Meeting Date: 06/23/26
Application Number: 4794
Staff: J. Toy

Staff Report 34

APPLICANT:

Central Valley Flood Protection Board

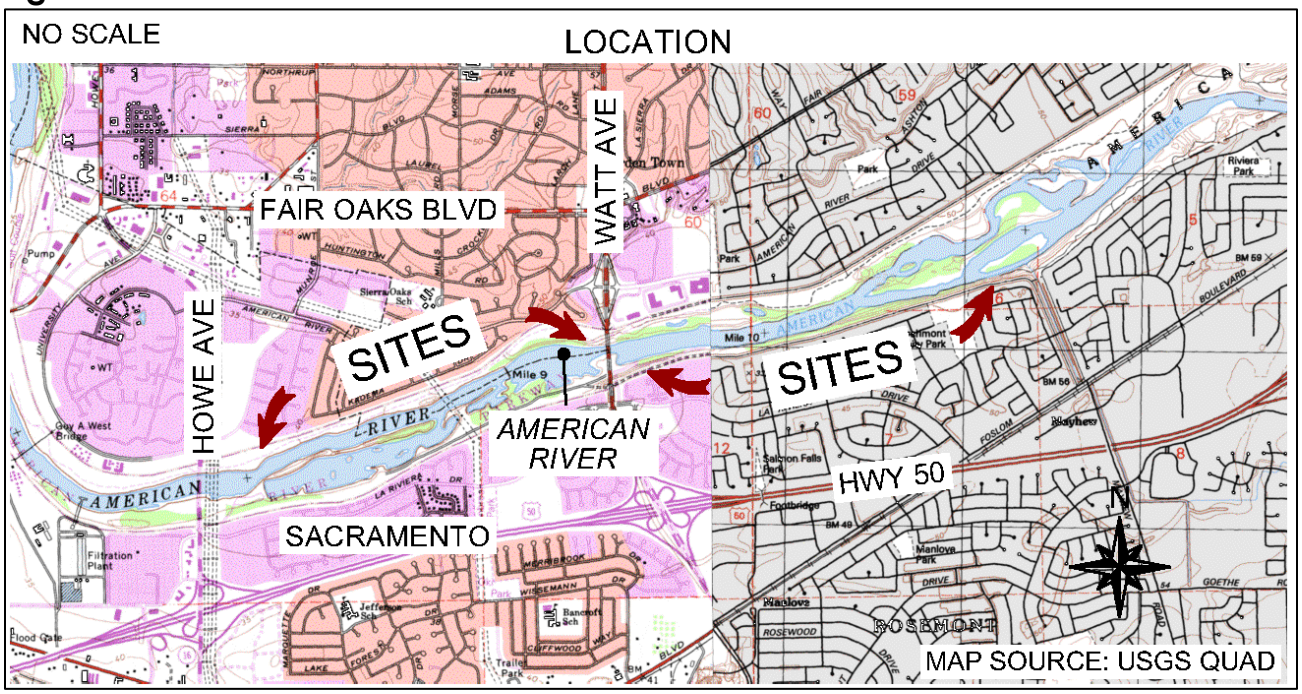
PROPOSED ACTION:

Issuance of a General Lease – Public Agency Use.

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the American River, along River Miles (RM) 7.7 to 8.8 along the right bank, 9.1 to 10.5 along the left bank, and 9.7 to 10.3 along the right bank, near Sacramento, Sacramento County (as shown in Figure 1).

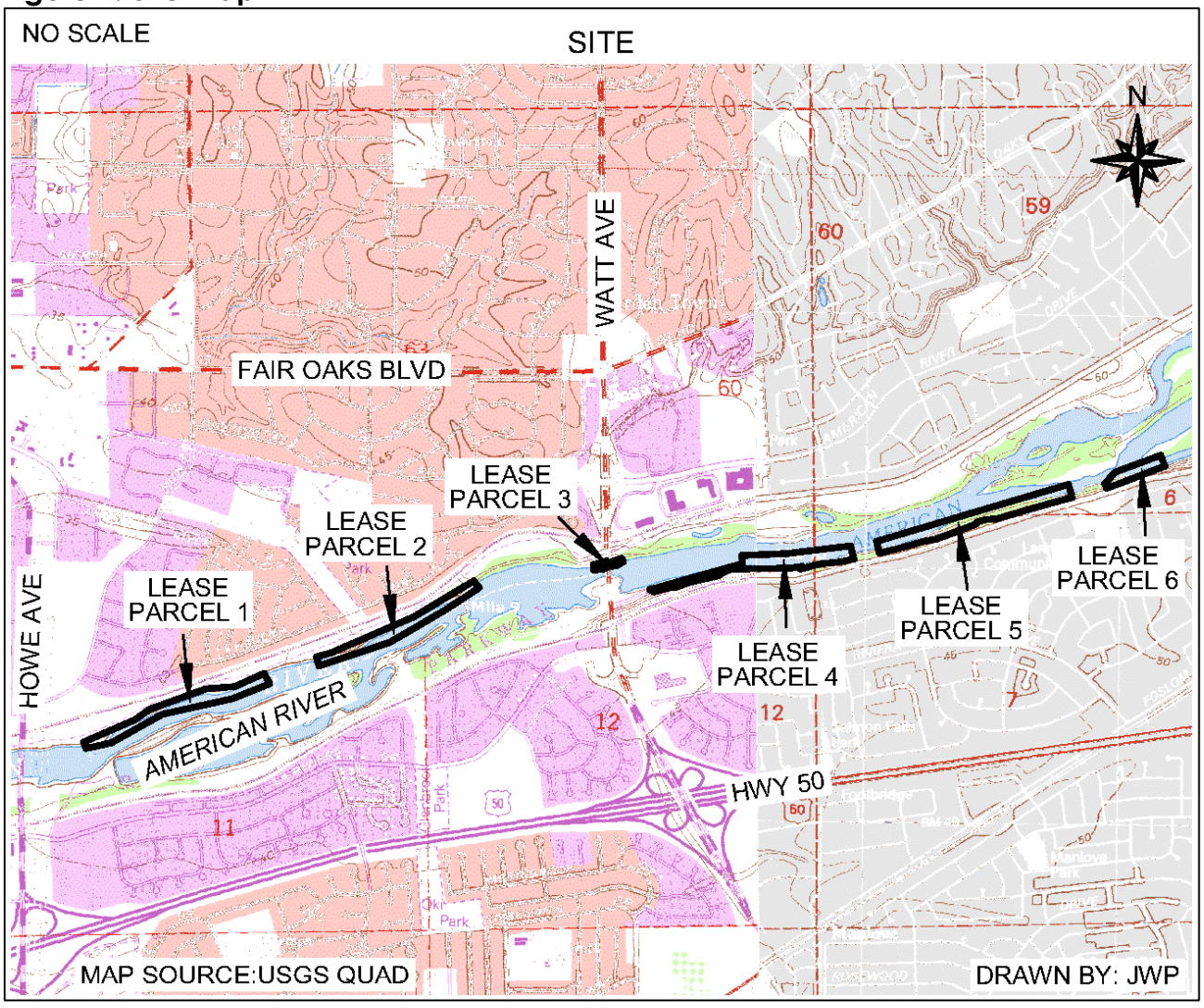
Figure 1. Location



AUTHORIZED USE:

Construction and use of launchable rock toe, launchable trench, tie backs, planting bench, instream woody material, ramps; bank protection including soil filled revetment, soil filled levee embankment, and soil filled riverbank revetment; and temporary use of construction ramps as proposed in the American River Watershed Common Features, Water Resources Development Act of 2016 Project, American River Erosion Contract 3B North and South (as shown in Figure 2).

Figure 2. Site Map



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

TERM:
49 years, beginning June 23, 2026.

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

SPECIFIC LEASE PROVISIONS:

- Lessee shall place warning signage or buoys, or both, clearly visible from the shore and in the water, both upstream and downstream of the construction site, to provide notice of the construction and to advise the public to exercise caution. Lessee shall place and maintain such signage during the term of the construction 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 installation and removal.
- Provisions requiring Lessee to comply with certain safety and construction standards.

BACKGROUND:

Following extensive flooding in 1986, and severe impacts to Sacramento's levee system, Congress directed the U.S. Army Corps of Engineers (USACE) to investigate additional means to reduce flood risk to Sacramento. USACE completed this investigation in 1991, recommending levee improvements downstream of Folsom Dam. As a result of subsequent studies, the American River Common Features Project (ARCF) was authorized in the Water Resources Development Act (WRDA) of 1996, Pub. L. No. 104-303, § 101(a)(1) (WRDA 1996).

Major components of the ARCF within WRDA 1996 included construction of seepage remediation along approximately 22 miles of American River levees, levee strengthening, and the raising of 12 miles of the Sacramento River levee in the Natomas Basin. Over time, the ARCF Project has expanded and, in 2016, an extensive program of levy strengthening and erosion repair along the Sacramento and American Rivers was analyzed in the American River Watershed Common Features General Reevaluation Report (ARCF GRR) Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (State Clearinghouse No. 2005072046).

Supplemental EIS/EIRs have been prepared for each portion or contract of the overall ARCF as each project design has been refined. There are five American River Erosion contracts:

- Contract 1 included levee repair and erosion control from RM 5.1 to 6.6 adjacent to Paradise Beach; and a mitigation site at RM 4.9 adjacent to Glenn Hall Park. On June 29, 2021, the Commission authorized Leases 9667 and 9668 under application numbers 2402 and 2715, respectively (Item 21).
- Contract 2 includes erosion protection from RM 7.45 to 7.65 at the Howe Avenue Bridge. On December 17, 2024, the Commission authorized Lease 9806 under application number 3065 (Item 25).
- Contract 3a includes erosion protection from RM 3.8 to 4.2 at Interstate 80 and upstream of the City of Sacramento's Sutter's Landing Park in the American River Parkway. On April 7, 2026, the Commission authorized Lease 9948 under application number 4813 (Item 26).
- Contract 3B North and South includes erosion protection from RM 7.7 to 8.8, 9.1 to 10.5, and 9.7 to 10.3 and is under consideration for authorization under this application.
- The Applicant will submit an application for a General Lease – Public Agency Use to authorize Contract 4.

PROJECT DESCRIPTION:

The American River Watershed Common Features, Water Resources Development Act of 2016 Project, American River Erosion Contract 3B North and South (Project) includes levee erosion protection measures along three sites:

- **Site 3-1**: approximately 1.1 miles along the right (north) bank between Howe Avenue and Watt Avenue between RM 7.7 to RM 8.8.
- **Site 4-1**: approximately 1.5 miles along the left (south) bank upstream of Watt Avenue between RM 9.1 to RM 10.5.
- **Site 4-2**: approximately 0.7 miles along the right (north) bank near the Estates Drive River Access between RM 9.7 to RM 10.3. Project activities at this site are landward of the Commission's jurisdiction.

American River Erosion Contract 3B North, Sites 3-1 and 4-2, would include constructing approximately 1.8 miles of launchable rock toe, launchable trench,

and bank protection. American River Erosion Contract 3B South, Site 4-1, would include construction of the same features with the addition of tie backs along approximately 1.5 miles.

Bank protection would be revetment placed on the surface of the riverbank or levee. This includes soil-filled revetment (soil between revetment and above to establish vegetation on the surface); soil-filled levee embankment (soil filled revetment placed on the levee embankment); soil filled riverbank revetment (placed on or near the riverbank); and bank protection without soil fill (typically seen in areas where construction of soil filled revetment would not be feasible).

Launchable trench is buried revetment (near the levee embankment toe or on the river overbank typically above the typical wetted channel) that launches to provide flood protection where erosion occurs.

Launchable toe is stack revetment placed at the waterward face of the planting or along the riverbank near the riverbank toe to address vertical scour. It is also used to support planting benches and the establishment of vegetation. Planting benches would be filled with soil and filled burlap sandbags and coir fabric. Along the lower bench, instream woody material consisting of whole trees with intact root wads would be installed to increase the roughness of the bench and to provide juvenile salmonid rearing habitat. Minimizing the area of wooded vegetation and number of trees that would be impacted was a primary consideration throughout the design process.

Tie backs are revetment placed perpendicular to the river that impedes erosion from spreading further. Buried rock tiebacks are placed on their own and installed underground. Planting bench tie backs are placed within planting benches and are spaced intermittently.

Temporary and permanent ramps would be used for the construction of the Project and for operation and maintenance activities. Construction at the north sites would obstruct the Jedediah Smith Memorial Trail. Safe trail detours would be provided either within the Project footprint or in the American River Parkway outside of the Project footprint. An equestrian trail and University Park would also be closed during construction at these sites. A non-paved trail at the levee toe and the patrol road on the top of the levee within the south site is routinely used by recreationalists and would be closed during construction. Detours in this area would be designed in consultation with County Parks. Many parks would be impacted for staging and site access; however, the required ratio of parkland to population set by local

governments would not significantly change due to these closures. Construction of the Project is estimated to take two years to complete.

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:

The CVFPB applied for a General Lease – Public Agency Use for the construction and use of the Project. The Applicant is responsible for ensuring that the levee is maintained in a manner that reduces the risk of flooding and works in partnership with the USACE, California Department of Water Resources (DWR), and the Sacramento Area Flood Control Agency (SAFCA). The high risk of flooding from levee failure threatens public safety, property, and critical infrastructure. Multiple erosion control measures are planned to allow conveyance of the 200-year flood flow without risk of levee failure.

The Applicant has requested a 49-year lease term for various reasons, the most pertinent being that the USACE requires that the Applicant have control over the land for the life of the project, anticipated for over 50 years. Given that the Commission is not able to lease lands for more than 49-years, nor alienate sovereign Public Trust Lands, a 49-year lease is proposed as a compromise that best satisfies federal requirements for the Project.

While the proposed project will temporarily impact Public Trust uses while under construction, the Applicant has agreed to limit such impacts to the extent necessary to protect the public health and safety during the construction activity. Given the overall public value of this project, staff believe the proposed Project does not constitute an unreasonable interference with the Public Trust uses at this time and is in the best interests of the State. The Project's purpose is to provide enhanced levee erosion protection, protecting the public and Public Trust resources from potential flooding while preserving public access along the levee to the extent feasible and safe during the construction.

The proposed lease 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.

CLIMATE CHANGE:

INTRODUCTION:

The climate crisis is impacting California now. Likely impacts to the lease premises include, but are not limited to prolonged drought, extreme heat, lower streamflow, runoff and river levels, as well as changes to the intensity and timing of precipitation events. These impacts can exacerbate natural hydrological processes such as erosion, scour, and sedimentation. These impacts may affect the existing levee system subject to the proposed lease, located on the American River, Sacramento County.

DATA & PROJECTIONS:

The changing climate is affecting California's weather patterns, leading to more severe droughts and floods. Warmer temperatures have led California to experience a megadrought from 2000 to 2022, measured as the driest 22 years in the past 1200 years, and more megadroughts are projected through the end of the century (Fifth National Climate Change Assessment: Southwest Region, 2023). Sustained droughts reduce streamflow and river levels due to increased evaporation, declines in snowpack volumes, higher-elevation snow lines, earlier snowmelt, and reduced overall runoff. These changes are pronounced in the Sierra Nevada, where the headwaters to many of the state's rivers are located. It is projected that temperatures in the Sierra Nevada will increase by six to ten degrees Fahrenheit on average by the end of the century, and the snowline will move 1,500 to 3,000 feet higher in elevation. It is projected that by 2100, the annual Sierra Nevada snowpack, a critical source of water supply to rivers, will decrease from today's average by 60 percent. Rivers will be drawn down farther as temperatures continue to rise and demand for water increases. Despite the region's increasing aridity, flooding from extreme precipitation events is projected to increase, attributed to earlier snowmelt, and more intense and frequent atmospheric rivers.

ANALYSIS:

The lease premises is likely to experience more extreme conditions over the lease term than in the past, due to climate change. Changes to the timing and amount of runoff from the higher elevations of the watershed will result in higher flood risks.

Bank stability may be compromised due to increased channel erosion and undercutting from more intense precipitation and floods.

The proposed Project would install levee improvements on the left and right bank of the American River to prevent erosion and possible levee failure, and to continue to protect the adjacent open space areas and commercial and residential neighborhoods against scour and erosion during high flows. Activities would include installing launchable rock-toe and launchable trench bank protection, soil-filled levee embankments and revetments, and nature-based solutions such as riparian planting benches and instream woody debris, to prevent erosion and provide habitat along the American River. Activities on State Lands would be short-term and consist of in-water work to improve existing facilities and reduce the potential of future impacts from climate change.

RECOMMENDATION:

Regular maintenance, as referenced in the lease, may reduce the likelihood of severe structural degradation. Any future construction or activities on State land would require a separate authorization from the Commission. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland are located in an area that may be subject to the effects of climate change.

CONCLUSION:

For all the reasons above, staff believe the issuance of this lease will not substantially interfere with Public Trust needs at this location, at this time, and for the term of the proposed lease; 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 also has no right to a new lease or to renewal of any previous lease.
2. This action is consistent with the "Leading Climate Activism", "Meeting Evolving Public Trust Needs", and "Committing to Collaborative Leadership" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.

3. An Environmental Impact Report (EIR) and a Subsequent EIR, State Clearinghouse No. 2005072046, were prepared for this Project by CVFPB and certified on June 9, 2016, and July 18, 2025, respectively. As part of its project approvals, CVFPB made a Statement of Facts and Findings and Statement of Overriding Considerations for the American River Watershed Common Features 2016 Project, Flood Risk Management Project (Erosion Contract 3B) and adopted Mitigation Monitoring and Reporting Programs.

   Staff has reviewed these documents and prepared an independent Mitigation Monitoring Program (MMP) (attached, Exhibit A) that incorporates the CVFPB documents. Staff recommends adoption of Exhibit A by the Commission. Staff also prepared Findings made in conformance with the California Environmental Quality Act (CEQA) Guidelines (Cal. Code Regs., tit. 14, §§ 15091, 15096), contained in the attached Exhibit B.

   Staff determined that 13 potential resource areas would have impacts that are less than significant with implementation of mitigation measures. Staff also identified in the Findings that, despite the implementation of all applicable measures, the project could cause potentially significant impacts to transportation and circulation, recreation, aesthetics and visual resources, air quality, noise and vibration, and vegetation and wildlife from the removal of riparian vegetation to construct levee improvements and construction activities (including the use of construction ramps) which would require the temporary closure of recreational facilities and trails along the American River. Staff prepared a Statement of Overriding Considerations made pursuant to the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15093) that balances the benefits of the project against its unavoidable impacts and finds that the potential impacts are acceptable in light of the project benefits. Staff recommends the Commission adopt the Findings and Statement of Overriding Considerations contained in the attached Exhibit B.

4. 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 participation from the agency nominating such lands through the CEQA review and permitting process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

- Central Valley Regional Water Quality Control Board
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- State Historic Preservation Office
- National Park Service
- Sacramento Metropolitan Air Quality Management District

EXHIBITS:

A. Mitigation Monitoring Program

B. Statement of Findings and Statement of Overriding Considerations

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an EIR and a Subsequent EIR, State Clearinghouse No. 2005072046, were prepared for this project by the Central Valley Flood Protection Board and certified on June 9, 2016, and July 18, 2025, respectively, and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the lease to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact have occurred; and, therefore no additional CEQA analysis is required.

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

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

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

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not cause an unreasonable interference with the public rights to navigation, fishing, and commerce or substantially interfere with Public Trust needs and values at this location, at this time, and for the 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:

1. Authorize issuance of a General Lease – Public Agency Use to the Applicant, beginning June 23, 2026, for a term of 49 years, for the construction and use of launchable rock toe, launchable trench, tie backs, planting bench, instream woody material, ramps; bank protection including soil filled revetment, soil filled levee embankment, and soil filled riverbank revetment; and temporary use of construction ramps; consideration being the public use and benefit, with the State reserving the right, at any time, to set a monetary rent as specified in the lease if the Commission finds such action to be in the State's best interests.
2. Authorize the Executive Officer or designee to replace exhibits in the lease upon submission, review, and approval of as-built plans detailing the final location of the new improvements, and to remove the temporary construction area, following construction.

EXHIBIT A

CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM
American River Watershed Common Features 2016 Project, Flood Risk Management Project (Erosion Contract 3B)
(A4794, State Clearinghouse No. 2005072046)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the American River Watershed Common Features 2016 Project, Flood Risk Management Project (Erosion Contract 3B) (Project). The CEQA lead agency for the Project is the Central Valley Flood Protection Board (CVFPB).

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 an 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). CEQA Guidelines section 15097, subdivision (a), states in part:

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

The lead agency certified an Environmental Impact Statement (EIS)/EIR, State Clearinghouse No. 2005072046, on June 9, 2016; certified a Final Supplemental EIS/ Subsequent EIR on July 18, 2025; adopted a Mitigation Monitoring and Reporting Program (MMRP) for the whole of the Project (see Exhibit A, Attachment A-1); and remains responsible for ensuring that implementation of the measures occurs in accordance with its program. The Commission's action and authority as a

responsible agency apply only to the measures listed in Table A-1 below. The full text of each measure, as set forth in the MMRP prepared by the CEQA lead agency and provided in Attachment A-1, is incorporated by reference in this Exhibit A.

Table A-1. Project Impacts and Applicable Measures

Potential Impact	**Mitigation Measure (MM) or Avoidance Minimization Measure (AMM)[1]**
2.1-a	MM TRANS-1
2.2-c	MM REC-1, MM VEG-2
2.4-b	MM GEO-1, MM WQ-1, MM VEG-1, MM VEG-2
3.1-a, 3.1-c	MM VEG-2
3.1-d	MM VIS-1, MM VIS-2
3.2-b	MM GEO-1
3.4-a	MM GEO-1, MM WATERS-1, MM WQ-1
3.5-a, 3.5-b	MM AIR-1 through MM AIR-5
3.6-a, 3.6-b	MM GHG-1
3.7-a, 3.7-b	MM NOI-1
3.8-b	AMM HAZ-1
4.1-a, 4.1-b	MM VEG-1, MM VEG-2, MM VIS-2, MM BIRD-1
4.1-c	MM VEG-1, MM VEG-2
4.1-d	MM WATERS-1
4.1-e	MM VEG-2
4.2-a, 4.2-b	MM FISH-1 through MM FISH-3, MM WATERS-1, MM WQ-1, MM GEO-1
4.3-a	MM BADGER-1, MM VEG-1, MM VEG-2, MM BAT-1, MM BEE-1, MM VELB-1, MM GEO-1, MM WQ-1, MM BIRD-1, MM BUOW-1, MM PLANT-1
5.1-b	MM CR-1 through MM CR-5
5.1-c	MM CR-6
5.1-d	MM CR-1 through MM CR-5

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

ATTACHMENT A-1

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

Central Valley Flood Protection Board

Mitigation Monitoring and Reporting Program

American River Common Features, 2016 Flood Risk Management Project

State Clearinghouse Number
2005072046

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

Contact:
Josh Brown, Senior Environmental Scientist - Supervisor
Environmental Support Unit
Department of Water Resources
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July 2025

Abbreviations and Acronyms

Abbreviation or Acronym	Definition
ARCF	American River Watershed Common Features
ATV	All-terrain vehicle
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
BO	Biological Opinion
CAPCOA	California Air Pollution Control Officers Association’
CARB	California Air Resources Board
Caltrans	California Department of Transportation
CCR	Code of California Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CRHR	California Register of Historic Resources
CVFPB	Central Valley Flood Protection Board
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
EIS	Environmental Impact Statement
EIR	Environmental Impact Report
ESA	Endangered Species Act
FHAST	Fish Habitat Assessment and Simulation Model
GHG	Greenhouse gas
GRR	General Reevaluation Report
HPMP	Historic Properties Management Plan
HPTP	Historic Properties Treatment Plan
HTRW	Hazardous, Toxic or Reactive Wastes

Abbreviation or Acronym	Definition
I-	Interstate
LTGO	Limited Threat General Order
MLD	Most Likely Descendent
MMRP	Mitigation, Monitoring, and Reporting Program
mph	Miles per hour
NAHC	Native American Heritage Center
NMFS	National Marine Fisheries Service
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
OHWM	Ordinary High Water Mark
O&M	Operations and Maintenance
PA	Programmatic Agreement
PM	Particulate matter
PM10	Particulate matter 10 microns or less in diameter
PPV	Peak particle velocity
PRC	Public Resources Code
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Officer
SMAQMD	Sacramento Metropolitan Air Quality Management District
SPCCP	Spill Prevention Control and Countermeasures Plan
SR	State Route
SRA	Shaded Riverine
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
VELB	Valley elderberry longhorn beetle

MITIGATION MONITORING AND REPORTING PROGRAM
American River Common Features 2016, Flood Risk Management Project

Public Resources Code Section 21081.6(a) and the California Environmental Quality act (CEQA) California Code of Regulations (CCR), Title 14, Section 15097 require that public agencies adopt a program for monitoring or reporting on the revisions which it has required in the project and measures it has imposed to mitigate or avoid significant environmental effects of the project. This program is required to be adopted when the public agency is making required findings after consideration of the final environmental document (Public Resources Code Section 21081.6 and CEQA CCR, Title 14, Section 15091).

This Mitigation Monitoring and Reporting Program (MMRP) was prepared in accordance with the California Public Resources Code Section 21081.6 (a) and CEQA Guidelines under CCR, Title 14, Section 15097 for the American River Common Features, 2016 Flood Risk Management Project (Flood Risk Management Project). This MMRP identifies the action being monitored, responsible party for implementation, the schedule for implementation, and the mechanism that verifies that monitoring is complete. For purposes of this document, Project Partners refers to the U.S. Army Corps of Engineers (USACE), the Central Valley Flood Protection Board (Board/CVFPB), and the Sacramento Area Flood Control Agency (SAFCA). Non-Federal Project Partners refers to the Board and SAFCA.

The MMRP for the project is organized by resource area impacted and includes each mitigation measure as identified in the Final Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR). The MMRP discusses only those impacts for which mitigation has been identified. Each mitigation measure will include its number as designated in the Final SEIS/SEIR, description of the mitigation, timing, responsible party, and monitoring/reporting action as follows:

- **Mitigation Number:** Lists the adopted mitigation measures by number as designated in the Final SEIS/SEIR.
- **Mitigation Measure:** Provides the text of the mitigation measures, each of which has been adopted and incorporated into the Flood Risk Management Project.
- **Implementation Timing:** Identifies the timing of implementation of the action described in the mitigation measures.
- **Responsible for Mitigation:** Identifies the agency/party responsible for implementing the actions described in the mitigation measures.

- **Responsible for Monitoring/Reporting Action:** Identifies the agency/party responsible for monitoring and/or reporting on the implementation of the actions described in the mitigation measures.

Air Quality

AIR-1

Mitigation Measure: Implement the Sacramento Metropolitan Air Quality Management District and Bay Area Air Quality Management District Basic Construction Emission Control Practices.

SMAQMD and BAAQMD require 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 track out 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, and 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 construction sites.
- 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.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners and construction contractor(s)

AIR-2

Mitigation Measure: Implement the Sacramento Metropolitan Air Quality Management District's Enhanced Fugitive PM Dust Control Practices.

SMAQMD recommends that construction projects that will exceed or contribute to the mass emissions threshold for PM_{10} implement the Enhanced Fugitive PM Dust Control Practices, as applicable to the project. As the construction activities for the Proposed Action will involve substantial material movement activities and will be located in proximity of residential receptors, the Project Partners shall require construction contractors to implement the Enhanced Fugitive PM Dust Control Practices listed below to help reduce potential fugitive PM dust emissions.

Soil Disturbance Areas

- Water exposed soil with adequate frequency for continued moist soil; however, do not overwater to the extent that sediment flows off the site.
- Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 miles per hour.
- Plant vegetative ground cover (fast germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.

Unpaved Roads (Entrained Road Dust)

- Install wheel washers for all exiting trucks or wash off all trucks and equipment leaving the site.
- Treat site accesses 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.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners and construction contractor(s)

AIR-3

Mitigation Measure: Implement SMAQMD's Enhanced Exhaust Control Practices and Require Lower Exhaust Emissions for Construction Equipment.

The Project Partners shall require all off-road diesel-powered equipment used during construction to be zero-emission if reasonably available. If not reasonably available, all off-road equipment shall be equipped with Tier 4 Final or cleaner engines, except for specialized construction equipment in which Tier 4 Final engines are not available. In place of Tier 4 Final engines, off-road equipment can incorporate retrofits such that emissions reductions achieved equal or exceed that of a Tier 4 Final engine. All heavy-duty trucks entering the construction sites must be zero-emission if reasonably available. If not reasonably available, on-road heavy duty trucks must be model year 2014 or later and must meet CARB's lowest optional low-NO_x standard. Diesel equipment will be required to use renewable diesel fuel, 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, which will be used an aggregate of 8 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, and the CARB equipment identification number for each piece of equipment. This will include all owned, leased, and subcontracted equipment to be used. 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, or as pre-arranged with SMAQMD, except for any 30-day period in which no construction activity occurs. If no construction occurs for any 30-day period, a notification will be sent to SMAQMD stating that no construction occurred.
- 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 Tier 4 emissions. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- SMAQMD's Construction Mitigation Tool can be used to identify an equipment fleet that achieves this reduction. 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 PM_{10} emissions and mileage traveled by on-road trucks, reporting results to USACE and SMAQMD on a monthly basis.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners and construction contractor(s)

AIR-4

Mitigation Measure: Use the Air District's Off-site Mitigation Fee to Reduce NO_x and PM_{10} Emissions.

The Project Partners shall implement the measures listed below to reduce NO_x and PM_{10} construction-related emissions.

Pursuant to air district thresholds of significance, if the projected construction-related emissions exceed the NO_x and/or PM_{10} thresholds 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 NO_x and PM_{10} 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 for NO_x, USACE 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. (USACE anticipates purchasing offsets for NOx emissions in 2024 and 2026, because the ARCF 2016 Project is forecast to exceed the *de minimis* threshold. Estimated fees for the Proposed Action are $37,350 annually to SMAQMD for emissions in the SVAB.) All mitigation fees shall be paid prior to the start of construction activity to allow air districts to obtain emissions reductions for the proposed project. If there are changes to construction activities (e.g., equipment lists, increased equipment usage or schedules), USACE shall work with SMAQMD and BAAQMD to ensure emission calculations and fees are adjusted appropriately.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

AIR-5

Mitigation Measure: Implement Marine Engine Standards

Project Partners shall require use of Tier 4 marine engines where locally available and feasible. Due to uncertainty as to the availability of Tier 4 marine engines within the required project timeline, the lowest emission marine engines locally available shall be required, either Tier 3 or Tier 2. The Tier 3 standards reflect the application of technologies to reduce engine PM and NO_x emission rates. Tier 4 standards reflect application of high-efficiency catalytic after-treatment technology enabled by the availability of ultra-low sulfur diesel.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

Special Status Species

BADGER-1

Mitigation Measure: Implement Measures to Avoid and Minimize Effects on American Badger.

The Non-Federal Partners will implement the following measures to avoid and minimize effects on American badger.

- The Non-Federal Partners will conduct pre-construction clearance surveys for American badgers. These surveys will be conducted within 14 days of the start of any ground-disturbing activity. If no potential American badger dens are present, no further mitigation is necessary.
- If a potential American badger den is discovered but deemed inactive, the qualified biologist will excavate the den during the initial clearance survey to prevent badgers from reoccupying the den during the construction period.
- If found to be present, occupied badger dens will be flagged and ground disturbing activities will be avoided within 50 feet of an occupied den. Maternity dens will be avoided during pup-rearing season (February 15 through July 1) and a minimum 200-foot buffer will be established.
- If avoidance of a non-maternity den is not feasible, badgers will be relocated by carefully evacuating the burrow (either by hand or using mechanized

equipment, under the direct supervision of a qualified biologist) before or after the rearing season (February 15 through July 1). Any relocation of badgers will be coordinated with CDFW.

Implementation Timing: Before and during construction

Responsible for Mitigation: Non-Federal Partners

BAT-1

Mitigation Measure: Implement Measures to Protect Maternity Roosts of Special-Status Bats.

The Non-Federal Partners will implement the following measures to avoid and minimize effects on special-status bats:

- Wherever feasible, USACE will conduct construction activities outside of the pupping season for bats (generally April 1 to August 31).
- Project Partners or their designated environmental personnel will identify trees slated for removal that contain suitable bat roosting habitat. Trees indicated for removal that are not identified as suitable bat habitat can be removed using normal methods.
- Live trees that are indicated to contain roosting habitat shall be removed in a two-phase process. The first day, under the supervision of the biological monitor, remove limbs and branches that do not contain cavities, cracks, crevices, or deep bark fissures that can provide roosting habitat. On the second day remove the remainder of tree by gently lowering the tree to the ground, under the supervision of the biological monitor and leave material undisturbed for 48 hours. If it is not feasible to remove a tree using the two-phased approach, limbs containing habitat features should be removed and gently lowered to the ground in a location where they are not likely to be crushed or disturbed by the felling of the tree and left undisturbed for the next 48 hours.
- Standing dead trees or snags with habitat features should be removed over a single day by gently lowering the tree or snag to the ground. The tree or snag should be left undisturbed on the site for the next 48 hours.
- For trees containing suitable bat roosting habitat that will be trimmed, trimming shall be conducted in the presence of a biological monitor. If trimming results in the removal of vegetation that contains potential bat habitat, vegetation should be gently lowered to the ground and left near the tree for 48 hours prior to removal, if feasible. If the vegetation cannot be left for 48 hours, the biological monitor shall survey the vegetation for presence of

bats. If any bats are found within the vegetation, the vegetation must be left for 48 hours.

- 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 biological monitor for the presence of features that may function as special-status bat maternity roosting habitat. Trees that do not contain potential special-status maternity roosting habitat may be removed. For trees that contain suitable special-status bat maternity roosting habitat, surveys for active maternity roosts shall be conducted by the designated biological monitor in trees designated for removal. The surveys shall be conducted from dusk until dark.
- If any special-status species bat maternity roost is located, appropriate buffers must be established by clearly marking the buffer area. The buffer area must be a minimum of 100 feet outside the tree containing the maternity roost. No contract activities shall commence within the buffer areas until the end of pupping season (September 1) or the biological monitor confirms that the maternity roost is no longer active.
- If construction activities must occur within the buffer, the biological monitor must monitor activities either continuously or periodically during the work, which will be determined by the biological monitor. The biological monitor will be empowered to stop activities that, in their opinion, may cause roost failure. If construction activities are stopped, the biological monitor will inform USACE, and activities will only resume in the buffer if the biologist determines they will not cause roost failure.

Implementation Timing: Before and during construction.

Responsible for Mitigation: Non-Federal Partners.

BEE-1

Mitigation Measure: Implement Measures to Avoid and Minimize Effects on Crotch's Bumble Bee.

To avoid and minimize effects on Crotch's bumble bee, the Project Partners will implement the following measures:

- A qualified biologist knowledgeable about the biology, habitat use, plant use, and identification of Crotch’s bumble bee (and identification of similar bumble bee species) shall conduct a habitat assessment before project activities commence to determine if floral resources used by Crotch’s bumble bee for nectar and/or pollen and potential nesting sites are present in the Project

Area. The biologist shall conduct a site visit during the colony active period (generally April through August) to observe potential floral resources, nesting sites, and overwintering refugia, and assess the diversity and percent cover of blooming plants and general plant diversity.

- Prior to project-related ground-disturbing activities and/or activities involving removal of vegetation or debris (excluding pruning, limb removal, and overhead trimming), the qualified biologist shall conduct a single visual survey during the colony active period (generally April 1 through August 31) in areas identified as suitable habitat. Surveys shall occur no more than 14 days prior to ground-disturbing and/or vegetation removal activities. A new survey shall be conducted at the beginning of the survey period in each year that project activities (including operations and maintenance) involving ground disturbance or vegetation removal will occur unless such activities commence prior to April. Surveys shall be conducted in accordance with 2023 CDFW Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Surveys shall include visual encounters only, with identification aided by photographs. Surveyors shall not capture or handle bumble bees unless authorized by CDFW. Bumble bees may only be netted, chilled, and photographed for identification purposes if the biologist is authorized by a Memorandum of Understanding in accordance with CFGC Section 2081(a).
- If Crotch's bumble bee adults are detected during the habitat assessment or surveys described above, or incidentally later in the season, a biological monitor shall monitor project activities involving ground disturbance or vegetation removal in the areas the adults were observed until the adults are no longer present onsite. A 25- foot no-work buffer shall be implemented around Crotch's bumble bees not nesting within the area. Biological monitoring shall continue until the individual leaves the area on its own.
- If a Crotch's bumble bee nest is detected, a 50- foot no-disturbance buffer shall be implemented around the nest until a qualified biologist determines the nest is no longer active. A biological monitor shall monitor the nest long enough to determine the buffer is effective in protecting the nest (i.e., the nest is not getting disturbed, and the contractor is aware of the prohibited work area). The buffer shall be increased if observations indicate a larger buffer is warranted. The buffer shall only be reduced if a qualified biologist determines a smaller buffer distance will be adequate to avoid nest disturbance.
- If foraging Crotch's bumble bees are present but a nest has not been found, floral resources and other vegetation in the project area may be carefully removed, under guidance of a qualified biologist. Floral resources shall be

removed with a biological monitor present and with hand-held tools, such as weed-whackers. Vegetation removal shall occur during suitable weather conditions for bees to be flying.

- If Crotch's bumble bee activity continues at a location after floral resources have been removed, a nest may be present and a second focused survey for active nests shall be conducted.

Implementation Timing: Before and during construction

Responsible for Mitigation: Non-Federal Partners

BIRD-1

Mitigation Measure: Avoid and Minimize Effects on Nesting Birds

Project Partners will implement the following measures to minimize potential effects on active nests of Swainson's hawk, white-tailed kite, bank swallow, purple martin, and other migratory birds:

- Before on-site project activities begin each year, all construction personnel will participate in a worker environmental awareness program. A qualified biologist will inform all construction personnel about the life history of Swainson's hawk and other nesting birds and the importance of nest sites.
- 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 to August 31, depending on the species and environmental conditions for any given year) to the maximum extent feasible.
- If vegetation removal will occur during the nesting season, surveys will be conducted to identify active bird nests and measures will be implemented to avoid and minimize impacts on active nests. For special-status species, a survey will also be conducted for active nests within 500 feet of construction activities. For all other migratory birds, the survey will cover active nests within 100 feet of construction activities. All surveys will be completed using the latest techniques and protocols. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removing or pruning trees and shrubs, can commence.
- For any active bird nest found, regardless of the season, a protective buffer will be established and implemented until the nest is no longer active. The size of the buffer will 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 will 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.

- For bald eagle, the typical maximum buffer distance between a bald eagle nest and construction activities is 660 feet (USFWS, 2007). If any bald eagle nests are discovered during the field surveys, regardless of whether a nest is classified as active, inactive/alternate, or abandoned, the Project will comply with the National Bald Eagle Management Guidelines (USFWS 2007).
- For bank swallow, if avoidance of bank swallow nests is not feasible, design measures to minimize impacts, including reducing the construction footprint to protect the upper bank from encroachment, will be considered. If nesting habitat is directly impacted, mitigation will include removal of existing rock at a former bank protection site, acquisition of a permanent easement, and/or participation in a conservation easement on an appropriate landform.
- For purple martin and white-tailed kite, a survey will also be conducted for active nests within 500 feet of construction activities. These surveys could be conducted concurrent with Swainson's hawk surveys, so long as one survey is conducted no more than 48 hours from the initiation of construction activities. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removing or pruning trees and shrubs, can commence.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

BUOW-1

Mitigation Measure: Implement Measures to Protect Burrowing Owl.

The Project Partners will implement the following measures to reduce effects on burrowing owl:

- Prior to the implementation of construction, surveys will be conducted to determine the presence of burrows or signs of burrowing owl at project sites that provide suitable habitat. A habitat assessment and any proceeding surveys will be conducted in accordance with Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFG 2012).
- If burrowing owls are observed, coordination with the California Department of Fish and Wildlife (CDFW) will be initiated regarding impact avoidance and minimization measures to be implemented. At a minimum, these measures will include implementing protective buffers around occupied burrows during the duration of the breeding/juvenile rearing season and biological monitoring

of active burrows, per the 2012 Staff Report on Burrowing Owl Mitigation, to ensure that construction activities do not result in adverse effects on nesting burrowing owls. To the extent feasible, destruction of occupied burrows will also be avoided outside the nesting season.

- If burrows known to be occupied at least seasonally by burrowing owls are within the project footprint and burrow destruction cannot be avoided, an exclusion plan will be developed and implemented in coordination with CDFW. Exclusion will not be conducted during the breeding season, unless a qualified biologist verifies through noninvasive means that either (1) the birds have not begun egg laying or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- If exclusion is conducted, each occupied burrow that is destroyed will be replaced with at least one artificial burrow on a suitable portion of the project site that will not be subject to project impacts or O&M activities that could adversely affect burrowing owl. Artificial burrows will be installed within 330 feet of the destroyed occupied burrow(s) and within suitable foraging habitat. Monitoring will be conducted to determine if artificial burrows are occupied followed exclusion from and destruction of the occupied burrow.
- If occupied or suitable burrows are present, all on-site construction personnel will be instructed on the potential presence of burrowing owls, identification of these owls and their habitat, and the importance of minimizing impacts on burrowing owls and their habitat.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

GGS-1

Mitigation Measure: Implement Measures to Avoid, Minimize and Compensate Impacts on Giant Garter Snake.

If the project is implemented, USACE will implement the following measures to minimize effects on giant garter snakes and habitat that occurs within 200 feet of any construction activity. These measures are based on USFWS guidelines for restoration and standard avoidance measures included as appendices in USFWS (1997):

- Unless approved otherwise by USFWS, construction will be initiated only during the giant garter snakes' active period (May 1–October 1, when they are able to move away from disturbance).
- Construction personnel will participate in USFWS-approved worker environmental awareness program.

- Giant garter snake survey will be conducted 24 hours prior to construction in potential habitat. Should there be any interruption in work for greater than 2 weeks, a biologist will survey the project area again no later than 24 hours prior to the restart of work.
- Giant garter snakes encountered during construction activities will be allowed to move away from construction activities on their own.
- Movement of heavy equipment to and from the construction site will be restricted to established roadways. Stockpiling of construction materials will be restricted to designated staging areas, which will be located more than 200 feet away from giant garter snake aquatic habitat.
- Giant garter snake habitat within 200 feet of construction activities will be designated as an environmentally sensitive area and delineated with signs or appropriate fencing. This area will be avoided by all construction personnel.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

MONARCH-1

Mitigation Measure: Implement Measures to Avoid and Minimize Effects on Monarch Butterfly.

To avoid and minimize effects on monarch butterfly, the Project Partners will implement the following measures, where feasible, for construction and O&M activities that occur within 100 feet of milkweed plants (*Asclepias* spp.) to avoid or minimize disturbances and impacts to monarch butterflies:

- Before construction activities a qualified biologist will conduct preconstruction surveys for milkweed (*Asclepias* spp.). Flag and fence existing milkweed patches, when feasible, and avoid mowing or removing them, during the monarch breeding season in the Central Valley from March 15 to October 31 (Xerces Society 2018), to conserve milkweed plants and avoid causing direct mortality to immature stages of monarchs.
- A 2-foot buffer will be maintained around milkweed plants during project construction to protect breeding habitat.
- Include USFWS recommended pollinator plants into mitigation site planting plans, when possible. Pollinator plants may need to be introduced into mitigation site planting plans after invasive and exotic weeds have been controlled. Several years of weed control efforts may be necessary to reach a satisfactory level of control prior to planting pollinator plants.

- All newly planted milkweed will be regionally native and preferably of the same species removed.

Mowing

- Train mower operators to recognize milkweed plants and important native nectar plants to reduce accidental mowing.
- Do not cut or mow milkweed during the monarch breeding season in the Central Valley from March 15 to October 31 (Xerces Society 2018)
- Limit mowing to no more than twice per year. Generally, fall mowing after the first frost is ideal to avoid mowing floral resources and host. In mitigation sites mowing limits may be delayed until exotic and invasive weeds are sufficiently controlled. This may take several years of intensive weed control.
- If mowing must occur during monarch breeding season, delay mowing to as late as possible (late summer or early fall) to provide a longer period for monarch caterpillars to develop and extend availability of nectar plants to monarchs and other pollinators into the late summer.

Weed Control

- No herbicide application will take place within 50 feet of occupied monarch habitat (including milkweed) when monarchs are present (adults or larvae), generally March 15 through October 31. If herbicide application must occur within 50 feet of occupied monarch habitat, then application will only be conducted using targeted spraying, cut stump, and wiping by a Service-approved biologist and will be no closer than 2 feet.
- Actively unoccupied growing milkweed will be avoided by a minimum of 2 feet during the application of herbicides (target spray, cut stump, wiping and wicking). Herbicide application within 50 feet of a milkweed plant will be conducted spray equipment equipped with low-pressure fan type nozzles to reduce the risk of drift.
- No broadleaf selective herbicide application will take place within 100 feet of occupied monarch habitat when wind speeds exceed 10 mph, or temperatures exceed 85°F to minimize potential for drift and volatilization.
- No persistent or pre-emergent herbicides will be used within 100 feet of milkweed or other occupied monarch habitats (e.g., roosting sites).
- Milkweed numbers and species will be assessed in project areas where impacts to milkweed may occur due to activities such as ATV access and herbicide application.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

TURTLE-1

Mitigation Measure: Implement Measures to Protect Northwestern Pond Turtle

The mitigation measure previously identified for northwestern Pond turtle and adopted for the ARCF 2016 Project has been augmented to address nesting sites. The Project Partners will implement the following measures, to avoid and minimize effects on northwestern Pond turtle:

- Ground disturbance (including vegetation removal) in suitable upland habitat within 500 feet of aquatic habitat for northwestern pond turtle will be minimized, to greatest extent feasible. The target period for vegetation removal in these areas will be mid-April to mid-May) when potential for turtle strikes and direct impacts are lowest, if practical with combined seasonal limitations on construction (e.g., nesting birds, VELB, flood season, etc.).
- The following measures may be implemented, where feasible, to minimize potential for heavy equipment to destroy northwestern pond turtle nests and to encounter hatchling turtles.
    - Placing artificial ground cover that prevents female turtles from excavating nests in most likely nesting areas where construction activities will occur before the following hatchling turtle emergence period.
    - Fencing most likely nesting areas to exclude access by female turtles and/or enclose hatchlings after emergence. If active nests and hatchlings may be present, the fenced area will be inspected daily by a qualified biologist and hatchling turtles will be captured and relocated to suitable habitat at a pre-determined location.
- A qualified biologist will conduct preconstruction surveys.
- A qualified biologist will be present during initial ground disturbance and in-water work to search for western pond turtles and minimize encounters with heavy equipment.
- If northwestern pond turtles or nests are observed on land within the construction footprint during project activities, work will stop within approximately 200 feet of the turtle, and a qualified biologist will be notified immediately. If possible, the turtle will be allowed to leave on its own and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the turtle is not harmed.

Alternatively, with prior CDFW approval, the qualified biologist may capture and relocate the turtle unharmed to suitable habitat at a pre-determined location.

- If a northwestern pond turtle nest is unintentionally uncovered during project activities, work will stop in the vicinity of the nest and will appropriate next steps, depending on the circumstances, will be determined by a qualified biologist. These may include fencing and buffering the nest and/or rescue, rehabilitation, and relocation of affected turtles.

Implementation Timing: Before and during construction

Responsible for Mitigation: Non-Federal Project Partners

VELB-1

Mitigation Measure: Implement Current USFWS Avoidance, Minimization, and Compensation Measures for Valley Elderberry Longhorn Beetle.

The mitigation for O&M impacts will be offset by developing off-site mitigation sites designed in accordance with the 2017 VELB Framework (USFWS 2017). In addition, each year the local maintaining agencies will document the amount of VELB habitat trimmed and report that number to USACE to ensure compliance with the USFWS Biological Opinion (BO). If the local maintaining agencies need to exceed the amount of VELB habitat which needs to be trimmed or affected due to routine maintenance, then they will request USACE reinitiate consultation on the USFWS BO for those actions.

The Project Partners will implement the following measures in accordance with the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017) to reduce effects on valley elderberry longhorn beetle:

- Fencing. All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible.
- Avoidance area. To the extent feasible, activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) will be avoided within 20 feet from the drip-line of the shrub, depending on the type of activity.
- Worker education. A qualified biologist will 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 will 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 will be conducted outside of the valley elderberry longhorn beetle flight season (March to July).
- Trimming. To the extent feasible, elderberry shrub trimming will 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 will not be used within the drip-line, and insecticides will not be used within 100 feet of an elderberry shrub. All chemicals will be applied using a backpack sprayer or similar direct application method.
- Mowing. Weed removal with machinery within the drip-line of elderberry shrubs will be limited to the season when adults are not active (August to February) and will avoid damaging the shrub.
- Transplanting. To the extent feasible, elderberry shrubs will be transplanted when the shrubs are dormant (November through the first 2 weeks in February) and after they have lost their leaves. Exit-hole surveys will be completed immediately before transplanting. A qualified biologist will be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.
- Compensation. Effects will 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. Mitigation can include onsite restoration, in-lieu fee payment, off-site mitigation and/or purchase of mitigation credits from a resource agency approved mitigation bank. Mitigation as required in accordance with the Endangered Species Act consultation with USFWS, may be applied to satisfy the compensation standard.

Implementation Timing: Before and during, and after construction

Responsible for Mitigation: Before and during Construction Project Partners; During O&M Phase Non-Federal Partners

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SHRIMP-1

Mitigation Measure: Implement Measures to Avoid and Minimize Effects on Vernal Pool Fairy Shrimp and Tadpole Shrimp.

The following measures, from the 2004 Biological Opinion from the Magpie Creek Flood Control Project as stated on page 185 of the ARCF GRR Final EIS/EIR, will be

implemented to avoid and minimize impacts to vernal pool fairy shrimp and vernal pool tadpole shrimp in the vicinity of the Magpie Creek Project construction area.

- Preservation component: For every acre of habitat directly or indirectly affected, at least two vernal pool credits will be dedicated within a Service-approved ecosystem preservation bank or, based on Service evaluation of site-specific conservation values, three acres of vernal pool habitat may be preserved on the project site or another nonbank site as approved by the Service.
- Creation component: For every acre of habitat directly affected, at least one vernal pool creation credit will be dedicated within a Service-approved habitat creation bank or, based on Service evaluation of site-specific conservation values, two acres of vernal pool habitat will be created and monitored on the project site or another non-bank site as approved by the Service.
- Listed vernal pool crustacean habitat and associated uplands utilized as on-site compensation will be protected from adverse effects and managed in perpetuity or until the Corps, the applicant, and the Service agree on a process to exchange such areas for credits within a Service-approved conservation banking system. Off-site conservation at a Service-approved non-bank location will be protected and managed in perpetuity through a Service approved conservation easement, Service-approved management plan, and a sufficient endowment fund to manage the site in perpetuity in accordance with the management plan.
- If habitat is avoided (preserved) on site, then a Service-approved biologist (monitor) will inspect any construction-related activities at the proposed project site to ensure that no unnecessary take of listed species or destruction of their habitat occurs. The biologist will have the authority to stop all activities that may result in such take or destruction until appropriate corrective measures have been completed. The biologist also will be required to immediately report any unauthorized impacts to the Service and the California Department of Fish and Game.
- Adequate fencing will be placed and maintained around any avoided (preserved) vernal pool habitat to prevent impacts from vehicles.
- All on-site construction personnel will receive instruction regarding the presence of listed species and the importance of avoiding impacts to these species and their habitat.
- The applicant will ensure that activities that are inconsistent with the maintenance of the suitability of remaining habitat and associated on-site watershed are prohibited. This includes, but is not limited to: (i) alteration of

existing topography or any other alteration or uses for any purposes, including the exploration for or development of mineral extraction; (ii) placement of any new structures on these parcels; (iii) dumping, burning, and/or burying of rubbish, garbage, or any other wastes or fill materials; (iv) building of any new roads or trails; (v) killing, removal, alteration, or replacement of any existing native vegetation; (vi) placement of storm water drains; (vii) fire protection activities not required to protect existing structures at the project site; and (viii) use of pesticides or other toxic chemicals.

- Prior to any earth-moving activities at the proposed project site, the Project Partners shall purchase vernal pool preservation credits within a Service-approved ecosystem preservation bank or fund account.

Implementation Timing: Before construction.

Responsible for Mitigation: Project Partners.

PLANT-1

Mitigation Measure: Implement Measures to Protect Special-Status Plants

The Non-Federal Partners will implement the following measures, to avoid and minimize effects on special-status plants:

- 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, which will likely be during the blooming period.
- The botanists will conduct a floristic survey that follows the CDFW botanical survey guidelines (California Department of Fish and Wildlife 2018). All plant species observed will be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions.
- If special-status plant species are found during preconstruction surveys, Project Partners will redesign or modify proposed project components, if necessary, to avoid indirect or direct effects on special-status plants to the extent feasible.
- If the plants are found during construction 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 direct impacts cannot be avoided, the plants (including their root balls or rhizomes if applicable) may be transplanted to an appropriate location under the supervision of a qualified biologist or landscape architect, if the species is known to transplant effectively. The qualified biologist or landscape architect will coordinate with CDFW regarding transplantation techniques and locations prior to implementation of transplantation efforts.

Implementation Timing: Before and during construction

Responsible for Mitigation: Non-Federal Partners

Cultural

CR-1

Mitigation Measure: Resolve Adverse Effects through Programmatic Agreement and Historic Properties Treatment Plan (HPTP).

For Historic Properties which will be adversely affected by implementation of the MCP, American River Erosion Contract 3B North and South, American River Erosion Contract 4B, and American River Contract 4A, (pending concurrence of eligibility and finding of effect in the ARCF PA consultation process), USACE will consult with the SHPO and interested Native American Tribes in accordance with the ARCF PA and associated HPMP to develop a HPTP. The HPTP will specify measures that will be implemented to resolve the adverse effects to the Historic Properties and will constitute mitigation for the effects to these resources. USACE will implement the terms described in the HPTP.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

CR-2

Mitigation Measure: Prepare an Archaeological Discovery Plan and an Archaeological Monitoring Plan.

In accordance with the procedures described in Section 9.2 of the ARCF HPMP, a discovery plan will be prepared by USACE and included in the construction contractor's specifications. The discovery plan will specify what actions are required to be taken by the contractor in the event of an archaeological discovery and describe what actions USACE may take in the event of a discovery.

In accordance with the procedures described in Section 9.3.9 of the ARCF HPMP, an archaeological monitoring plan will be developed for the MCP, American River Erosion Contract 3B North and South, American River Erosion Contract 4B, and American River

Contract 4A. This plan will identify the locations of known Historic Properties as well as sensitive areas designated for archaeological monitoring and will include methods and procedures for monitoring and the procedures to be followed in the event of a discovery of archaeological materials.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

CR-3

Mitigation Measure: Conduct Cultural Resources Awareness Training.

In accordance with the procedures described in Section 9.1 of the ARCF HPMP, USACE will require the contractor to provide a cultural 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 will be developed in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (36 CFR Part 61), 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 will be conducted before any project-related construction activities begin in the APE and will 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 will also describe appropriate avoidance and impact minimization measures for cultural resources and Tribal cultural resources that could be located in the APE and will outline what to do and who to contact if any potential cultural resources or Tribal cultural resources are encountered. The training will emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and will discuss appropriate behaviors and responsive actions, consistent with Native American tribal values.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

CR-4

Mitigation Measure: Implement Procedures for Inadvertent Discovery of Cultural Material.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, and building remains); Tribal cultural resources; sacred sites; or landscapes is made at any time during project-related

construction activities, the Project Partners and other interested parties, will develop appropriate protection and avoidance measures where feasible. These procedures will be developed in accordance with the ARCF PA and 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.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

CR-5

Mitigation Measure: In the Event that Tribal Cultural Resources are Discovered Prior to or During Construction, Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.

California Native American Tribes that are traditionally and culturally affiliated with the geographic area in which the project is located may have expertise concerning their Tribal cultural resources (California PRC Section 21080.3.1). As was done during SEIR preparation, culturally affiliated Tribes will be further consulted concerning Tribal cultural resources that may be impacted, if these types of resources are discovered prior to or during construction. Further consultation with culturally affiliated Tribes will focus on identifying measures to avoid or minimize impacts on any such resources discovered during construction. If Tribal cultural resources are identified in the APE prior to or during construction, the following performance standards will 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, the Project Partners will avoid damaging the Tribal Cultural Resource in accordance with California PRC Section 21084.3, if feasible. If CVFPB determines that the project will 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 will 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.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

CR-6

Mitigation Measure: Implement Procedures for Inadvertent Discovery of Human Remains.

To minimize adverse effects from encountering human remains during construction, the Project Partners will implement the following measures:

In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the Project Partners will immediately halt potentially damaging excavation in the area of the burial and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48-hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, the coroner 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, will determine the ultimate treatment and disposition of the remains.

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

- record the site with the NAHC or the appropriate Information Center, and
- record a document with the county in which the property is located.

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

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

Aquatic Resources and Fisheries

FISH-1

Mitigation Measure: Use the Fish Habitat Assessment and Simulation (FHAST) Model to Ground Truth Effects and Mitigation.

Project effects for fish and their associated mitigation will be calculated using the methods outlined in the 2021 NMFS BO, or updated to be consistent with any new NMFS BO should the 2021 version be reinitiated. The FHAST model (NMFS 2024) was developed in coordination with NMFS. FHAST is a publicly available model for estimating effects on levee protection projects and determining habitat mitigation measures for salmonid, sturgeon, and other fish species in the Sacramento River Basin.

The FHAST model may be utilized to ground truth the effects of levee protection and any habitat mitigation measures for the ARCF 2016 Project. Data output from this model will be used to improve analysis, design, and mitigation on future bank protection sites.

Implementation Timing: Model approved March 2024

Responsible for Mitigation: Project Partners

FISH-2

Mitigation Measure: Implement Measures to Avoid, Minimize, and Compensate for Effects on Shaded Riverine Aquatic Habitat.

Project Partners will implement the following avoidance, minimization, and compensation measures:

- 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 at mitigation sites nearby in the Sacramento or American River Basins. Effects on designated critical habitat, SRA habitat, and instream components combined, and the compensation value of replacement habitat will be informed by the methods outlined in NMFS and USFWS BOs.
- USACE will compensate for habitat losses either by constructing off-site mitigation sites, purchase of credits at a NMFS-approved conservation bank, or by implementing a combination of the two, in coordination with NMFS and USFWS. USACE will compensate for lost habitat using the mitigation ratios identified in the NMFS and USFWS BOs. On-site created SRA habitat acreage will also be counted toward offsetting lost SRA habitat.
- As described in the Habitat Mitigation, Monitoring, and Adaptive Management Plan (Appendix I of the ARCF GRR Final EIS/EIR), compensation sites will be monitored, and vegetation will be replaced as necessary based on performance standards described in the plan.

Implementation Timing: Before, during, and after construction

Responsible for Mitigation: Project Partners

FISH-3

Mitigation Measure: Implement Measures to Avoid and Minimize Effects on Listed Fish Species.

To avoid and minimize effects on listed fish species, the following measures will be implemented by the Project Partners:

- In-water construction activities (all activities below the OHWM including placement of rock revetment) will be limited to the work window of July 1 through October 31. The in-water work window (as it applies to the Sacramento River, American River, and Magpie Creek only) could be extended to November 15 with NMFS approval. In addition, NMFS approved an earlier start date of June 1 for earlier contracts that are already under construction, and NMFS would possibly approve this earlier start date for American River Erosion Contract 3B North and South on a case-by-case basis.
- Erosion control measures, or BMPs, will be implemented, including a SWPPP and Water Pollution Control Plan, to minimize the entry of soil or sediment into the American and Sacramento Rivers. 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 stockpile construction materials, such as portable equipment, vehicles, and supplies, at designated construction staging areas and barges.
- USACE will stockpile all liquid chemicals and supplies at a designated impermeable membrane fuel and refueling station with a 110% containment system (container with 10% extra capacity).
- USACE will limit site access to the smallest area possible to minimize disturbance.
- USACE will minimize ground and vegetation disturbance during project construction, and clearly mark project limits, including the boundaries of designated equipment staging areas; ingress and egress corridors; stockpile areas for spoils disposal, soil, and materials; and equipment exclusion zones.
- USACE and construction contractors will observe a 15-mile-per-hour speed limit or less (depending on constraints placed on the project for other natural resources analyzed as part of the Proposed Action) within construction areas for all project-related vehicles, except on County roads and on State and Federal highways.
- USACE will secure or remove litter and debris from the project daily. Such materials or waste will be deposited at an appropriate disposal or storage site.
- USACE will immediately (within 24 hours) clean up and report any spills of hazardous materials to the USFWS, NMFS, and California Department of Fish and Wildlife (CDFW). Any such spills, and the success of the efforts to clean them up, shall also be reported in post-construction compliance reports.

- USACE will screen any water pump intakes prior to project activities, such as irrigation or dewatering, to maintain an approach velocity of 0.2 feet per second or less when working in areas that may support Federally listed fish species.
- USACE will participate in an existing Interagency Working Group to coordinate stakeholder input into future flood risk reduction actions associated with the ARCF 2016 Project.
- 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 implement a 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, objectives, and performance standards 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 effects on listed fish species.
    - The HMMAMP shall include a compensatory mitigation accounting plan to ensure the tracking of compensatory measures associated with future ARCF GRR projects as described in the Proposed Action.
    - USACE will include, as part of the HMMAMP, 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 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 effects where they have occurred or in close proximity. USACE will develop and implement a compensatory mitigation accounting plan and associated monitoring and adaptive management plans for on-site mitigation efforts to ensure the tracking of compensatory measures associated with implementation of the Proposed Action. Monitoring for the establishment of riparian tree and shrub species within shaded riparian aquatic habitat is expected to last approximately 8/10 years, not to exceed 10 years. Establishment success will be based on criteria determined on a site-by-site basis with NMFS. Once the monitoring period is complete, all vegetation maintenance and monitoring will transfer and be the responsibility of the non-Federal sponsor and local maintaining agency. 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 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 consider varying the elevation of planting benches and IWM to accommodate a wide variety of water years and ensure there is ample shoreline habitat in different flow scenarios.
- USACE will minimize the removal of existing vegetation during project-related activities. If needed, removed or disturbed vegetation will be replaced with native riparian vegetation. USACE will also 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.
- USACE will provide a copy of the 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 notification that contractors have been supplied with this information will be provided to NMFS. A NMFS-approved Worker Environmental Awareness Training Program for construction personnel will be conducted by the NMFS-approved biologist for all construction workers before

initiating construction activities. The program will provide workers with information on their responsibilities with regard to Federally listed fish, their critical habitat, an overview of the life-history of all the species, information on take prohibitions, protections afforded these animals under ESA, and an explanation of the relevant terms and conditions of the issued BO. Written documentation of the training will be submitted to NMFS within 30 days of the completion of training.

- USACE will designate a NMFS-approved biologist as the point-of-contact for any contractor who might incidentally take a living, or find a dead, injured, or entrapped threatened or endangered species. This representative will be identified to the employees and contractors during all employee education programs. If lethal take is to occur on any ESA-listed species, USACE and NMFS will be contacted immediately.
- USACE will avoid adverse effects from nighttime construction activities. USACE will use the minimal amount of lighting necessary to safely and effectively illuminate the work areas. USACE will shield and focus lights on work areas and away from the water surface (e.g., Sacramento River), to the maximum extent practicable.
- USACE will monitor turbidity during in-water work activities to ensure levels stay below the allowable thresholds (turbidity measures 1,000 feet downstream of the extent of the site is not to exceed double the upstream of site turbidity measurement). Work will stop if the threshold is exceeded, until turbidity decreases below the threshold and/or activities creating turbidity are altered to reduce turbidity to allowable thresholds.
- USACE will continue to conduct a tagging and monitoring program for previously tagged Green Sturgeon at ARCF 2016 Project sites pre-construction, during construction, and post-construction on the Sacramento River. USACE will conduct telemetry monitoring of Green Sturgeon for 3 years post-construction within the ARCF action area. Monitoring results will be reported annually. This is in coordination with the Green Sturgeon Habitat Mitigation Monitoring Plan. USACE will also conduct telemetry monitoring upstream and downstream of the American River confluence. Monitoring would not be required above the confluence in the American River, as previous and on-going monitoring studies and literature citations have shown no Green Sturgeon documented migrating up the American River. USACE will continue to work in close collaboration with other State and Federal research agencies and academia institutions. This collaboration will assist in the further findings of impacts associated with USACE projects and impacts

to other listed species as they are being monitored by other research partners.

- USACE will identify all habitats containing, or with a substantial possibility of containing, listed terrestrial, wetland, aquatic, and/or plant species in the potentially affected project areas. The project will minimize effects by modifying engineering design to avoid potential effects.
- USACE will install IWM along all projects associated with the ARCF GRR at 40-80 percent shoreline coverage at all seasonal water surface elevations in coordination with the Interagency Working Group or the Bank Protection Working Group, where site engineering allows. The purpose is to maximize the refugia and rearing habitats for juvenile fish.
- USACE will develop a Vegetation Design Deviation for each site in consultation with NMFS to allow for the protection of existing vegetation in place and the planting of new low-risk vegetation on the lower slope of the levee system.
- USACE will provide NMFS a detailed O&M plan for all aspects of the Proposed Action, to ensure all sites are properly managed and the Vegetation Design Deviation allowing vegetation to remain is followed. This plan shall be incorporated into the O&M manual for each site to ensure vegetation removal does not occur in the future.
- USACE will provide NMFS a Long-Term Management Plan outlining the maintenance of all on-site and off-site mitigation. The plan will include performance goals, monitoring plans, replanting plans, and adaptive management plan for how mitigation will be addressed if the mitigation site fails.
- USACE will provide NMFS with a site-specific project description prior to advertising for construction contracts at any sites. The project description will include a design at or beyond the 65 percent level, anticipated impacts, and proposed mitigation ratios for the site. NMFS must provide written approval that the site is consistent with the 2021 Biological Opinion for the ARCF GRR prior to construction, NMFS will respond within 14 days of receiving site-specific documents.
- USACE will submit a report to NMFS of any incidental take that occurs as part of the Proposed Action. This report will be submitted no later than December 31 of each reporting cycle.

Implementation Timing: Before, during, and after construction

Responsible for Mitigation: Project Partners

Geology

GEO-1

Mitigation Measure: 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.

Prior to the start of earthmoving activities, the Project Partners will obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2022-0057-DWQ), including preparing and submitting a project-specific SWPPP at the time the Notice of Intent to discharge is filed. The SWPPP shall identify and specify the following:

- the use of an effective combination of robust erosion and sediment control 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 would not be limited to temporary erosion control and soil stabilization measures, sedimentation ponds, inlet protection, perforated riser pipes, check dams, and silt fences;
- the implementation of approved local plans, non-stormwater management controls, permanent post-construction BMPs, and inspection and maintenance responsibilities;
- the 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:

- work window- conduct earthwork during low-flow periods;
- to the extent possible, stage construction equipment and materials on the landside of the levee in areas that have already been disturbed;
- minimize ground and vegetation disturbance during project construction by establishing designated equipment staging areas, ingress and egress corridors, spoils disposal and soil 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 stockpiling soil on the landside of the levee is not feasible, a waterside soil stockpiling location above the OHWM will be coordinated with the appropriate agencies, such as NMFS, CVRWQCB, and USFWS (if applicable). 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 native 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 to measure increases in turbidity and sedimentation caused by construction activities. Specifically, where natural turbidity is between 0 and 5 NTUs, increases shall not exceed 1 NTU; where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20%; where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and where natural turbidity is greater than 100 NTUs, increases shall not exceed 10%. If turbidity is found to exceed these standards, cease construction activities until filtration or construction BMPs can be demonstrated to effectively prevent sediment discharge above standards; and

- a copy of the approved SWPPP shall be maintained and available at all times on the construction site.

Project Partners will also prepare and implement a Spill Prevention, Control, and Countermeasure Plan (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.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

GEO-2

Mitigation Measure: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.

To minimize the potential for destruction of or damage to potentially unique, scientifically important paleontological resources during project-related earthmoving activities, the Project Partners shall require the following measures to be implemented to minimize accidental damage to or destruction of unique paleontological resources:

Before the start of any earthmoving activities in the Riverbank Formation (at the bike bridge portion of the MPC), the Project Partners shall retain a qualified paleontologist to train all construction personnel involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered.

If paleontological resources are discovered during earthmoving activities, the construction crew shall notify the Project Partners and shall immediately cease work in the vicinity of the find. The Project Partners shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan may include, but is not

limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the Project Partners to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Implementation Timing: Before and during construction activities at the Magpie Creek bike bridge area.

Responsible for Mitigation: Project Partners

Greenhouse Gas Energy

GHG-1

Mitigation Measure: Implement GHG Reduction Measures

Measures that would be implemented to reduce the project's contribution from generation of GHGs are as follows:

- Encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking for construction worker commutes.
- Recycle at least 50 percent of construction waste and demolition debris.
- Purchase at least 20 percent 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 5-minute, as required by the State's airborne toxics 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 (e.g., 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 a California Air Resources Board (CARB)-approved low carbon fuel for construction equipment. (NO_x 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) that meet the criteria of being real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in Health and Safety Code section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols approved by the CARB, consistent with Section 95972 of Title 17 of the California Code of Regulations and shall not allow the use of offset projects originating outside of California, except to the extent that the quality of the offsets, and their sufficiency under the standards set forth herein, can be verified by USACE or SMAQMD. Such credits must be purchased through one of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; (ii) any registry approved by CARB to act as a registry under the California Cap and Trade program; or (iii) through the California Air Pollution Control Officers Association's (CAPCOA's) GHG Rx and SMAQMD. Purchase of carbon offsets shall be sufficient to reduce the project's GHG emissions to below SMAQMD's significance thresholds applicable through a one-time purchase of credits, based on the emissions estimates in this SEIR or on an ongoing basis based on monthly emissions estimates that will be prepared in accordance with procedures established by Measure AQ-3.

Implementation Timing: Before, during, and after construction

Responsible for Mitigation: Project Partners

Hazards and Hazardous Materials

HAZ-1

Mitigation Measure: Address Potentially Contaminated Materials in Accordance with Applicable Laws.

The Non-Federal Partners have the responsibility to assess and clean-up HTRW prior to turn over of the site to USACE for construction. However, if soil or water showing is evidence of contamination (odor, staining, etc.) is encountered during excavation or construction activities, Project Partners will direct construction contractors to halt activities and require investigation (potentially including data collection or sampling) by a qualified professional. Any hazardous materials found will be handled, transported, and

disposed of at an approval disposal site in accordance with all Federal, State, and local regulations at an approved disposal site.

Implementation Timing: During construction

Responsible for Mitigation: Project Partners

HAZ-2

Mitigation Measure: Contact Sacramento Metropolitan Fire District Station 62 Prior to Closing Watt Avenue Boat Launch

Prior to construction, Project Partners will provide notice to the Sacramento Metropolitan Fire District Station 62 concerning closures of the Watt Avenue Boat Launch.

Implementation Timing: Before construction

Responsible for Mitigation: Project Partners

Hydraulics and Hydrology

HYDRO-1

Mitigation Measure: Obtain flowage easements on adjacent floodplain

Prior to the start of the channel widening and levee improvements, the Project Partners shall obtain easements on 80 acres of the floodplain, to ensure the downstream portion of the system can accommodate the increased design flows conveyed by the upstream channel, and will be obtained on portions of downstream parcels that could experience stage increases of up to 0.2 feet. The easements will reserve 80 acres of floodplain area to contain flood flows and ban development of structures that could impact flood flows in perpetuity.

Implementation Timing: Before construction

Responsible for Mitigation: Project Partners

Noise and Vibration

NOI-1

Mitigation Measure: Implement Measures to Reduce Construction Noise and Vibration Effects

The Project Partners will require contractors to implement the following measures at each work site to avoid and minimize construction noise and vibration effects on sensitive receptors. To the extent feasible and practicable, the primary construction contractor(s) will employ noise-reducing construction practices such that noise effects are limited to the maximum degree practical during construction. Measures that will be used to limit noise will include, but not be limited to, the measures listed below:

- Provide written notice to residents or other sensitive receptors within 1,200 feet of the construction zone, advising them of the estimated construction schedule, and including the City and County Noise Ordinance limits and hours, Mitigation Measure NOI-1 applicable minimization measures, and a link to the USACE Construction Inquiry Form to advise residents of the process for handling their concerns related to impacts from levee construction. 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 manner, such as on construction site fences.
- Schedule the loudest and most intrusive construction activities during daytime hours (7:00 a.m. to 7:00 p.m.) Monday through Friday, when feasible.
- 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. No equipment will have unmuffled exhaust.
- Only use equipment that will comply with pertinent equipment noise standards of EPA and the State of California.
- Locate stationary noise-generating equipment as far as practicable from sensitive receptors.
- Limit unnecessary engine idling (i.e., more than 5 minutes) as required by State air quality regulations.
- Employ equipment that is specifically designed for low noise emission levels, when feasible.
- Employ equipment that is powered by electric or natural gas engines, as opposed to those powered by gasoline fuel or diesel, when feasible.
- If the construction zone is within 500 feet of a sensitive receptor, place temporary noise-reduction barriers (e.g., sound curtains) between stationary noise equipment and noise sensitive receptors to block noise transmission,

when feasible, or take advantage of existing barrier features, such as existing terrain or structures, when feasible.

- Locate construction staging areas as far as practicable from sensitive receptors.
- Design haul routes to avoid sensitive receptors, to the extent practical.
- To the extent feasible and practicable, the primary construction contractors will employ vibration-reducing construction practices such that vibration from construction complies with applicable noise-level rules and regulations that apply to the work, including the vibration standards established for construction vibration-sources by the applicable agencies (City of Sacramento and Sacramento County), depending on the jurisdictional location of the affected receptor(s), and the California Department of Transportation's (Caltrans) Transportation and Construction Vibration Guidance Manual, which identifies maximum vibration levels of 0.2 to 0.5-inch per second Peak Particle Velocity (PPV) for minimizing damage to structures. Project construction specifications will require the contractor to limit vibrations to less than 0.2-inch per second PPV, and less than 72 vibration velocity level in decibel scale (VdB) within 50 feet at any building. If construction will occur within 50 feet of any occupied building, the contractor will prepare and implement a vibration control plan prior to construction. The plan will include measures to limit vibration, including but not limited to the following:
    - Establish numerical thresholds above which the contractor will be required to document vibration sources and implement measures to reduce vibration, and above which work will be required to stop for consideration of alternative construction methods.
    - Avoid vibratory rollers and packers near sensitive areas to the maximum extent practicable.
    - Route heavily loaded trucks away from residential streets, if possible. If no alternatives are available, select streets with the fewest homes.
    - Prior to construction activities, notify each residence within 100 feet of construction and provide contact information to request pre- and post-construction surveys. These pre- and post-construction surveys will assess the existing condition of structures prior to construction and potential architectural/structural damage induced by levee construction vibration at each structure within 100 feet of construction activities, including staging areas. The survey will include visual inspection of the structures that could be affected and documentation of structures by means of photographs and video. This documentation will be reviewed

with the individual owners prior to any construction activities. Post-construction monitoring of structures will be performed to identify (and repair, if necessary) damage, if any, from construction activities. Any construction-related damage will be documented with photographs and video. This documentation will be reviewed with the individual property owners.

- Place vibration monitoring equipment in lines approximately parallel to the levee alignment at intervals not to exceed 200 feet along the construction limits, including active staging areas. Vibration monitors will be operational at all times during the performance of construction activities. The contractor will monitor and record vibrations continuously.

Implementation Timing: Before and during construction.

Responsible for Mitigation: Project Partners

Recreation

REC-1

Mitigation Measure: Implement Bicycle and Pedestrian Detours, Provide Construction Period Information on Facility Closures, and Repair Project-related Damage to Recreational Areas

Project Partners will implement the following measures to reduce temporary, short-term construction effects on recreational facilities in the project site:

- Identify all times and locations where recreation access will be prohibited or limited prior to construction each construction season and consult with Sacramento County Department of Regional Parks and City of Sacramento Department of Parks and Recreation to implement planned closures. Provide 14 days advance notice to recreation users using signs posted at entrances to recreation facilities informing recreation users of anticipated construction activities, facility closures (areas and durations), and maps of detours. Closures of paved trails will be noticed at least 14 days in advance using posted signs at the detour locations. When work in the American River Parkway affects the Jedidiah Smith Memorial Trail, a Bike Detour Plan and a Sign Plan will be submitted to the Sacramento County Department of Regional Parks for input on the plans prior to any construction work associated with the closure.

- Post signs at entry points for parks and recreation facilities clearly indicating closures and estimated duration of closures at least 14 days prior to closures. Information signs will notify the public of alternate parks and recreation sites, including boat launch ramps, and provide a contact number to call for questions or concerns. Where feasible, avoid placing construction signage in the bike lanes themselves.
- Provide flaggers and post warning signs and signs restricting access before and during construction to ensure public safety.
- Provide marked detours for all bike trails and on-street bicycle routes that will be temporarily closed during construction. Detours could be modified based on consultation with the Sacramento County Department of Regional Parks, City of Sacramento Department of Parks and Recreation and Sacramento County Department of Transportation, or City of Sacramento Transportation Division at least 14 days before the start of construction activities, as applicable. Signs that clearly indicate closure routes at least 14 days prior to closures will be posted at major entry points for bicycle trails, information signs will be posted to notify motorists to share the road with bicyclists where necessary, and a contact number will be provided to call for questions or concerns. Fences will be erected to prevent access to the project site.
- Provide traffic control in conformance with California Manual for Uniform Traffic Control Devices in areas where recreational traffic will intersect with construction vehicles.
- If any access point or boat launch ramp needs to be closed during construction, post notices at least 14 days prior to closure and providing alternative access routes and facilities.
- Upon completion of levee improvements, coordinate with the City of Sacramento, Sacramento County, and/or Cordova Recreation and Parks District to restore access and repair any construction-related damage to recreational facilities to pre-project conditions.
- Consult with the Sacramento County Department of Regional Parks related to events that are scheduled on the American River Parkway, and schedule construction at particular locations to avoid and/or minimize impacts to these events to the extent feasible.

Implementation Timing: Before, during, and after construction

Responsible for Mitigation: Project Partners

REC-2

Mitigation Measure: Implement Measures to Notify Boaters

The Project Partners will implement the following measures to reduce temporary, short-term construction effects on recreational facilities and users at the project site:

- Post signs 14 days prior to construction activities at the Sacramento Marina, Garcia Bend Park, Hidden Harbor Marina, Rio Vista Public Boat Launch, and/or Snug Harbor Marina, to clearly indicate the estimated duration of in-water work windows and construction duration.
- Place buoys at the upstream and downstream ends of the construction site at the beginning of construction through the end of construction to warn boaters of the ongoing 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.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

Transportation

TRANS-1

Mitigation Measure: Prepare and Implement a Traffic Control and Road Maintenance Plan.

Before the start of project-related construction activities for each project component, the Project Partners will require the contractor to prepare and implement a Traffic Control and Road Maintenance Plan. This plan will describe the timing and methods of traffic control to be used during construction. All on-street construction traffic will be required to comply with the local jurisdiction's standard construction specifications. The items listed below will be included in the plan and implemented as terms of the construction contracts:

- Follow the standard construction specifications of affected jurisdictions and obtain the appropriate encroachment permits, if required. Encroachment permit conditions, as known at the time of construction contract solicitation, will be included in the construction contract. Encroachment permit conditions will be enforced by USACE and the local agency that issues the encroachment permit.

- Provide a site-specific access plan specifying the roadways on which construction workers are allowed travel to access the work sites and borrow areas.
- 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.
- Queue trucks only in areas and at times allowed by the appropriate local jurisdiction.
- Post warnings about the potential presence of slow-moving vehicles during construction.
- Proposed lane closures will be coordinated with the appropriate local jurisdiction and be minimized to the extent possible during the morning and evening peak traffic periods. Construction specifications will limit lane closures during commuting hours where feasible, and lane closures will be kept as short as possible. If a road must be closed, detour routes and/or temporary roads will be made to accommodate traffic flows. Signs will be provided to direct traffic through detours.
- Post signs providing advance notice of upcoming construction activities at least 1 week in advance so that motorists and cyclists can avoid traveling through affected areas during these times.
- Provide bicycle detours to allow for continued use by bicycle commuters. Always maintain safe pedestrian and bicyclist access around the construction areas. Construction areas will be secured as required by the applicable jurisdiction to prevent pedestrians and bicyclists from entering the work site, and all stationary equipment will be located as far away as possible from areas where bicyclists and pedestrians are present. Signage for street detours will be located outside of the bike lanes and up on the curb where feasible and posted at least 1 week prior to construction affecting pedestrian and bicyclist access.
- Notify (by means such as physical signage, internet postings, letters, or telephone calls) and consult with emergency service providers at least 1 week in advance to inform them of construction activities, maintain emergency access, and facilitate the passage of emergency vehicles on city streets during construction activities. Emergency vehicle access will always be made available.

- The construction contractor will document pre- and post- construction conditions on roadways used during construction. This information will be used to assess damage to roadways used during construction. The contractor will repair all potholes, fractures, or other visual damages associated with project work.
- Comply with Caltrans requirements by submitting this Traffic Control and Road Maintenance Plan to Caltrans for review of traffic controls and points of access from the State highway system (SR-160, I-5, I-80 Business, and I-80) for haul trucks and other construction equipment.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

Public Utilities and Services

UTL-1

Mitigation Measure: Verify Utility Locations, Coordinate with Affected Utility Owners/Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage

The Project Partners will implement the measures listed below before construction begins to avoid and minimize potential damage to utilities, infrastructure, and service disruptions during construction.

- Coordinate with applicable utility and service providers to implement the orderly relocation of utilities that need to be removed or relocated.
- Provide notification one week prior to any potential interruptions in service to the appropriate agencies and affected landowners.
- Verify through field surveys and the use of the Underground Service Alert services the locations of buried utilities at the Proposed Action's construction sites, including natural gas, petroleum, and sewer pipelines. Any buried utility lines will be clearly marked at the construction sites (e.g., in the field) and on the construction specifications in advance of any earthmoving activities.
- Prepare and implement a response plan that addresses potential accidental damage to a utility line. The plan will identify chain-of-command rules for notification of authorities and appropriate actions and responsibilities regarding the safety of the public and workers. A component of the response plan will include worker education training in response to such situations.

- Stage utility relocations during construction to minimize interruptions in service.
- Communicate construction activities with first responders to avoid response delays due to construction detours.

Implementation Timing: Before construction

Responsible for Mitigation: Project Partners

Vegetation and Wildlife

VEG-1

Mitigation Measure: Compensate for Riparian Habitat Removal.

No net loss of riparian habitats will be achieved through impact avoidance, minimization, and compensatory mitigation. Impacts on sensitive natural communities that result in the removal of vegetation shall be mitigated at a minimum 2:1 ratio. Mitigation can include onsite restoration, offsite habitat creation, in-lieu fee payment, and/or purchase of mitigation credits from a resource agency approved mitigation bank. Mitigation as required in accordance with the 2015 ARCF GRR Fish and Wildlife Coordination Act Report or the Endangered Species Act consultation with USFWS and NMFS, depending on the type of habitat, may be applied to satisfy the no net loss of riparian habitat performance standard.

Implementation Timing: Before, during, and after construction

Responsible for Mitigation: Project Partners

VEG-2

Mitigation Measure: Retain, Protect, and Plant Trees On-Site.

Final project designs will be refined to reduce impacts on vegetation and wildlife to the extent feasible. Refinements implemented to reduce riparian habitat losses will include reducing the impact footprint, constructing bank protection rather than launchable rock trench whenever feasible, and designing and constructing planting benches. Where practicable, trees will be retained in locations where the bank protection and planting benches are constructed. Trees will be protected in place along the natural channel during rock placement. Additional plantings will be installed on the newly constructed benches to provide habitat for fish and avian species. The planting benches will be used where feasible to minimize impacts on fish and wildlife species. Where feasible, soil-filled revetment will be used to allow plantings and erosion protection features like launchable trench to be buried to allow plantings. The on-site habitat will be created in

accordance with the ARCF GRR Habitat Mitigation, Monitoring, and Adaptive Management Plan, which includes conceptual mitigation proposals, performance standards, and adaptive management tasks.

All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible. Where possible, protective fencing or flagging shall be installed 5 feet beyond the tree canopy dripline boundary of each tree or tree group, referred to as the protected tree zone. Contractors and subcontractors shall avoid heavy equipment operation, grading, and excavation in the protected tree zones, to the greatest extent practicable. Heavy equipment operation, grading, and excavation activities in the protected tree zone shall be overseen be a qualified arborist/ecologist. The contractor shall maintain the fencing or flagging to always keep it identifiable. Fencing and flagging shall be removed only after all construction activities are complete.

An annual pre-construction meeting shall be held between all contractors and subcontractors (e.g., grading, tree removal/pruning, and builders) and a qualified arborist/biologist. The meeting shall focus on instructing the contractors and subcontractors on tree protection practices and answering any questions. All equipment operators and spotters, assistants, or those directing operators from the ground, shall provide written acknowledgement of receiving tree protection training. This training shall include information on the location and marking of protected tree zones, the necessity of preventing damage, and the discussion of work practices that shall accomplish these tasks.

Contractors and subcontractors shall take care when moving construction equipment or supplies near protected trees, paying special attention to overhead vegetation. Contractors and subcontractors shall ensure that damage to the trees shall be avoided when transporting or moving construction materials and working around the tree (even outside of the fenced protected zone). Contractors and subcontractors shall flag aboveground tree parts with potential for damage (e.g., low limbs, scaffold branches, and trunks) with high-visibility flagging, such as fluorescent red or orange. If contact with the tree crown is unavoidable, conflicting branches may be pruned under supervision of a qualified arborist/ecologist. The contractor or subcontractor shall not prune protected trees until all construction is completed unless standard pruning will reduce conflict between canopy and equipment. All pruning shall be conducted under supervision of a qualified arborist, or their representative.

A qualified arborist/ecologist shall inspect the preserved protected trees adjacent to grading and construction activity prior to initiation of construction activities, during construction activities within tree protection zones, and prior to removal of tree

protection zone fencing/flagging at the end of construction. A report summarizing site conditions, observations, tree health, and recommendations for minimizing tree damage shall be submitted to the Project Partners by the qualified arborist/ecologist following each inspection.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

Aesthetics and Visual Resources

VIS-1

Mitigation Measure: Shielding construction lighting

Project Partners shall require its construction contractors to ensure that all temporary lighting is shielded or directed downward to avoid or minimize any direct illumination onto light-sensitive receptors located outside of the project site.

Implementation Timing: During nighttime construction

Responsible for Mitigation: Project Partners

VIS-2

Mitigation Measure: Minimize Disturbance to Wildlife from Nighttime Lighting

The Project Partners will minimize or avoid the effects of nighttime lighting on wildlife and special-status fish species by implementing the following actions in the area of 24-hour night work.

- Avoiding construction activities at night, to the maximum extent practicable.
- Using the minimal amount of lighting necessary to safely and effectively illuminate the work areas.
- Shielding and focusing lights on work areas and away from the water surface of the Sacramento and American Rivers, to the maximum extent practicable.
- Temporary and permanent lighting will have correlated color temperatures and under 3000K to minimize disturbance to wildlife at night.
- A qualified biologist will monitor the work area at appropriate intervals to assure that all relevant mitigation measures are implemented. Mitigation Measure BIRD-1 (See Appendix B Section 4.3) applies to night work as well.

Implementation Timing: During any nighttime construction

Responsible for Mitigation: Project Partners

Water Quality

WATERS-1

Mitigation Measure: Compensate for Fill of State and Federally Protected Waters.

In compliance with the CWA, the Project Partners would compensate for fill of State and Federally protected waters to ensure no net loss of functions and values of jurisdictional waters at a minimum 1:1 ratio. Mitigation for permanent impact on aquatic resources shall be provided at a minimum 1:1 ratio. Mitigation can include onsite restoration, in-lieu fee payment, or purchase of mitigation credits at a resource agency approved mitigation bank. Mitigation as required in regulatory permits issued through USFWS, NMFS, and/or the Regional Water Quality Control Board may be applied to meet the performance standard of a minimum 1:1 ratio to ensure no net loss of functions and values of jurisdiction waters.

Water quality certification pursuant to Section 401 of the CWA would be obtained from the Central Valley RWQCB before starting project activities subject to Section 401. Any measures determined necessary during the permitting processes would be implemented, such that there is no net loss of functions and values of jurisdictional waters.

If compensation is provided through permittee-responsible mitigation with additional NEPA and/or CEQA documentation, a mitigation plan would be developed to detail appropriate compensation measures determined through consultation with USACE and Central Valley RWQCB. These measures would include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails.

Implementation Timing: Before and after construction

Responsible for Mitigation: Project Partners

WQ-1

Mitigation Measure: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering

Before discharging any dewatered effluent to surface water, USACE and its Partners will obtain a Limited Threat General Order (LTGO) from the CVRWQCB. The LTGO will include water quality monitoring to adhere to the effluent and receiving water quality criteria outlined in the permit, which is typically based on the CVRWQCB Basin Plan. As part of the permit, the permittee will design and implement measures as necessary to meet the discharge limits identified in the relevant permit. For example, if dewatering is needed during the construction of a cutoff wall, the dewatering permit would require

treatment or proper disposal of the water prior to discharge if it is contaminated. These measures will represent the best available technology that is economically achievable to achieve maximum sediment removal.

Measures could include retaining dewatering effluent until particulate matter has settled before it is discharged, use of infiltration areas, and other BMPs. Final selection of water quality control measures will be subject to approval by the CVRWQCB. USACE will verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. USACE or its authorized agent will perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. USACE will notify its contractors and Project Partners immediately if there is a non-compliance issue and compliance will be required and met.

Implementation Timing: Before and during construction

Responsible for Mitigation: Project Partners

EXHIBIT B

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, to the Central Valley Flood Protection Board (CVFPB), for use of sovereign land associated with the proposed American River Watershed Common Features 2016 Project, Flood Risk Management Project (Erosion Contract 3B) (Project). (See generally Pub. Resources Code, § 21069; 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 CVFPB, as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The CVFPB analyzed the environmental impacts generally associated with the Project in the American River Watershed Common Features General Reevaluation Report (ARCF GRR) Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (State Clearinghouse [SCH] No. 2005072046, herein referred to as the ARCF GRR EIR) and on June 9, 2016, certified the ARCF GRR EIR and adopted a Mitigation

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

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

Later, the CVFPB prepared a Final Subsequent EIR / Supplemental EIS to analyze environmental impacts from several components, including the Project, herein referred to as the Subsequent EIR, certified the Final Subsequent EIR on July 18, 2025, and adopted an MMRP, Findings, and a Statement of Overriding Considerations.

The Project involves construction and use of erosion protection measures (e.g., launchable rock toe, launchable trench, rock tie-backs, planting bench, instream woody material, soil-filled revetment, soil-filled embankment) and the construction and temporary use of construction ramps.

The CVFPB determined that the Project as a whole could have significant environmental effects on the following environmental resource areas:

- Transportation and Circulation
- Recreation
- Land Use, Farmland, and Forestland
- Aesthetics and Visual Resources
- Geological Resources
- Water Quality
- Air Quality
- Greenhouse Gases and Energy Consumption
- Noise and Vibration
- Vegetation and Wildlife
- Aquatic Resources and Fisheries
- Special Status Species
- Cultural and Tribal Cultural Resources

Of the 13 resources areas noted above, Project components within the Commission's jurisdiction (i.e., installation of erosion protection measures below the ordinary high-water mark [OHWM] of the American River) could have significant environmental effects on all 13 of the resource areas.

In certifying the ARCF GRR EIR and Subsequent EIR and approving the Project, 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 such that the impacts would be less than significant for most

resource areas. However, even with the integration of all feasible mitigation, CVFPB concluded in the Subsequent EIR that some of the identified impacts would remain significant. As a result, 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 transportation and circulation, recreation, aesthetics and visual resources, air quality, noise and vibration, and vegetation and wildlife. 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 B as part of its approval.

As a responsible agency, the Commission complies with CEQA by considering the ARCF GRR EIR and Subsequent 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 A 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 ARCF GRR EIR and Subsequent 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 Science, 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); CEQA Guidelines, § 15091, subd. (a).) Because

the ARCF GRR EIR and Subsequent EIR certified by 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. (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 ARCF GRR EIR and Subsequent 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); 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 ARCF GRR EIR and Subsequent EIR fully comply with CEQA.

The Commission has reviewed and considered the information contained in the Project ARCF GRR EIR and Subsequent 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 the construction and use of erosion protection measures (e.g., launchable rock toe, launchable trench, rock tie-backs, planting bench, instream woody material, soil-filled revetment, soil-filled embankment) and temporary construction ramps, 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 ARCF GRR EIR and Subsequent 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 ARCF GRR EIR and Subsequent 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 ARCF GRR EIR and Subsequent 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); CEQA Guidelines, §§ 15092 and 15093.)

The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the ARCF GRR EIR and Subsequent EIR. For the full text of each mitigation measure (MM), please refer to Exhibit A, Attachment A-1.

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

A. Summary of Findings

Based on the Subsequent EIR, the proposed Project would adversely affect all environmental resource areas. The Project's impacts to the following resource areas are Less than Significant:

- Public Utilities and Services
- Hydraulics and Hydrology
- Hazards and Hazardous Materials

For the remaining potentially significant effects, the Findings are organized by level of significant impact within the ARCF GRR EIR and Subsequent EIR resource areas as presented below.

B. Potentially Significant Impacts

The impacts within the Commission's jurisdiction, identified in Table B-1, were determined in the ARCF GRR EIR and Subsequent EIR to be potentially significant absent mitigation. After application of mitigation, however, several impacts were determined to be less than significant (LTSM).

However, even with the integration of all feasible mitigation, CVFPB concluded in the Subsequent EIR that other identified potentially significant impacts will remain significant. Table B-1 identifies those impacts that CVFPB determined would be, after mitigation, significant and unavoidable (SU). The impacts were identified by the resource area number found in the Subsequent EIR's *Appendix B Detailed Analyses*. Each impact found in Appendix B was then assigned a letter in the order presented in the analysis (i.e., the impact listed first is lettered as "a", the second "b", etc.)

Table B-1 – Significant Impacts by Resource Area

Environmental Resource Area	Impact Nos. (LTSM)	Impact Nos. (SU)
Transportation and Circulation		2.1-a
Recreation		2.2-c
Land Use, Farmlands, and Forestlands	2.4-b	
Aesthetics and Visual Resources	3.1-d	3.1-a, 3.1-c
Geological Resources	3.2-b	
Water Quality	3.4-a	
Air Quality		3.5-a, 3.5-b

Environmental Resource Area	Impact Nos. (LTSM)	Impact Nos. (SU)
Greenhouse Gases and Energy Consumption	3.6-a, 3.6-b	
Noise and Vibration		3.7-a, 3.7-b
Vegetation and Wildlife	4.1-a, 4.1-b, 4.1-e	4.1-c, 4.1-d
Aquatic Resources and Fisheries	4.2-a, 4.2-b	
Special Status Species	4.3-a	
Cultural and Tribal Cultural Resources	5.1-b, 5.1-c, 5.1-d	

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

The impacts identified below were determined in the ARCF GRR EIR and Subsequent EIR to be potentially significant absent mitigation; however, the impacts were determined to be less than significant with mitigation (LTSM).

1. LAND USE, FARMS, AND FOREST LANDS

CEQA Finding No. 1

Impact:	**2.4-b. Conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project (e.g., vegetation removal, construction of erosion protection measures) have the potential to result in impacts to trees, riparian vegetation, and wildlife corridors in conservation areas along the American River and are in conflict with American River Parkway Plan policies. The ACRF GRR EIR and Subsequent EIR identified measures that would reduce water quality impacts and comply with the American River Parkway Plan through water quality monitoring and best management practices (BMPs) and by requiring the post-construction replanting of native vegetation to maintain wildlife corridors in affected conservation areas.

Implementation of MMs GEO-1, WQ-1, VEG-1, and VEG-2 has been incorporated into the Project to reduce this impact 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 WQ-1: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.

MM VEG-1: Compensate for Riparian Habitat Removal.

MM VEG-2: Retain, Protect, and Plant Trees On-site.

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

2. *AESTHETICS AND VISUAL RESOURCES*

CEQA Finding No. 2

Impact:	**3.1-d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project (e.g., nighttime construction activities) have the potential to result in temporary and short-term disturbances to wildlife movements from the creation of a new source of substantial light or glare. The ARCF GRR EIR and Subsequent EIR identified measures to shield construction lighting and minimize disturbing wildlife.

Implementation of MMs VIS-1 and VIS-2 has been incorporated into the Project to reduce this impact to a less than significant level.

MM VIS-1: Shielding construction lighting.

MM VIS-2: Minimize Disturbance to Wildlife from Nighttime Lighting.

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

3. *GEOLOGICAL RESOURCES*

CEQA Finding No. 3

Impact:	**3.2-b. Cause substantial soil erosion or the loss of topsoil.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project (e.g., vegetation removal, construction of erosion protection measures, use of temporary construction ramps) have the potential to result in temporary disturbance of soil that could be dislodged by rainfall of sufficient intensity and generate runoff and localized erosion, water erosion from higher river flows from construction during winter months, and wind erosion from construction during summer months. The ARCF GRR EIR and Subsequent EIR identified measures to enable source control and re-vegetation which will reduce erosion and maintain surface water quality conditions in adjacent receiving waters through best management practices (BMPs) specified in the required Stormwater Pollution Prevention Plan (SWPPP).

Implementation of MM GEO-1 has been incorporated into the Project to reduce this impact 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.

4. WATER QUALITY

CEQA Finding No. 4

Impact:	**3.4-a. Violate any water quality standards or waste discharge requirements, otherwise substantially degrade surface or ground water quality, or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan due to 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 ARCF GRR EIR and Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would use construction equipment and associated hazardous compounds (e.g., oil, grease, lubricants, etc.) and include ground-disturbing activities adjacent to surface waters, which could increase sediment entering those waters and potentially affect surface water and groundwater quality, aquatic organisms, and beneficial uses. In addition, the Project would result in fill discharges (placement of rock riprap below the OHWM) into Federal and State waters. The ARCF GRR EIR and Subsequent EIR identified measures to enforce BMPs addressed in the SWPPP, address discharge, and compensate for fill placed in Federal and State waters. In addition, a Spill Prevention, Control, and Countermeasure Plan would be prepared and implemented.

Implementation of MMs GEO-1, WATERS-1, and WQ-1 has been incorporated into the Project to reduce this impact 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.

MM WQ-1: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.

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

5. GREENHOUSE GASES AND ENERGY CONSUMPTION

CEQA Finding No. 5

Impact:	**3.6-a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in temporary and short-term emissions from construction equipment and worker vehicles, including carbon dioxide (CO_2) and other "greenhouse gases" (GHGs), that can contribute to climate change. Estimated emissions of GHGs, expressed as carbon dioxide equivalents (CO2e), would exceed the Sacramento Metropolitan Air Quality Management District's (SMAQMD's) threshold of 1,100 metric tons CO2e per year during the estimated construction period. The ARCF GRR EIR and Subsequent EIR identified measures that would require implementation of a GHG emission reduction plan and, if needed, purchase of carbon credits from programs approved by SMAQMD to mitigate any CO2e emissions in excess of 1,100 metric tons per year.

Implementation of MM GHG-1 has been incorporated into the Project to reduce this impact 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.

CEQA Finding No. 6

Impact:	**3.6-b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

The Project aligns with the goals of the Assembly Bill (AB) 32 Scoping Plan to protect against climate change, including flooding, and would help avoid reconstruction and repair expenditures, losses and disruptions to economic activities, and effects on local residents from a flood event. However, activities proposed as part of the Project still have the potential to result in temporary and short-term emissions from construction equipment and worker vehicles, including CO_2 and other GHGs, that can contribute to climate change. Estimated emissions of GHGs would exceed SMAQMD's threshold of 1,100 metric tons CO2e per year during the estimated construction period. The ARCF GRR EIR and Subsequent EIR identified measures that would require implementation of a GHG emission reduction plan and, if needed, purchase of carbon credits from programs approved by SMAQMD to mitigate any CO2e emissions in excess of 1,100 metric tons per year.

Implementation of MM GHG-1 has been incorporated into the Project to reduce this impact 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. *VEGETATION AND WILDLIFE*

CEQA Finding No. 7

Impact:	**4.1-a. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.** **4.1-b. Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in temporary and short-term disturbances to riparian habitat, and nighttime construction has the potential to disrupt wildlife movement, because many species are active at night

when disturbance levels are usually lowest. Consecutive nights of construction activities with high levels of noise, lighting, and visual disturbance could have a substantial but temporary adverse effect on movement of some wildlife. The ARCF GRR EIR and Subsequent EIR identified measures that would compensate for removing riparian habitat, protect existing trees and plant new trees on-site, minimize effects to nesting birds, and minimize disturbing wildlife from nighttime lighting needed to carry out the Project-related activities.

Implementation of MMs VEG-1, VEG-2, VIS-2, and BIRD-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM VEG-1: Compensate for Riparian Habitat Removal.

MM VEG-2: Retain, Protect, and Plant Trees On-Site.

MM VIS-2: Minimize Disturbance to Wildlife from Nighttime Lighting.

MM BIRD-1: Avoid and Minimize Effects on Nesting Birds.

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

CEQA Finding No. 8

Impact:	**4.1-e. Conflict with local policies or ordinances protecting biological 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in the loss of riparian vegetation which is in conflict with American River Parkway Plan policies requiring the preservation of the environmental, aesthetic, and recreational quality of the Parkway and the protection, enhancement, and expansion of riparian tree species such as native willow, cottonwood, and valley oak. The ARCF GRR EIR and Subsequent EIR identified measures that would require on-site replacement of riparian vegetation to ensure that there would be no net impact on lands designated by the American River Parkway Plan as Protected Areas or Nature Study Areas.

Implementation of MM VEG-2 has been incorporated into the Project to reduce this impact to a less than significant level.

MM VEG-2: Retain, Protect, and Plant Trees On-site.

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

7. AQUATIC RESOURCES AND FISHERIES

CEQA Finding No. 9

Impact:	**4.2-a. Result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW, USFWS, or NMFS.** **4.2-b. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors; impede the use of native wildlife nursery sites; substantially reduce the habitat of a fish population; or cause a fish population to drop below self-sustaining levels.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in both temporary and permanent disturbances to aquatic habitat and fish species by increasing noise, water turbulence, and turbidity in the American River. Construction activities would disturb soils and lead to temporarily increased turbidity in the nearshore aquatic habitat. Placement of rock riprap below the OHWM could result in both the potential loss of long-term fluvial functioning necessary for habitat development and renewal along the bank as well as permanent degradation of nearshore habitats. In addition, during rock placement in the river, fish species would move away from the cover of riverbanks and be at an increased risk of predation. The ARCF GRR EIR and Subsequent EIR identified measures to avoid impacts on listed fish species by limiting in-water construction to specified aquatic work windows, implementing erosion control measures outlined in

the SWPPP, minimizing ground disturbance, assessing fish habitat through modeling, compensating for added riprap, and complying with required permits.

Implementation of MMs FISH-1 through FISH-3, WATERS-1, WQ-1, and GEO-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM FISH-1: Use the Fish Habitat Assessment and Simulation (FHAST) Model to Ground Truth Effects and Mitigation.

MM FISH-2: Implement Measures to Avoid, Minimize, and Compensate for Effects on Shaded Riverine Aquatic Habitat.

MM FISH-3: Implement Measures to Avoid and Minimize Effects on Listed Fish Species.

MM WATERS-1: Compensate for Fill of State and Federally Protected Waters.

MM WQ-1: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.

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

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

8. SPECIAL STATUS SPECIES

CEQA Finding No. 10

Impact:	**4.3-a. Result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW, USFWS, or NMFS.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in temporary and short-term disturbances to special status species from removal and

degradation of nesting and foraging habitat due to vegetation removal and construction of erosion protection measures (e.g., launchable rock toe, launchable trench, soil-filled levee embankment, soil-filled revetment). The ARCF GRR EIR and Subsequent EIR identified measures that would identify ways to reduce direct and indirect effects to special status species by preserving and enhancing vegetation as possible, minimizing nighttime lighting, minimizing impacts to water quality, and implementing specific measures for identified special status species.

Implementation of MMs VEG-1, VEG-2, BADGER-1, BAT-1, BEE-1, VELB-1, BIRD-1, BUOW-1, PLANT-1, GEO-1, and WQ-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM VEG-1: Compensate for Riparian Habitat Removal.

MM VEG-2: Retain, Protect, and Plant Trees On-Site.

MM BADGER-1: Implement Measures to Avoid and Minimize Effects on American Badger.

MM BAT-1: Implement Measures to Protect Maternity Roosts of Special-Status Bats.

MM BEE-1: Implement Measures to Avoid and Minimize Effects on Crotch's Bumble Bee.

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

MM BIRD-1: Avoid and Minimize Effects on Nesting Birds.

MM BUOW-1: Implement Measures to Protect Burrowing Owl.

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

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 WQ-1: Obtain Appropriate Discharge and Dewatering Permit and Implement Provisions for Dewatering.

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

9. *CULTURAL AND TRIBAL CULTURAL RESOURCES*

CEQA Finding No. 11

Impact:	**5.1-b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project (e.g., ground disturbance, grading, construction of erosion of protection measures) have the potential to impact previously unidentified archaeological resources. No known archaeological resources have been identified in American River Erosion Contract 3b sites. The ARCF GRR EIR and Subsequent EIR identified measures to require a discovery plan, archaeological monitoring, awareness training for construction workers, and steps to address inadvertent discovery of materials.

Implementation of MMs CR-1 through CR-5 has been incorporated into the Project to reduce this impact to a less than significant level.

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

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. 12

Impact:	**5.1-c. Disturb any human remains, including those interred outside of dedicated cemeteries.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project (e.g., ground disturbance, grading, construction of erosion of protection measures) have the potential to result in short-term direct or indirect disturbances to human burials from earth-moving activities. Native American human remains could be encountered during earth-moving activities associated with the Project. The ARCF GRR EIR and Subsequent EIR identified measures to require that, if human remains are discovered during Project-related construction activities, disturbances in the area of the find will be stopped and appropriate treatment and protection measures will be implemented.

Implementation of MM CR-6 has been incorporated into the Project to reduce this impact 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.

CEQA Finding No. 13

Impact:	**5.1-d. Cause a substantial adverse change in the significance of a Tribal Cultural Resource.**
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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in short-term direct or indirect disturbances to cultural and tribal resources from earth-moving activities that could result in damage to or destruction of known pre-contact period archaeological sites and Native American-identified Tribal cultural resources (TCRs). The ARCF GRR EIR and Subsequent EIR identified measures to require appropriate treatment and protection measures for pre-contact period

archaeological sites and TCRs to be implemented consistent with the U.S. Army Corps of Engineers' (USACE) Programmatic Agreement, requiring USACE to consult with the State Historic Preservation Officer and interested Native American Tribes.

Implementation of MMs CR-1 through CR-5 has been incorporated into the Project to reduce this impact to a less than significant level.

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

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.

D. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts were determined in the ARCF GRR EIR and Subsequent 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); CEQA Guidelines, §§ 15092 and 15093.)

10. TRANSPORTATION AND CIRCULATION

CEQA Finding No. 14

Impact:	**2.1-a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, or substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project (e.g., hauling construction materials to the Project sites, access to temporary construction ramps) have the potential to alter normal traffic flows, potentially slowing down traffic and making it more challenging for other drivers to navigate. In addition, the heavy truck traffic would disturb residential areas and conflict with the County of Sacramento's goal to enhance quality of life in the area through traffic management. The ARCF GRR EIR and Subsequent EIR identified measures that would require a Traffic Control and Road Maintenance Plan. However, the potentially significant short-term impacts to transportation and circulation, in particular the number of vehicle trips required to complete Project objectives cannot be reduced. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MM TRANS-1 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM TRANS-1: Prepare and Implement a Traffic Control and Road Maintenance Plan.

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

11. RECREATION

CEQA Finding No. 15

Impact: **2.2-c. Cause substantial disruption in the use of an existing recreational resource, reduce the quality of an existing recreational resource, reduce availability of an existing recreational resource, or result in inconsistencies or non-compliance with planning documents (such as the American River Parkway 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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to disrupt the use and quality of recreational resources as the Project will result in changes in visual effects, trail closures and detours, disruptions to access points, and generation of noise, dust, and odors from construction activities. The ARCF GRR EIR and the Subsequent EIR identified measures to require notifications in advance of closures and detours to recreational sites along the American River Parkway and to restore riparian vegetation on-site immediately following construction. After approximately 8 to 10 years of initial plant growth, a similar range of recreational opportunities would be available. However, the potentially significant short-term impacts to recreation cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MMs REC-1 and VEG-2 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM REC-1: Implement Bicycle and Pedestrian Detours, Provide Construction Period Information on Facility Closures, and Repair Project-related Damage to Recreational Areas.

MM VEG-2: Retain, Protect, and Plant Trees On-site.

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

12. AESTHETICS AND VISUAL RESOURCES

CEQA Finding No. 16

Impact: **3.1-a. Have a substantial adverse effect on a scenic vista.**

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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in permanent, direct and indirect impacts to scenic vistas from the removal of trees and vegetation, the presence of construction equipment, and the construction of erosion protection measures (launchable rock toe, launchable trench, soil filled levee embankment, soil filled revetment) along the levees of the American River. The ARCF GRR EIR and the Subsequent EIR identified measures which would require riparian vegetation to be replanted on site following construction; however, the potentially significant short-term impact to visual resources from the removal of trees and other vegetation cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MM VEG-2 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM VEG-2: Retain, Protect, and Plant Trees On-site.

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

CEQA Finding No. 17

Impact:	**3.1-c. Result in substantial degradation to the existing visual character or quality of public views of the site and its surroundings in nonurbanized areas. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.**

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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in permanent, direct and indirect impacts to scenic vistas from the removal of trees and vegetation for the construction of erosion protection measures (launchable rock toe, launchable trench, soil filled levee embankment, soil filled revetment) along the levees of the American River. Trees removed along the levee would also have an impact on the viewshed of parks. The ARCF GRR EIR and Subsequent EIR identified measures that would maximize, where feasible, the retention, protection, and planting of trees on-site. However, the potentially significant short-term impacts from the removal of trees and other vegetation to aesthetic and visual resources cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MM VEG-2 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM VEG-2: Retain, Protect, and Plant Trees On-site.

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

13. AIR QUALITY

CEQA Finding No. 18

Impact:	**3.5-a. Conflict with or Obstruct Implementation of the Applicable Air Quality Plan** **3.6-b. Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for which the Project Region Is Non-Attainment under an**

Applicable Federal or State Ambient Air Quality Standard 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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to emit maximum daily and annual construction emissions that would potentially exceed SMAQMD and Bay Area Air Quality Management District (BAAQMD) thresholds. In addition, fugitive dust would be generated from construction equipment on unpaved roads and during ground disturbing construction activities. The ARCF GRR EIR and Subsequent EIR identified measures that would implement emission and dust control to reduce air quality impacts, and SMAQMD's and/or BAAQMD's off-site mitigation fee program will be required for any emissions of nitrogen oxides (NO_x) and particulate matter with a diameter of 10 micrometers or less (PM_{10}) exceeding applicable significance thresholds. However, the potentially significant short-term impacts to air quality cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MMs AIR-1 through AIR-5 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM AIR-1: Implement the Sacramento Metropolitan Air Quality Management District and Bay Area Air Quality Management District 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: Implement SMAQMD's Enhanced Exhaust Control Practices and Require Lower Exhaust Emissions for Construction Equipment.

MM AIR-4: Use the Air District's Off-site Mitigation Fee to Reduce NOx and PM10 Emissions.

MM AIR-5: Implement Marine Engine Standards.

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

14. NOISE AND VIBRATION

CEQA Finding No. 19

Impact:	**3.7-a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**
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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Construction would result in a temporary increase in ambient noise levels in the vicinity of the Project improvements, including at nearby residential properties and recreation sites, in excess of local standards. Noise would be generated by heavy-duty equipment operating at the sites, use of heavy-duty trucks for hauling of materials to and from the sites, worker commute traffic, and project activities at staging areas. The ARCF GRR EIR and Subsequent EIR identified measures to prepare and implement a noise control plan, implement feasible BMPs such as placing noise barriers between the construction site and nearby residences, and notify sensitive users of excessive noise generation during the day. However, the potentially significant short-term increases in ambient noise levels cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MM NOI-1 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

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

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

CEQA Finding No. 20

Impact:	**3.7-b. Generation of excessive groundborne vibration or groundborne noise levels.**
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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project, including operation of heavy-duty construction equipment, could create seismic waves that radiate along the surface of the earth and downward into the earth. The surface waves can be felt as vibrations. Construction equipment would exceed the recommended criteria for infrequent events for sensitive land uses and would impact nearby residential receptors. The ARCF GRR EIR and Subsequent EIR identified measures to require a vibration control plan, implement feasible BMPs such as routing heavy loaded trucks away from sensitive receptors, and limit the use of vibratory rollers and packers near sensitive receptors. However, the potentially significant short-term impacts from excessive ground-borne vibration or noise cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MM NOI-1 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

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

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

15. VEGETATION AND WILDLIFE

CEQA Finding No. 21

Impact:	**4.1-c. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**
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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in temporary, direct and indirect impacts to riparian habitat or other sensitive natural communities through vegetation removal, construction of erosion protection measures (e.g., launchable rock toe, launchable trench, soil filled levee embankment, soil filled revetment), and use of temporary construction ramps. The ARCF GRR EIR and Subsequent EIR identified measures to require habitat replacement onsite at a 2:1 compensatory mitigation ratio, replace habitat that is removed to the maximum amount feasible, and require the placement of in-stream woody material to compensate for the temporal habitat loss while the replacement habitat matures. However, the potentially significant short-term impacts to vegetation and wildlife cannot be eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MMs VEG-1 and VEG-2 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM VEG-1: Compensate for Riparian Habitat Removal.

MM VEG-2: Retain, Protect, and Plant Trees On-Site.

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

CEQA Finding No. 22

Impact:	**4.1-d. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**
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 Subsequent 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 Subsequent EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in temporary, direct and indirect impacts to protected wetlands from the placement of rock bank protection below the OHWM of the American River. The ARCF GRR EIR and Subsequent EIR identified measures to compensate for wetlands loss and ensure no net loss of functions and values of jurisdictional waters. However, the direct impact to filled Federal and State waters cannot be reduced or eliminated. There are no other feasible mitigation measures available to avoid or reduce this impact.

Implementation of MM WATERS-1 has been incorporated into the Project and would reduce the severity of this impact, although not necessarily to a less than significant level.

MM WATERS-1: Compensate for Fill of State and Federally Protected Waters, Including Wetlands.

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

E. Findings on Alternatives

The Commission, as a responsible agency and pursuant to CEQA Guidelines section 15096, subdivision (g)(2), finds there are no feasible Project alternatives within its powers that would substantially lessen or avoid any outstanding significant effects that the Project, as proposed, would have on the environment.

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 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 2016 Project, Flood Risk Management Project (Erosion Contract 3B) 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. (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 the (1) 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 mitigation measures to reduce impacts, impacts remain that are considered significant after application of all feasible mitigation. Significant impacts of the approved Project fall under six resource areas: transportation and circulation, recreation, aesthetics and visual resources, air quality, noise and vibration, and vegetation and wildlife. These

impacts are specifically identified and discussed in more detail in the Commission's CEQA Findings (see Section D., *Significant and Unavoidable Impacts*) and in CVFPB's ARCF GRR EIR and Subsequent EIR. While the Commission has required all feasible mitigation measures, these impacts remain significant for purposes of adopting this Statement of Overriding Considerations.

B. Balancing the Benefits and Risks Associated with Lease Approval

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. The Project would provide benefits as presented in CVFPB's Statement of Overriding Considerations (Attachment B-1).

C. Commission Adoption of Statement of Overriding Considerations

As noted above, under Public Resources Code section 21081, subdivisions (a)(3) and (b), and 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 ARCF GRR EIR, Subsequent 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, as described in Attachment B-1, 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 ARCF GRR EIR and Subsequent 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 Subsequent EIR and these Findings that cannot be reduced to a less than significant level. Each benefit set forth in Attachment B-1 constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

5.0 CONCLUSION

The Commission has considered the ARCF GRR EIR and the Subsequent 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 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 Final Subsequent EIR remain unmitigated, mitigation measures 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. Based upon the objectives identified in the ARCF GRR EIR and Subsequent EIR and the detailed mitigation measures imposed upon the Project, the Commission has determined that the expected benefits from the project outweigh the policy of reducing or avoiding significant impacts sufficient to warrant approving the Project.

Attachment B-1

Central Valley Flood Protection Board's

Excerpt from Statement of Findings and

Statement of Overriding Considerations

7.3 Justification in Support of the Statement of Overriding Considerations

The Board balanced the economic, legal, social, technological, and other benefits of the Flood Risk Management Project (Project Alternative 3c) against its significant and unavoidable environmental impacts and has adopted all feasible mitigation measures with respect to the resources listed above with significant and unavoidable impacts. The Board has found that the benefits of the Flood Risk Management Project outweigh the significant and unavoidable adverse environmental effects that cannot be feasibly mitigated to less-than-significant levels based on the following analysis:

1. The purpose of the Flood Risk Management 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, release of environmental contaminants, and cause substantial environmental impacts from flood clean-up and rebuilding activities.
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 and American River levees are a key feature for flood risk management for the Sacramento Metropolitan area.
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 Flood Risk Management Project (Project Alternative 3c) incorporates all feasible means to minimize, avoid, and mitigate for its potentially significant and significant and unavoidable adverse impacts on the physical environment.
5. The long-term flood risk management benefits potentially provided by the proposed project far outweigh the significant and unavoidable adverse environmental effects of the Flood Risk Management Project, most of which are

short term. In light of these considerations, the significant and unavoidable impacts of the proposed project (Alternative 3c), after all feasible mitigation is applied, are considered acceptable.

8.0 Adoption of Statement of Findings and Statement of Overriding Considerations

In accordance with CCR, Title 14, Section 15091, the Board made a Statement of Findings for each significant environmental impact. Pursuant to Public Resource Code Section 21081(b) and CEQA CCR, Title 14, Section 15093, the Board has balanced the Flood Risk Management Project's benefits against its significant and unavoidable impacts. The Board finds that the benefits of implementing the Flood Risk Management Project outweigh the significant and unavoidable environmental impacts thereof. The Board finds that each of the benefits is an overriding consideration, independent of other benefits, that warrants approval of the Flood Risk Management Project notwithstanding its significant and unavoidable impacts. The Board hereby formally adopts the Statement of Findings and Statement of Overriding Considerations set forth herein.

By: _____ Date: 7/16/2025
Jane Dolan
President

By: _____ Date: 7/18/25
Chris Lief
Executive Officer

By: _____ Date: 7/18/25
Kanwarjit Dua
Board Counsel