Meeting Date: 10/25/22
Lease Number: 7203
Staff: M. Schroeder

Staff Report 28

APPLICANT:

Central Valley Flood Protection Board

PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use

AREA, LAND TYPE, AND LOCATION:

Sovereign land located along the east bank of the Sacramento River, adjacent to 1000 Rio Lane, Sacramento, Sacramento County.

AUTHORIZED USE:

Construction, use, and maintenance of bank protection.

TERM:

49 years, beginning October 25, 2022.

CONSIDERATION:

The 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 agrees to obtain necessary permits from all applicable regulatory agencies prior to start of construction.
- Lessee agrees and acknowledges that the hazards associated with sea level rise may require additional maintenance or protection strategies to ensure safe use of the lease premises.
- 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.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6321, 6321.2, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On May 9, 1988, the Commission authorized a General Permit – Public Agency Use (Master Lease) to the State Reclamation Board for maintenance of existing bank protection and construction and maintenance of new bank protection at various sites along the Sacramento River and adjoining sloughs (Item C17, May 9, 1988). Over the years, several amendments of the Master Lease occurred resulting in the addition of new sites to the lease. During the term of the lease, the State Reclamation Board was renamed as the Central Valley Flood Protection Board. The Master Lease expired April 30, 2018.

The Applicant is responsible for ensuring that levees are maintained in a manner that reduces the risk of flooding. The Applicant, in partnership with the U.S. Army Corps of Engineers, California Department of Water Resources, and the Sacramento Area Flood Control Agency proposes to complete erosion repairs through the addition of bank protection along the waterside slope of the Sacramento River East Levee. The project is referred to as the American River Common Features 2016 and includes the Sacramento East Levee. The project includes multiple sites in the Sacramento River and American River. For purposes of this lease, the project location is limited to one site identified as Sacramento River Erosion Contract 1 River Mile 55.2L. The Applicant has indicated they will apply for either separate leases or a new Master Lease for the several sites that were previously authorized under the original Master Lease. In addition to the bank protection, the Applicant proposes to install a riparian planting bench and placement of in-stream woody material to improve the habitat value of this bank protection.

The primary design objective is to restore the structural stability of the levee and maintain public safety. The project is part of a larger plan to help the Sacramento region achieve a 200-year level of flood protection, meaning a severe flood event with a 1-in-200 chance of occurring in any given year. The proposed bank protection design was developed to ensure the future integrity of the levee system

near Sacramento's Little Pocket area at River Mile 55.2L. The proposed bank protection would increase the roughness of the bank ultimately protecting against future erosion caused by wind-wave action and boat wake.

In order to prepare for construction, trees would be removed from mid-slope below the existing riparian bench and the mean, late summer water surface elevation. A river barge equipped with a crane and an excavator would be used to place rock and shape the bank protection. The bank protection design would place quarry stone above and below the planting bench and extend placement of the quarry stone to the bottom of the river channel providing the levee with protection from natural erosive forces.

The bank protection design incorporates a low elevation planting bench into the river channel along the length of the site. The bench is composed of a planting soil mix, which will provide a surface that can support vegetation. The purpose of the vegetation within the planting bench would be to provide overhead cover and near-shore aquatic habitat during the low flow season for fish and other local wildlife. The planting bench would include a variety of native riparian plant species.

The incorporation of the in-stream woody material into the bank protection design is a requirement of the overall project. The in-stream woody material allows for the replacement of in-stream cover for fish that are impacted due to construction. The in-stream woody material consists of full trees with root balls and canopies. Both large and medium sized trees will be used, depending on site conditions. The trees would be placed into the quarry stone below the planting bench by the root ball. The counterweight of the planting bench and quarry stone will provide adequate protection for the logs to withstand buoyancy and drag forces from incoming flows and debris.

Construction access to the site would be from the existing levee maintenance road through a secured levee access gate at Seamas Avenue. The barges would access the site along existing waterways between the Delta and River Mile 55.2L. Construction of the bank protection site would occur from the waterside of the levee via barges. Boaters would be warned of the construction activities by warning buoys placed both upstream and downstream of the site.

Staging would occur on the barges which would be brought to the site pre-loaded with construction materials and construction equipment. Use of the levee crown and levee road would be limited to the construction crews personally owned vehicles, occasional deliveries, and construction facilities, such as temporary fencing and lighting. Tree removal vehicles and equipment would also access the site from the landside.

Construction is likely to occur in two phases. The first phase would include mobilization, out of water earthwork, and improvements. The second phase of construction would include the construction of the planting benches and rock toe. After construction is complete, the staging areas, landside levee slope, and any other bare earth areas would be reseeded with native grasses to promote revegetation and minimize soil erosion. Any roads or other areas damaged by construction activities would be fully repaired and restored to its preconstruction condition. All trash, excess construction materials, and construction equipment will be removed, and the site will be left in a safe and clean condition.

Staff believes the proposed project for construction of the bank protection along the Sacramento East Levee is consistent with the common law Public Trust Doctrine. The project's purpose is to provide enhanced erosion protection for the levee, thereby protecting the area from potential flooding. The project would ensure the integrity of the levee is maintained preserving Public Trust resources. In addition to maintaining the integrity of the levee, the project would allow for continuation of public access along the levee.

The proposed lease is consistent with the common law Public Trust Doctrine and does not alienate the State's fee simple interest or permanently impair public rights. The lease requires the Applicant to conduct all construction and maintenance work safely and indemnify the Commission in the event of any liability resulting from the proposed action. The proposed lease also has a term of 49 years. While staff rarely recommends a lease term of this length, staff reviewed several factors in making a recommendation. First, this is a federally led project, led by the U.S. Army Corps of Engineers who typically require the non-federal sponsors to have or obtain permanent easement rights in perpetuity for ongoing operations and maintenance activities after the construction of the project. In this case, given the Commission's statutory and common law restrictions, a maximum lease term of 49 years is more likely to be accepted by the U.S. Army Corps of Engineers in order to fulfill the 50-year federal funding commitment and the 50-year project design of the project. Second, the amount of sovereign land for this project subject to the proposed lease is approximately 1,150 linear feet and is one location site out of several location sites that are part of the overall project. Lastly, the sea level rise and flooding risk that generally guide staff to recommending a shorter lease term are addressed with the project's proposed erosion protection of the levee over several years.

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 Sacramento River's inundation levels within the lease area over the term of the lease. 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 bank protection and flood management in the Sacramento River and include the installation of levee improvements to reduce risks of levee failure, especially related to seepage, under-seepage, and levee stability. The Project includes the addition of rock bank protection, riparian benches, and in-stream woody material. Activities on State

lands would be short-term and consist of in-water work to improve existing facilities and reduce 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 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 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. The lessee has no right to a new lease or a renewal of any previous lease.

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

3. An Environmental Impact Report (EIR), State Clearinghouse No. 2005072046 and a Supplemental EIR, State Clearinghouse No. 2020070269, were prepared for this project by the Central Valley Flood Protection Board and certified on April 22, 2016, and January 20, 2021, respectively. Staff has reviewed such documents and Mitigation Monitoring and Reporting Programs prepared pursuant to the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code, section 21081.6) and adopted by the lead agency.

4. Findings and a Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (California Code of Regulations, title 14, sections 15091 and 15096) and California Code of Regulations, title 14, section 15093) are contained in the attached Exhibit D.

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. Based upon staff's consultation with the persons nominating such 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, State Clearinghouse No. 2005072046 and a Supplemental EIR, State Clearinghouse No. 2020070269, were prepared for this project by the Central Valley Flood Protection Board and certified on April 22, 2016, and January 20, 2021, respectively 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 and the Statement of Overriding Considerations, made in conformance with California Code of Regulations, title 14, sections 15091, 15093, and 15096, subdivision (h) as contained in Exhibit D.

PUBLIC TRUST AND STATE'S BEST INTERESTS:
Find that 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 lease; 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 October 25, 2022, for a term of 49 years, for the construction, use and maintenance of bank protection along the east bank of the Sacramento River, as described in Exhibit A and shown on 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 if the Commission finds such action to be in the State's best interests.

EXHIBIT A

LEASE 7203

LAND DESCRIPTION

A parcel of tide and submerged land situate in the bed of the Sacramento River, lying adjacent to Rancho New Helvetia, approved May 18, 1866, County of Sacramento, State of California and more particularly described as follows:

Bounded on the northeast by the northwesterly prolongation of the northeasterly line of Lot 14 as shown on that certain map entitled “Plat of Rio Acres” filed on March 17, 1925, in Book 18 of Maps, Map 31, Records of said County;

Bounded on the southwest by the northwesterly prolongation of the southwesterly line of Lot 14 as shown on that certain map entitled “Plat of Riverside Village” (sheet 2) filed on January 10, 1947, in Book 25 of Maps, Map 13, Records of said County;

Bounded on the southeast by the ordinary high water mark of the left bank of the Sacramento River;

Bounded on the northwest by a line parallel with and 20 feet northwesterly from the ordinary high water mark of the left bank of the Sacramento River.

END OF DESCRIPTION

Prepared 05/05/2022 by the California State Lands Commission Boundary Unit

NO SCALE

SITE

YOLO COUNTY

APPROX. SHORELINE

RIVER

LEASE PARCEL

SACRAMENTO

APN 016-0161-035

APN 016-0161-042

APN 016-0171-009

APN 016-0171-008

APN 016-0171-003

APN 016-0171-004

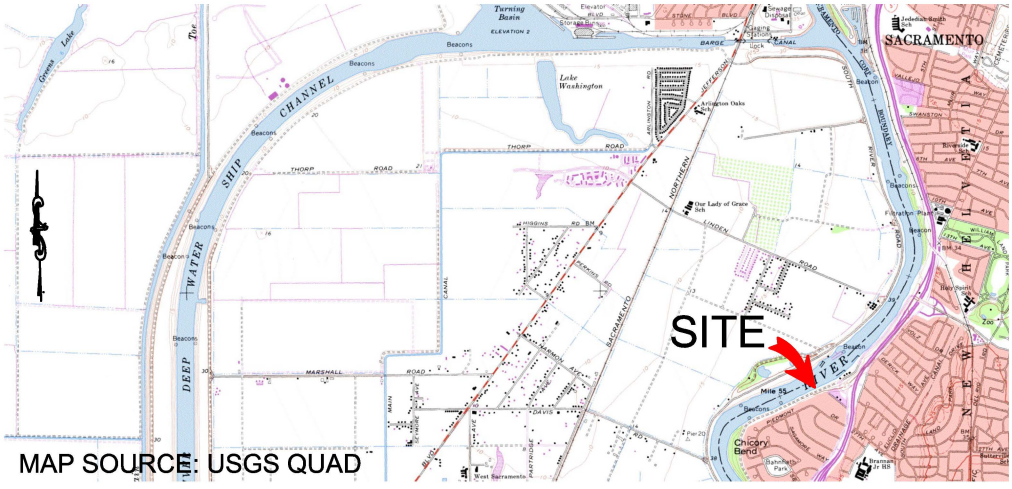
APPROX. SHORELINE

SACRAMENTO COUNTY

1000 RIO LANE, CITY OF 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

LEASE 7203
CENTRAL VALLEY FLOOD PROTECTION BOARD
APNs: MULTIPLE
GENERAL LEASE-
PUBLIC AGENCY USE
SACRAMENTO COUNTY

TS 05/05/2022

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

AMERICAN RIVER WATERSHED COMMON FEATURES, WATER RESOURCES DEVELOPMENT ACT OF 2016 PROJECT, SACRAMENTO RIVER EROSION CONTRACT 1: RIVER MILE 55.2 LEFT BANK PROTECTION

(A3467, State Clearinghouse No. 2005072046 / 2020070269)

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 River Erosion Contract 1: River Mile 55.2 Left Bank Protection (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 state 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 section 15097, subdivision (a), states in part:[1]

> *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 Environmental Impact Study/EIR, State Clearinghouse No. 2005072046 on April 22, 2016, a Supplemental Environmental Assessment/EIR (SCH No. 2020070269) on January 20, 2021, and adopted a Mitigation Monitoring and Reporting Program (MMRP) for both the whole of the

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

Project, and the portion of the Project covered in the Supplemental (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.

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMRP
VIS-3	MM VIS-1	None
AIR-1	MMs AIR-1 through AIR-5	None
VEG-1	MMs VEG-1, VEG-2, BIRD-1, PLANT-1, WATERS-1, GEO-1	None
VEG-2	MMs VEG-1, VEG-2	None
SSS-1	MM PLANT-1	None
SSS-3	MMS FISH-1, SRA-1, VEG-1, VEG-2	None
SSS-4	MM BIRD-1	None
GHG-1	MM GHG-1	None
CR-3	MMs CR-2, CR-3, CR-4, CR-5	See below for CR-2; None for MMs CR-3, CR-4, CR-5
CR-4	MM CR-6	None
CR-C	MMs CR-2, CR-3, CR-4, CR-5	None
GEO-1	MM GEO-1	None
WQ-1	MMs GEO-1, WATERS-1	None
NOI-1	MM NOI-1	None
REC-1	MMs REC-1, REC-2	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

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

lands must be approved by the Commission. In addition, if requested by a Tribe, a Native American Monitor shall remain onsite during Project construction.

ATTACHMENT C-1

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

Mitigation Monitoring and Reporting Program

American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento River Erosion Contract 1: River Mile 55.2 Left Bank Protection

SCH# 2020070269

Central Valley Flood Protection Board
3310 El Camino Avenue, Suite 170
Sacramento, CA 95821

Contact:

David Moldoff
Chief, Environmental Support Section
(916) 574-1442

Prepared by:

Miles Claret
Environmental Scientist, Department of Water Resources
(916) 574-0251

December 2020

Abbreviations and Acronyms

APE	Area of Potential Effects
ARB	Air Resources Board
ARCF	American River Watershed Common Features
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
BSLMS	Beach Stone Lakes Mitigation Site
CCR	Code of California Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CRHR	California Register of Historic Resources
CVFPB	Central Valley Flood Protection Board
EA	Environmental Assessment
EIS	Environmental Impact Statement
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
GHG	Greenhouse gas
GRR	General Reevaluation Report
HPMP	Historic Properties Management Plan
HPTP	Historic Properties Treatment Plan
MLD	Most Likely Descendent
MMRP	Mitigation, Monitoring, and Reporting Program
mph	Miles per hour
NAHC	Native American Heritage Center
NOI	Notice of Intent
NO_x	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
PA	Programmatic Agreement
PM	Particulate matter
PM_{10}	Particulate matter 10 microns or less in diameter
PPV	Peak particle velocity
PRC	Public Resources Code
REC	Recognized Environmental Condition
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SMAQMD	Sacramento Metropolitan Air Quality Management District
SPCCP	Spill Prevention Control and Countermeasures Plan
SRCSD	Sacramento Regional County Sanitation District
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VdB	Velocity decibels

This page intentionally left blank.

Mitigation Monitoring and Reporting Program

Section 21081.6(a)(1) of the California Public Resources Code (PRC) and Section 15097 of the State 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 the successful implementation of the mitigation measures identified in the Final Supplemental Environmental Assessment/Environmental Impact Report (EA/EIR) for the American River Watershed Common Features (ARCF) Water Resources Development Act of 2016 Project, Sacramento River Erosion Contract 1: River Mile 55.2 Left Bank Protection. All appropriate mitigation measures, including measures from the American River Watershed Common Features (ARCF) General Reevaluation Report (GRR) Final Environmental Impact Statement (EIS)/EIR, have been incorporated into the Final Supplemental EA/EIR.

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

Mitigation Number: Lists the mitigation measures by number, as designated in the Final Supplemental EA/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 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 Project design or permitting

C: To be implemented during 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 Project and an MMRP completion report will be submitted to the CVFPB staff upon implementation of all mitigation measures.

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
HAZ-1	**Conduct Phase 2 Environmental Site Assessment as Needed** USACE will require that Project Areas be tested for contaminants prior to construction. Any hazardous materials found will be disposed of in accordance with all Federal, State, and local regulations at an approved disposal site. Where construction activities will occur in close proximity to sites with Recognized Environmental Conditions in the Phase 1 Environmental Site Assessment (2012), a Phase 2 Environmental Site Assessment should also be conducted.	D, P	USACE	CVFPB
TRA-1	**Implement Traffic Control Measures** • The construction contractor will notify and consult with emergency service providers to maintain emergency access and facilitate the passage of emergency vehicles on city streets. • The construction contractor will assess damage to roadways its vehicles cause during construction and will repair all potholes, fractures, or other damages. • The construction contractor will 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 will 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. • Construction contractors will follow the standard construction specifications of the City of Sacramento and obtain the appropriate encroachment permits, as required. The conditions of the permit will be incorporated into the construction contract and will be enforced by the City of Sacramento.	D, P, C	USACE	CVFPB
FISH-1	**Implement Measures to Avoid and Minimize Effects on Listed Fish Species** • In-water construction activities (e.g., placement of rock revetment) will be limited to the work window of July 1 through October 31. The in-water work window could be extended to November 15 with NMFS approval. If USACE needs to work outside of this window, it will consult with USFWS and NMFS. • Erosion control measures (BMPs) will be implemented, including a Storm Water Pollution Prevention Plan and Water Pollution Control Plan, to minimize the entry of soil or sediment into the American River. BMPs will be installed, monitored for effectiveness, and maintained throughout construction operations to minimize effects on federally listed fish and their designated critical habitat. Maintenance will include daily inspections of all heavy equipment for leaks. • USACE will participate in an existing Interagency Working Group or work with other agencies to participate in a new Bank Protection Working Group to coordinate stakeholder input into future flood risk reduction actions associated with the ARCF 2016 Project, Sacramento River Contract 1, RM 55.2L.	P, C, M	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• USACE will coordinate with NMFS during pre-construction engineering and design as future flood risk reduction actions are designed to ensure that conservation measures are incorporated to the extent practicable and feasible and projects are designed to maximize ecological benefits. • USACE will include a Riparian Corridor Improvement Plan as part of the project, with the overall goal of maximizing the ecological function and value of the existing levee system in the Sacramento metropolitan area. • USACE will implement the Habitat Mitigation Monitoring and Adaptive Management Plan (HMMAMP) with an overall goal of ensuring that the conservation measures achieve a high level of ecological function and value. The HMMAMP will include: • Specific goals and objectives and a clear strategy for maintaining all project conservation elements for the life of the project. • Measures to be monitored by USACE for 10 years after construction. USACE will update its O&M manual to ensure that the HMMAMP is adopted by the local sponsor to ensure that the goals and objectives of the conservation measures are met for the life of the project. • Specific goals and objectives and a clear strategy for achieving full compensation for all project-related impacts on listed fish species. • USACE will continue to coordinate with NMFS during all phases of construction, implementation, and monitoring by hosting annual meetings and issuing annual reports throughout the construction period as described in the HMMAMP. • USACE will seek to avoid and minimize adverse construction effects on listed species and their critical habitat to the extent feasible, and will implement on-site and off-site compensation actions as necessary. • For identified designated critical habitat, where feasible, all efforts will be made to compensate for impacts where they have occurred or in close proximity. USACE will develop and implement a compensatory mitigation accounting plan to ensure the tracking of compensatory measures associated with implementation of the Project. USACE will continue to coordinate with NMFS during all phases of construction, implementation, and monitoring by hosting meetings and issuing annual reports throughout the construction period. • USACE will minimize the removal of existing riparian vegetation and instream-woody material IWM to the maximum extent practicable. Where appropriate, removed IWM will be anchored back into place, or if not feasible, new IWM will be anchored in place. • USACE will ensure that the planting of native vegetation will occur as described in the HMMAMP. All plantings must be provided with the appropriate amount of water to ensure successful establishment.			

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• USACE will provide a copy of the Biological Opinions (BOs), or similar documentation, to the prime contractor, making the prime contractor responsible for implementing all requirements and obligations included in the documents and for educating and informing all other contractors involved in the project as to the requirements of the BOs. • A NMFS-approved Worker Environmental Awareness Training Program for construction personnel will be conducted by the NMFS-approved biologist for all construction workers before the start of construction activities. Written documentation of the training will be submitted to NMFS within 30 days of the completion of training. • USACE will consider installing IWM of at least 40 percent shoreline coverage at all seasonal water surface elevations in coordination with the Interagency Working Group or the Bank Protection Working Group. The purpose is to maximize the refugia and rearing habitats for juvenile fish. • USACE will protect in place all riparian vegetation on the lower waterside slope of any levee, unless removal is specifically approved by NMFS, following completion of project construction. • The following conservation measure from the 2015 NMFS Biological Opinion on the ARCF GRR is also incorporated into the Project: • Screen any water pump intakes, as specified by the 2011 NMFS screening specifications. 68F water pumps will maintain an approach velocity of 0.2 feet per second or less. Screen openings will be for a perforated plate: circular or square openings shall not exceed 3/32 inch (2.38 millimeters [mm]), measured on a side, and slotted or rectangular screen face openings must not exceed 1.75 mm (approximately 1/16 inch) in the narrow direction. Screen material shall provide a minimum of 27 percent open area.			
SRA-1	**Implement Measures to Avoid, Minimize, and Compensate for Effects to Shaded Riverine Aquatic Habitat.** • For identified designated critical habitat of listed fish species, where feasible, all efforts will be made to compensate for impacts where they have occurred, or elsewhere in the Sacramento or American River Basins. Impacts on designated critical habitat, SRA habitat, and instream components combined and the compensation value of replacement habitat will be based on the interagency-approved Standard Assessment Method (SAM) model used throughout the Sacramento River basin and Sacramento–San Joaquin Delta flood control system. • USACE will incorporate compensation for SRA habitat losses either by constructing off-site compensation sites, purchase of credits at a NMFS-approved conservation bank, where appropriate, or by implementing a combination of the two, and by funding a research grant for green sturgeon. USACE would	D, P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	compensate for lost habitat using NMFS-approved mitigation actions at a 1:1 ratio prior to construction, 2:1 ratio during construction, or a 3:1 ratio if mitigation actions occur after construction. SRA habitat compensation sites will be established in coordination with NMFS and USFWS as part of consultation under Section 7 of the Endangered Species Act for the ARCF GRR, consistent with the American River Parkway Plan, and in coordination with the Sacramento County Department of Parks and Recreation. On-site created SRA habitat acreage will also be counted toward offsetting lost SRA habitat. • Compensation sites will be monitored, and vegetation will be replaced as necessary based on performance standards in the ARCF GRR HMMAMP.			

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
BIRD-1	**Implement Measures to Protect Nesting Migratory Birds** USACE will implement the following measures to minimize potential effects on active nests of Swainson's Hawk, White-tailed Kite, Purple Martin and other migratory birds: • Before on-site project activities begin, all construction personnel will participate in a USFWS-approved worker environmental awareness program. A qualified biologist shall inform all construction personnel about the life history of Swainson's hawk and other relevant species, as well as 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. • For any active migratory bird nest 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 • Where feasible, tree and shrub removal and other clearing, grading, and construction activities that remove vegetation will not be conducted during the nesting season (generally February 15 through August 31, depending on the species and environmental conditions for any given year).	P, C	USACE	CVFPB
VELB-1	**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, in the event that any are found on the project site:** • Fencing. All areas to be avoided during construction activities shall be fenced and/or flagged as close to construction limits as feasible.	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• 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. • 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 two 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. • Compensation. Effects shall be compensated at ratios ranging from 1:1 to 3:1, depending on the compensation approach and circumstances of the affected shrubs. Affected area will be re-vegetated with appropriate native plants.			
BAT-1	**The 2016 ARCF GRR EIS/EIR did not identify a significant impact associated with special- status bats. Therefore, the following is a new mitigation measure. USACE will implement the following measure to avoid and minimize effects on special status bats.** • Wherever feasible, USACE will conduct construction activities outside of the active 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	P, C	CVFPB	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	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 will monitor activities either continuously or periodically during the work, as determined by the qualified biologist. The qualified biologist will 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 will 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 will 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 will be removed. A qualified biologist will monitor removal of these trees.			
PLANT-1	**USACE will implement the following measures to minimize potential effects on Sanford's arrowhead and wooly rose-mallow:** • Preconstruction surveys will be conducted by a qualified botanist in suitable habitat to determine the presence of any special status plants. Surveys will be conducted at an appropriate time of year during which the species are likely to be detected, likely be during the blooming period. • If special status plant species are found during preconstruction surveys, the habitat will be marked or fenced as an avoidance area during construction. A buffer of 25 feet will be established. If a buffer of 25 feet is not possible, the next maximum possible distance will be fenced off as a buffer. • If special status plant species cannot be avoided during construction, USACE will coordinate with the resource agencies to determine additional appropriate mitigation measures.	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
AIR-1	SMAQMD requires that all projects, regardless of their significance, implement the following measures to minimize the generation of fugitive PM dust. The Basic Construction Emission Control Practices shall include measures to control fugitive PM dust pursuant to SMAQMD Rule 403, as well as measures to reduce construction-related exhaust emissions. USACE shall require its contractors to comply with the basic construction emission control practices listed below for all construction-related activities occurring in SMAQMD jurisdiction. • 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. • Complete pavement of all roadways, driveways, sidewalks, parking lots to be paved as soon as possible. • 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
Air-2	SMAQMD recommends that construction projects that will exceed or contribute to the mass emissions threshold for PM10 implement the Enhanced Fugitive PM Dust Control Practices, as applicable to the project. As the construction activities for the Project will involve substantial material movement activities and will be located in proximity of residential receptors, USACE shall require its construction contractors to implement the Enhanced Fugitive PM Dust Control Practices listed below to help reduce potential fugitive PM dust emissions. <u>Soil Disturbance Areas</u> • 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 miles per hour. Install wind breaks (e.g., plant trees, solid fencing) on windward side(s) of construction areas.	C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• Plant vegetative ground cover (fast germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established. <u>Unpaved Roads (Entrained Road Dust)</u> • Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the site. • Treat site accesses with a 6- to 12-inch layer of wood chips, mulch, or gravel to a distance of 100 feet from the paved road 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 SMAQMD also will be visible to ensure compliance.			
AIR-3	**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 SMAQMD 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 the name and phone numbers of the project manager and the 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 SMAQMD Construction Mitigation Tool can be used to submit this information. The inventory shall be updated and submitted monthly throughout the duration of the project, except for any 30-day period in which no construction activity occurs. • The construction contractor shall provide a plan for approval by USACE and SMAQMD 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.	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• SMAQMD's Construction Mitigation Tool can be used to identify an equipment fleet that achieves this reduction. The construction contractor shall ensure that emissions from all off-road diesel-powered equipment used in the project area do not exceed 40 percent opacity for more than 3 minutes in any 1 hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided monthly to USACE and SMAQMD. A visual survey of all in-operation equipment shall be made at least weekly. A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed, as well as the dates of each survey. • Use the Construction Mitigation Tool to track PM10 emissions and mileage traveled by on-road trucks, reporting results to USACE and SMAQMD on a monthly basis.			
AIR-4	**USACE shall implement the measures listed below to reduce 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 and use, USACE shall contribute to SMAQMD's and/or BAAQMD'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 will exceed the de minimis threshold of 25 tons per year, USACE and CVFPB will enter into an agreement with SMAQMD and/or BAAQMD to purchase offsets for all NOx emissions in any year that projected emissions will exceed the threshold. The determination of the estimated mitigation fees shall be conducted in coordination with SMAQMD and/or BAAQMD before any ground disturbance occurs for any phase of project construction. (Estimated fees for the Project are $23,500 to SMAQMD for emissions in the Sacramento Valley Air Basin and $37,350 to BAAQMD for emissions in the San Francisco Valley Air Basin.) All mitigation fees shall be paid prior to the start of construction activity 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 and BAAQMD to ensure emission calculations and fees are adjusted appropriately.	P, C	USACE	CVFPB
AIR-5	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. 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.	P, 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 will be required in order to further lower project emissions.			
GHG-1	**Additional measures that will be implemented to further reduce the project's contribution from generation of GHGs include the following measures will also be implemented to the extent feasible to minimize GHG emissions:** • 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 toxic control measure [Title 13, sections 2449(d)(3) and 2485 of the California Code of Regulations]). 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 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 SMAQMD.	P, C	USACE	CVFPB
CR-1	A Programmatic Agreement (PA) has been executed for the ARCF Project. A Historic Properties Treatment Plan (HPTP) will be developed if the Project is found to result in adverse effects to historic properties.	D, P, C	USACE	CVFPB
CR-2	In accordance with the procedures described in Sections 9.2 and 9.3.9 of the ARCF Historic Properties Management Plan (HPMP), an archaeological monitoring and discovery plan	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	was included in the Identification and Evaluation Report and distributed to consulting Native American Tribes in April 2020. No comments were received. SHPO had no comment on the monitoring and discovery plan. This plan identifies the locations of known Historic Properties as well as sensitive areas designated for archaeological monitoring and includes methods and procedures for monitoring and the procedures to be followed in the event of a discovery of archaeological materials or human remains. Consultation with Native American Tribes concerning Tribal Monitoring is ongoing.			
CR-3	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 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.	C	USACE	CVFPB
CR-4	If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains), Tribal Cultural Resources, sacred sites, or landscapes is made at any time during project-related construction activities, USACE in consultation with CVFPB and other interested parties, shall develop appropriate protection and avoidance measures where feasible. 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 HPTPs prepared in accordance with the PA and HPMP, may be necessary if avoidance or protection is not possible.	P, C	CVFPB and USACE	CVFPB
CR-5	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, culturally affiliated Tribes shall be consulted concerning 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	C	CVFPB	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	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 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 will avoid significant impacts to a Tribal Cultural Resource. These measures may be considered to avoid or minimize significant adverse impacts: i. Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria. ii. Treat the resource with culturally appropriate dignity, taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following: a. Protect the cultural character and integrity of the resource. b. Protect the traditional use of the resource. c. Protect the confidentiality of the resource. d. Establish permanent conservation easements or other interests in real estate, with culturally appropriate management criteria for the purposes of preserving or using the resources or places. e. Protect the resource			
CR-6	**To minimize adverse effects from encountering human remains during construction, 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	C	CVFPB	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	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 Native American Heritage Commission (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 Descendent (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 site protection measures employed by CVFPB shall include: o record the site with the NAHC or the appropriate Information Center; and. o record a document with the county in which the property is located. 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.			
REC-1	**USACE and CVFPB will implement the following measures to reduce temporary, short- term construction effects on recreational facilities in the Project Area:** • Provide marked detours for pedestrian routes. Detours should be developed in consultation with the City of Sacramento Bicycle and Pedestrian Coordinator at least 10 days before the start of construction activities, as applicable. Post signs that clearly indicate closure routes at major entry points for trails, and will provide a contact number to call for questions or concerns. • Post signs at major entry points for trails, and boat launch ramps at the Westin Hotel and the Sacramento Yacht Club clearly indicating closures of trails and	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	estimated duration of closures. Information signs will notify the public of alternate parks and recreation sites, including boat launch ramps, and will provide a contact number to call for questions or concerns. • Upon completion of levee improvements, coordinate with the City of Sacramento to restore access and repair any construction-related damage to recreational facilities to pre- project conditions.			
REC-2	• Post signs at the Westin Hotel and the Sacramento Yacht Club to clearly indicate the estimated duration of in-water work windows and construction duration. • Buoys will be placed at the upstream and downstream ends of the construction site to warm boaters of the in-water work. • Notify the Coast Guard, in accordance with the Rivers and Harbors Act, of in-water work from barges moored in the river. Notification will include in-water work windows and construction duration	P, C	USACE	CVFPB
VIS-1	USACE will require its construction contractors to ensure that all temporary lighting related to security of the staging areas to be shielded or directed to avoid or minimize any direct illumination onto light-sensitive receptors located outside of the Project Area.	C	USACE	CVFPB
NOI-1	**USACE and CVFPB will require construction contractors to 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, to the extent practicable and feasible may include, but are not limited to, the following:** • provide written notice to residents within 1,000 feet of the construction zone, advising them of the estimated construction schedule. This written notice will be provided within 1 week to 1 month of the start of construction at that location; • display notices with information including, but not limited to, contractor contact telephone number(s) and proposed construction dates and times in a conspicuous location, 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.); • require that construction equipment be equipped with 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;	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• 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; • employ equipment that is powered by electric or natural gas engines, as opposed to those powered by gasoline fuel or diesel; • if the construction zone is within 500 feet of a sensitive receptor, place temporary barriers between stationary noise equipment and noise sensitive receptors or take advantage of existing barrier features, such as existing terrain or structures to block noise transmission; • 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 State and Federal worker safety regulations; • locate construction staging areas as far as practicable from sensitive receptors; and • design haul routes to avoid sensitive receptors. • In addition to noise reduction measures, to the extent feasible and practicable, the primary construction contractors shall employ vibration-reducing construction practices compliant with applicable noise-level rules and regulations. These practices must comply with vibration standards established for construction vibration-sources by applicable agencies (City of Sacramento and Sacramento County), depending on the jurisdictional location of the affected receptor(s). Project construction specifications will require the contractor to limit vibrations to less than 0.2-inch per second PPV and less than 72 VdB within 50 feet of any building. If construction will 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. and if no alternatives are available, select routes with the fewest homes; • a voluntary pre- and post-construction survey will be conducted to assess potential architectural damage from levee construction vibration at each residence within 75 feet of the proposed construction area. The survey will include visual inspection of the structures that could be affected and include supporting documentation of structures by means of photographs and video. This documentation will be reviewed with the individual owners prior to any construction activities for their awareness and concurrence. Post-construction monitoring of structures shall be performed to identify (and repair, if necessary) damage, if any, from construction vibrations. Any damage shall be			

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	documented, reviewed with the individual property owners and supported by photographs and video; and • place vibration monitoring equipment at the property line adjacent to large equipment and, with owner approval, at the back of the residential structures adjacent to the large equipment. Vibration measurements must be recorded daily.			
VEG-1	Project designs will be refined to reduce impacts on vegetation and wildlife to the extent practicable. Refinements implemented to reduce the loss of riparian habitat will include reducing the impact footprint, constructing bank protection rather than launchable rock trench whenever feasible, and designing planting benches. Where practicable, trees will be retained in locations where the bank protection and planting bench is constructed. Trees will be protected in place along the natural channel during the placement of rock. Additional plantings will be installed on the newly constructed bench to provide habitat for fish and avian species. The planting bench will be used where practicable to minimize impacts on fish and wildlife species. The on-site habitat will be created in accordance with the ARCF GRR HMMAMP, which includes conceptual mitigation proposals, performance standards, and adaptive management tasks.	D, P, C	USACE	CVFPB
VEG-2	**USACE will implement the following measures to compensate for riparian habitat degradation:** To compensate for the removal of riparian habitat (up to 1.38 acres), replacement habitat will be created at a ratio of 2:1 to account for the temporal loss of habitat while newly created habitat is growing. Species selected to compensate for the riparian corridor removal will be consistent with the approved list of trees, shrubs, and herbaceous plants native to the Great Valley Mixed Riparian Forest. The replacement habitat will be created in accordance with the ARCF GRR HMMAMP, which includes conceptual mitigation proposals, performance standards, and adaptive management tasks. After construction has been completed, 0.22 acres of riparian vegetation will be planted in the planting bench. The remaining compensation for the temporal loss of riparian vegetation and habitat will be off-site and will occur at locations that will be protected in perpetuity. These sites will be selected and designed in coordination with NMFS and USFWS as part of the consultation under the Endangered Species Act.	D, P, C	USACE	CVFPB
WATERS-1	If the project is implemented, in compliance with the Clean Water Act, USACE will compensate for fill of State and federally protected waters to ensure the project causes no net loss of functions and values. Water quality certification pursuant to Section 401 of the Clean Water Act (CWA) will be obtained from the Central Valley RWQCB before starting project activities that are subject to Section 401. Any measures determined necessary during the permitting processes will be implemented, such that there is no net loss of functions and values of jurisdictional waters.	D, P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	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, ensuring there is no net loss of waters of the United States. If compensation is provided through permittee-responsible mitigation with additional NEPA and CEQA documentation, a mitigation plan will be developed to detail appropriate compensation measures determined through consultation with USACE and Central Valley RWQCB. These measures will include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails.			
GEO-1	Prior to the start of earthmoving activities, USACE and CVFPB will obtain coverage under the State Water Resources Control Board (SWRCB) NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ), including preparation and submittal of a project- specific SWPPP at the time the NOI to discharge is filed. The SWPPP shall identify and specify the following: • the use of an effective combination of robust erosion and sediment control BMPs and construction techniques 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 will 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 pollutants that are likely to be used during construction that could be present in stormwater drainage and non-stormwater discharges, including 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 implementation of the SWPPP. Where applicable, BMPs identified in the SWPPP will be in place throughout all site work, construction/demolition activities, and will be used in all subsequent site development activities. BMPs may include, but are not limited to, such measures as those listed below.	P, C	USACE	CVFPB

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• work window- conduct earthwork during low flow periods (July 1 through November 30); • 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 stockpile areas, and equipment exclusion zones prior to the commencement of any grading operations; • stockpile soil on the landside of the levee reaches, and install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) around the base of stockpiles to intercept runoff and sediment during storm events. If necessary, cover stockpiles with geotextile fabric to provide further protection against wind and water erosion; • install sediment barriers on graded or otherwise disturbed slopes as needed to prevent sediment from 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 will 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, will 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). A SPCCP is intended to prevent any discharge of oil into navigable water or adjoining shorelines. The contractor will develop and implement an SPCCP to minimize the potential for adverse effects from spills of hazardous, toxic, or petroleum substances during construction and operation activities. The SPCCP will be completed before any construction activities begin. Implementation of this measure will comply with State and Federal water quality regulations. The SPCCP will describe spill sources and spill pathways in addition to the actions that will be taken in the event of a spill (e.g., an oil spill from engine refueling will be immediately cleaned up with oil absorbents). The SPCCP will outline descriptions of containments facilities and practices such as doubled-walled tanks, containment berms, emergency shut-offs, drip pans, fueling procedures and spill response kits. It will also describe how and when employees are trained in proper handling procedure, spill prevention, and response procedures;			

Mitigation Number	Mitigation Measure	Implementation Timing	Implementation Responsibility	Responsible for Monitoring/Reporting Action
	• a copy of the approved SWPPP shall be maintained and available at all times on the construction site; and • USACE and CVFPB will also prepare a SPCCP. A SPCCP is intended to prevent any discharge of oil into navigable water or adjoining shorelines. The contractor will develop and implement a SPCCP to minimize the potential for adverse effects from spills of hazardous, toxic, or petroleum substances during construction and operation activities. The SPCCP will be completed before any construction activities begin. Implementation of this measure will comply with state and Federal water quality regulations. The SPCCP will describe spill sources and spill pathways in addition to the actions that will be taken in the event of a spill (e.g., an oil spill from engine refueling will be immediately cleaned up with oil absorbents). The SPCCP will outline descriptions of containments facilities and practices such as doubled-walled tanks, containment berms, emergency shut-offs, drip pans, fueling procedures, and spill response kits. It will also describe how and when employees are trained in proper handling procedures and spill prevention and response procedures.			

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.

EXHIBIT D – AMERICAN RIVER WATERSHED COMMON FEATURES, WATER RESOURCES DEVELOPMENT ACT OF 2016 PROJECT, SACRAMENTO RIVER EROSION CONTRACT 1: RIVER MILE 55.2 LEFT BANK PROTECTION
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 Sacramento Area Flood Control Agency (SAFCA), for use of sovereign land associated with the proposed American River Watershed Common Features, Water Resources Development Act of 2016 Project, Sacramento River Erosion Contract 1: River Mile 55.2 Left Bank Protection (Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines, § 15381.)[1] 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.

The Commission is a responsible agency under CEQA for the Project because the Commission must approve a lease for the Project to go forward and because the Central Valley Flood Protection Board (CVFPB), as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The environmental impacts associated with the Project were originally evaluated in the American River Watershed Common Features General Reevaluation Report Final Environmental Impact Study/Report (herein referred to as the ARCF GRR EIR) State Clearinghouse [SCH] No. 2005072046 and a Supplemental Environmental Assessment/Environmental Impact Report (herein referred to as the Supplemental EIR (SCH No. 2020070269). The lead agency certified the ARCF GRR EIR on April 22, 2016, and the Supplemental EIR on January 20, 2021, and

[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.

adopted a Mitigation Monitoring and Reporting Program (MMRP), Findings, and a Statement of Overriding Considerations.

The Project includes the installation of levee improvements to reduce risks of levee failure, especially related to seepage, under-seepage, and levee stability. Types of levee improvements would include rock bank protection, riparian benches, and in-stream woody material. Activities within state lands would include all of these activities in addition to site preparation.

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

- Aesthetics and Visual Resources
- Air Quality
- Vegetation and Wildlife
- Special-Status Species
- Climate Change
- Cultural Resources
- Geological Resources
- Hazardous Wastes and Materials
- Water Quality and Groundwater Resources
- Noise
- Recreation

Of the 11 resources areas noted above, Project components within the Commission's jurisdiction (i.e., bank protection under the ordinary high-water mark [OHWM] of the Sacramento River) could have significant environmental effects on 10 of the resource areas, as follows:

- Aesthetics and Visual Resources
- Air Quality
- Vegetation and Wildlife
- Special-Status Species
- Climate Change
- Cultural Resources
- Geological Resources
- Water Quality and Groundwater Resources
- Noise
- Recreation

In certifying the ARCF GRR EIR and Supplemental EIR 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 Supplemental EIR 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 long-term Aesthetics and Visual Resources and Recreation. Because some of these significant impacts may occur on lands under the jurisdiction of the Commission, the Commission also adopts the 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 Supplemental EIR 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 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 Supplemental EIR 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 Supplemental EIR, 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 Supplemental EIR fully comply with CEQA.

The Commission has reviewed and considered the information contained in the Project EIR and Supplemental EIR. All significant adverse impacts of the Project identified in the EIR relating to the Commission's approval of a General Lease – Public Agency Use, which would allow site preparation and the installation of rock protection and riparian benches, 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]

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 Supplemental EIR.

A. SUMMARY OF FINDINGS

All impacts to resource areas within the Commission's jurisdiction are considered potentially significant. The Findings are organized by significant impacts within the EIR issue areas as presented below.

B. POTENTIALLY SIGNIFICANT IMPACTS

The impacts identified in Table 1 were determined in the ARCF GRR EIR and Supplemental EIR to be potentially significant absent mitigation. After

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

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 EIR and Supplemental EIR that the other identified potentially significant impacts will remain significant. Table 1 identifies those impacts that the CVFPB determined would be significant and unavoidable (SU) after mitigation.

Table 1 – Significant Impacts by Issue Area

Environmental Issue Area	Impact Nos. (LTSM)	Impact Nos. (SU)
Aesthetics and Visual Resources	VIS-3	VIS-2
Air Quality	AIR-1	
Vegetation and Wildlife	VEG-1	VEG-2
Special-Status Species	SSS-1, 3, 4	
Climate Change	GHG-1	
Cultural Resources	CR-3, 4	CR-C
Geological Resources	GEO-1	
Water Quality and Groundwater Resources	WQ-1	
Noise	NOI-1	
Recreation		REC-1

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 Supplemental EIR to be potentially significant absent mitigation; after application of mitigation, however, the impacts were determined to be less than significant.

1. 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

During construction, the levee crown and barges may be equipped with lighting for security of construction equipment and stored materials, which will result in new sources of nighttime light visible by neighboring residences and boaters.

The applicant will require its construction contractors to ensure that all temporary lighting related to security of the staging areas to be shielded or directed to avoid or minimize any direct illumination onto light-sensitive receptors located outside the Project area. MM VIS-1 will reduce the Project's impact to a less than significant level.

MM VIS-1: Shield or Direct Temporary Lighting to Avoid or Minimize Direct Illumination onto Light-Sensitive Receptors

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

2. AIR QUALITY

CEQA FINDING NO. AIR-1

Impact: **Impact AIR-1. Potential Conflict with Air Quality Plan or Contribute Substantially to Air Quality Violation.**

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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Air emissions will be generated by heavy equipment constructing the Project. The total estimated air emissions for the Project will potentially exceed the local air district thresholds for oxides of nitrogen (NO_x).

The U.S. Army Corps of Engineers (USACE) will require that the construction contractor implement the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) Basic Construction Emission Control Practices and Enhanced Fugitive PM Dust Control Practices. Additional avoidance and minimization measures will be implemented to reduce criteria pollutant emissions, and mitigation measures (payment of fees) will be implemented to reduce air quality impacts to a less than significant level. Implementing MMs AIR-1 through AIR-5 will reduce or offset the Project's emissions to a less than significant level.

MM AIR-1: Implement the Sacramento Metropolitan Air Quality Management District's 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: Use the Sacramento Metropolitan Air Quality Management District's Off-site Mitigation Fee to Reduce NO_x 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.

3. VEGETATION AND WILDLIFE

CEQA FINDING NO. VEG-1

Impact: **Impact VEG-1. Adverse Effects on Vegetation and Wildlife Resources, including Riparian Habitat and Waters of the United States (Long-Term Effects).**

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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Removal of up to 1.38 acres of riparian habitat would cause a significant impact to vegetation and wildlife resources.

USACE will refine the Project design to reduce impacts on vegetation and wildlife to the extent practicable. Refinements to reduce the loss of riparian habitat will include reducing the impact footprint, constructing bank protection other than launchable rock whenever feasible, and designing planting benches. Where practicable, trees will be retained in locations where the bank protection and planting bench are constructed, and trees will be protected in place along the natural channel during placement of rock where feasible. To compensate for removal of up to 1.38 acres of riparian habitat, replacement habitat will be created at a ratio of 2:1 to account for the temporal loss of habitat while newly created habitat is growing. Approximately 0.22 acres of riparian vegetation will be installed on the newly constructed planting bench to provide on-site riparian habitat for fish and avian species. The remaining compensation for loss of riparian vegetation will be constructed off-site according to the USACE consultation with U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under the Endangered Species Act. This mitigation will also be consistent with the Habitat Mitigation Monitoring and Adaptive Management Plan (HMMAMP) that was included in the ARCF GRR EIR. Implementing MMs VEG-1 and VEG-2 will reduce or offset the Project's long-term impact on riparian habitat to a less than significant level. Furthermore, MMs BIRD-1, BAT-1, PLANT-1, WATERS-1, and GEO-1 are included to further reduce the Project's impacts on vegetation and wildlife resources to a less than significant level.

MM VEG-1: Avoid and Minimize Impacts to Riparian Habitat

MM VEG-2: Compensate for Riparian Habitat Removal

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

MM PLANT-1: Implement Measures to Protect Special-Status Plants

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.

4. SPECIAL-STATUS 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Construction could result in adverse impacts to an unknown population of special-status plants.

USACE will conduct special-status plant preconstruction surveys in suitable habitat to determine the presence of special-status plants. Surveys will be conducted at an appropriate time of year during which the species are likely to be detected. If special-status plant species are found, the habitat would be marked or fenced as avoidance area during construction if possible. A buffer of 25 feet would be established. If a buffer of 25 feet is not possible, the maximum possible distance would be fenced off as a buffer. If special-status plant species cannot be avoided during construction, USACE will coordinate with resource agencies to determine appropriate mitigation plans. Implementing MM PLANT-1 will reduce or offset the Project's impact to special-status plant species to a less than significant level.

MM PLANT-1: Implement Measures to Protect Special-Status Plants

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

CEQA FINDING NO. SSS-3

Impact: **Impact SSS-3. Adverse Effect on Special-Status Species: Salmonids, Green Sturgeon, and Delta Smelt.**

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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

The placement of rock riprap below the OHWM will occur during the anadromous fish and delta smelt activity windows. Removing riparian vegetation along the river would reduce the amount of Shaded Riverine Aquatic (SRA) habitat available for special-status fish species in the Sacramento River.

Project actions are not likely to result in long-term habitat losses to the Sacramento River due to USACE implementing applicable minimization and compensatory mitigation measures. The conclusion is based on the USACE commitment to minimize temporary habitat losses through the incorporation of on-site mitigation features and implementation of off-site habitat compensatory mitigation. The on-site planting bench will provide some on-site mitigation for special-status fish species. USACE, CVFPB, and SAFCA are seeking compensatory mitigation opportunities on or adjacent to the main stem of the Sacramento River within a 20-mile radius (27 river miles), ideally, but sites within a 50-mile radius (55 river miles) may need to be utilized. Coordination with USFWS and NMFS to identify and design the mitigation sites is currently ongoing. In-water construction activities will be limited to the work window of July 1 through October 31, or as otherwise approved by USFWS and NMFS. Erosion control measures will be implemented to minimize the entry of soil or sediment into the river. USACE will also install instream woody material (IWM) to benefit juvenile salmonids. Implementing MMs FISH-1, SRA-1, VEG-1, and VEG-2 will reduce or offset the Project's impact to special-status fish species to a less than significant level.

MM FISH-1: Implement Measures to Avoid and Minimize Effects on Listed Fish Species

MM SRA-1: Implement Measures to Avoid, Minimize, and Compensate for Effects on Shaded Riverine Aquatic Habitat

MM VEG-1: Avoid and Minimize Impacts to Riparian Habitat

MM VEG-2: 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.

CEQA 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Swainson's hawk, Western yellow-billed cuckoo, white-tailed kite, purple martin, and other migratory birds could be impacted due to effects of construction activities. Tree removal from construction activities will reduce the amount of habitat available to these species, and active nests could be disturbed or destroyed during construction, causing loss of eggs or young or forcing nest abandonment.

USACE will implement measures to minimize potential adverse effects on active nests of Swainson's hawk and other special-status bird species by conducting preconstruction surveys to determine if nests are present within the Project area. Protocol level surveys for Swainson's hawk will occur according to the Swainson's Hawk Technical Advisory Committee guidance from 2000. If active nests are discovered, protective buffers will be established and implemented until an active nest is no longer active. A qualified biologist will monitor the nest during Project activities to confirm the effectiveness of the buffer and adjust the buffer as needed to ensure Project activities do not adversely affect behavior of adults or young. Where feasible, tree and shrub removal will not occur during the nesting season (generally February 15 through August 31). 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.

5. 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 ARCF GRR EIR and Supplemental EIR.

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 from construction of the Project, expressed as CO_2 equivalents (CO2e), would not exceed SMAQMD's threshold of 1,000 metric tons CO_2e per year during the estimated construction period. However, these emissions will still contribute to the overall global cumulative GHG emissions. Mitigation Measures will be implemented to reduce the overall ARCF 2016 Project's contribution from generation of GHGs. Mitigation 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 area. USACE will purchase carbon credits from programs approved by SMAQMD to mitigate program wide CO_2e emissions in excess of 1,000 metric tons per year. Implementing MM GHG-1 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.

6. CULTURAL RESOURCES

CEQA FINDING NO. CR-3	
Impact:	**Impact CR-3. 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

To date, cultural resources investigations have not identified archeological resources or Tribal Cultural Resources (TRCs) in the Area of Potential Effect (APE) for the Project. However, based on known resources nearby on the Sacramento River and other available information, areas within the APE are potentially sensitive for unknown buried archaeological resources and Tribal Cultural Resources. There remains the possibility that previously unknown archaeological resources or Tribal Cultural Resources could be discovered during Project construction and inadvertently damaged by earthmoving activities.

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 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-4

Impact: **Impact CR-4. 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Although no human remains have been discovered in or near the APE, 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; 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, all in consultation with the National American Heritage Commission, most likely descendant, and landowners, in compliance with California Health and Safety Code Section 7050 et seq. and PRC 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. GEOLOGICAL RESOURCES

CEQA FINDING NO. GEO-1

Impact: **Impact GEO-1. 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Constructing the Project could result in the temporary and short-term disturbance of soil, and disturbed areas could be impacted by 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.

USACE will acquire appropriate regulatory permits and prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), a Spill Prevention Control and Countermeasures Plan (SPCCP) and associated 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 and SPCCP. 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.

8. 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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Placement of rock revetment along the riverbank below the OHWM of the Sacramento River will temporarily generate increased turbidity in the vicinity of the construction area. Placement of revetment could result in sediment plumes, and the use of barges to install the revetment could cause additional turbidity in the immediate vicinity of the construction area.

USACE will compensate for fill of State and federally protected waters to ensure the Project causes no net loss of functions and values. A water quality certification pursuant to Section 401 of the Clean Water Act (CWA) will be obtained from the Regional Water Quality Control Board prior to starting Project activities. Additionally, USACE will acquire and implement a SWPPP and SPCCP. Implementing MMs GEO-1 and WATERS-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 WATERS-1: Compensate for Fill of State and Federally Protected Waters

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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

The Project would generate construction noise and vibration from equipment operation and materials placement. Construction activities will result in temporary, short-term, and intermittent increases of noise for sensitive receptors.

USACE and the CVFPB will require construction contractors to implement measures to avoid and minimize construction noise and vibration on sensitive receptors. Prior to the start of construction, a noise control plan will be prepared to reduce the effects of construction-related noise. These actions include but are not limited to providing notice to nearby residents of the construction zone, displaying notices with information including the contractor(s) phone number(s) and proposed dates and times of construction, scheduling the loudest and most intrusive construction activities during daytime hours, requiring that construction equipment be equipped with noise-muffling devices, and following the City of Sacramento noise ordinance. 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.

D. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts were determined in the ARCF GRR EIR and Supplemental EIR 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. AESTHETICS AND VISUAL RESOURCES

CEQA FINDING NO. VIS-2

Impact: **Impact VIS-2. Changes in Scenic Vistas and Existing Visual Character (Short-Term)**

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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

The ARCF GRR EIR found that placement of bank protection materials and removal of vegetation caused by construction activities would result in short-term significant and unavoidable effects to visual resources with no feasible mitigation measures to reduce the effect. The presence of construction equipment will degrade the visual quality of this area of the Sacramento River for residents, visitors, and recreational users, which would be a significant and unavoidable impact. However, the reduction in visual quality from construction activities will be short-term and temporary. This conclusion is consistent with the analysis in the ARCF GRR EIR. Construction of the Project will not result in short-term visual impacts that are new or more severe than those addressed in the ARCF GRR EIR. The Project will not result in a long-term significant effect to scenic resources or visual character because the presence of construction equipment is temporary and the site will be re-vegetated with riparian vegetation, which will restore the visual quality of the Project after construction.

Construction activities associated with the Project will require hauling of material and equipment via barges loaded with large construction equipment and materials on the Sacramento River. Impacts will be realized by boaters and pedestrians near this portion of the levee, in addition to nearby residents who may be able to see construction activities from their properties. No feasible mitigation measures were identified to reduce short-term visual effects. It is infeasible to construct the Project without construction crews and equipment. Screening views of the construction crews and equipment would be costly and cause their own impacts on visual quality. The ARCF GRR EIR included a requirement for planting berms to address long-term visual impacts. This requirement was adopted as a Mitigation Measure in the ARCF GRR EIR and associated MMRP, but there are no other feasible mitigation measures available to further avoid or reduce this short-term impact.

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

2. VEGETATION AND WILDLIFE

CEQA FINDING NO. VEG-2

Impact: **Impact VEG-2. Adverse Effects on Vegetation and Wildlife Resources, including Riparian Habitat and Waters of the United States (Short-Term Effects)**

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 Supplemental EIR.

(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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Construction activities would require the removal of riparian vegetation and native and non-native trees within the Project area. The ARCF GRR EIR concluded that long-term impacts to vegetation and wildlife caused by removing riparian habitat would be mitigated to a less than significant level, but the short-term impacts to vegetation and wildlife would be significant and unavoidable due to the time required for replacement riparian habitat to provide the same ecological value provided by the habitat expected to be removed.

Construction of the Project will require the permanent removal of up to 80 trees (or 1.38 acres of canopy) within the 1,150-foot-long footprint. Implementing MMs VEG-1 and VEG-2 will reduce the long-term impact on vegetation and wildlife habitat to a less than significant level. 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 ARCF GRR EIR. Implementing MMs VEG-1 and VEG-2 will reduce or offset the Project's long-term impact on riparian habitat, but there are no other feasible mitigation measures available to further avoid or reduce this short-term impact.

MM VEG-1: Avoid and Minimize Impacts to Riparian Habitat

MM VEG-2: Compensate for Riparian Habitat Removal

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

3. CULTURAL RESOURCES (CUMULATIVE)

CEQA FINDING NO. CR-C

Impact: **Impact CR-C. Cultural Resources (Cumulative)**

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 Supplemental EIR.

(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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

As described in the ARCF GRR EIR, the ARCF 2016 Project, along with other flood-risk reduction projects and development projects considered in the cumulative analysis, have the potential to contribute to the loss or degradation of known and unrecorded archaeological resources, known prehistoric period Cultural Landscapes, known and unknown human remains, and known and unknown historic-period archaeological resources.

Implementing MMs CR-1, CR-2, CR-3, CR-4, and CR-5 will reduce contribution to a significant cumulative effect on cultural resources because appropriate treatment and protection measures must be implemented. Implementing MMs CR-1 and CR-5 will reduce the Project's contribution to the cumulative impact to cultural resources, but this cumulative impact remains significant and unavoidable and there are no other feasible mitigation measures available to further avoid or reduce this impact.

MM CR-1: Resolve Adverse Effects through Programmatic Agreement and Historic Properties Treatment Plan

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. This impact is considered significant and unavoidable.

4. 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 Supplemental EIR.
	(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 ARCF GRR EIR and Supplemental EIR.

FACTS SUPPORTING THE FINDING(S)

Project construction may impact public use of a limited portion of the levee, and recreational experiences could be degraded by the presence of construction equipment. This would cause significant and unavoidable effects on recreation while the Project is being constructed.

The ARCF GRR EIR concluded that the ARCF 2016 Project would cause significant and unavoidable short-term impacts to recreation by limiting public access to certain portions of the levee. During construction of the Project, access to the levee crown will be restricted and detours may need to be established. However, the portion of the levee within the Project area is gated and not available for general public use. Construction could also result in a temporary impact to boating traffic due to the presence of barges. Nearby boating facilities will not be impacted, and boaters will still be able to move through the area. Signage will be utilized to inform boaters of any obstructions. Mitigation measures adopted in the ARCF GRR EIR and the Supplemental EIR will

reduce many recreational impacts to a less than significant level. However, the short-term impact on recreation would remain significant and unavoidable, as described in the ARCF GRR 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 Pedestrian Detours and Provide Construction Period Information on Facility Closures Mitigation Measure

MM REC-2: Implement Measures to Notify Boaters

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 three alternatives analyzed in the EIR and Supplemental EIR represent a reasonable range of potentially feasible alternatives that could reduce one or more significant impacts of the Project. These alternatives include:

1) No Action Alternative
2) Alternative 1 – Improve Levees
3) Alternative 2 – Improve Levees and Widen the Sacramento Weir and Bypass (Recommended Plan)

As presented in the EIR and Supplemental EIR, the alternatives were described and compared with each other and with the proposed Project.

Under State CEQA Guidelines section 15126.6, subdivision (e)(2), if the No Project Alternative is identified as the environmentally superior alternative, the EIR must

also identify an environmentally superior alternative among the other alternatives. Based on the analysis contained in the EIR, Alternative 2 (Recommended Plan) has been identified as the Environmentally Superior Alternative under CEQA.

The CVFPB independently reviewed and considered the information on alternatives provided in the EIR and in the record. The EIR reflects the CVFPB's independent judgment as to alternatives. The CVFPB found that the Project provides the best balance between the Project goals and objectives and the Project's benefits. Two of the three CEQA alternatives proposed and evaluated in the EIR and Supplemental EIR were rejected as being infeasible for reasons provided in the CVFPB's Findings Regarding Alternatives (incorporated herein by reference).

1) The No Action Alternative assumes that no work would be completed by USACE and the City of Sacramento and surrounding areas (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 is not a feasible means to avoid risk to avoid the residual significant and unavoidable effects of the Project.
2) Alternative 1 as described in the ARCF GRR 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. The terms of the 2015 Biological Opinion (08ESMF00-2014-F-0518) require implementation of green sturgeon modeling and monitoring to improve effects assessment and minimize construction impacts. 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 and circulation, visual resources, and cultural resources, and cumulatively significant and unavoidable impacts to vegetation and wildlife, special-status species, cultural resources, air quality, and visual resources. Alternative 1 is not a feasible means to minimize flood risk and meet all or most Project objectives and avoid or minimize the residual significant and unavoidable environmental effects of the Project.
3) Alternative 2 as described in the ARCF GRR 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. The terms of the 2015 Biological Opinion require implementation of green sturgeon modeling and monitoring to improve effects assessment and minimize construction impacts. Alternative 2 will also implement fish passage at the Sacramento Bypass and grade the widened Bypass for improved fish movement. Alternative 2 as described in the ARCF GRR EIR has significant and unavoidable impacts to vegetation and wildlife, recreation, transportation and circulation, visual resources, and cultural resources, and cumulatively significant and unavoidable impacts to vegetation and wildlife, special-status species, cultural resources, air quality, and visual resources.

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

Based upon the objectives identified in the ARCF GRR EIR and Supplemental EIR, 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 River Erosion Contract 1: River Mile 55.2 Left Bank Protection

Project 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 four resource areas: Aesthetics and Visual Resources, Vegetation and Wildlife, Cultural Resources, and Recreation (see Table 2). These impacts are specifically identified and discussed in more detail in the Commission's CEQA Findings and in the ARCF GRR EIR and Supplemental EIR. 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
Aesthetics and Visual Resources	
Impact VIS-2. Changes in Scenic Vistas and Existing Visual Character (Short-Term)	Construction activities associated with the Project will require hauling of material and equipment via barges loaded with large construction equipment and materials on the Sacramento River, the placement of bank protection materials onshore, and the removal of vegetation. These activities and the presence of construction equipment will degrade the visual quality of this area of the Sacramento River for residents, visitors, and recreational users, which would be a significant and unavoidable impact. No feasible mitigation measures were identified to reduce short-term visual effects.
Vegetation and Wildlife	

Impact	Impact Description
Impact VEG-2. Adverse Effects on Vegetation and Wildlife Resources, including Riparian Habitat and Waters of the United States (Short-Term Effects)	Construction activities would require the removal of riparian vegetation and native and non-native trees within the Project area. Short-term impacts to vegetation and wildlife would be significant and unavoidable due to the time required for replacement riparian habitat to provide the same ecological value provided by the habitat expected to be removed. Implementing MMs will reduce or offset the Project's long-term impact on riparian habitat, but there are no other feasible mitigation measures available to further avoid or reduce this short-term impact.
Cultural Resources	
Impact CR-C. Cultural Resources (Cumulative)	The Project along with other flood-risk reduction projects and development projects considered in the cumulative analysis have the potential to contribute to the loss or degradation of known and unrecorded archaeological resources, known prehistoric period Cultural Landscapes, known and unknown human remains, and known and unknown historic-period archaeological resources. Implementing MMs CR-1 and CR-5 will reduce the Project's contribution to the cumulative impact to cultural resources, but this cumulative impact remains significant and unavoidable and there are no other feasible mitigation measures available to further avoid or reduce this impact.
Recreation	
Impact REC-1. Temporary and Short-term Changes in Recreational Opportunities during Project Construction Activities	Project construction may impact public use of a limited portion of the levee, and recreational experiences could be degraded by the presence of construction equipment. 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.

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, damage to property and infrastructure, and release of environmental contaminants.

2. Sacramento 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 flood risk. The Sacramento River East Levee is a key feature for flood risk management for Sacramento.

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 with 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 potentially 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 aesthetics and visual resources, vegetation and wildlife, cultural resources, and recreation are considered acceptable.

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 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 Supplemental EIR 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 Commission adopts and makes this Statement of Overriding Considerations with respect to the impacts identified in the ARCF GRR EIR and Supplemental EIR 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 ARCF GRR EIR and Supplemental EIR 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 ARCF GRR EIR and Supplemental EIR 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.