

## STAFF REPORT

# 05

A 4, 9, 11, 12, 13

06/23/20

W 27165

S 3, 4, 5, 6, 8

M.J. Columbus

### GENERAL LEASE – PUBLIC AGENCY USE

#### APPLICANT:

Central Valley Flood Protection Board

#### PROPOSED LEASE:

##### *AREA, LAND TYPE, AND LOCATION:*

Sovereign land in the Sacramento River, San Joaquin River, Cache Slough, Haas Slough, Elk Slough, Georgiana Slough, Lindsey Slough, and Steamboat Slough; Colusa, Sacramento, San Joaquin, Solano, Stanislaus, Sutter, and Yolo counties.

##### *AUTHORIZED USE:*

Construction, use and maintenance of existing levee erosion repair sites, and bank protection.

##### *LEASE TERM:*

20 years, beginning June 23, 2020.

##### *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:*

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

## STAFF REPORT NO. 05 (CONT'D)

### **STAFF ANALYSIS AND RECOMMENDATION:**

#### **Authority:**

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

#### **Public Trust and State's Best Interests Analysis:**

The Central Valley Flood Protection Board (CVFPB) has applied for a General Lease – Public Agency Use for required waterside levee repairs. The application was prepared by the California Department of Water Resources (DWR), acting by and through the Central Valley Flood Protection Board. The proposed lease areas and levees are part of the DWR 2017 Storm Damage Emergency Levee Rehabilitation Project (Project). On March 7, 2017, Governor Edmund G. Brown Jr. declared a state of emergency. The Governor's proclamation focused on damage caused by the atmospheric river storm system that swept across California during the 2017 storm season. The storm system caused dangerous flash flooding, erosion, substantial mud and debris flows, and damage to roads and highways. In response, DWR implemented the Project at several emergency repair levee sites along various waterways in Northern California. The Project includes five phases and a total of 69 sites. Phases 1 through 3 consisted of 40 critical levee-erosion sites and the proposed Phases 4 and 5 include 29 noncritical sites in the counties of Butte, Glenn, Sutter, Yolo, Colusa, Tehama, Lake, Solano, Stanislaus, San Joaquin, Sacramento, and Yolo.

The emergency repairs under Phases 1 through 3 did not require review under the California Environmental Quality Act (CEQA) due to the Governor's Proclamation of a State of Emergency. On July 7, 2017, DWR submitted a Notice of Exemption to the State Clearinghouse No. 2017078085. On August 28, 2017, staff provided DWR with a letter of non-objection (LON) for the repair of critical levee erosion or stability sites due to levee performance problems. Due to the emergency nature of the Project and the potential for impacts to life and property, the multiphase Project proceeded with the environmental regulatory compliance through the emergency processes and after-the-fact permitting. DWR requested state and federal emergency permits and tribal outreach was conducted. Best Management Practices were implemented by DWR to protect sensitive resources whenever possible. The most critical sites were completed in three phases. Twelve of the original 40 sites in Phases 1 through 3 are within the Commission's jurisdiction. The erosion damage repairs to the critical levee sites included rock slope protection with rock and soil filled repairs extending onto sovereign land, and earthfill repairs away from the water channels in the San Joaquin River, Elk Slough,

## STAFF REPORT NO. 05 (CONT'D)

Cache Slough, Lindsey Slough and Steamboat Slough in Stanislaus, San Joaquin, Yolo, Solano, and Sacramento counties.

An additional 29 nonemergency repair sites (Phases 4 and 5) were identified for repair and required review under CEQA. The DWR's Division of Flood Management, Flood Maintenance Office, is the CEQA Lead Agency for the proposed Phase 4 and 5 Project. The Phase 4 and 5 sites are damaged to an extent that their flood control performance has been compromised, presenting a potential safety risk to the public. Levee failure could result in flooding, property damage, and loss of life within the protected areas during a high-water event. The Applicant has applied to the Commission to conduct bank protection work for the remaining Phase 4 and 5 sites along various waterways. Two sites in Phases 4 and 5 are included in another site. Twenty-two of the 29 Phase 4 and 5 sites are within the Commission's jurisdiction in Colusa, Sacramento, San Joaquin, and Yolo counties. In total, Phases 1 through 5 include 34 sites that are located on State sovereign land.

The proposed Project will repair and rehabilitate the levees at the Phase 4 and 5 sites near various cities between Grimes and Stockton. Based on the conditions of the levees at each location, varying design considerations and construction equipment will be required. Waterside repairs and staging areas will be located along the levee crown, waterside berm, or on waterside toe roads where areas are of sufficient size and free of woody vegetation. For landside and certain waterside repairs, staging areas may require construction easements from adjacent landowners.

After each site is cleared and grubbed, existing rock and levee soils distributed by the structural failure and transition zones would be removed. The site would be excavated and graded to a 1.5 height and 1 vertical slope unless otherwise specified by design specifications. The back slope of the levee would be shaped for stability of clean rock placement. All excavated material will be hauled off-site. Geotextile fabric may be used as a filter separator between the natural ground and rock slope protection, launch rock, and soil filled rockfill above and below standing or flowing water surfaces. The geotextile fabric placed above the water surface would be covered with rock slope protection within 72 hours of placement. Clean rock would be placed in the water at the toe of the bank up to the water elevation by using a long-arm bucket excavator or barge crane. Rock would be placed in 2-foot lifts and the voids would be filled with clean soil. If appropriate, willow poles may be placed after construction to ensure underlying soil contact. In locations with earthfill, 0.5 feet of clean

## STAFF REPORT NO. 05 (CONT'D)

topsoil would be placed above the fill covered with erosion fabric to stabilize the bank.

Once the levee rehabilitation construction is completed, all equipment and materials will be removed from the repair sites and excess materials will be disposed of at appropriate facilities. Staging areas and temporary access roads, if constructed, will be ripped to loosen the soil surface and then seeded with native grass mix to promote revegetation and to minimize erosion. The areas will be restored to pre-project conditions to the extent feasible. Any damage as a result of the construction, including haul route roads and fencing, will be repaired. All areas will be cleaned and cleared of rubbish and left in a safe condition, for the intended use.

Construction activities at some sites will be concurrent and will require no more than 2 to 4 weeks of active construction. The proposed construction will take place from July 2 through November 1 of each year in 2020 and 2021.

The proposed Project will not have a significant impact on public access to sovereign land and Public Trust resources. Staff believes that the levee rehabilitation Project is consistent with the common law Public Trust Doctrine. The Project would improve navigation by providing reinforced structural support to the banks of the waterways and limiting the harmful erosion of the banks into the waterways. The Project also confers benefits to the upland owners by ensuring sufficient sublater support to the adjoining properties. The proposed Project will repair levee structures essential to public health and safety and minimize the potential for levee failures during a high-water event.

The subject levees have existed for many years at their current locations. The proposed lease is limited to a 20-year term and does not alienate the State's fee simple interest or permanently impair public rights. The proposed lease requires the lessee to indemnify the State for liability incurred as a result of lessee's activities thereon.

### **Climate Change:**

Climate change impacts, including sea-level rise, more frequent and intense storm events, and increased flooding and erosion affect both open coastal areas and inland waterways in California. The subject activities are located within the Sacramento and San Joaquin River systems which are tidally influenced and vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea-level rise. There are areas of the river systems that are not impacted by tidal

## STAFF REPORT NO. 05 (CONT'D)

influence. They include the Feather River, Cache Slough, Elder, Butte, and Deer Creeks as well as the Sutter Bypass within the proposed Project area.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea-level rise projections and rates. Commission staff evaluated the “high emissions,” “medium-high risk aversion” scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea-level rise scenario for the region as listed in Table 1.

**Table 1. Projected Sea-Level Rise for San Francisco<sup>1</sup>**

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

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update

Note: <sup>1</sup> Projections are with respect to a 1991 to 2009 baseline.

Rising sea levels can lead to more frequent flood inundation in low-lying areas and larger tidal events and could increase the Sacramento and San Joaquin River’s inundation levels within the lease area over the term of the lease. The additional areas of the proposed lease will include watercourses which will not be subjected to tidal influence but will be subjected to climate change impacts. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding and storms (especially when coupled with sea-level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate-change induced droughts could decrease river levels and flow for extended periods of time. Climate change and sea-level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

## STAFF REPORT NO. 05 (CONT'D)

The proposed Project activities are specifically to improve the identified subject area levees to support the broader purpose of reducing flood risk associated with the identified watercourses. If the levees are not improved, they would remain at heightened risk of failure from seepage, and much of Sacramento and surrounding areas, including vital agricultural lands, could be flooded and significantly damaged during a future flood event.

Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland (not within the lease area) are located in an area that may be subject to effects of climate change, including sea-level rise.

### **Conclusion:**

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

### **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. If the Commission denies the application, the Applicant will not be authorized to conduct its levee repair project. Upon expiration or prior termination of the lease, the lessee also has no right to a new lease or to renewal of any previous lease.
2. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation, and responsible economic use of the lands and resources under the Commission's jurisdiction.
3. **Phases 1 through 3:** Staff recommends that the Commission find that this activity is exempt from the requirements of CEQA as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 14, section 15301.

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15300.

STAFF REPORT NO. **05** (CONT'D)

4. **Phases 4 and 5:** A Mitigated Negative Declaration, State Clearinghouse No. 2019049138, and a Mitigation Monitoring Program were prepared and adopted by DWR on December 16, 2019, for Phases 4 and 5 of this project. Commission staff reviewed these documents and prepared an independent Mitigation Monitoring Program (Exhibit B) that incorporates DWR's document.
5. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon staff's consultation with the persons nominating such lands and through the CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

**APPROVALS OBTAINED:**

California Department of Fish and Wildlife  
Central Valley Regional Water Quality Control Board  
U.S Army Corps of Engineers  
U.S. Fish and Wildlife Service  
National Marine Fisheries Service

**EXHIBITS:**

- A-1. Site and Location Map: Sacramento, San Joaquin, Solano, and Yolo counties
- A-2. Site and Location Map: Colusa, San Joaquin, and Stanislaus counties
- B. Mitigation Monitoring Program

**RECOMMENDED ACTION:**

It is recommended that the Commission:

**CEQA FINDING:**

**Phases 1 through 3:** Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt project, Class 1, Existing Facilities; California Code of Regulations, title 14, section 15301.

**Phases 4 through 5:** Find that a Mitigated Negative Declaration, State Clearinghouse No. 2019049138, and a Mitigation Monitoring Program were prepared by DWR and adopted on December 16, 2019, for this project 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

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the events specified in Public Resources Code section 21166 or the State CEQA Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

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

**PUBLIC TRUST AND STATE'S BEST INTERESTS:**

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

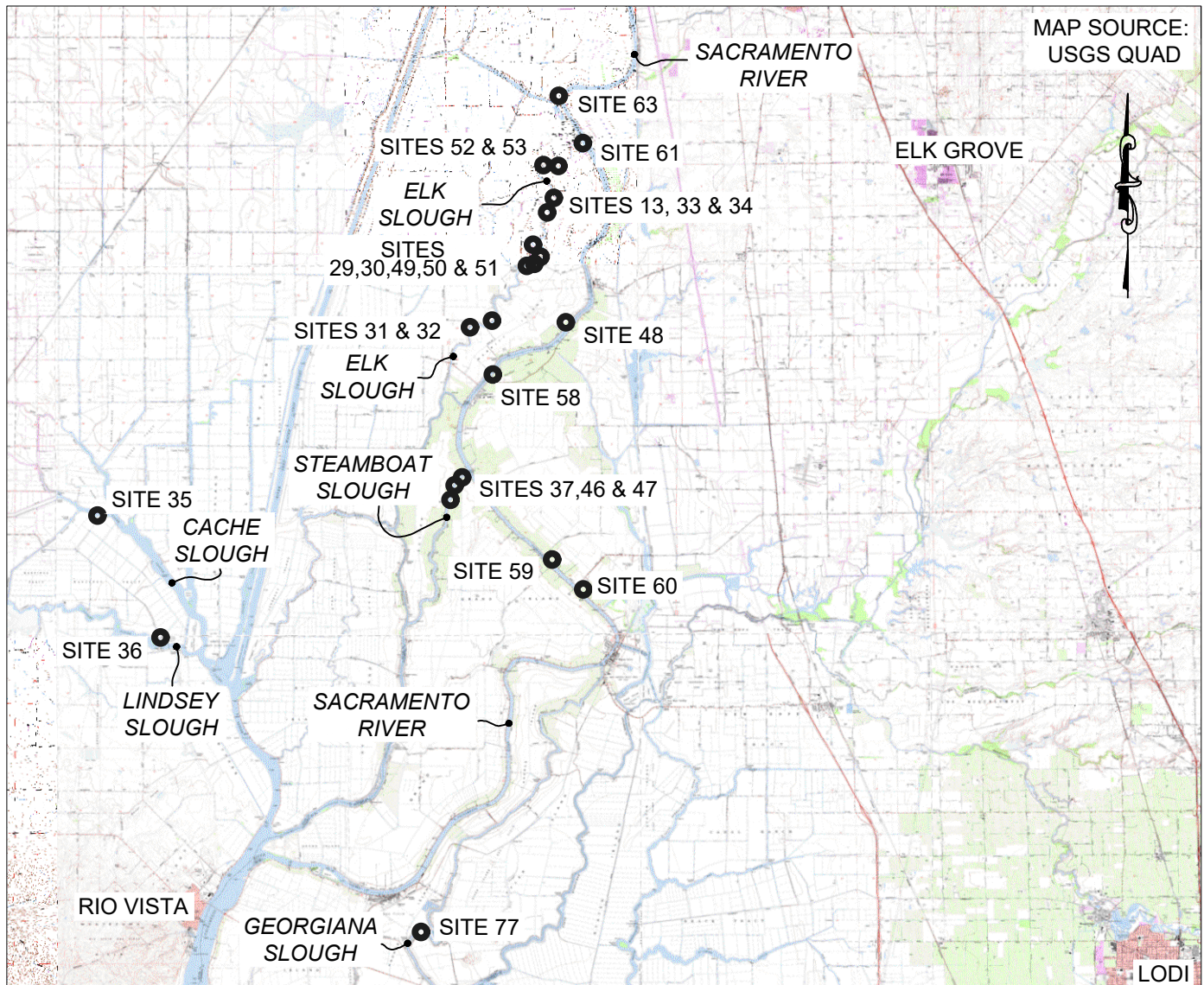
**AUTHORIZATION:**

Authorize issuance of a General Lease – Public Agency Use to the Applicant, beginning June 23, 2020, for a term of 20 years, for construction, use, and maintenance of existing levee erosion repair sites and bank stabilization shown on Exhibit A (for reference purposes only), attached and by this reference made a part hereof; consideration being the public use and benefit, with the State reserving the right, at any time, to set a monetary rent as specified in the lease if the Commission finds such action to be in the State's best interests.



NO SCALE

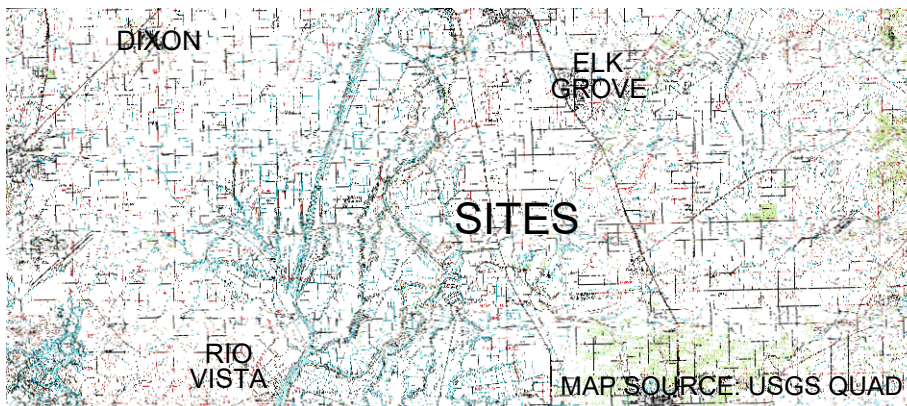
## SITE



## 24 BANK PROTECTION SITES

NO SCALE

## LOCATION



## EXHIBIT A-1

W 27165

CENTRAL VALLEY FLOOD

PROTECTION BOARD

GENERAL LEASE -

PUBLIC AGENCY USE

SACRAMENTO, SAN JOAQUIN,  
SOLANO, AND YOLO COUNTIES

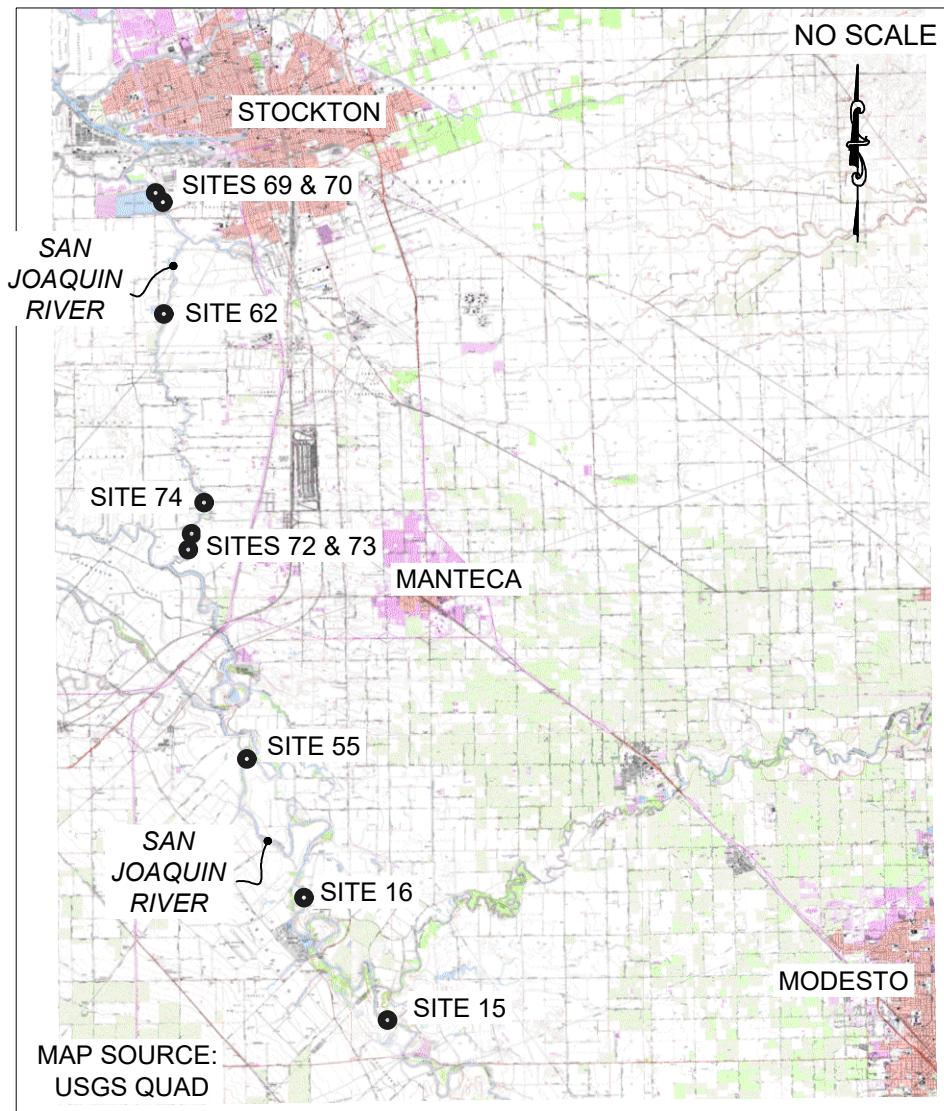


THIS EXHIBIT IS SOLELY FOR PURPOSES OF GENERALLY DEFINING THE LEASE PREMISES, IS BASED ON UNVERIFIED INFORMATION PROVIDED BY THE LESSEE OR OTHER PARTIES AND IS NOT INTENDED TO BE, NOR SHALL IT BE CONSTRUED AS, A WAIVER OR LIMITATION OF ANY STATE INTEREST IN THE SUBJECT OR ANY OTHER PROPERTY.

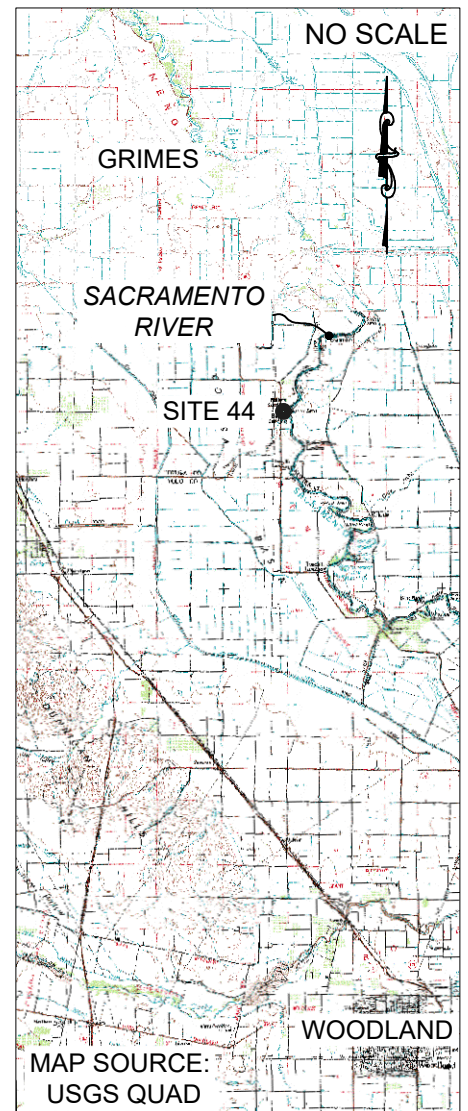
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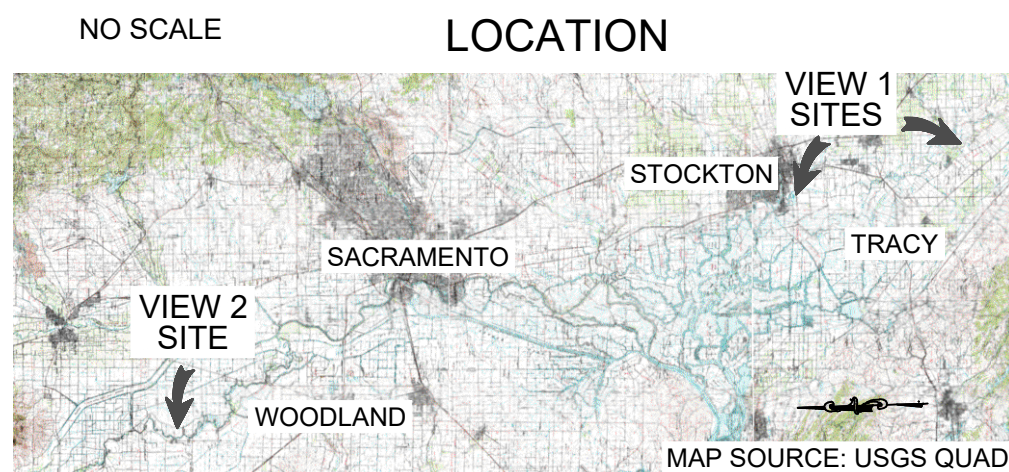
# SITES



VIEW 1  
9 BANK PROTECTION SITES



VIEW 2  
1 BANK PROTECTION SITE



## LOCATION

## EXHIBIT A-2

W 27165  
CENTRAL VALLEY FLOOD  
PROTECTION BOARD  
GENERAL LEASE - PUBLIC  
AGENCY USE  
COLUSA, SAN JOAQUIN, AND  
STANISLAUS COUNTIES



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JWP 6/3/2020

**EXHIBIT B**  
**CALIFORNIA STATE LANDS COMMISSION**  
**MITIGATION MONITORING PROGRAM**  
**2017 STORM DAMAGE DWR REHABILITATION –**  
**PHASE 4 AND 5 REPAIR SITES PROJECT**  
(W27165, State Clearinghouse No. 2019049138)

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The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the 2017 Storm Damage DWR Rehabilitation – Phase 4 and 5 Repair Sites Project (Project). The CEQA lead agency for the Project is Department of Water Resources, Flood Maintenance Office.

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

*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 adopted an MND, State Clearinghouse No. 2019049138, adopted an MMP for the whole of the Project (see Exhibit B, Attachment B-1), and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table B-1 below. The full text of each mitigation measure, as set forth in the MMP prepared by the CEQA lead agency and provided in Attachment B-1, is incorporated by reference in this Exhibit B. Any mitigation measures adopted by the Commission that differ substantially from those adopted by the lead agency are shown as follows:

- Additions to the text of the mitigation measure are underlined; and
- Deletions of the text of the mitigation measure are shown as ~~strikeout~~ or as otherwise noted.

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<sup>1</sup> The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

**Table B-1. Project Impacts and Applicable Mitigation Measures**

Potential Impact <sup>2</sup>	Mitigation Measure (MM) <sup>3</sup>	Difference Between CSLC MMP and Lead Agency MMP
<b>Air Quality</b>		
Create 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.	MM AQ-1	None
	MM AQ-3	None
	MM AQ-4	None
	MM AQ-5	None
<b>Biological Resources</b>		
Create 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service.	MM BIO-1	None
	MM BIO-2	None
	MM BIO-3	None
	MM BIO-4	None
	MM BIO-5	None
	MM BIO-6	None
	MM BIO-7	None
	MM BIO-8	None
<b>Cultural Resources</b>		
Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	MM CUL-1	None
	MM CUL-2	None
	MM CUL-3	None
Disturb any human remains, including those interred outside of formal cemeteries.	MM CUL-4	None
	MM CUL-5	None
	MM CUL-6	See below
<b>Greenhouse Gases</b>		
Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	MM GHG-1	None
<b>Tribal Cultural Resources</b>		
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074. That is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of	MM TCR-1	None
	MM TCR-2	None
	MM TCR-3	None

<sup>2</sup> Impacts corresponds to the Environmental Checklist questions in the MND.

<sup>3</sup> See Attachment B-1 for the full text of each MM taken from the MMP prepared by the CEQA lead agency.

historical resources as defined in Public Resources Code section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		
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### **Mitigation Measure CUL-6: Mitigation of Effects to Submerged Shipwrecks or Maritime Features**

There is one known shipwreck within a project repair site on the water-side toe of the levee subject to repair, P-57-000609. Water-side levee work conducted from a barge is expected in the vicinity of P-57-000609. The resources should be avoided to avoid adverse effects. If it is determined that project activities could damage P-57-000609, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, DWR will follow an existing an Historic Property Treatment Plan, prepared by the USACE for this resource, that will reduce the effects of the project to less than significant.

While unlikely, the accidental discovery of additional submerged shipwrecks or maritime features cannot be entirely discounted. If additional submerged shipwrecks or maritime features are encountered, all construction activities within 100 feet will halt. DWR will be notified, and a Secretary of the Interior-qualified archaeologist will inspect the findings within 24 hours of discovery. The shipwreck or maritime feature will be evaluated for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively). Title to all shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the Commission. Commission staff shall be notified of any cultural resources or paleontological specimens discovered on lands under the jurisdiction of the Commission. The final disposition of archaeological and historical resources or paleontological specimens from such lands must be approved by the Commission. If it is determined that the proposed project could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer.

## **ATTACHMENT B-1**

**Mitigation Monitoring Program Adopted by  
California Department of Water Resources**

# MITIGATION MONITORING AND REPORTING PROGRAM

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## Introduction

This Mitigation Monitoring and Reporting Program (MMRP) has been developed to make sure that the Department of Water Resources (DWR) carries out the adopted measures to mitigate and/or avoid significant environmental impacts associated with the implementation of the proposed project.

This MMRP is intended to be used by DWR to ensure compliance with mitigation measures during project implementation. DWR has ultimate responsibility for implementing and monitoring these measures. However, DWR may contract out for these services and/or make them part of the construction specifications. Mitigation measures identified in this MMRP were developed as part of the Initial Study/Mitigated Negative Declaration (IS/MND) process for the proposed project.

The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of levee repair activities as necessary, in-the-field identification and resolution of environmental concerns, and proper reporting.

## Compliance Checklist

The following table contains a compliance monitoring checklist that provides a synopsis of all adopted mitigation measures, the applicable sites, the entity responsible for implementation, the entity responsible for monitoring, and the timing of implementation. All the mitigation measures presented in this MMRP will be incorporated into the proposed project.



## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Air Quality</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?	<b>Mitigation Measure AQ-1: Implement DWR Best Management Practices (BMPs) for Construction.</b> The following measures identified in DWR's Climate Action Plan will reduce construction-related emissions of NOx and are applicable to repair sites in Sacramento County and Tehama County:  <b>BMP 7.</b> Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.	Post signage that requires shut down of equipment after five minutes when not in use.	Construction Contractor / DWR	During construction activities
	<b>BMP 12.</b> For deliveries to project sites where the haul distance exceeds 100 miles and a heavy duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay certified truck will be used to the maximum extent feasible.	Use SmartWay certified truck to the maximum extent feasible.	Construction Contractor / DWR	During construction activities
	<b>Mitigation Measure AQ-2: Truck Hauling requirements for Repair Sites 46 and 58.</b> Material hauling for Repair Sites 46 and 58 shall be conducted using trucks and not barges to reduce daily emission of NOx to below SMAQMD significant thresholds.	Use trucks to haul materials to Repair Sites 46 and 58.	Construction Contractor / DWR	During construction activities
	<b>Mitigation Measure AQ-3: Avoid Concurrent Activities of Repair Sites in Sacramento County.</b> This measure applies to all repair sites in Sacramento County. DWR shall schedule work to avoid concurrent activities of repair sites 46, 47, 58, and 59 with any other repair site such that daily NOx emissions would not cumulatively exceed 85 pounds per day on the same day.	Avoid concurrent activities of repair sites 46, 47, 58, and 59 with any other repair site.	Construction Contractor / DWR	During construction activities
	<b>Mitigation Measure AQ-4: Limit Concurrent Activities of Repair Sites in YSAQMD Jurisdiction.</b> This measure applies to all repair sites in YSAQMD jurisdiction. DWR shall schedule work to restrict concurrent activities of repair sites to no more than six at any one time to ensure that daily PM10 emissions would not cumulatively exceed 80 pounds per day.	Restrict concurrent activities of repair sites in YSAQMD Jurisdiction to no more than six at any one time.	Construction Contractor / DWR	During construction activities
	<b>Mitigation Measure AQ-5: Implement Construction BMPs for Tehama County.</b> The following measures identified in TCAPCD's CEQA Guidelines will reduce construction-related emissions of NOx and are applicable to construction equipment for the repair site in Tehama County: <ul style="list-style-type: none"> <li>Maintain all construction equipment in proper tune according to manufacturer's specifications.</li> </ul>	Implement Construction BMPs identified in TCAPCD's CEQA Guidelines.	Construction Contractor / DWR	During construction activities



## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Air Quality (cont.)</b>				
	<ul style="list-style-type: none"> <li>Maximize to the extent feasible, the use of diesel construction equipment meeting current CARB certification standards for off-road heavy-duty diesel engines.</li> <li>Registration of off-road equipment in the California Air Resources Board's DOORS program and meeting all applicable standards for replacement and/or retrofit.</li> <li>All portable equipment, including generators and air compressors rated over 50 brake horse power, shall be registered in the Portable Equipment Registration Program (PERP), or permitted through the District as a stationary source.</li> <li>Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission.</li> <li>Haul vehicles transporting soil into or out of the property shall be covered to reduce track out.</li> <li>Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary to reduce fugitive dust emissions.</li> </ul>			
<b>Biological Resources</b>				
Have 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<b>Mitigation Measure BIO-1:</b> If the biologist observes an occupied burrow during the preconstruction survey (as identified under Section 2.4.5), a minimum 600-foot buffer shall be established during work between April 1 and October 15 and a 150-foot buffer shall be established during work between October 15 and March 31.	Establish a 600-foot buffer if the biologist observes an occupied burrow during the preconstruction survey.	DWR / DWR	Prior to construction activities between April 1 and October 15.
	<b>Mitigation Measure BIO-2:</b> Within 24 hours prior to tree removal, a qualified biologist shall conduct a survey of all trees proposed for removal. If no special-status bats are observed within the trees, no additional mitigation is required for bats so long as the trees are removed within 24 hours of the survey. If the tree removal lapses for more than 24 hours, an additional survey is required.	Establish a 150-foot buffer if the biologist observes an occupied burrow during the preconstruction survey.  Conduct special-status bat survey.	DWR / DWR  DWR / DWR	Prior to construction activities between October 15 and March 31.  Prior to construction activities, within 24 hours prior to tree removal.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Biological Resources (cont.)</b>				
	<b>Mitigation Measure BIO-3:</b> If a bat is observed within a tree proposed for removal, the removal shall be halted and a minimum 20-foot buffer would be established around the tree. Through coordination with the CDFW, methods shall be established and implemented to exclude the bats from roosting in the tree. No tree removal would occur until the biologist determines that the tree is no longer occupied by the bats.	Establish a 20-foot buffer around the tree if a bat is observed.	DWR / DWR	Prior to tree removal.
	<b>Mitigation Measure BIO-4:</b> A qualified biologist shall conduct a preconstruction survey for active dens within 3 days prior to the start of vegetation clearing and grading activities in repair sites containing agricultural land, annual grassland, and ruderal/disturbed sites. If no active dens are observed, no additional measures are required so long as construction activities commence within 3 days of the survey. If construction activities lapse for more than 3 days, an additional survey would be required.	Conduct a preconstruction survey for active dens.	DWR / DWR	Within 3 days prior to the start of vegetation clearing and grading activities in repair sites containing agricultural land, annual grassland, and ruderal/disturbed sites.
	<b>Mitigation Measure BIO-5:</b> If active American badger dens are found, the biologist shall establish a minimum 20-foot buffer using flagging and shall be onsite to monitor all vegetation clearing and grading activities for the purpose of temporarily halting construction activities until the biologist determines that the badger has left the construction footprint on its own accord.	Establish a minimum 20-foot buffer if active American badger dens are found.  A biologist shall be onsite to monitor all vegetation clearing and grading activities.	DWR / DWR  DWR / DWR	During vegetation clearing and grading activities.
	<b>Mitigation Measure BIO-6:</b> Within 3 days prior to entering or working near stream/riparian habitat within the foothill yellow-legged frog range, a qualified biologist shall conduct a survey in aquatic habitat and adjacent riparian habitat within the repair area and a 500-foot buffer upstream and downstream of the repair area.	A qualified biologist shall conduct a survey.	DWR / DWR	Within 3 days prior to entering or working near stream/riparian habitat within the foothill yellow-legged frog range.
	<b>Mitigation Measure BIO-7:</b> If foothill yellow-legged frogs are observed in the repair area, DWR will stop work in the immediate area until the frog is out of the area and will notify a qualified biologist immediately. If possible, the frog 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 is no longer necessary to ensure that the frog is not harmed. If the frog does not leave the work area on its own volition, CDFW would be consulted to identify next steps.	Stop work in the immediate area if foothill yellow-legged frogs are observed in the repair area.  Notify a qualified biologist immediately	Construction contractor / DWR  Construction contractor / DWR	During construction
	<b>Mitigation Measure BIO-8:</b> A qualified biologist will be onsite to monitor all locations where repairs will occur within aquatic habitat where the frog has the potential to occur or was observed during the preconstruction survey.	A qualified biologist shall monitor locations where the frog has the potential to occur.	DWR / DWR	During construction within aquatic habitat.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Cultural Resources</b>				
Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<p><b>Mitigation Measure CUL-1. Preconstruction Training and a Plan for Inadvertent Discovery of Archaeological Resources.</b> Prior to construction, a qualified archaeologist with expertise in California archaeology will develop an archaeological resources training program for all construction and field workers involved in ground-disturbing activities. Only personnel who have received cultural resource awareness and sensitivity training will be allowed to enter areas potentially containing archaeological resources. Training will include a presentation developed in coordination with affiliated tribal representatives. Topics may include the potential presence and type of Native American and non-Native American resources that might be found during operations associated with the individual flood control projects, and necessary reporting protocols. Written materials will be provided to personnel as appropriate.</p> <p>While unlikely, the accidental discovery of archaeological resources or human remains at these locations cannot be entirely discounted. If prehistoric or historic-era archaeological resources are encountered, all construction activities within 100 feet will halt. DWR will be notified, and a Secretary of the Interior-qualified archaeologist will inspect the findings within 24 hours of discovery. If it is determined that the proposed project could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer and, for prehistoric resources, the appropriate Native American representative.</p>	<p>A qualified archaeologist will develop an archaeological resources training program for all construction and field workers involved in ground-disturbing activities.</p> <p>Suspend work within 100 feet if prehistoric or historic-era archaeological resources are encountered.</p> <p>A qualified archaeologist will inspect the findings.</p>	<p>DWR / DWR</p> <p>Construction contractor / DWR</p> <p>DWR / DWR</p>	<p>Prior to start of construction activities.</p> <p>During construction.</p> <p>Within 24 hours of discovery.</p>
	<p><b>Mitigation Measure CUL-2. Conduct Monitoring at Locations Identified by Native Americans as Sensitive.</b> Native American monitoring may be conducted at sensitive locations under agreements between DWR and culturally affiliated Native American Tribes. DWR may include qualified tribal monitors during certain construction activities. The decision to do so is based on the nature of the activity and the cultural sensitivity of the specific location. Tribal monitors would be required to submit reports, and the results be maintained by DWR to determine the need for additional surveys related to future activities in the area. If cultural materials are encountered during construction, Mitigation Measure CUL-2 will be implemented.</p>	<p>Tribal monitors present at sensitive sites will submit reports to DWR for determination of additional surveys.</p>	<p>DWR/ DWR</p>	<p>During construction.</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Cultural Resources (cont.)</b>				
	<p><b>Mitigation Measure CUL-3. Archaeological Monitoring and a Plan for Inadvertent Discovery of Archaeological Resources.</b> Project-related activities would require ground-disturbance, including excavation, trenching, grading, and use of staging areas. Ground disturbing activities could result in damage to or destruction of known archaeological sites, if present in the construction area. However, based on the archaeological studies on file at the CHRIS that have been conducted, there are no known prehistoric or historic-era (other than the Clarksburg Ferry, addressed in CUL-6) archaeological sites on the project site.</p> <p>Archaeological monitoring is necessary when ground-disturbing activities occur at the proposed project repair sites 44, 60, 61, 63, 65, 67 and 69. Monitoring shall be conducted by or supervised by a qualified archaeologist who meets the Secretary of the Interior's Qualification Standards. A Monitoring Plan shall be developed that includes (but not be limited to) the following components:</p> <ul style="list-style-type: none"> <li>• Person(s) responsible for conducting monitoring activities;</li> <li>• Person(s) responsible for overseeing and directing the monitors;</li> <li>• How the monitoring shall be conducted and the required format and content of monitoring reports;</li> <li>• Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports;</li> <li>• Protocol for notifications in case of encountering cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation);</li> <li>• Methods to ensure security of cultural resources sites;</li> <li>• A protocol for notifying local authorities (i.e., Sheriff, Police) should site looting and other illegal activities occur during construction.</li> <li>• During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.</li> <li>• Contact information for all responsible personnel identified in the Plan.</li> </ul>	<p>A qualified archaeologist shall monitor sites 44, 60, 61, 63, 65, 67 and 69.</p> <p>A Monitoring Plan shall be developed.</p>	<p>DWR / DWR</p> <p>DWR / DWR</p>	<p>Prior to and during ground-disturbing activities at sites 44, 60, 61, 63, 65, 67 and 69.</p> <p>Prior to start of construction activities</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Cultural Resources (cont.)</b>				
	<p>If an archaeological resource is encountered, all activity within 100 feet of the find shall immediately halt until it can be evaluated by a qualified archaeologist (and a Native American representative if the artifacts are prehistoric). If it is determined that project activities could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer and, for prehistoric resources, the appropriate Native American representative.</p> <p>In considering any suggested mitigation proposed by the archaeologist and Native American representative, DWR shall determine whether avoidance is feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is not feasible, other appropriate measures (e.g., data recovery as agreed upon between DWR, the archaeological consultant, and Native American representatives) shall be instituted. Work may proceed in other parts of the project site while mitigation for archaeological resources is being carried out.</p> <p>Because no known prehistoric or historic-era (other than the Clarksburg Ferry, (addressed in CUL-6) archaeological sites are on file with the CHRIS are present within the project sites, there would be no damage to or destruction of known archaeological resource locations during project construction. Therefore, there would be no impact on known prehistoric archaeological resources.</p>	<p>Suspend work within 100 feet if prehistoric or historic-era archaeological resources are encountered.</p> <p>A qualified archaeologist will inspect the findings.</p>	<p>Construction contractor / DWR</p> <p>DWR / DWR</p>	<p>During construction activities.</p> <p>Within 24 hours of discovery.</p>
Disturb any human remains, including those interred outside of formal cemeteries?	<p><b>Mitigation Measure CUL-4. Inadvertent Discovery of Human Remains:</b> If potential human remains are encountered, all work will halt within 100 feet of the find and the on-site construction crew will immediately contact DWR. DWR will contact the appropriate County coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.</p>	Halt work within 100 feet of the find and contact DWR.	Construction contractor / DWR	During construction activities.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Cultural Resources (cont.)</b>				
	<p><b>Mitigation Measure CUL-5. In the Event that Tribal Cultural Resources or Traditional Cultural Properties are Discovered during Construction, Implement Procedures to Evaluate Tribal Cultural Resources/Traditional Cultural Properties and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.</b> 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 TCRs (California PRC Section 21080.3.1). As was done during preparation of this IS/MND, culturally affiliated Tribes will be further consulted concerning TCRs and TCPs that may be impacted. If these types of resources are discovered during construction. Further consultation with culturally affiliated Tribes will focus on identification of measures to avoid or minimize impacts on any such resources discovered during construction. Should TCRs or TCPs be identified in the project APE during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of TCRs or TCPs:</p> <ul style="list-style-type: none"> <li>Each identified TCR/TCP will be evaluated for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively), in consultation with interested Native American Tribes.</li> <li>If a TCR is determined to be eligible for listing on the NRHP, DWR will avoid damaging effects to the TCR/TCP in accordance with California PRC Section 21084.3, if feasible. If DWR determines that the project may cause a substantial adverse change to a TCR/TCP, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a TCR/TCP or alternatives that would avoid significant impacts to a TCR/TCP. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:</li> </ul>	<p>Culturally affiliated Tribes will be further consulted.</p> <p>Evaluate TCR/TCPs for CRHR and NRHP eligibility.</p>	<p>DWR / DWR</p> <p>DWR / DWR</p>	<p>Prior to and during construction activities.</p> <p>During construction activities.</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Cultural Resources (cont.)</b>				
	<ul style="list-style-type: none"> <li>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:               <ul style="list-style-type: none"> <li>Protect the cultural character and integrity of the resource.</li> <li>Protect the traditional use of the resource.</li> <li>Protect the confidentiality of the resource.</li> <li>Protect the resource.</li> </ul> </li> </ul> <p>If a TCP is determined to be eligible for listing in the NRHP, then the procedures for determination of effect and, if adverse, treatment of the resource to resolve adverse effect will be conducted in accordance with the procedures required for compliance with Section 106 of the NHPA (36 CFR Parts 800.5–800.6).</p>			
	<p><b>Mitigation Measure CUL-6: Mitigation of Effects to Submerged Shipwrecks or Maritime Features.</b> There is one known shipwreck within a project repair site on the water-side toe of the levee subject to repair, P-57-000609. Water-side levee work conducted from a barge is expected in the vicinity of P-57-000609. The resources should be avoided to avoid adverse effects. If it is determined that project activities could damage P-57-000609, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, DWR will follow an existing an Historic Property Treatment Plan, prepared by the USACE for this resource, that will reduce the effects of the project to less than significant.</p> <p>While unlikely, the accidental discovery of additional submerged shipwrecks or maritime features cannot be entirely discounted. If additional submerged shipwrecks or maritime features are encountered, all construction activities within 100 feet will halt. DWR will be notified, and a Secretary of the Interior-qualified archaeologist will inspect the findings within 24 hours of discovery. The shipwreck or maritime feature will be evaluated for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively). If it is determined that the proposed project could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer.</p>	<p>Avoid resource P-57-000609 or follow the existing Historic Property Treatment Plan.</p> <p>Halt work within 100 feet of the find and contact DWR.</p> <p>A qualified archaeologist will inspect the findings.</p>	<p>DWR / DWR</p> <p>Construction contractor / DWR</p> <p>DWR / DWR</p>	<p>Prior to water-side levee work.</p> <p>During construction activities.</p> <p>Within 24 hours of discovery.</p>

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Greenhouse Gas Emissions</b>				
Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<p><b>Mitigation Measure GHG-1: Implement DWR BMP's for Construction Practices.</b> The following GGERP Plan BMP's shall be implemented as part of construction activities associated with the proposed project:</p> <p><b>BMP 1.</b> Evaluate project characteristics, including location, project work flow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project or specific elements of the project.</p> <p><b>BMP 2.</b> Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines. This BMP has been implemented by consideration of barge transport.</p> <p><b>BMP 3.</b> Ensure that all feasible avenues have been explored for providing an electrical service drop to the construction site for temporary construction power. When generators must be used, use alternative fuels, such as propane or solar, to power generators to the maximum extent feasible.</p> <p><b>BMP 6.</b> Limit deliveries of materials and equipment to the site to off peak traffic congestion hours.</p> <p><b>BMP 7.</b> Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.</p> <p><b>BMP 8.</b> Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an Air Quality Control Plan prior to commencement of construction.</p> <p><b>BMP 9.</b> Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on-site and every two weeks for equipment that remains on-site. Check vehicles used for hauling materials off-site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an Air Quality Management Plan prior to commencement of construction.</p>	Implement GGERP Plan BMPs.	Construction Contractor / DWR	During construction activities



## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Greenhouse Gas Emissions (cont.)</b>				
	<p><b>BMP 10.</b> Develop a project specific ride share program to encourage carpools and shuttle vans for construction worker commutes.</p> <p><b>BMP 12.</b> For deliveries to project sites where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay certified truck will be used to the maximum extent feasible.</p> <p><b>BMP 14.</b> Develop a project specific construction debris recycling and diversion program to achieve a documented 50% diversion of construction waste.</p> <p><b>BMP 15.</b> Evaluate the feasibility of restricting all material hauling on public roadways to off-peak traffic congestion hours. During construction scheduling and execution minimize, to the extent possible, uses of public roadways that would increase traffic congestion.</p>			
<b>Noise</b>				
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?	<p><b>Mitigation Measure NOI-1: Work Hour Restriction for Repair Site 44.</b> To ensure consistency with the restrictions of the Colusa County Code, work hours at repair site 44 shall be restricted to between 7 a.m. and 7 p.m.</p>	Work hours shall be restricted to between 7 a.m. and 7 p.m.	Construction contractor / DWR	During construction activities at repair site 44.
	<p><b>Mitigation Measure NOI-2: Noise control Measures for Repair Site 79.</b> To ensure consistency with the restrictions of Policy HS-P1.9 of the County General Plan Noise Element, DWR and its contractors shall implement the following construction-related noise control measures at repair site 79:</p> <ul style="list-style-type: none"> <li>• Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.</li> <li>• Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area; and</li> <li>• Utilize quiet air compressors and other stationary noise-generating equipment where appropriate technology exists and is feasible.</li> </ul>	Implement construction-related noise control measures.	Construction contractor / DWR	During construction activities at repair site 79.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Tribal Cultural Resources</b>				
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p> <p>ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<p><b>Mitigation Measure TCR-1: Implement Procedures for Inadvertent Discovery of Cultural Material and Implement an Inadvertent Discovery Plan</b></p> <p>Survey work and literature review have not identified any known TCR's within the project area, and tribal consultation is ongoing. Project-related activities associated with the project will require ground-disturbance, including excavation, trenching, grading, and use of staging and borrow areas. These ground disturbing activities could result in damage to or destruction of previously unidentified TCRs, which could be present within the project sites. There is no evidence of the presence of buried archaeological sites in the APE and, therefore, this impact would be less than significant. It is nevertheless possible that archaeological resources could be discovered during construction. In the event that archaeological resources that are considered TCRs are discovered during construction, Mitigation Measure TCR-1, described below, shall be implemented.</p> <ul style="list-style-type: none"> <li>If an inadvertent discovery of archaeological cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains) is made at any other time during project-related construction activities or project planning, DWR, in consultation with the appropriate tribe(s), USACE, and other interested parties, will develop and implement appropriate protection and avoidance measures where feasible.</li> <li>These procedures will be developed in accordance with 36CFR 800.13 which specifies procedures for post-review discoveries. Additional measures, such as development of a Memorandum of Agreement and a Historic Property Treatment Plan, may be necessary if avoidance or protection is not possible. All the steps identified above will be detailed in an accidental-discovery plan developed before construction so that all parties are aware of the process that must be implemented should buried archaeological resources be uncovered during construction.</li> </ul>	Develop protection and avoidance measures.	DWR / DWR	Prior to and during construction activities.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Tribal Cultural Resources (cont.)</b>				
	<p><b>Mitigation Measure TCR-2: Implement Procedures for Inadvertent Discovery of Human Remains.</b> There is no evidence of the presence of human remains in the APE and, therefore, this impact would be less than significant. It is nevertheless possible that human remains could be discovered during construction. In the event that human remains are discovered during construction, Mitigation Measure TCR-2, described below, shall be implemented.</p> <p>If an inadvertent discovery of human remains is made at any other time during project-related construction activities or project planning, DWR will implement the procedures listed below. Should human remains be identified in the project APE, the following performance standards shall be met prior to implementing or continuing actions such as construction, that may result in damage to or destruction of human remains. Avoiding or substantially lessening potential significant impacts to human remains or implementation of the procedures described below may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less than significant may be reached:</p> <ul style="list-style-type: none"> <li>• In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, DWR will immediately halt potentially damaging excavation in the area of the burial and notify the Yolo County Coroner and a professional archaeologist to determine the nature of the remains.</li> <li>• The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]).</li> <li>• After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains.</li> <li>• The responsibilities of DWR for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.</li> </ul>	Halt work and contact coroner.	Construction contractor / DWR	During construction activities.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Tribal Cultural Resources (cont.)</b>				
	<p>Upon the discovery of Native American human remains, DWR 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, 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. Site-protection measures that DWR will employ are as follows:</p> <ul style="list-style-type: none"> <li>Record the site with the NAHC or the appropriate Information Center; and</li> <li>Record a document with the County in which the property is located;</li> <li>If agreed to by the MLD and the landowner, DWR or DWR's authorized representative will work with the landowner and MLD to 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. DWR or DWR's authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to DWR. Mitigation may still be needed if impacts occur to those burials; DWR will consult with the MLD to identify appropriate mitigation.</li> <li>If the human remains are of historic age and are determined to be not of Native American origin, DWR will follow the provisions of the California Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.</li> </ul>	Stop work within 100 feet of the discovery.	DWR / DWR	Upon the discovery of Native American human remains until consultation with the MLD has taken place.

## MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Tribal Cultural Resources (cont.)</b>				
	<p><b>Mitigation Measure TCR-3: In the Event that Tribal Cultural Resources or Traditional Cultural Properties are Discovered during Construction, Implement Procedures to Evaluate Tribal Cultural Resources/Traditional Cultural Properties and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.</b> 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 TCRs (California PRC Section 21080.3.1)., Culturally affiliated Tribes will be further consulted concerning TCRs and TCPs that may be impacted. If these types of resources are discovered during construction. Further consultation with culturally affiliated Tribes will focus on identification of measures to avoid or minimize impacts on any such resources discovered during construction. Should TCRs or TCPs be identified in the project APE during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of TCRs or TCPs:</p> <ul style="list-style-type: none"> <li>DWR shall evaluate each identified TCR/TCP, prior to construction, for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively), in consultation with interested Native American Tribes.</li> <li>If a TCR is determined to be eligible for listing on the NRHP, DWR will avoid damaging effects to the TCR/TCP in accordance with California PRC Section 21084.3, if feasible. If DWR determines that the project may cause a substantial adverse change to a TCR/TCP, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a TCR/TCP or alternatives that would avoid significant impacts to a TCR/TCP. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:</li> <li>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.</li> </ul>	Culturally affiliated Tribes will be further consulted.	DWR / DWR	Prior to and during construction activities.

### MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Implementing Party / Monitoring Party	Timing
<b>Tribal Cultural Resources (cont.)</b>				
	<ul style="list-style-type: none"> <li>• 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:               <ul style="list-style-type: none"> <li>○ Protect the cultural character and integrity of the resource.</li> <li>○ Protect the traditional use of the resource.</li> <li>○ Protect the confidentiality of the resource.</li> <li>○ Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.</li> <li>○ Protect the resource.</li> </ul> </li> </ul>			