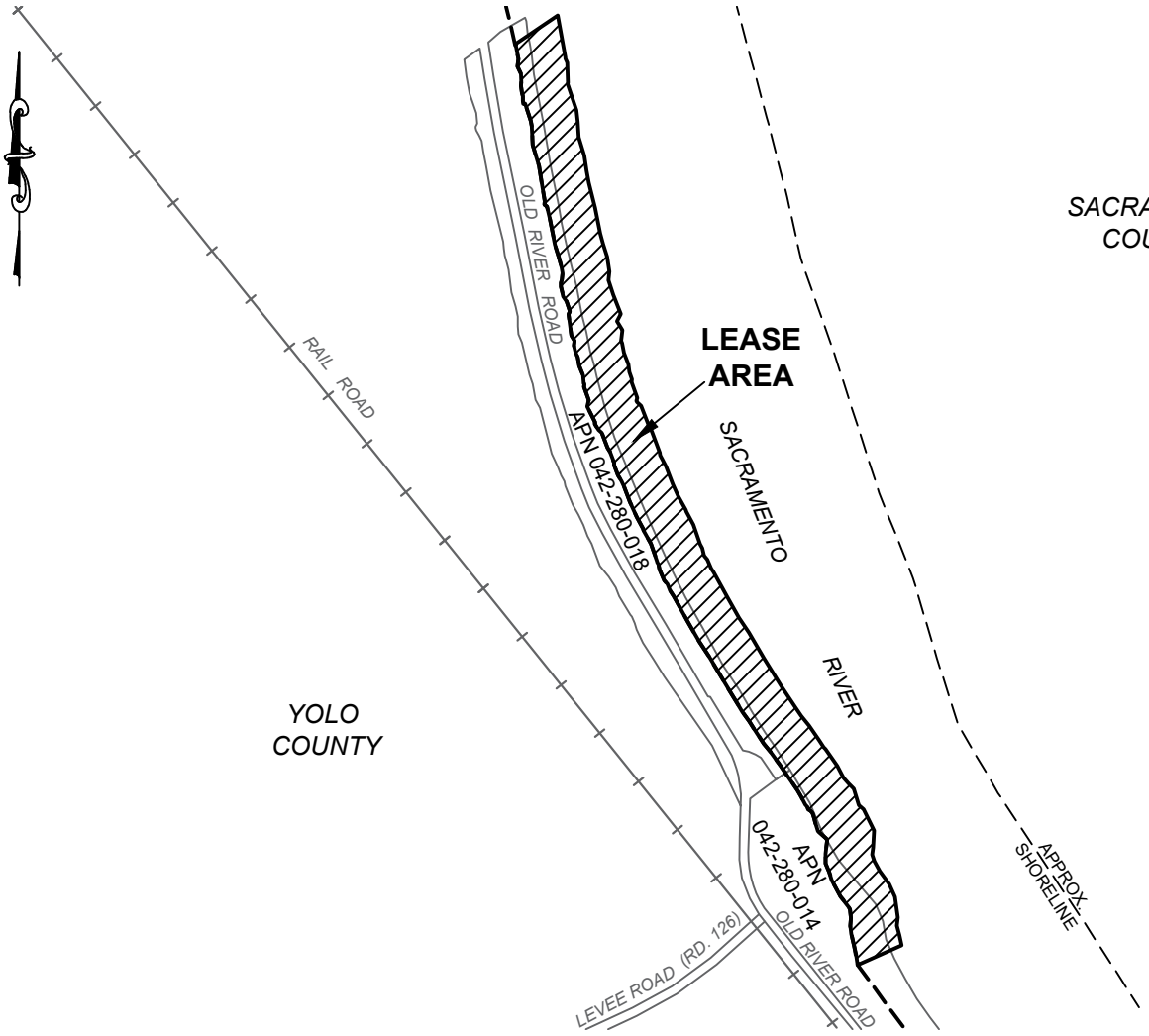
EXCEPTING THEREFROM any portion lying landward of the ordinary high water mark of the right bank of the Sacramento River.

END OF DESCRIPTION

Prepared 09/29/2021 by the California State Lands Commission Boundary Unit

NO SCALE

SITE



NEAR 22568 OLD RIVER ROAD, WEST SACRAMENTO

NO SCALE

LOCATION

MAP SOURCE: USGS QUAD

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

Exhibit B

A 2610
CENTRAL VALLEY FLOOD PROTECTION BOARD
APNs 042-280-014 & -018
GENERAL LEASE-
PUBLIC AGENCY USE
YOLO COUNTY

TS 09/29/2021

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

AMERICAN RIVER WATERSHED COMMON FEATURES, WATER RESOURCES DEVELOPMENT ACT OF 2016 PROJECT, SACRAMENTO WEIR WIDENING

(A2610, State Clearinghouse No. 2005072046)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento Weir Widening (Project). The CEQA lead agency for the Project is the Central Valley Flood Protection Board.

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines[1] section 15097, subdivision (a), states in part:

> *In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency certified an EIR, State Clearinghouse No. 2005072046 on April 22, 2016, and a Supplemental EIR on August 27, 2021, and adopted Mitigation Monitoring and Reporting Program (MMRP) for both the whole of the Project and the portion of the Project covered in the Supplemental EIR (see Exhibit C, Attachment C-1). The lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below. The full text of each mitigation measure, as set forth in the MMRP prepared by the CEQA lead agency and provided in Attachment C-1, is incorporated by reference in this Exhibit C.

[1] The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMRPs
GEO-2	GEO-1	None
GEO-3	GEO-2	None
WQ-1	GEO-1, HWQ-1	None
VEG-1A (long term)	VEG-1, WATERS-1, GEO-1	None
VEG-1B (short term)	VEG-1	None
VEG-2	VEG-1	None
FISH-2	FISH-1, GEO-1	None
FISH-3	FISH-1, FISH-3	None
FISH-5	FISH-1, FISH-2, FISH-3, HWQ-1, GEO-1	None
SSS-1	PLANT-1	None
SSS-2	VELB-1	None
SSS-4	BIRD-1	None
CR-1	CR-1	None
CR-2	CR-2, CR-3, CR-4, and CR-5	MM CR-2 (see below)
CR-3	CR-6	None
AIR-1	AIR-1 to AIR-5	None
AIR-2	AIR-4, AIR-5	None
AIR-3	AIR-4	None
GHG-1	GHG-1	None
NOI-1	NOI-1	None
REC-1	REC-1, REC-2	None
VIS-3	VIS-2, VIS-3	None

Addition to MM CR-2: Title to all archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the Commission. Commission staff shall be notified of any cultural resources or paleontological specimens discovered on lands under the jurisdiction of the Commission. The final disposition of archaeological and historical resources or paleontological specimens from such lands must be approved by the Commission. In addition, if requested by a Tribe, a Native American Monitor shall remain onsite during Project construction.

[2] See Attachment C-1 for the full text of each MM taken from the MMRPs prepared by the CEQA lead agency.

ATTACHMENT C-1

Mitigation Monitoring and Reporting Program Adopted by the Central Valley Flood Protection Board

Mitigation Monitoring and Reporting Program

Section 21081.6(a)(1) of the California Public Resources Code (PRC) and Section 15097 of the State California Environmental Quality Act (CEQA) Guidelines require a public agency to adopt a reporting and monitoring program on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental impacts on the physical environment.

This Mitigation Monitoring and Reporting Program (MMRP) will be used by the Central Valley Flood Protection Board (CVFPB) to ensure successful implementation of the mitigation measures identified in the Final Supplemental Environmental Impact Statement /Environmental Impact Report (EIS/EIR) for the American River Watershed Common Features, Water Resources Development Act of 2016 Project (ARCF 2016 Project), Sacramento Weir Widening (Sacramento Weir Widening Project). There are no additional mitigation measures that apply to the Sacramento Weir Widening Project from the ARCF 2016 Project General Reevaluation Report (GRR) Final EIS/EIR.

The MMRP is presented in tabular format. The table columns contain the following information:

Mitigation Number: Lists the mitigation measures by number, as designated in the Final Supplemental EIS/EIR.

Mitigation Measure: Provides the text of the mitigation measures, each of which has been adopted and incorporated into the Project.

Implementation Timing: Lists the time frame in which the mitigation measure is expected to take place. The following abbreviations are used in the table:

> D: To be implemented or included as part of Sacramento Weir Widening Project design. Includes pre-project permitting and agency coordination
>
> P: To be implemented prior to construction being initiated prior (pre-construction), but not part of Sacramento Weir Widening Project design or permitting
>
> C: To be implemented during Sacramento Weir Widening Project construction
>
> M: To be implemented as ongoing maintenance after construction is complete

Implementation Responsibility: Identifies the entity responsible for implementing the mitigation measure.

Responsible for Monitoring/Reporting Action: Identifies the entity responsible for monitoring implementation of the actions described in the mitigation measures. Verification will be carried out during the Sacramento Weir Widening Project and an MMRP completion report will be submitted to CVFPB staff upon implementation of all mitigation measures.

Table 1. Mitigation Monitoring and Reporting Program for the Sacramento Weir Widening

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
GEO-1	**Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasure Plan.** If the project is implemented, prior to the start of earthmoving activities, USACE shall obtain coverage under the California State Water Resources Control Board (SWRCB) NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ), including preparing and submitting a project-specific Storm Water Pollution Prevention Plan (SWPPP) at the time the Notice of Intent to discharge is filed. The SWPPP shall identify and specify the following: • The use of an effective combination of robust erosion and sediment control Best Management Practices (BMPs) and construction techniques in the project area at the time of construction that shall reduce the potential for runoff and the release, mobilization, and exposure of pollutants, including legacy sources of mercury from project-related construction sites. These may include but would not be limited to temporary erosion control and soil stabilization measures, sedimentation ponds, inlet protection, perforated riser pipes, check dams, and silt fences; • The implementation of approved local plans, non-stormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities; • The materials that are likely to be used during construction that could enter stormwater drainage and non-stormwater discharges, include fuels, lubricants, and other types of materials used for equipment operation; • The means of waste disposal; • Spill prevention and contingency measures, including measures to prevent or clean up spills of hazardous waste and of hazardous materials used for equipment operation, and emergency procedures for responding to spills; • Personnel training requirements and procedures that shall be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP; and • The appropriate personnel responsible for supervisory duties related to SWPPP implementation. • Where applicable, BMPs identified in the SWPPP shall be in place throughout all site work and construction/demolition activities and shall be used in all subsequent site development activities. BMPs may include, but are not limited to, such measures as those listed below. • Conduct earthwork during low-flow periods. • To the extent possible, stage construction equipment and materials on the landside of the levee in areas that have already been disturbed. • Minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations. • Stockpile soil landside of the levee, and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion. • Install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from leaving the project site and entering nearby surface waters. • Install plant materials to stabilize cut and fill slopes and other disturbed areas once construction is complete. Plant materials could include an erosion control seed mixture or shrub and tree container stock. Temporary structural BMPs, such as sediment barriers, erosion control blankets, mulch, and mulch tackifier, could be installed as needed to stabilize disturbed areas until vegetation becomes established. • Conduct water quality tests specifically for increases in turbidity and sedimentation caused by construction activities. • Prepare a Spill Prevention Control and Countermeasures Plan (SPCCP). An SPCCP is intended to prevent any discharge of oil into the river and other aquatic habitats. The contractor would develop and implement an SPCCP to minimize the potential for adverse effects from spills of hazardous, toxic, or petroleum substances during construction activities. The SPCCP would be completed before any construction activities begin. Implementation of this measure would comply with Federal and state water quality regulations. The SPCCP would describe spill sources and spill pathways in addition to the actions that would be taken in the event of a spill (e.g., an oil spill from engine refueling would be immediately cleaned up with oil absorbents). The SPCCP would outline descriptions of containment facilities and practices, such as doubled-walled tanks, containment berms, emergency shut-offs, drip pans, fueling procedures, and spill response kits. It would also describe how and when employees are trained in proper handling procedure and spill prevention and response procedures. • A copy of the approved SWPPP shall be maintained and available at all times on the construction site.			
GEO-2	**Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as required.** To minimize the potential for destruction of or damage to potentially unique, scientifically important paleontological resources during earth-moving activities, USACE will implement the measures described below if the project is implemented: • Before the start of construction activities at the project site, construction personnel involved with earth-moving activities (including the site superintendent) will be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This worker	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist. • If paleontological resources are discovered during earth-moving activities, the construction crew will notify USACE will immediately cease work in the vicinity of the find. USACE will retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology Guidelines (1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by USACE to be necessary and feasible will be implemented before construction activities can resume at the site where the paleontological resources were discovered.			
AG-1	**Purchase Conservation Easement is to Offset Conversion of Prime Farmland.** USACE will require purchase or establishment of property interests in agricultural land (i.e., conservation easements) requiring the preservation and/or enhancement of other land of similar agricultural quality and acreage, either directly or indirectly, to offset conversion of prime farmland to construct project facilities. These easements may include but are not limited to establishing agricultural conservation easements, paying in-lieu fees toward agricultural conservation easements, supporting agricultural land trusts, and participating in habitat conservation plans or natural community conservation plans that include conservation of agricultural lands. Conservation easements will be purchased at a 1:1 ratio. Where feasible, the agricultural conservation easements should be acquired in the county in which the conversion would take place, Yolo County. If there is not a sufficient supply of similar prime farmland where the conversions would occur, the agricultural conservation easements may be obtained in a different county. Where conservation easements are established by USACE, they may be held by land trusts, local governments, or other appropriate agencies that are responsible for ensuring that these lands will be maintained in agricultural use. Where easements are considered for other resources such as terrestrial biological resources, purchase of easements will be coordinated where possible so that agricultural resources are also addressed.	D	USACE	CVFPB
HWQ-1	**Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.** Before discharging any dewatered effluent to surface water, USACE shall obtain a Low Threat Discharge and Dewatering NPDES permit or an Individual Permit from the Central Valley RWQCB, if the dewatering is not covered under the Regional Water Quality Control Board (RWQCB's) National Pollutant Discharge Elimination System (NPDES) Construction General Permit. The dewatering permit includes extensive water quality monitoring to adhere to the strict effluent and receiving water quality criteria outlined in the permit. As part of the permit, the permittee shall design and implement measures, as necessary, to meet the discharge limits identified in the relevant permit. For example, if dewatering is needed during cutoff wall construction, the dewatering permit	D, P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	would require treatment or proper disposal of contaminated water prior to discharge. These measures shall be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. Implemented measures could include temporary retention of dewatering effluent until particulate matter has settled, use of infiltration areas, and other BMPs. Final selection of water quality control measures would be subject to approval by the Central Valley RWQCB. USACE shall verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. USACE, or an authorized agent, shall perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. USACE shall notify its contractors immediately if there is a non-compliance issue and shall require compliance.			
VEG-1	**Compensate for Riparian and Woodland Habitat Removal.** If the project is implemented, USACE will compensate for riparian and woodland habitat removal. Replacement habitat shall be created at a 2:1 ratio, in accordance with the American River Common Features (ARCF) General Reevaluation Report (GRR) Habitat Mitigation, Monitoring, and Adaptive Management Plan, which includes conceptual mitigation proposals, performance standards, and adaptive management tasks.	P, C, M	USACE	CVFPB
WATERS-1	**Compensate for Fill of state and Federally Protected Waters.** If the project is implemented, USACE will compensate for fill of state and Federally protected waters to ensure the project causes no net loss of functions and values, in compliance with the Clean Water Act. Water quality certification pursuant to Section 401 of the Clean Water Act (CWA) shall be obtained from the Central Valley RWQCB before starting project activities. Any measures determined necessary during the permitting processes shall be implemented, such that there is no net loss of functions and values of jurisdictional waters. Mitigation may be accomplished through habitat replacement, enhancement of degraded habitat, off-site mitigation at an established mitigation bank, contribution of in-lieu fees, or other method acceptable to the regulatory agencies, such that there is no net loss of waters of the United States. If compensation is provided through permittee-responsible mitigation, a mitigation plan shall be developed to detail appropriate compensation measures determined through consultation with USACE and Central Valley RWQCB, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails.	D, P, M	USACE	CVFPB
FISH-1	**In-water Work Window.** If the project is implemented, in-water construction will be restricted to a work window of August 1 through November 30 or as otherwise specified by National Marine Fisheries Service (NMFS) in the revised Biological Opinion. The work window may be adjusted on a site-specific basis with concurrence by NMFS, taking into account periods of low fish abundance and in-water construction outside the principal spawning and migration season. The typical construction season generally corresponds to the dry season, but construction may occur outside the limits of the dry season, only as allowed by applicable permit conditions.	C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
FISH-2	**Shaded Riverine Aquatic and Aquatic Habitat.** If the project is implemented, resource agencies will be consulted during the Section 7 process to identify suitable habitat mitigation for Shaded Riverine Aquatic (SRA) and aquatic habitat. If habitat replacement is defined as the desired mitigation during the Section 7 process, habitat would be replaced at a minimum 1:1 ratio, either onsite, offsite, or at a mitigation bank, as deemed appropriate. Habitat mitigation could consist of other actions to improve conditions for affected fish species as agreed to by USACE and NMFS during Section 7 consultation. For critical habitat impacted by construction, the measures set forth in the Final EIS/EIR (pp. 193-194) remain appropriate and would be implemented • Compensation timing refers to the time between the initiation of construction at a particular site and the attainment of the habitat benefits to protected species from designated compensation sites. In general, compensation time is the time required for on-site plantings to provide significant amounts of shade or structural complexity. Significant long-term benefits have often been considered by resource agencies, such as NMFS, as appropriate to offset small short-term losses in habitat for listed species in the past, as long as the overall action contributes to recovery of the listed species. The authority to compensate prior to or concurrent with project construction is given under WRDA 1986 (33 United States Code [USC] §§ 2201–2330). • For identified designated critical habitat, where feasible, all efforts will be made to compensate for impacts where they have occurred or in close proximity. Impacts to designated critical habitat, SRA habitat, and in stream components combined and the compensation value of replacement habitat will be based on a methodology approved by the resource agencies, including NMFS. Compensation sites would be monitored, and vegetation would be replaced as necessary based on performance standards in the Habitat Mitigation and Monitoring Plan (HMMP), as detailed in Appendix I of the ARCF GRR Final EIS/EIR or based on other performance standards agreed to by USACE and NFMS. The Sacramento Weir Widening project would impact up to 6.2 acres of SRA and critical aquatic habitat in the Sacramento River which is designated as critical habitat for green sturgeon and winter-run Chinook salmon. The ARCF GRR Final EIS/EIR includes mitigation measures related to a Habitat Mitigation and Monitoring Plan (HMMP). Those HMMP-related actions which have not already been completed by USACE (including the purchase of critical habitat mitigation credits for green sturgeon) have been removed and replaced by Mitigation Measure FISH-2 for the Sacramento Weir widening, which calls for actions to be taken in accordance with the results of the Section 7 consultation between USACE and NMFS.	D, P, C, M	USACE	CVFPB
FISH-3	**Fish Rescue Plan** USACE and CVFPB will consult with NMFS, U.S. Fish and Wildlife Services (USFWS), and California Department of Fish and Wildlife (CDFW) during the project permitting process to develop and approve a fish rescue plan for construction and operation of the project. At a minimum, the plan will identify monitoring scenarios, action triggers, capture/handling methodologies, relocation	D, P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	procedures, and reporting. Methods for capture may include but are not limited to electrofishing and seining. The plan shall specify when a trained biologist will be onsite, and in the event of any project-related special-status fish stranding events, the biologist will stop work and immediately contact resource agencies.			
PLANT-1	**Implement Measures to Minimize Impacts on Special-status Plants.** If the project is implemented, USACE will implement the following measures to minimize potential effects on woolly rose-mallow, Suisun marsh aster, and Sanford's arrowhead: • Preconstruction surveys would be conducted by a qualified botanist in suitable habitat to determine the presence of any special-status plants. Surveys would be conducted at an appropriate time of year during which the species are likely to be detected, which would likely be during the blooming period. • If special-status plant species are found during preconstruction surveys, the habitat would be marked or fenced as an avoidance area during construction. A buffer of 25 feet would be established. If a buffer of 25 feet is not possible, the next maximum possible distance would be fenced off as a buffer. • If special-status plant species cannot be avoided during construction, USACE and CVFPB would coordinate with CDFW to determine additional appropriate mitigation measures, and identify implementation methods, success criteria, monitoring and reporting protocols, and contingency measures, if necessary. Such measures may include salvaging and transplanting individual plants, collecting the seeds of affected plants, and collecting and translocating seed- and rhizome-containing mud. If compensatory mitigation is required, it may include preserving in perpetuity other known populations of these species in the project vicinity.	P, C	USACE	CVFPB
VELB-1	**Implement Current U.S. Fish and Wildlife Service Avoidance, Minimization, and Compensation Measures for Valley Elderberry Longhorn Beetle.** • If the project is implemented, USACE will implement the following measures in accordance with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017), to reduce effects on valley elderberry longhorn beetle: • Fencing. All areas to be avoided during construction activities shall be fenced and/or flagged as close to construction limits as feasible. • Avoidance area. To the extent feasible, activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) shall be avoided within 20 feet from the drip-line of the shrub. • Worker education. A qualified biologist shall provide training for all contractors, work crews, and any onsite personnel on the status of valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging elderberry shrubs, and the possible penalties for noncompliance. • Construction monitoring. A qualified biologist shall monitor the work area at appropriate intervals to assure that all avoidance and minimization measures are implemented.	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	• Timing. To the extent feasible, activities within 165 feet of an elderberry shrub shall be conducted outside of the valley elderberry longhorn beetle flight season (March–July). • Trimming. To the extent feasible, elderberry shrub trimming shall occur between November and February and avoid the removal of any branches or stems greater than or equal to 1 inch in diameter. • Chemical Usage. Herbicides shall not be used within the drip-line, and insecticides shall not be used within 100 feet of an elderberry shrub. All chemicals shall be applied using a backpack sprayer or similar direct application method. • Mowing. Mechanical weed removal within the drip-line of elderberry shrubs shall be limited to the season when adults are not active (August–February) and shall avoid damaging the shrub. • Transplanting. To the extent feasible, elderberry shrubs shall be transplanted when the shrubs are dormant (November through the first 2 weeks in February) and after they have lost their leaves. Exit-hole surveys will be completed immediately before transplanting. A qualified biologist shall be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures. Mitigation identified in the ARCF GRR Final EIS/EIR has been updated in Mitigation Measure VELB-1 for consistency with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (2017).			
GGS-1	**Implement Measures to Avoid, Minimize and Compensate Impacts on Giant Garter Snake.** If the project is implemented, USACE will implement the following measures to minimize effects on giant garter snakes and habitat that occurs within 200 feet of any construction activity. These measures are based on USFWS guidelines for restoration and standard avoidance measures included as appendices in USFWS (1997). • Unless approved otherwise by USFWS, construction will be initiated only during the giant garter snakes' active period (May 1–October 1, when they are able to move away from disturbance). • Construction personnel will participate in USFWS-approved worker environmental awareness program. • Giant garter snake survey would be conducted 24 hours prior to construction in potential habitat. Should there be any interruption in work for greater than two weeks, a biologist would survey the project area again no later than 24 hours prior to the restart of work. • Giant garter snakes encountered during construction activities will be allowed to move away from construction activities on their own. • Movement of heavy equipment to and from the construction site will be restricted to established roadways. Stockpiling of construction materials will be restricted to designated staging areas, which will be located more than 200 feet away from giant garter snake aquatic habitat. • Giant garter snake habitat within 200 feet of construction activities will be designated as an environmentally sensitive area and delineated with signs or appropriate fencing. This area will be avoided by all construction personnel.	P, C, M	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	• Habitat temporarily affected for more than three or more seasons will be restored and twice as much habitat will be created. • Habitat permanently affected in the Sacramento Bypass will be compensated for through the purchase of credits at an USFWS-approved conservation bank prior to permanent disturbance of giant garter snake habitat. Due to the spatial and temporal loss of habitat, and the lack of permanent on-site replacement, the ecological value associated with doing all mitigation at an off-site location was reduced to an overall 70% habitat value. This reduction is offset by the increase of mitigation credits at ratios specified by USFWS in the ARCF GRR Biological Opinion. • One year of monitoring will be conducted for habitat that is temporarily affected.			
BIRD-1	**Implement Measures to Protect Nesting Migratory Birds.** If the project is implemented, USACE will undertake the following measures to minimize potential effects on active nests of Swainson's hawk, white-tailed kite, northern harrier, Modesto song sparrow, and other migratory birds: • Before on-site project activities begin, all construction personnel shall participate in a worker environmental awareness program. A qualified biologist shall inform all construction personnel about the life history of Swainson's hawk and the importance of nest sites. • A breeding season survey shall be conducted for active Swainson's hawk nests within 0.5 mile of construction activities, including grading. A survey shall also be conducted for active nests of white-tailed kite and purple martin within 500 feet of construction activities and active nests of other migratory birds within 100 feet of construction activities. Swainson's hawk surveys shall be completed during at least two of the following survey periods: January 1 to March 20, March 20 to April 5, April 5 to April 20, and June 10 to July 30 with no fewer than three surveys completed in at least two survey periods, and with at least one survey occurring immediately prior to project initiation (Swainson's Hawk Technical Advisory Committee 2000). Other bird nest surveys could be conducted concurrent with Swainson's hawk surveys, with at least one survey to be conducted no more than 48 hours from the initiation of project activities. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removal or pruning of trees and shrubs, could commence without any further mitigation. • A breeding season survey shall be conducted for any active nests of birds protected under the Migratory Bird Treaty Act (MBTA), which essentially includes all native birds. If active nests are found, a protective buffer shall be established and implemented until the nest is no longer active. The size of the buffer shall be determined based on the species, nest stage, type, and intensity of project disturbance in the nest vicinity; presence of visual buffers; and other variables that may affect susceptibility of the nest to disturbance. A qualified biologist shall monitor the nest during project activities to confirm effectiveness of the buffer and adjust the buffer as needed to ensure project activities do not adversely affect behavior of adults or young.	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	• Tree and shrub removal and other clearing, grading, and construction activities that remove vegetation shall not be conducted during the nesting season (generally February 15–August 31, depending on the species and environmental conditions for any given year), to the extent feasible.			
BAT-1	**Implement Measures to Protect Maternity Roosts of Special-status Bats.** If the project is implemented, CVFPB will implement the following measures to minimize potential for loss of special-status bat maternity roosts: Wherever feasible, the USACE would conduct construction activities outside of the pupping season for bats (generally April 1 to August 31). • If removal of trees must occur during the bat pupping season, within 30 days of tree removal activities, all trees to be removed will be surveyed by a qualified biologist for the presence of features that may function as special status bat maternity roosting habitat. Trees that do not contain potential special status maternity roosting habitat may be removed. For trees that contain suitable special status bat maternity roosting habitat, surveys for active maternity roosts shall be conducted by a qualified biologist in trees designated for removal. The surveys shall be conducted from dusk until dark. • If a special-status bat maternity roost is located, appropriate buffers around the roost sites shall be determined by a qualified biologist and implemented to avoid destruction or abandonment of the roost resulting from tree removal or other project activities. The size of the buffer shall depend on the species, roost location, and specific construction activities to be performed in the vicinity. No project activity shall commence within the buffer areas until the end of the pupping season (September 1) or until a qualified biologist confirms the maternity roost is no longer active. If construction activities must occur within the buffer, a qualified biologist would monitor activities either continuously or periodically during the work, as determined by the qualified biologist. The qualified biologist would be empowered to stop activities that, in the biologist's opinion, threaten to cause unanticipated adverse effects on specials status bats. If construction activities are stopped, CDFW would be consulted to determine appropriate measures to implement to avoid adverse effects. • For trees containing cavities, cracks, crevices, or deep bark fissures that are planned for removal or trimming (irrespective of time of year), such trees must be trimmed and/or removed in a two-phase removal system conducted over two consecutive days. The first day (in the afternoon), limbs and branches would be removed, using chainsaws only. Removal activities must avoid limbs with cavities, cracks, crevices, or deep bark fissures, and remove only branches and limbs without those features. On the second day, the entire tree would be removed. A qualified biologist would monitor removal of these trees.	P, C	USACE	CVFPB
CR-1	**Prepare a Historic Properties Treatment Plan and Continue Consultation in Accordance with the Programmatic Agreement and the Historic Properties Management Plan.** In accordance with the requirements of the ARCF PA and the procedures described in Section 8.2 of the ARCF Historic Properties Management Plan (HPMP), a Historic Properties Treatment Plan	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	(HPTP) shall be prepared to address treatment of adverse effects to the Sacramento Weir and Bypass Historic Property. The ARCF HPMP specifies the content, procedures and consultation requirements for the HPTP. CVFPB shall contact the Native American contacts, including those already identified by the Native American Heritage Commission (NAHC), in an effort to identify cultural resources important to Native Americans, including Tribal Cultural Resources as defined in California Public Resources Code 21074, that may be present in the project area. If Tribal Cultural Resources are identified in the APE, then the requirements of Mitigation Measure CR-5 shall be implemented by the CVFPB			
CR-2	**Prepare an Archaeological Discovery Plan and Archaeological Monitoring Plan.** In accordance with the procedures described in Section 9.2 of the ARCF HPMP, a discovery plan shall be prepared and included in the construction contractor's specifications. The discovery plan shall specify what actions are required to be taken by the contractor in the event of an archaeological discovery and describe what actions USACE may take in the event of a discovery. In accordance with the procedures described in Section 9.3.9 of the ARCF HPMP, an archaeological monitoring plan shall be developed. This plan shall identify the locations of known Historic Properties as well as sensitive areas designated for archaeological monitoring and shall include methods and procedures for monitoring and the procedures to be followed in the event of a discovery of archaeological materials.	P, C	USACE	CVFPB
CR-3	**Conduct Cultural Resources Awareness Training.** In accordance with the procedures described in Section 9.1 of the ARCF HPMP, USACE shall require the contractor to provide a cultural resources and tribal cultural resources sensitivity and awareness training program for all personnel involved in project construction, including field consultants and construction workers. The training shall be developed in coordination with an archaeologist meeting Secretary of the Interior Professional Qualifications Standards for Archaeology, as well as culturally affiliated Native American tribes. USACE may invite Native American representatives from interested culturally affiliated Native American tribes to participate. The training shall be conducted before any project-related construction activities begin in the APE and shall include relevant information regarding sensitive cultural resources and Tribal Cultural Resources, including applicable regulations, protocols for avoidance, and consequences of violating Federal and state laws and regulations. The training shall also describe appropriate avoidance and impact minimization measures for cultural resources and Tribal Cultural Resources that could be located in the Area of Potential Effect (APE) and shall outline what to do and who to contact if any potential cultural resources or Tribal Cultural Resources are encountered. The training shall emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and shall discuss appropriate behaviors and responsive actions, consistent with Native American tribal values.	P	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
CR-4	**Implement Procedures for Discovery of Cultural Material.** If cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, building remains,) are discovered during project-related construction activities or if any of these types of resources are identified prior to construction, USACE in consultation with CVFPB and other interested parties, shall develop appropriate protection and avoidance measures where feasible (where avoidance is possible through re-design, revised construction methods, or other means which do not cause construction of the project to become impractical). These procedures shall be developed in accordance with the ARCF PA and ARCF HPMP, which specifies procedures for post-review discoveries. Additional measures, such as development of Historic Property Treatment Plans prepared in accordance with the PA and HPMP, may be necessary if avoidance or protection is not possible.	C	USACE	CVFPB
CR-5	**In the Event that Tribal Cultural Resources are Discovered Prior to or During Construction, Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.** California Native American Tribes that are traditionally and culturally affiliated with the geographic area in which the project is located may have expertise concerning their Tribal Cultural Resources (California PRC Section 21080.3.1). Consistent with the California Natural Resources Agency Tribal Consultation Policy, CVFPB will consult with culturally affiliated Tribes concerning the identification and evaluation of Tribal Cultural Resources and the treatment of any Tribal Cultural Resources that may be impacted, if these types of resources are discovered prior to or during construction. Consultation with culturally affiliated Tribes shall focus on identifying measures to avoid or minimize impacts on any such resources discovered during construction. If Tribal Cultural Resources are identified in the APE prior to or during construction, the following performance standards shall be met before proceeding with construction and associated activities that may result in damage to or destruction of Tribal Cultural Resources: • Each identified Tribal Cultural Resource will be evaluated for California Register of Historical Resources (CRHR) eligibility through application of established eligibility criteria (CCR 15064.636), in consultation with interested Native American Tribes. • If a Tribal Cultural Resource is determined to be eligible for listing in the CRHR, USACE, in consultation with CVFPB, will avoid damaging the Tribal Cultural Resource in accordance with California PRC Section 21084.3, if feasible. If CVFPB determines that the project may cause a substantial adverse change to a Tribal Cultural Resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation steps capable of avoiding or substantially lessening potential significant impacts to a Tribal Cultural Resource or alternatives that would avoid significant impacts to a Tribal Cultural Resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact specifically address inadvertent discovery of human remains: i. Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace,	D, P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria. ii. Treat the resource with culturally appropriate dignity, taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following: a. Protect the cultural character and integrity of the resource. b. Protect the traditional use of the resource. c. Protect the confidentiality of the resource. d. Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places. e. Protect the resource.			
CR-6	**Implement Procedures for Discovery of Human Remains.** To minimize adverse effects from encountering human remains during construction, USACE and CVFPB shall implement the following measures: • In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, CVFPB shall consult with USACE, and USACE shall immediately halt potentially damaging excavation in the area of the burial and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). After the coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. • Upon the discovery of Native American human remains, USACE, in coordination with CVFPB, shall require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations to the landowner after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that CVFPB shall employ: i. Record the site with the NAHC or the appropriate Information Center. ii. Record a document with the county in which the property is located.	C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	iii. If agreed to by the MLD and the landowner, CVFPB or CVFPB's authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. If the NAHC is unable to identify an MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site, CVFPB or CVFPB's authorized representative may reinter the remains in a location not subject to further disturbance. If CVFPB rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to CVFPB, CVFPB shall implement mitigation to protect the burial remains. Construction work in the vicinity of the burials shall not resume until the mitigation is completed.			
TR-1	**Prepare and Implement a Traffic Control and Road Maintenance Plan.** Before the start of project-related construction activities, USACE shall require the contractor to prepare and implement a Traffic Control and Road Maintenance Plan. This plan will describe the methods of traffic control to be used during construction. All on-street construction traffic will be required to comply with the local jurisdiction's standard construction specifications. The items listed below shall be included in the plan and as terms of the construction contracts: • Follow the standard construction specifications of affected jurisdictions with regard to use and repair of the roads and incorporate those conditions into the construction contract. • Provide adequate parking for construction trucks, equipment, and construction workers within the designated staging areas throughout the construction period. If inadequate space for parking is available at a given work site, the construction contractor shall provide an off-site staging area and, as needed, coordinate the daily transport of construction vehicles, equipment, and personnel to and from the work site. • Proposed lane closures shall be coordinated with the appropriate jurisdiction and be minimized to the extent possible during the morning and evening peak traffic periods. Construction specifications shall limit lane closures during commuting hours where feasible, and lane closures will be kept as short as possible. If a road must be closed, detour routes and/or temporary roads shall be made to accommodate traffic flows. Signs shall be provided to direct traffic through detours. • Post signs providing advance notice of upcoming construction activities at least 1 week in advance, so that motorists are able to avoid traveling through affected areas during these times. • Provide bicycle detours to allow for continued use by bicycle commuters. Maintain safe pedestrian and bicyclist access around the construction areas at all times. Construction areas shall be secured as required by the applicable jurisdiction to prevent pedestrians and bicyclists from entering the work site, and all stationary equipment should be located as far away as possible from areas where bicyclists and pedestrians are present. • Notify (by means such as physical signage, internet postings, letters, or telephone calls) and consult with emergency service providers to inform them of construction activities, maintain	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	emergency access, and facilitate the passage of emergency vehicles during construction activities. Emergency vehicle access shall be made available at all times. • The construction contractor shall document pre- and post- construction conditions on roadways used during construction. This information will be used to assess damage to roadways used during construction. The contractor shall repair all potholes, fractures, or other damages attributed to the project's construction activities. • Comply with Caltrans requirements by submitting this Traffic Control and Road Maintenance Plan to Caltrans for review to cover points of access from the state highway system (I 5 and I-80) for haul trucks and other construction equipment.			
TR-2	**Adjust Rail Traffic.** USACE and CVFPB shall implement the following measure to reduce effects on rail transportation in the project area: • Trains using the Yolo Shortline Railroad would be detoured to a different rail line when required. If an alternative rail line is not available, railroad services would be continued by transporting goods on public roads using cargo trucks during the extent of closures required by the project.	P, C	USACE and CVFPB	CVFPB
AIR-1	**Implement the Sacramento Metropolitan Air Quality Management District's Basic Construction Emission Control Practices.** If the project is implemented, USACE shall require its contractors to comply with the basic construction emission control practices listed in the Final EIS/EIR (see Section 3.11.6 of the Final EIR/EIS, p. 251) and presented below for all construction-related activities: • Water all exposed surfaces two times daily or more, as needed. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. • Cover, or suitably wet soils and other materials on haul trucks transporting soil, sand, or other loose material on the site. Cover any haul trucks that travel along freeways or major roadways. • Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Limit vehicle speed on unpaved roads to 15 miles per hour (mph). • Complete pavement of all roadways, driveways, sidewalks, parking lots to be paved as soon as possible. In addition, lay building pads as soon as possible after grading unless seeding or soil binders are used. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by CCR, Title 13, Sections 2449[d][3] and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site. • Maintain all construction equipment in proper working condition according to manufacturer's specifications. Have the equipment checked by a certified mechanic and determined to be running in proper condition before it is operated.	C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
AIR-2	**Implement the Sacramento Metropolitan Air Quality Management District's Enhanced Fugitive PM Dust Control Practices.** Because the construction activities would involve substantial material movement activities and would be located in proximity of residential receptors, USACE shall require its construction contractors to implement the Enhanced Fugitive (particulate matter) PM Dust Control Practices listed in the Final EIS/EIR (at page 251) below to help reduce potential fugitive PM dust emissions if the project is implemented. Soil Disturbance Areas • Water exposed soil with adequate frequency for continued moist soil. However, do not overwater to the extent that sediment flows off the site. • Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph. • Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas. • Plant vegetative ground cover (fast germinating native grass seed) in disturbed areas as soon as possible. Water appropriately until vegetation is established. • Unpaved Roads (Entrained Road Dust) • Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the site. • Treat site accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads. • Post a publicly visible sign with the telephone number and person to contact at USACE regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of Yolo Solano Air Quality Management District (YSAQMD) also will be visible to ensure compliance.	C	USACE	CVFPB
AIR-3	**Require Lower Exhaust Emissions for Construction Equipment.** If the project is implemented, USACE shall require its contractors to use a fleet-wide average of 90 percent Tier 4 emissions vehicles for off-road construction equipment, and on-road haul trucks must be equipped with 2010 or newer engines. In order to demonstrate compliance with this requirement: • The construction contractor shall submit to USACE and YSAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. • The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager, and on-site foreman. This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The Sacramento Metropolitan Air Quality Management District (SMAQMD) Construction Mitigation Tool can be used to submit this information. The inventory shall be updated and submitted monthly throughout the duration of	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. • The construction contractor shall provide a plan for approval by USACE and YSAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet average of 90 percent Tier 4 emissions vehicles. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. • SMAQMD's Construction Mitigation Tool can be used to identify an equipment fleet that achieves this reduction. • Use the Construction Mitigation Tool to track PM equal to or less than 10 micrometers in diameter (PM10) emissions and mileage traveled by on-road trucks, reporting results to USACE on a monthly basis.			
AIR-4	**Pay Mitigation Fees to Reduce and Offset NOx Emissions.** If the project is implemented, USACE shall implement measures to reduce oxides of nitrogen (NOx) construction-related emissions. Pursuant to air district thresholds of significance, if the projected construction-related emissions exceed the NOx threshold of significance based on the equipment inventory, USACE and CVFPB shall contribute to SMAQMD's, Bay Area Air Quality Management District (BAAQMD's), or YSAQMD's off-site mitigation fee program sufficiently to offset the amount by which the project's NOx emissions exceed the threshold. If emissions for the ARCF 2016 Project in any given year would exceed the de minimis threshold of 25 tons per year, USACE and CVFPB would enter into an agreement with SMAQMD and/or YSAQMD to purchase offsets for all NOx emissions in any year that projected emissions would exceed the threshold. The determination of the estimated mitigation fees shall be conducted in coordination with SMAQMD and/or YSAQMD before any ground disturbance occurs for any phase of project construction. (Estimated fees for the Sacramento Weir Widening project are $163,485 in 2021, $189,000 in 2022, and $251,605 in 2023.) All mitigation fees shall be paid prior to the start of construction activity in each year to allow air districts to obtain emissions reductions for the project. If there are changes to construction activities (e.g., equipment lists, increased equipment usage or schedules), USACE and CVFPB shall work with SMAQMD, BAAQMD, and YSAQMD to ensure emission calculations and fees are adjusted appropriately.	P	USACE	CVFPB
AIR-5	**Implement Marine Engine Standards.** If the project is implemented, USACE shall encourage the use of U.S. Environmental Protection Agency (EPA) adopted Tier 3 and Tier 4 standards for newly built marine engines in 2008 under the barge delivery scenario. The Tier 3 standards reflect the application of technologies to reduce engine PM and NOX emission rates. Tier 4 standards reflect application of high-efficiency catalytic after-treatment technology enabled by the availability of ultra-low sulfur diesel.	C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	USACE will use Tier 2 and 3 marine engines standards where available to reduce marine exhaust emissions. Due to uncertainty as to the availability of Tier 4 marine engines within the required project timeline, this mitigation measure does not require the use of Tier 4 marine engines. However, should they become available during the appropriate construction periods, the use of these engines would further lower project emissions.			
GHG-1	**Implement GHG Reduction Measures.** If the project is constructed, measures that will be implemented to further reduce the project's contribution from generation of greenhouse gas (GHGs) are specified in the Final EIS/EIR at pp. 265-266 and include the following: • Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking for construction worker commutes. • Recycle at least 75% of construction waste and demolition debris. • Purchase at least 20% of the building materials and imported soil from sources within 100 miles of the project site. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure [Title 13, sections 2449(d)(3) and 2485 of the CCR]). • Provide clear signage that posts this requirement for workers at the entrances to the site. • Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. • Use equipment with new technologies (repowered engines, electric drive trains). • Perform on-site material hauling with trucks equipped with on-road engines (if determined to be less emissive than the off-road engines). • Use an ARB-approved low carbon fuel for construction equipment. NOx emissions from the use of low carbon fuel must be reviewed and any increases mitigated. • Purchase GHG offset for program-wide GHG emissions (direct emissions plus indirect emissions from on-road haul trucks plus commute vehicles) exceeding SMAQMD significance thresholds applicable at the time of construction. Carbon offset credits shall be purchased from programs that have been approved by YSAQMD.	P, C	USACE	CVFPB
NOI-1	**Implement Measures to Reduce Construction Noise and Vibration Effects.** If the project is implemented, USACE shall require that construction contractors implement measures at each work site to avoid and minimize construction noise and vibration effects on sensitive receptors. Prior to the start of construction, a noise control plan will be prepared to identify feasible measures to reduce construction noise, when necessary. The measures in the plan will apply to construction activities within 500 feet of a sensitive receptor, including, but not limited to, residences. These measures may include, but are not limited to, the following:	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	• Provide written notice to residents within 1,000 feet of the construction zone, advising them of the estimated construction schedule. This written notice would be provided within 1 week to 1 month of the start of construction at that location and updated with any substantial changes to the schedule. • Display notices with information including, but not limited to, contractor contact telephone number(s) and proposed construction dates and times. Notices shall be displayed in a conspicuous manner, such as on construction site fences. • Schedule the loudest and most intrusive construction activities during daytime hours (7:00 a.m. to 7:00 p.m.), when feasible. • Require that construction equipment include factory-installed muffling devices and that all equipment be operated and maintained in good working order to minimize noise generation. • Locate stationary noise-generating equipment as far as practicable from sensitive receptors. • Limit unnecessary engine idling (i.e., more than 5 minutes) as required by state air quality regulations. • Employ equipment that is specifically designed for low noise emission levels, when feasible. • Employ equipment that is powered by electric or natural gas engines, as opposed to those powered by gasoline fuel or diesel, when feasible. • If the construction zone is within 500 feet of a sensitive receptor, place temporary barriers between stationary noise equipment and noise sensitive receptors to block noise transmission, when feasible, or take advantage of existing barrier features, such as existing terrain or structures, when feasible. • If the construction zone is within 500 feet of a sensitive receptor, prohibit use of backup alarms and provide an alternate warning system, such as a flagman or radar-based alarm that is compliant with Federal and state worker safety regulations. • Locate construction staging areas as far as practicable from sensitive receptors. • Design haul routes to avoid sensitive receptors, to the extent practical. • To the extent feasible and practicable, employ vibration-reducing construction practices such that vibration from construction complies with applicable noise-level rules and regulations that apply to the work, including the vibration standards established for construction vibration-sources by the applicable agencies, depending on the jurisdictional location of the affected receptor(s). Project construction specifications shall require the contractor to limit vibrations to less than 0.2-inch per second peak particle velocity (PPV), and less than 72 VdB within 50 feet at any building. If construction would occur within 50 feet of any occupied building, the contractor will prepare a vibration control plan prior to construction. The plan will include measures to limit vibration, including but not limited to the following: • Avoid vibratory rollers and packers near sensitive areas. • Route heavily loaded trucks away from residential streets, when possible. If no reasonable alternatives are available, select streets with the fewest homes.			

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
REC-1	**Implement Bicycle and Pedestrian Detours, Provide Construction Period Information on Facility Closures, and Coordinate with Yolo County and California Department of Fish and Wildlife to Repair Damaged Facilities.** If the project is implemented, USACE and CVFPB shall implement the following measures to reduce temporary, short-term construction effects on recreational facilities in the project area: Provide marked detours for areas, informal trails, and on-street bicycle routes that are temporarily closed during construction. Detours should be developed in consultation with Yolo County at least 10 days before the start of construction activities, as applicable. Post signs that clearly indicate closure routes at major entry points for bicycle trails, post information signs to notify motorists to share the road with bicyclists where necessary and provide a contact number to call for questions or concerns. Post signs at major entry points for parks and recreation facilities. Information signs will notify the public of alternate parks and recreation sites and provide a contact number to call for questions or concerns. Upon completion of levee improvements, coordinate with Yolo County and CDFW to restore access and repair any construction-related damage to pre-project conditions.	P, C	USACE	CVFPB
REC-2	**Implement Water Safety Measures for Barges.** If the project is constructed, USACE and CVFPB shall implement the following measure to reduce temporary, short-term construction effects on recreational boating in the project area: • If rock or other materials are transported by barge on the Sacramento River, appropriate water safety measures would be used to reduce impacts to recreational boaters.	C	USACE	CVFPB
VIS-1	**Coordinate Nighttime Lighting with Sacramento International Airport Operations and Restrict Night Lighting within and Near Airport Runway Approaches and Near CHP Academy Airport.** If the project is implemented, USACE will implement the following measures for construction in proximity to airports to reduce airport safety hazards associated with project-related nighttime lighting. • All project-related nighttime lighting that would be located within Sacramento International Airport's runway approach zones, as well as all nighttime lighting that would be located within 2 miles of the CHP Academy Airport, will be shielded and directed downward to reduce interference with nighttime airport operations and aircraft flight paths. • Sacramento County Airport System (SCAS) and the California Highway Patrol (CHP) Academy Airport will be notified at least 10 days prior the start of nighttime lighting operations within the Sacramento International Airport runway approach zones or within 2 miles of the CHP Academy Airport. USACE and CVFPB will coordinate with SCAS and the CHP Academy Airport during final project design to ensure that all appropriate safety precautions are incorporated into the construction plans. • Prior to the start of nighttime construction activities that would be located within Sacramento International Airport runway approach zones, as well as all nighttime lighting that would be	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	located within 2 miles of the CHP Academy Airport, USACE's construction contractor will hold a safety meeting for all nighttime construction personnel, informing construction personnel of the need to ensure all lighting is shielded and directed downward at all times, along with other safety measures that may be required by SCAS or the CHP Academy Airport. The safety briefing will include emergency contact information for SCAS and the CHP Academy Airport. If nighttime lighting activities are necessary throughout the course of the construction season (i.e., April–October), at least two safety meetings will be held by the construction contractor, at evenly spaced intervals over the course of the construction season.			
VIS-2	**Provide Shielding from Nighttime Construction Activities or Offer to Temporarily Relocate Affected Residents.** To reduce nighttime light and glare effects on residents and motorists, USACE will ensure that the following measures are implemented if the project is constructed. All nighttime lighting will be shielded and directed downward. • If nighttime construction would occur within 300 feet of residences, solid screened temporary construction fencing at least 6 feet high will be provided along the boundary of the construction site where nighttime lighting would occur, between the construction site and the residence. A minimum of 200 linear feet of shielded construction fencing will be provided. The shielded fencing will be proximate to the location of the lighting (e.g., if lighting is required on top of the levee, then the fencing will also be placed on top of the levee). • In lieu of screened construction fencing, USACE and CVFPB may offer to temporarily relocate affected residents to a local hotel during the period when nighttime lighting would occur. Reimbursement of hotel accommodations will be limited to reasonable expenses and will be limited to the duration of nighttime lighting activities within 300 feet of the residence.	C	USACE	CVFPB
UTL-1	**Verify Utility Locations, Coordinate with Affected Utility Owners/Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage.** If the project is implemented, USACE shall implement the measures listed below before construction begins to avoid and minimize potential damage to utilities, infrastructure, and service disruptions during construction: • Coordinate with applicable utility and service providers to implement orderly relocation of utilities that need to be removed or relocated. • Provide notification of any potential interruptions in service to the appropriate agencies and affected landowners. • Verify through field surveys and the use of the Underground Service Alert services the locations of buried utilities in the project area, including natural gas, petroleum, and sewer pipelines. Any buried utility lines shall be clearly marked in the area of construction (e.g., in the field) and on the construction specifications in advance of any earthmoving activities. • Before the start of construction, prepare and implement a response plan that addresses potential accidental damage to a utility line. The plan shall identify chain-of-command rules for	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/ Reporting Action
	notification of authorities and appropriate actions and responsibilities regarding the safety of the public and workers. A component of the response plan will include worker education training in response to such situations. • Stage utility relocations during project construction to minimize interruptions in service. • Communicate construction activities with first responders to avoid response delays due to construction detours.			
HAZ-1	**Conduct Phase II Investigations as Needed.** If the project is implemented, USACE will require that project areas be tested for contaminants prior to construction. Any hazardous materials found would be disposed of in accordance with all Federal, state, and local regulations at an approved disposal site. Where construction activities would occur in close proximity to sites identified as Recognized Environmental Conditions (RECs) in the Phase I Environmental Site Assessment (ESA) (HDR 2019), a Phase II site investigation should also be conducted.	P	USACE	CVFPB

Notes:
D: To be implemented or included as part of project design, including pre-project permitting and agency coordination.
P: To be implemented prior to construction being initiated(pre-construction), but not part of project design or permitting.
C: To be implemented during project construction.
M: To be implemented as ongoing maintenance after construction is complete.

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EXHIBIT D – AMERICAN RIVER WATERSHED COMMON FEATURES, WATER RESOURCES DEVELOPMENT ACT OF 2016 PROJECT, SACRAMENTO WEIR WIDENING

CALIFORNIA STATE LANDS COMMISSION STATEMENT OF FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS

1.0 INTRODUCTION

The California State Lands Commission (Commission or CSLC), acting as a responsible agency under the California Environmental Quality Act (CEQA), makes these findings and this Statement of Overriding Considerations to comply with CEQA as part of its discretionary approval to authorize issuance of a General Lease – Public Agency Use lease to the Central Valley Flood Protection Board (CVFPB) for use of sovereign land associated with the proposed American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento Weir Widening (Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines[1], § 15381.) The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions. (Pub. Resources Code, §§ 6301, 6306, 6009, subd. (c).) All tidelands and submerged lands granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

The Commission is a responsible agency under CEQA for the Project because the Commission must approve a General Lease – Public Agency Use for the Proposed Action (Project) to go forward, and because the CVFPB, as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The CVFPB analyzed the environmental impacts associated with the Project in a Final Environmental Impact Statement/Report (EIS/EIR) (State Clearinghouse [SCH] No. 2005072046), American River Watershed Common Features General Reevaluation Report (ARCF GRR), herein referred to as the EIR and, on June 9, 2016, certified the EIR and adopted a Mitigation Monitoring and Reporting Program (MMRP), Findings, and a Statement of Overriding Considerations.

The CVFPB then prepared a Supplemental EIS/EIR (American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento Weir Widening [herein referred to as the SEIR]). The lead agency certified the SEIR on August 27, 2021, and adopted a MMRP, Findings, and a Statement of Overriding Considerations.

[1] CEQA is codified in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.

The Project includes construction of a 1,500-foot-long passive weir, with associated levee, roadway, rail, and fish passage improvements. The overall purpose is to construct a new weir upstream of the existing weir along the Sacramento River to reduce flood risk by lowering high water surface elevations against urban levees and reducing flow farther downstream in urbanized areas. The Project would include the following components that have potential to affect State sovereign land:

- Erosion protection (riprap, articulated concrete mats, or a similar material) would be placed on the Sacramento River side of the weir to prevent erosion.
- Two fish passage channel exits: One channel would accommodate fish passage when Sacramento River stages are relatively higher, and one fish passage channel would accommodate fish passage when Sacramento River stages are relatively lower.
- Debris management features on the Sacramento River side of the structure that would include a floating boom, debris control berm, retaining walls, and deflection walls.
- Temporary cofferdams, or sheet pile installation during construction.

The CVFPB determined that the Project could have significant environmental effects on the following environmental resources:

- Geological Resources
- Land Use
- Water Quality and Groundwater Resources
- Vegetation and Wildlife
- Fisheries
- Special-Status Species
- Cultural Resources
- Transportation and Circulation
- Air Quality
- Greenhouse Gas Emissions and Energy Consumption
- Noise
- Recreation
- Visual Resources
- Public Utilities and Service Systems
- Hazards and Hazardous Materials

Of the 15 resources areas noted above, Project components within the Commission’s jurisdiction (i.e., bank protection and restoration) could have significant environmental effects on 11 of the resource areas, as follows:

- Geological Resources
- Water Quality and Groundwater Resources
- Vegetation and Wildlife
- Fisheries
- Special-Status Species

- Cultural Resources
- Air Quality
- Greenhouse Gas Emissions and Energy Consumption
- Noise
- Recreation
- Visual Resources

In certifying the EIR and SEIR and approving the Project, the CVFPB imposed various mitigation measures for Project-related significant effects on the environment as conditions of Project approval and concluded that Project-related impacts would be substantially lessened with implementation of these mitigation measures; however, even with the integration of all feasible mitigation, the CVFPB concluded in the EIR and SEIR that some of the identified impacts would remain significant. As a result, the CVFPB adopted a Statement of Overriding Considerations to support its approval of the Project despite the significant and unavoidable impacts. The CVFPB determined that, after mitigation, the Project may still have significant impacts on Land Use, Vegetation and Wildlife, Transportation and Circulation, Recreation, and Visual Resources. Because three of these significant impacts (Visual Resources, Vegetation and Wildlife, and Recreation) may occur on lands under the jurisdiction of the Commission, the Commission also adopts a Statement of Overriding Considerations set forth in this Exhibit as part of its approval.

As a responsible agency, the Commission complies with CEQA by considering the EIR and SEIR and reaching its own conclusions on whether, how, and with what conditions to approve a project. In doing so, the Commission may require changes in a project to lessen or avoid the effects, either direct or indirect, of that part of the project which the Commission will be called on to carry out or approve. In order to ensure the identified mitigation measures and/or Project revisions are implemented, the Commission adopts the Mitigation Monitoring Program (MMP) as set forth in Exhibit C as part of its Project approval.

2.0 ADMINISTRATIVE RECORD OF PROCEEDINGS AND CUSTODIAN OF THE RECORD

These Findings are supported by substantial evidence contained in the EIR and SEIR and other relevant information provided to the Commission or existing in its files, all of which is contained in the administrative record. The administrative record is located at the California State Lands Commission, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825. The custodian for the administrative record is the California State Lands Commission Division of Environmental Planning and Management.

3.0 FINDINGS

The Commission’s role as a responsible agency affects the scope of, but not the obligation to adopt, findings required by CEQA. Findings are required under CEQA by each “public agency” that approves a project for which an EIR has been certified that

identifies one or more significant impacts on the environment (Pub. Resources Code, § 21081, subd. (a); State CEQA Guidelines, § 15091, subd. (a).) Because the EIR and SEIR certified by the CVFPB for the Project identify potentially significant impacts that fall within the scope of the Commission's approval, the Commission makes the Findings set forth below as a responsible agency under CEQA. (State CEQA Guidelines, § 15096, subd. (h); *Riverwatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1202, 1207.)

While the Commission must consider the environmental impacts of the Project as set forth in the EIR and SEIR, the Commission's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the Commission's exercise of discretion involves only issuing a General Lease – Public Agency Use for this Project, the Commission is responsible for considering only the environmental impacts related to lands or resources subject to the Commission's jurisdiction. With respect to all other impacts associated with implementation of the Project, the Commission is bound by the legal presumption that the EIR and SEIR fully comply with CEQA.

The Commission has reviewed and considered the information contained in the Project EIR and SEIR. All significant adverse impacts of the Project identified in the documents relating to the Commission's approval of a General Lease – Public Agency Use, which would allow Project access and staging, are included herein and organized according to the resource affected.

These Findings, which reflect the independent judgment of the Commission, are intended to comply with CEQA's mandate that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects unless the agency makes written findings for each of those significant effects. Possible findings on each significant effect are:

(1) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the EIR and Supplemental EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the Commission. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR and Supplemental EIR.[2]

[2] See Public Resources Code section 21081, subdivision (a) and State CEQA Guidelines section 15091, subdivision (a).

A discussion of supporting facts follows each Finding.

- Whenever Finding (1) occurs, the mitigation measures that lessen the significant environmental impact are identified in the facts supporting the Finding.
- Whenever Finding (2) occurs, the agencies with jurisdiction are specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed.
- Wherever Finding (3) is made, the Commission has determined that, even after implementation of all feasible mitigation measures and consideration of feasible alternatives, the identified impact will exceed the significance criteria set forth in the EIR. Furthermore, to the extent that potentially feasible measures have been alleged or proposed, the Findings explain why certain economic, legal, social, technological or other considerations render such possibilities infeasible. The significant and unavoidable impacts requiring Finding (3) are identified in the Final EIR, discussed in the Responses to Comments, and explained below. Having done everything it can to avoid and substantially lessen these effects consistent with its legal authority and CEQA, the Commission finds in these instances that overriding economic, legal, social, and other benefits of the approved Project outweigh the resulting significant and unavoidable impacts. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the EIR and SEIR.

A. SUMMARY OF FINDINGS

Based on public scoping, there are no resource areas in which the Project resulted in no impacts. Hydrology and Hydraulics resulted in less than significant impacts. For the remaining potentially significant effects, the Findings are organized by significant impacts within the SEIR issue areas as presented below.

B. POTENTIALLY SIGNIFICANT IMPACTS

The impacts identified in Table 1 were determined in the SEIR to be potentially significant absent mitigation. After application of mitigation, however, several impacts were determined to be less than significant (LTSM). For the full text of each mitigation measure (MM), please refer to Exhibit C, Attachment C-1. However, even with the integration of all feasible mitigation, the CVFPB concluded in the SEIR that the other identified potentially significant impacts will remain significant. Table 1 identifies those impacts that the CVFPB determined would be less than significant with mitigation (LTSM) and significant and unavoidable (SU) even after mitigation.

Table 1 – Significant Impacts by Issue Area

Environmental Issue Area	Impact Nos.	
	LTSM	**SU**
Geological Resources	GEO-2, GEO-3	
Water Quality and Groundwater Resources	WQ-1	
Vegetation and Wildlife	VEG-1A, VEG-2	VEG-1B
Fisheries	FISH 2, FISH-3, FISH-5	
Special-Status Species	SSS-1, SSS-2, SSS-4	
Cultural Resources	CR-1, CR-2, CR-3	
Air Quality	AIR-1, AIR-2, AIR-3	
Greenhouse Gas Emissions and Energy Consumption	GHG-1	
Noise	NOI-1	
Recreation		REC-1
Visual Resources	VIS-3	VIS-1, VIS-2

As a result, the Commission adopts the Statement of Overriding Considerations set forth as part of this Exhibit to support its approval of the Project despite the significant and unavoidable impacts.

C. IMPACTS REDUCED TO LESS THAN SIGNIFICANT LEVELS WITH MITIGATION (LTSM)

The impacts identified below were determined in the EIR and SEIR to be potentially significant absent mitigation; after application of mitigation, however, the impacts were determined to be less than significant. Numbering of the impacts has been added to provide additional clarity.

1. GEOLOGICAL RESOURCES

CEQA FINDING NO. GEO-2

Impact: **Impact GEO-2. Potential Temporary, Short-term Construction-related Erosion.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Constructing the Project would result in the temporary and short-term disturbance of soil and could expose disturbed areas to winter storm events. Rainfall of sufficient intensity

could dislodge soil particles from the soil surface and generate runoff and localized erosion. In addition, soil disturbance during summer could result in substantial loss of topsoil because of wind erosion. The U.S. Army Corps of Engineers (USACE) or its contractor will develop and implement a Storm Water Pollution Prevention Plan (SWPPP) and a Spill Prevention Control and Countermeasures Plan including required best management practices (BMPs) to reduce construction-related erosion effects to a less-than-significant level. All workers will be properly trained on requirements and procedures to properly install and maintain BMPs specified in the SWPPP. Implementing MM GEO-1 will reduce the Project's potential short-term construction erosion impacts to a less than significant level.

- **MM GEO-1:** Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasures Plan, and Associated Best Management Practices.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. GEO-3

Impact: **Impact GEO-3. Potential to Directly or Indirectly Destroy a Unique Paleontological Resource or Site.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

The Project site is located on Holocene-age Alluvium and Basin Deposits underlain by Riverbank Formation. The Riverbank Formation is known to be paleontologically sensitive due to numerous vertebrate fossils remains found in the sediment. Depending on the depth of excavation, the Riverbank Formation could be encountered, and unique paleontological resources could be damaged during construction-related excavation. A qualified paleontologist will evaluate the resource and prepare a recovery plan. Implementing MM GEO-2 will reduce the Project's potential impacts on paleontological resources to a less than significant level.

- **MM GEO-2**: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

2. WATER QUALITY AND GROUNDWATER RESOURCES

CEQA FINDING NO. WQ-1

Impact: **Impact WQ-1. Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface or Groundwater Quality, Result in Substantial Erosion or Siltation On- or Offsite, or Conflict with or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Construction activities would employ equipment that uses potentially harmful products such as fuels, lubricants, hydraulic fluids, and coolants, all of which can be toxic to fish and other aquatic organisms. This equipment could be a direct source of contamination if safe equipment and construction practices are not properly followed. An accidental spill or inadvertent discharge from such equipment could directly affect the water quality of the river or water body in the Project area, or groundwater, and indirectly affect regional water quality of the river or water body. Additionally, earth moving construction activities and dewatering to facilitate construction activities could result in erosion and/or release sediment into surface or groundwater.

USACE will prepare and implement a SWPPP and comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) general stormwater permit for construction activity. USACE shall obtain a Low Threat Discharge and Dewatering NPDES permit or an Individual Permit from the Central Valley Regional Water Quality Control Board (RWQCB) if the Sacramento Weir Widening Project's dewatering is not covered under the RWQCB's NPDES Construction General Permit. Workers will be trained on the installation method of the BMPs addressed in the SWPPP. A Spill Prevention Control and Countermeasures Plan would also be prepared and implemented. Implementing MMs GEO-1 and HWQ-1 will reduce impacts to surface water quality to a less than significant level.

- **MM GEO-1**: Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasures Plan, and Associated Best Management Practices.
- **MM HWQ-1**: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

3. VEGETATION AND WILDLIFE

CEQA FINDING NO. VEG-1A	
Impact:	**Impact VEG-1A. Adverse Long-Term Effects on Riparian Habitat, Forestland, and Waters of the United States.**
Finding(s):	(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Removal of approximately 18.5 acres of riparian forestland would cause a significant impact. Additionally, fill and alteration of drainage ditches and potential degradation of additional open water habitat could be a significant impact.

The USACE will compensate for riparian and woodland habitat removal. Replacement habitat shall be created at a 2:1 ratio, in accordance with the ARCF GRR Habitat Mitigation, Monitoring, and Adaptive Management Plan. Additionally, USACE will prepare and implement a SWPPP and comply with the conditions of the NPDES general stormwater permit for construction activity. A Spill Prevention Control and Countermeasures Plan would also be prepared and implemented. Implementing MMs VEG-1, WATERS-1, and GEO-1 will reduce or offset the Project's long-term impact on riparian and woodland habitat to a less-than-significant level and reduce significant permanent, temporary, and short-term construction related effects on federally protected waters to a less than significant level.

- **MM VEG-1**: Compensate for Riparian and Woodland Habitat Removal.
- **MM WATERS-1**: Compensate for Fill of State and Federally Protected Waters.
- **MM GEO-1**: Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasures Plan, and Associated Best Management Practices.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. VEG-2

Impact: **VEG-2. Conflict with Tree Preservation Policies or Ordinances or Provisions of an Adopted Habitat Conservation Plan or Natural Community Conservation Plan.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Removing approximately 6 acres of oak woodland along the Sacramento River would conflict with the Yolo County voluntary Oak Woodland Conservation and Enhancement Plan and the Yolo County 2030 General Plan.

The USACE will compensate for riparian and woodland habitat removal. Replacement habitat shall be created at a 2:1 ratio, in accordance with the Habitat Mitigation, Monitoring, and Adaptive Management Plan. Additionally, expansion of the Sacramento Bypass would enhance overall habitat values. Implementing MM VEG-1 will reduce or offset the Project's long-term impact on riparian and woodland habitat to a less than significant level.

- **MM VEG-1:** Compensate for Riparian and Woodland Habitat Removal.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

4. FISHERIES

CEQA FINDING NO. FISH-2.

Impact: **Impact FISH-2. Operation and Maintenance for Fish Passage.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Potential impacts associated with the construction, operation, and maintenance (O&M) of the fish passage structure and channels would be significant and could include water quality degradation, habitat disturbance and alteration (including designated critical habitat), and other direct and indirect impacts.

The USACE will restrict in-water construction to August 1 through November 30 or as otherwise specified by the National Marine Fisheries Service (NMFS) in the Biological Opinion. Additionally, USACE will prepare and implement a SWPPP and comply with

the conditions of the NPDES general stormwater permit for construction activity. A Spill Prevention Control and Countermeasures Plan would also be prepared and implemented. Implementing MMs FISH-1 and GEO-1 will reduce or offset the Project's long-term impact on fish passage to a less than significant level.

- **MM FISH-1**: In-water Work Window.
- **MM GEO-1**: Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasures Plan, and Associated Best Management Practices.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. FISH-3.

Impact: **Impact FISH-3. Potential Increase in Stranding.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

The potential for more fish to enter the bypass system due to the fish passage channel in the expanded bypass would increase the risk of fish stranding.

The USACE will restrict in-water construction to August 1 through November 30 or as otherwise specified by NMFS in the revised Biological Opinion. USACE and CVFPB will consult with NMFS, U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW) during the permitting process to develop and approve a fish rescue plan for construction and operation of the Project. Implementing MM FISH-3 would reduce this impact to a less than significant level by specifying fish rescue actions in a fish rescue plan.

- **MM FISH-1**: In-water Work Window.
- **MM FISH-3**: Fish Rescue Plan.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. FISH-5.

Impact: **Impact FISH-5. Impacts of Construction and Erosion Control Measures on Critical Habitat.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Construction and Erosion Control Measures would significantly impact aquatic critical habitat, including Shaded Riverine Aquatic (SRA) habitat.

Implementing MMs FISH-1, FISH-3, HWQ-1, and GEO-1 would reduce this impact to a less-than-significant level by limiting in-water work windows, identifying actions to avoid dewatering and construction impacts to individual fish, and requiring measures to prevent introduction of sediment or contaminants into the waterway. Additionally, Implementing MM FISH-2 would reduce this impact to a less than significant level by ensuring compensation for habitat loss.

- **MM FISH-1:** In-water Work Window.
- **MM FISH-2:** Shaded Riverine Aquatic and Aquatic Habitat.
- **MM FISH-3:** Fish Rescue Plan.
- **MM HWQ-1**: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.
- **MM GEO-1**: Acquire Appropriate Regulatory Permits and Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasures Plan, and Associated Best Management Practices.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

5. SPECIAL-STATUS PLANT AND TERRESTRIAL WILDLIFE SPECIES

CEQA FINDING NO. SSS-1.

Impact: **Impact SSS-1. Adverse Effect on Special-Status Species: Plants.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Special-status plants could be removed or indirectly impacted by construction activities if present in or near areas where ground disturbance could occur along the Sacramento River or Sacramento Bypass.

According to MM PLANT-1, the USACE will conduct preconstruction surveys to determine the presence of any special-status plants. If special-status plant species are found during preconstruction surveys, the habitat would be marked, and a 25-foot fenced buffer would be established. If special-status plant species cannot be avoided during construction, USACE and CVFPB would coordinate with CDFW to determine additional appropriate mitigation measures and identify implementation methods, success criteria, monitoring and reporting protocols, and contingency measures, if necessary. Implementing MM PLANT-1 would reduce this impact to a less than significant level by avoiding impacts to special-status plants.

- **MM PLANT-1:** Implement Measures to Avoid and Minimize Effects on Special-Status Plants.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

FINDING NO. SSS-2.

Impact: **Impact SSS-2. Adverse Effect on Special-status Species: Valley Elderberry Longhorn Beetle.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

It is estimated approximately 0.75 acre of elderberry canopy is present in the Project area. Based on discussions with USFWS regarding this Project, USFWS considers riparian habitat within 25 meters of an elderberry shrub to be suitable valley elderberry longhorn beetle habitat. The total amount of riparian vegetation on the Project site that is considered to be suitable valley elderberry longhorn beetle habitat is approximately 6.02 acres, some of which would be within the jurisdiction of the State.

USACE will implement current USFWS avoidance, minimization, and compensation measures for valley elderberry longhorn beetle to compensate for riparian habitat removal. Removal of elderberry shrubs will be avoided to the extent practicable. Protective buffers will be established around elderberry shrubs and construction activity excluded from these areas. Elderberry shrubs that require removal will be transplanted when dormant. A qualified biologist will be present for the duration of the transplanting activities to assure compliance with avoidance and minimization measures. Construction personnel will receive worker awareness training to ensure that workers recognize elderberry shrubs. Compensatory mitigation will be provided by USACE. Implementing MM VELB-1 will reduce or offset the Project's impact to valley elderberry longhorn beetle to a less than significant level.

- **MM VELB-1:** Implement Current USFWS Avoidance, Minimization, and Compensation Measures for Valley Elderberry Longhorn Beetle and Compensate for Riparian Habitat Removal.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

FINDING NO. SSS-4.

Impact: **Impact SSS-4. Adverse Effect on Special-status Species: Swainson's Hawk and Other Special-status Birds.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Swainson's hawk, Western yellow-billed cuckoo, white-tailed kite, purple martin, Modesto song sparrow, and other migratory birds could be significantly impacted due to effects of construction activities. Nests could be disturbed or destroyed during construction, causing loss of eggs or young or forcing nest abandonment.

USACE will conduct pre-construction surveys to determine if active nests are present within the Project area. Surveys will be conducted during the nesting season. If active migratory bird nests are discovered, USACE will coordinate with USFWS and/or CDFW to implement a protective buffer for the nest to be determined upon the species type, nest or burrow stage, type and intensity of Project disturbance in the nest or burrow vicinity, and other variables that may affect vulnerability of the nest. Before on-site Project activities begin, all construction personnel shall participate in a worker environmental awareness program. Implementing MM BIRD-1 will reduce or offset the Project's impact to Swainson's hawk and other special-status birds to a less-than-significant level.

- **MM BIRD-1**: Implement Measures to Protect Nesting Migratory Birds.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

6. CULTURAL RESOURCES

CEQA FINDING NO. CR-1

Impact: **Impact CR-1. Damage to or Destruction of Built-Environmental Historic Properties**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

One Historic Property, the Sacramento Weir and Bypass, would be adversely affected by the Project. In accordance with the requirements of the ARCF Programmatic Agreement and the procedures described in Section 8.2 of the ARCF Historic Properties Management Plan, a Historic Properties Treatment Plan was prepared to address treatment of adverse effects to the Sacramento Weir and Bypass Historic Property. Implementing MM CR-1 would reduce this impact to a less-than-significant level

- **MM CR-1**: Prepare a Historic Properties Treatment Plan and Continue Consultation in Accordance with the Programmatic Agreement and the Historic Properties Management Plan.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. CR-2

Impact: **Impact CR-2. Potential Damage to or Destruction of Previously Undiscovered Archaeological Sites or Tribal Cultural Resources**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

To date, cultural resources investigations have not identified archaeological resources or Tribal Cultural Resources on the Project site. However, because Native American Tribal consultation is on-going, it is possible that unknown archaeological resources and Tribal Cultural Resources could be identified on the Project site.

Implementing MMs CR-2, CR-3, CR-4, and CR-5 will reduce the potential for a significant effect resulting from inadvertent damage to or destruction of presently undocumented archaeological resources and Tribal Cultural Resources because appropriate planning, training, treatment, and protection measures must be implemented. Implementing MMs CR-2, CR-3, CR-4, and CR-5 will reduce or offset the

Project's potential impacts to undocumented archaeological resources and Tribal Cultural Resources to a less-than-significant level

- **MM CR-2:** Prepare an Archaeological Discovery Plan and an Archaeological Monitoring Plan.
- **MM CR-3:** Conduct Cultural Resources Awareness Training.
- **MM CR-4:** Implement Procedures for Inadvertent Discovery of Cultural Material.
- **MM CR-5:** In the Event that Tribal Cultural Resources are Discovered Prior to or During Construction, Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. CR-3

Impact: **Impact CR-3 Damage to or Destruction of Human Remains During Construction**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Although no Native American human remains have been discovered on or near the Project site, they could be encountered during earthmoving activities associated with the Project.

Implementing MM CR-6 would reduce the potential for a significant effect resulting from inadvertent damage to or destruction of presently undocumented human remains because it requires that if human remains are discovered during Project-related construction activities, disturbances in the area of the find must be halted and appropriate treatment and protection measures must be implemented, in consultation with the Native American Heritage Commission, Most Likely Descendent, and landowners, and in compliance with California Health and Safety Code Section 7050 et seq. and Public Resources Code Section 5097.9 et seq. Implementing MM CR-6 will reduce the Project's potential impacts related to damage or destruction of human remains to a less than significant level

- **MM CR-6**: Implement Procedures for Inadvertent Discovery of Human Remains.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

7. AIR QUALITY

CEQA FINDING NO. AIR-1	
Impact:	**Impact AIR-1. Potential Conflict with Air Quality Plan or Contribute Substantially to Air Quality Violation Yolo-Solano Air Quality Management District Standards.**
Finding(s):	(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

The Project's maximum daily and annual construction emissions would exceed the Yolo-Solano Air Quality Management District (YSAQMD) thresholds for oxides of nitrogen (NOx) and particulate matter equal to or less than 10 micrometers in diameter (PM10) in 2021, 2022, and 2023.

USACE will require that the construction contractor implement the Sacramento Metropolitan Air Quality Management District (SMAQMD) Basic Construction Emission Control Practices and Enhanced Fugitive PM Dust Control Practices. Contractors will be required to use a fleet-wide average of 90 percent Tier 4 emissions vehicles, USACE will encourage the use of Environmental Protection Agency (EPA) adopted Tier 3 and Tier 4 standards for newly built marine engines in 2008 under the barge delivery scenario, and USACE will use Tier 2 and 3 marine engines standards where available to reduce marine exhaust emissions. USACE will also contribute to YSAQMD's off-site mitigation fee programs for NOx emissions in excess of significance thresholds. Implementing MMs AIR-1 through AIR-5 will reduce or offset the Project's emissions related to YSAQMD standards to a less than significant level.

- **MM AIR-1**: Implement the Sacramento Metropolitan Air Quality Management Districts' Basic Construction Emission Control Practices.
- **MM AIR-2**: Implement the Sacramento Metropolitan Air Quality Management District's Enhanced Fugitive PM Dust Control Practices.
- **MM AIR-3**: Require Lower Exhaust Emissions for Construction Equipment.
- **MM AIR-4**: Pay Mitigation Fees to Reduce and Offset NOx Emissions.
- **MM AIR-5**: Implement Marine Engine Standards.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. AIR-2

Impact: **Impact AIR-2. Potential Conflict with Air Quality Plan or Contribute Substantially to Air Quality Violation – Bay Area Air Quality Management District Standards.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

The Project's maximum daily and annual construction emissions would exceed the Bay Area Air Quality Management District (BAAQMD) significance thresholds for NOx in 2021 and 2023.

USACE will contribute to BAAQMD's off-site mitigation fee programs for NOx emissions in excess of significance thresholds. Additionally, USACE will encourage the use of EPA adopted Tier 3 and Tier 4 standards for newly built marine engines in 2008 under the barge delivery scenario, and USACE will use Tier 2 and 3 marine engines standards where available to reduce marine exhaust emissions. Implementing MMs AIR-4 and AIR-5 will reduce or offset the Project's emissions related to BAAQMD standards to a less than significant level

- **MM AIR-4**: Pay Mitigation Fees to Reduce and Offset NOx Emissions.
- **MM AIR-5**: Implement Marine Engine Standards.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. AIR-3

Impact: **Impact AIR-3. Potential Conflict with Air Quality Plan or Contribute Substantially to Air Quality Violation – General Conformity with the Clean Air Act.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

The ARCF 2016 Project's maximum daily and annual construction emissions would potentially exceed General Conformity de minimis significance thresholds for NOx in 2021, 2022, and 2023.

USACE will contribute to SMAQMD's, BAAQMD's, or YSAQMD's off-site mitigation fee programs for NOx emissions in excess of significance thresholds. Implementing MM

AIR-4 will reduce or offset the Project's emissions related to General Conformity to a less than significant level

- **MM AIR-4:** Pay Mitigation Fees to Reduce and Offset NOx Emissions.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

8. CLIMATE CHANGE

CEQA FINDING NO. GHG-1	
Impact:	**Impact GHG-1. Temporary, Short-term Generation of Greenhouse Gas Emissions.**
Finding(s):	(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Emissions from construction equipment and worker vehicles would include carbon dioxide (CO_2) and other "greenhouse gases" (GHGs) that can contribute to climate change. Estimated emissions of GHGs, expressed as CO_2 equivalents (CO_{2e}), would exceed SMAQMD's threshold of 1,000 metric tons CO_{2e} per year during the estimated construction period in 2021, 2022, and 2023.

GHG emission reduction measures will be implemented. Mitigation will encourage carpools and will require efficient operation of construction equipment engines, minimization of idling equipment when not in use, and enhanced emissions reductions for construction equipment used at the Project site. USACE will purchase carbon credits from programs approved by Yolo-Solano Air Quality Management District (YSAQMD) to mitigate CO_{2e} emissions in excess of 1,000 metric tons per year. Implementing MM GHG-1, in addition to MMs for impacts to air quality, will reduce or offset the Project's impacts from temporary, short-term generation of GHG emissions to a less than significant level

- **MM GHG-1:** Implement GHG Reduction Measures.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

9. NOISE

CEQA FINDING NO. NOI-1

Impact: **Impact NOI-1. Potential Increase in Ambient Noise Levels or Exposure of Sensitive Receptors to Excessive Noise or Vibration.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

The Project would generate construction noise and vibration from equipment operating at each work location and from the transport of construction workers, construction materials, and equipment to and from each work location.

The USACE will require a noise control plan and actions to reduce the effects of construction. These actions could include scheduling louder activities for daytime hours, using less noisy equipment where available, locating and routing activities to minimize effects on sensitive receptors, and providing written notice advising residents within 1,000 feet of the construction zone of the estimated construction schedule. Implementing MM NOI-1 will reduce significant impacts related to construction noise and construction traffic noise to a less than significant level

- **MM NOI-1:** Implement Measures to Reduce Construction Noise and Vibration Effects.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

10. VISUAL RESOURCES

CEQA FINDING NO. VIS-3

Impact: **Impact VIS-3. Create New Sources of Substantial Light or Glare.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Nighttime lighting may be required. If necessary, such lighting could be mistaken for airport lighting, could cause glare in the eyes of pilots or aircraft, and could disturb sleep of occupants at a nearby residence.

USACE will require all nighttime lighting to be shielded and directed downward, USACE will coordinate with the Sacramento County Airport System and the California Highway

Patrol (CHP) Academy Airport to provide notification and include safety measures during Project design and construction. An on-site safety meeting will be held prior to the start of nighttime construction. In addition, nighttime construction activities will either be screened from affected residences or USACE will offer to temporarily relocate affected residents while nighttime construction is occurring within 300 feet. Implementing MMs VIS-1 and VIS-2 will reduce significant impacts related to light or glare to a less than significant level.

- **MM VIS-2:** Coordinate Nighttime Lighting with Sacramento International Airport Operations and Restrict Night Lighting within and Near Airport Runway Approaches and Near CHP Academy Airport.
- **MM VIS-3:** Provide Shielding from Nighttime Construction Activities or Offer to Temporarily Relocate Affected Residents.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

D. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts were determined in the EIR and SEIR to be significant and unavoidable. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

1. VEGETATION AND WILDLIFE

CEQA FINDING NO. VEG-1B

Impact: **Impact VEG-1B. Adverse Short-Term Effects on Riparian Habitat, Forestland, and Waters of the United States.**

Finding(s):
(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Removal of approximately 18.5 acres of riparian forestland would cause a significant short-term impact due to the temporal loss of vegetation. USACE will provide compensatory mitigation that includes the creation or restoration of lost riparian habitat at a 2:1 ratio; approximately 37 acres of riparian habitat will be planted. Additionally, shrubby riparian habitat would likely regenerate naturally in the bypass expansion area. The project site would continue to provide habitat for covered species after project

implementation, and habitat values for some species would likely be improved by natural regeneration of wetlands and riparian vegetation in the expanded bypass. However, because it would take many years for compensation habitat to provide the value of habitat that would be removed, the short-term habitat loss would remain significant and unavoidable, as described in the EIR. Implementing MM VEG-1 will reduce or offset the Project's long-term impact on riparian habitat, but short-term habitat loss would remain significant, and there are no other feasible mitigation measures available to further avoid or reduce this impact

- **MM VEG-1**: Compensate for Riparian and Woodland Habitat Removal.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

2. RECREATION

CEQA FINDING NO. REC-1	
Impact:	**Impact REC-1. Temporary and Short-term Changes in Recreational Opportunities during Project Construction Activities**.
Finding(s):	(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR and SEIR.
	(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

Project construction would require temporary closures of bicycle and pedestrian facilities, including those along the levee. Access roads would be used by trucks as haul routes causing heavier traffic and possible disruption/detours to trails and boat launches. Recreational experiences may be degraded by construction activities going on within the area.

Short-term effects on recreational access resulting from construction activities will be reduced by preparing and implementing pedestrian detours, providing the public with information regarding detours and alternative access routes, and repairing construction-related damage to pre-project conditions. However, even with the MMs, the short-term impact on recreation would remain significant and unavoidable, as disclosed in the EIR. Implementing MMs REC-1 and REC-2 will reduce or offset the Project's temporary and short-term impact on recreational opportunities during Project construction activities, but there are no other feasible mitigation measures available to further avoid or reduce this impact.

- **MM REC-1:** Implement Bicycle and Pedestrian Detours, Provide Construction Period Information on Facility Closures, and Coordinate with Yolo County and California Department of Fish and Wildlife to Repair Damaged Facilities.
- **MM REC-2:** Implement Water Safety Measures for Barges.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

3. VISUAL RESOURCES

CEQA FINDING NO. VIS-1

Impact: **Impact VIS-1. Damage to Scenic Vistas or Resources Along State or County Designated Scenic Highways.**

Finding(s): (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

During the Project's operational phase, the presence of the new weir, changes to the vegetation along the Sacramento River, and the new Old River Road bridge would all represent substantial changes to existing views from the scenic highway (Old River Road). No feasible MMs were identified to reduce short-term visual impacts.

The EIR identified planting of riparian vegetation, including trees and shrubs, in the expanded bypass as mitigation for this significant impact. However, because the Lower Elkhorn Bypass Levee Setback (LEBLS) project is now constructing most of the levee setback for the expanded bypass, and due to hydraulic conditions in the portion of the bypass which would be constructed by the Project, planting woody vegetation in the bypass is considered not to be feasible. No further feasible mitigation is available to address this impact, and long-term operational impacts to scenic vistas along a county-designated scenic highway would be significant and unavoidable

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

4. VISUAL RESOURCES

CEQA FINDING NO. VIS-2

Impact: **Impact VIS-2. Changes in Existing Visual Character.**

Finding(s): (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR and SEIR.

FACTS SUPPORTING THE FINDING(S)

During construction, the presence of equipment and activities including levee degradation, weir construction, road relocation, addition of the railroad bridge, and vegetation removal would result in a short-term temporary impact. Additionally, one residence is present at the northern terminus of the realigned Old River Road. Significant effects to the visual character related to this sensitive residential receptor and to recreationalists along the Sacramento River and in the Sacramento Bypass Wildlife Area would be short-term and temporary during construction. During the operational phase, the presence of a new, approximately 1,500-foot-long concrete structure and associated bridge represents a substantial change in the visual character compared to existing conditions.

Significant effects to the visual character related to the sensitive residential receptor and to recreationalists along the Sacramento River and in the Sacramento Bypass Wildlife Area would be short-term and temporary during construction. No feasible mitigation is available to reduce this impact, which would remain significant and unavoidable.

The EIR identified planting of riparian vegetation, including trees and shrubs, in the expanded bypass as mitigation for long-term impacts associated with vegetation. However, because the LEBLS project is now constructing most of the levee setback for the expanded bypass, and due to hydraulic conditions in the portion of the bypass, which would be constructed by the Project, planting woody vegetation in the bypass is not considered feasible. No further feasible mitigation is available to address this impact, and long-term operational impacts to scenic vistas along a county-designated scenic highway would be significant and unavoidable.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

E. FINDINGS ON ALTERNATIVES

As explained in *California Native Plant Society* v. *City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000:

> *When it comes time to decide on project approval, the public agency's decisionmaking body evaluates whether the alternatives [analyzed in the EIR] are*

> *actually feasible…. At this final stage of project approval, the agency considers whether '[s]pecific economic, legal, social, technological, or other considerations…make infeasible the mitigation measures or alternatives identified in the environmental impact report.' Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives [citations omitted].*

The EIR evaluated two Project alternatives which attain all or most of these basic objectives, and the No-Action Alternative that does not meet any of the Project objectives. Other off-site Project alternatives were considered but rejected as infeasible for multiple reasons, including not being cost-effective, not effectively reducing the water surface elevations, and inconsistencies with the Folsom Water Control Manual Update regarding operation of Folsom Lake. Any feasible alternative must fix the levees in place. Because of the large number of houses immediately adjacent to the EIR project site, any type of setback levee or levee modifications other than a cutoff wall would require removing hundreds of homes and is therefore infeasible. Therefore, there are no other feasible alternatives available to meet all or most of the Project objectives, and significant and unavoidable impacts cannot be further reduced with MMs because all feasible MMs for reducing significant and unavoidable impacts will be implemented. The alternatives covered in the EIR would have similar levels of impact and result in similar significant and unavoidable impacts after all feasible mitigation is applied as presented in these Findings.

The SEIR also included two alternatives, the Proposed Action Alternative, and the Higher Weir Elevation Alternative. These two alternatives are both refinements of Alternative 2 in the EIR and would have similar significant and unavoidable impacts after all feasible mitigation is applied as presented in these Findings.

Based on the EIR, the Final SEIR, and the entire record, the CVFPB made the following Findings with regard to alternatives to the proposed Project:

Based on the EIR, the SEIR, and the entire record, the CVFPB made the following Findings with regard to alternatives to the proposed Project:

1. To potentially eliminate or lessen the significance of the Project's significant and unavoidable impacts, the Project would need to be implemented in another location, which is infeasible to address the Project's objectives.
2. The social and economic benefits of the Project outweigh the significant and unavoidable impacts because risk of flooding in a major portion of the Sacramento metropolitan area that has ongoing high risk of potential flooding would be substantially reduced.
3. None of the alternatives examined in the EIR or the SEIR, or any other potential alternative for reducing flood risk covered by the Project, would be a feasible means to avoid or eliminate the remaining significant and unavoidable effects.

4. Alternative 2 as described in the EIR, while still having significant and unavoidable impacts, has a greater benefit to the environment while meeting most of the ARCF 2016 objectives.
5. The No Action Alternative assumes that no work would be completed by USACE, and the study area would continue to be at a very high risk of levee failure and subsequent flooding of a major portion of the Sacramento Metropolitan area. This area includes the California State Capitol and other significant infrastructure. The No Action Alternative is inconsistent with the objectives of the Project and leaves the study area at an unacceptable level of risk due to flooding. The No Action Alternative in not a feasible means to avoid risk to avoid the residual significant and unavoidable effects of the Project.

6. Alternative 1 as described in the EIR includes fix-in-place levee remediation measures to address seepage, slope stability, erosion, and overtopping concerns identified for the American and Sacramento River, Natomas East Main Drain Canal, and Arcade, Dry/Robla, and Magpie Creek levees. This alternative has greater environmental impacts due to the levee raises and fewer environmental benefits. Alternative 1 has significant and unavoidable impacts to vegetation and wildlife, recreation, transportation, visual resources, and cultural resources. Alternative 1 has significant and unavoidable impacts to vegetation and wildlife, recreation, transportation, visual resources, and cultural resources. Alternative 1 is not a feasible means to minimize flood risk and meet all or most basic ARCF 2016 Project objectives and avoid or minimize the residual significant and unavoidable environmental effects of the ARCF 2016 Project.
7. Alternative 2 as described in the EIR includes all levee improvements discussed in Alternative 1, except levee raises along the Sacramento River would be included to a lesser extent. Instead of the full extent of levee raises, the Sacramento Weir and Bypass would be widened to divert more flows into the Yolo Bypass.

   While the impacts to landside vegetation would be reduced by the widening of the Sacramento Weir and Bypass, the alternative would still have significant and unavoidable impacts to vegetation and wildlife. The bypass would also create floodplain which could provide benefits to fish species. Alternative 2 would also implement fish passage at the Sacramento Bypass and grade the widened Bypass for improved fish movement. Alternative 2 has significant and unavoidable impacts to vegetation and wildlife, recreation, transportation, visual resources, and cultural resources.
8. The Proposed Action Alternative described in the Final SEIR includes constructing a 1,500-foot-long passive weir, with associated levee, roadway, rail, and fish passage improvements. Implementing the Proposed Action Alternative would result in significant and unavoidable impacts to land use, vegetation and wildlife, transportation and circulation, recreation, and visual resources.
9. The Higher Weir Elevation Alternative described in the Final SEIR includes all improvements discussed in the Proposed Action Alternative for the Sacramento Weir Widening Project, and also includes stop logs to raise the elevation of the widened

weir. The Higher Weir Elevation Alternative would not reduce or avoid any significant and unavoidable impacts of the Proposed Action, and like the Proposed Action, would have the same significant and unavoidable impacts related to land use, vegetation and wildlife, transportation and circulation, recreation, and visual resources.

10. Since the Board certified the EIR on April 22, 2016, and selected Alternative 2, USACE and the Board have worked to refine the design for the ARCF 2016 Project. The Project has been refined and adjusted (as the Proposed Action Alternative) to further reduce significant and significant and unavoidable impacts compared to the significant and significant and unavoidable impacts identified in the EIR.

Based upon the objectives identified in the EIR and SEIR, and the detailed MMs imposed upon the Project, the Commission has determined that the Project should be approved, subject to such MMs (Exhibit C, Mitigation Monitoring Program), and that any remaining unmitigated environmental impacts attributable to the Project are outweighed by the following specific economic, fiscal, social, environmental, land use, and other overriding considerations.

4.0 STATEMENT OF OVERRIDING CONSIDERATIONS

A. INTRODUCTION

This section addresses the Commission's obligations under Public Resources Code section 21081, subdivisions (a)(3) and (b). (See also State CEQA Guidelines, §§ 15091, subd. (a)(3), 15093.) Under these provisions, CEQA requires the Commission to balance, as applicable, the economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of the Lease approval related to the American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento Weir Widening against the backdrop of the Project's unavoidable significant environmental impacts. For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered acceptable, and the decision-making agency may approve the underlying project. (State CEQA Guidelines § 15092, subd. (b)(2)(B).) CEQA, in this respect, does not prohibit the Commission from approving the Lease even if the Project activities as authorized under the Lease may cause significant and unavoidable environmental effects.

This Statement of Overriding Considerations presents a list of: (1) the specific significant effects on the environment attributable to the approved Project that cannot feasibly be mitigated to below a level of significance, (2) benefits derived from the approved Project, and (3) specific reasons for approving the Project.

Although the CVFPB and Commission have imposed MMs to reduce impacts, impacts remain that are considered significant after application of all feasible mitigation. Significant impacts of the approved Project fall under three resource areas: Vegetation

and Wildlife, Recreation, and Visual Resources (see Table 2). These impacts are specifically identified and discussed in more detail in the Commission's CEQA Findings and in CVFPB's EIR and SEIR. While the Commission has required all feasible MMs, these impacts remain significant for purposes of adopting this Statement of Overriding Considerations.

Table 2 – Significant and Unavoidable Impacts Identified for the Approved Project

Impact	Impact Description
Vegetation and Wildlife	
Impact VEG-1B. Adverse Short-Term Effects on Riparian Habitat, Forestland, and Waters of the United States.	Removal of approximately 18.5 acres of riparian forestland would cause a significant short-term impact and would result in significant and unavoidable short-term effects on vegetation and wildlife.
Recreation	
Impact REC-1. Temporary and Short-term Changes in Recreational Opportunities during Project Construction Activities.	Recreational experiences may be degraded by construction activities going on within the area including possible disruption/detours to trails and boat launches, which would result in significant and unavoidable short-term effects on recreation.
Visual Resources	
Impact VIS-1. Damage to Scenic Vistas or Resources Along State or County Designated Scenic Highways.	Loss of vegetation due to removal and construction of levee improvements would result in significant and unavoidable short-term effects on visual resources of the mature vegetation.
Impact VIS-2. Changes in Existing Visual Character.	During construction, the presence of equipment and activities including levee degradation, weir construction, road relocation, addition of the railroad bridge, and vegetation removal would result in an unavoidable short-term temporary impact.

B. BALANCING OF BENEFITS AND RISKS ASSOCIATED WITH LEASE APPROVAL

State CEQA Guidelines section 15093, subdivision (a) requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project.

Overriding considerations that support Project approval are as follows:

1. The purpose of the Project is to reduce flood risk to the Sacramento area. Flood risk reduction is necessary to provide economic, social, and other benefits, as flood events are often uncontrolled and can result in deaths or injuries, substantial damage to property and infrastructure, and release of environmental contaminants.

2. The Sacramento area is identified as one of the most at-risk communities in the nation for flooding, motivating the need to reduce this risk through numerous flood damage reduction measures. The existing system leaves the highly urbanized Sacramento area at an unacceptably high level of risk of levee overtopping failure and subsequent catastrophic flooding. Widening of the Sacramento weir would specifically lower the flood stage in the Sacramento River below the weir during high-flow events to support the broader purpose of reducing flood risk to the urban area associated with the Sacramento River.

3. Major storms in 1986 and 1997, as well as significant rainfall in recent years, have caused record flood flows in the American River watershed and high lake levels in Folsom Reservoir. Outflows from Folsom Dam, together with high flows in the Sacramento River, caused the river stages to exceed the designed safety margin of levees protecting the City of Sacramento. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting a population of up to 900,000, with damages totaling up to $58 billion, depending on the magnitude of the event. A large flood could also result in disruption of drinking water supplies, which would have statewide impacts.

4. The Project incorporates all feasible means to minimize, avoid, and mitigate for potential significant and significant and unavoidable adverse impacts on the environment.

5. Flood risk management benefits provided by the Project outweigh the significant and unavoidable adverse environmental effects of the Project. In light of these considerations, the significant and unavoidable impacts on vegetation and wildlife, recreation, and visual resources are considered acceptable. The Commission finds that these benefits override the potential significant and unavoidable impacts resulting from the Project, including all construction, operations, and maintenance components.

C. COMMISSION ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS

As noted above, under Public Resources Code section 21081, subdivisions (a)(3) and (b) and State CEQA Guidelines section 15093, subdivision (a), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or state-wide environmental benefits, of a

proposed project against its unavoidable environmental risks when determining whether to approve a project.

For purposes of CEQA, if these benefits outweigh the unavoidable significant environmental effects of a proposed project, the decision-making agency may approve the underlying project. CEQA, in this respect, does not prohibit the Commission from approving the Project, even if the activities authorized by that approval may cause significant and unavoidable environmental effects. This balancing is particularly difficult given the significant and unavoidable impacts on the resources discussed in the EIR, SEIR, and these Findings. Nevertheless, the Commission finds, as set forth below, that the benefits anticipated by implementing the Project outweigh and override the expected significant effects.

The Commission has balanced the benefits of the Project against the significant unavoidable impacts that will remain after approval of the lease associated with the Approved Project and with implementation of all feasible mitigation in the EIR and SEIR that is adopted as enforceable conditions of the Commission's approval of the Project. Based on all available information, the Commission finds that the benefits of the approved Project outweigh the significant and unavoidable adverse environmental effects, and considers such effects acceptable. The overall purpose of the project is to construct a new weir upstream of the existing weir along the Sacramento River to reduce flood risk by lowering high water surface elevations against urban levees and reducing flow farther downstream in urbanized areas. This is a vital function intended to protect local communities from substantial flood risk. The impacts identified are temporary and unavoidable from the perspective of allowing the Project to meet its objectives. The Commission adopts and makes this Statement of Overriding Considerations with respect to the impacts identified in the EIR and SEIR and these Findings that cannot be reduced to a less than significant level. Each benefit set forth above or described below constitutes an overriding consideration warranting approval of the Project, independent of the other benefits, despite each and every significant unavoidable impact.

D. CONCLUSION

The Commission has considered the EIR and SEIR, and all of the environmental impacts described therein including those that cannot be mitigated to a less than significant level and those that may affect Public Trust uses of State sovereign land. Based on the foregoing and pursuant to Public Resources Code section 21081 and State CEQA Guidelines sections 15096 subdivision (h) and 15093, the Commission has considered the fiscal, economic, legal, social, environmental, and public health and safety benefits of the Project and has balanced them against the Project's significant and unavoidable and unmitigated adverse environmental impacts and, based upon substantial evidence in the record, has determined that the benefits of the Project outweigh the adverse environmental effects. The Commission finds that the remaining significant unavoidable impacts of the Project are acceptable in light of these benefits. Such benefits outweigh such significant and unavoidable impacts of the Project and provide the substantive and legal basis for this Statement of Overriding Considerations.

The Commission finds that to the extent that any impacts identified in the EIR and SEIR remain unmitigated, MMs have been required to the extent feasible, although the impacts could not be reduced to a less than significant level.

Based on the above discussion, the Commission finds that the benefits of the Project outweigh the significant unavoidable impacts that could remain after mitigation is applied and considers such impacts acceptable.