Board Packet for

Agenda Item 5F

Consider Board approval of Resolution No. 2018-04 to execute a Project Partnership Agreement with the U.S. Army Corps of Engineers (USACE) and Sutter Butte Flood Control Agency (SBFCA) to construct approximately 4.9 miles of in-place improvements to the Feather River West Levee from the Star Bend setback levee near Tudor Road downstream to Cypress Avenue.

Project Partnership Agreement

Sutter Basin, California Project

Meeting of the Central Valley Flood Protection Board

July 27, 2018

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July 27, 2018

Staff Report

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1.0 ITEM

Consider Central Valley Flood Protection Board (Board) adoption of Resolution 2018-04 (Attachment A) to:

1. Adopt California Environmental Quality Act (CEQA) responsible agency findings for the Sutter Basin, California Project (Project); and

2. Approve the Project Partnership Agreement (PPA) (Attachment B) between the Board, Sutter Butte Flood Control Agency (SBFCA), and U.S. Army Corps of Engineers (USACE) for construction of the Project in substantially the form provided; and

3. Delegate the Board President to sign the PPA and Certification Regarding Lobbying; and

4. Direct the Executive Officer to take the necessary actions to prepare and file a Notice of Determination pursuant to CEQA.

2.0 SPONSORS

Federal:	USACE
State:	Board (supported by Department of Water Resources, Division of Flood Management, Flood Projects Office (DWR))
Local:	SBFCA

3.0 PROJECT LOCATION

The Sutter Basin is a 326-square-mile area located in northern California on the west bank of the Feather River (Attachment C, Figure 1). The USACE study area is mostly encircled by project levees of the Sacramento River Flood Control Project (SRFCP), which was initially authorized by the Flood Control Act of 1917.

In 2014, the USACE federal project, described in the 2013 USACE Feasibility Final Report as the Locally Preferred Plan (LPP), was authorized by the Water Resources Reform and Development Act of 2014 (WRRDA 2014) (Public Law 113-121, § 7002(2)(8)). The LPP was approximately 41 miles in length, from Thermalito Afterbay in

Butte County downstream to Laurel Avenue south of Star Bend in Sutter County (Attachment C, Figure 2).

In 2016, the Water Infrastructure Improvements for the Nation Act of 2016 (WINN 2016) (Public Law 114-322, § 1305) deauthorized the LPP and authorized the National Economic Development Plan (NED). This action removed approximately 14 miles of levee improvements from Thermalito Afterbay to Sunset Weir, leaving approximately 27 miles of proposed improvements from Sunset Weir to Laurel Avenue south of Star Bend. The NED plan lies wholly within Sutter County. This federal action served to increase the Project benefit cost ratio to better compete against other authorized flood risk management projects nationwide for a "Construction New Start" award and construction funding.

In 2009 Levee District 1 constructed a 0.63-mile setback levee at Star Bend. Since 2013, SBFCA has completed improvements to approximately 36 miles of the Feather River west levee upstream of Star Bend (including approximately 22 of the 27-mile USACE NED plan) through its Feather River West Levee Project (FRWLP) in partnership with the Board and DWR in advance of the USACE Project.

As a result, the remaining improvements to be constructed by USACE are located along approximately 4.9 miles of the Feather River west levee downstream of Star Bend from near Tudor Road downstream to Cypress Avenue (Attachment C, Figure 3).

4.0 PROJECT DESCRIPTION

USACE is undertaking this work to construct approximately 4.9 miles of improvements to the Feather River west levee. At the upstream end, the Project will tie into the Star Bend Setback levee near Tudor Road. At the downstream end, this Project will tie into the cutoff wall constructed for the Laurel Avenue Repair Project near Cypress Avenue.

Construction will include a partial levee degrade, placement of soil-bentonite and soil-cement-bentonite cutoff walls (both trenched and deep mix methods) through the center of the levee, access roads, utility modifications to pressure and gravity pipes, removal or relocation of encroachments, and reconstruction of the levee to pre-project lines and grades.

5.0 PROJECT BACKGROUND

The Sutter Basin is home to approximately 95,000 people with over $7 billion in damageable assets. Significant flood events have occurred in 1909, 1914, 1940, 1955, 1964, 1970, 1986, and 1997. The flood of 1955 resulted in 38 deaths. Catastrophic and deadly failures occurred in 1997 on the Feather River east levee and the Sutter Bypass west levee, with significant flood fighting conducted on the west levee. The nearby levee failures, which reduced the Feather River water surface elevation, relieved pressure on the Sutter Basin levees and likely prevented further flooding and loss of life within the Basin.

After the 1997 event, the need for flood risk reduction improvements in the Sutter Basin was confirmed by the 1997 Flood Emergency Action Team report and agreed upon by federal, state, and local stakeholders. State Proposition 1E passed in 2006 to provide State bond funding, and a local Proposition 218 election passed in 2010 to provide local funding.

USACE initiated the Sutter Basin, California, Feasibility Study (Feasibility Study) in 2000 at the request of Sutter County through the Board. SBFCA was formed in 2007 as a joint powers agency by the Counties of Butte and Sutter; the Cities of Biggs, Gridley, Live Oak and Yuba City; and Levee Districts 1 and 9. SBFCA became a joint non-federal sponsor with the Board of the Feasibility Study in 2007, and the study area was redefined from the political boundaries of Sutter County to the Sutter Basin hydraulic boundaries.

The Feasibility Study resulted in a final report entitled *Sutter Basin Pilot Feasibility Final Report – Final Environmental Impact Report / Supplemental Environmental Impact Statement* (Feasibility Report) completed by USACE in 2013. After final USACE approval the report was submitted to Congress, and the Feasibility Study was authorized by WRRDA 2014. The Feasibility Report and WRRDA 2014 authorization recommended the Locally Preferred Plan which proposed approximately 41 miles of improvements to the Feather River west levee from Thermalito Afterbay in Butte County downstream to approximately four miles upstream of the Sutter Bypass in Sutter County. In 2016 the WIIN 2016 act deauthorized the LPP and authorized the NED.

In advance of completion of the Feasibility Study, and in partnership with the Board and DWR, SBFCA designed levee improvements and applied for the USACE U.S.C. Title 33, Section 408 (Section 408) approvals and Board permits needed to alter the SRFCP. In 2011 DWR approved SBFCA's Early Implementation Program (EIP) application to fund design of the FRWLP. From mid-2013 through 2017, SBFCA constructed approximately 36 miles of levee improvements, including approximately three miles of post-2017 high water emergency repairs. Major construction features included:

- cutoff walls (conventional soil bentonite slurry walls, soil-cement-bentonite deep mix method walls, and cement-bentonite panel walls) at crossings
- berms
- relief wells
- erosion protection
- utility relocations
- encroachment removals and compliance improvements

The FRWLP improvements were constructed at 100 percent non-Federal expense, and were approved through a USACE Section 408 Record of Decision (ROD) signed July 19, 2013 (amended September 13, 2013), and multiple Letters of Permission (LOP). The ROD approved all 41 miles of proposed FRWLP alterations. The State cost share was provided through DWR's EIP, Urban Flood Risk Reduction (UFRR), and Deferred Maintenance Programs for the 2017 emergency repair work. After federal approval, phased construction of improvements and repairs were permitted by the Board pursuant

to California Code of Regulations, Title 23, Division 1 (CCR Title 23) and other authorities.

Completion of improvements proposed in the NED Plan, along with the additional 14 miles of improvements completed by SBFCA from Sunset Weir to Thermalito Afterbay, will reduce flood risk for up to 95,000 residents and $7 billion of damageable assets in the communities of Biggs, Gridley, Live Oak, Yuba City and portions of unincorporated Sutter County.

All constructed improvements have been deemed consistent with the 2012 Central Valley Flood Protection Plan, and consistent with the Feasibility Report. Table 1 lists the Board permits and Section 408 RODs and LOPs to construct FRWLP improvements.

Table 1, Feather River West Levee Project and Related Board Permits and USACE Section 408 Actions

Date	Permit	Project	Miles	USACE 408 ROD	USACE 408 LOP
5/11/09	18191	LD 1 Star Bend Setback Levee	0.6	6/1/09	6/16/09
7/23/13	18793-1	FRWLP Area C, Reach 13, completed 2013	1.6	7/19/13	7/22/13
10/4/13	18793-1 (amended)	FRWLP Area C, Reaches 14-24, completed 2015	13.2	9/13/13	9/19/13
11/21/16	18793-1 (amended)	FRWLP Area C, Gap Closures, completed 2018	N/A	9/13/13	
3/26/13	18793-2	FRWLP Area B, Reaches 6-12, completed 2015	6.1	9/13/13	3/3/14
3/26/13	18793-3	FRWLP Area D Reaches 29-41, completed 2016	11.4	9/13/13	3/3/14
5/1/17	18793-4	Laurel Ave Repair Project, Area A, completed 2017	0.9	9/13/13 Sutter Basin Project (WRRDA 2014)	3/8/17
8/18/17	18793-5	FRWLP, 2017 Emergency Repairs, Reaches 14-16 completed 2017	2.9	Not Needed per WRRDA 2014, Section 1005(b)	8/1/17

6.0 AUTHORITIES

Federal:

- Section 14 of the Rivers and Harbors Act of 1899, (33 U.S.C. § 408)
- Section 209 of the Flood Control Act of 1962, (Public Law No. 87-874)
- Section 7002 of the Water Resources Reform and Development Act of 2014, (Public Law 113-121)
- Section 1305 of the Water Infrastructure Improvements for the Nation Act of 2016, (Public Law 114-322)
- Section 103 of the Water Resources Development Act of 1986, (Public Law 99-662)

State:

- Water Code sections 8615 and 12657

7.0 DESIGN AGREEMENT

SBFCA and USACE entered into a Design Agreement on August 2, 2016, to advance the required pre-construction engineering, design, and permitting activities necessary to construct the remaining five-mile reach of authorized levee improvements. During this time USACE, DWR, and SBFCA have partnered to advance the design, secure necessary environmental and cultural clearances, acquire required real estate, and prepare construction bid documents.

8.0 CONSTRUCTION FUNDING STATUS

On June 11, 2018, USACE released its Work Plan for Fiscal 2018 Civil Works Appropriations. The Work Plan included selection of the Project for a "Construction new start" in federal fiscal year 2018, and allocated of $50 million to complete project design and award a construction contract. The Work Plan can be found at: http://www.usace.army.mil/Missions/CivilWorks/Budget.aspx.

Federal and non-federal partners of USACE projects entering the construction phase are required to execute a PPA within the same fiscal year in which the construction new start is granted, and as such, the PPA proposed herein must be executed by September 30, 2018 to ensure that the federal allocation remains committed to the Project.

Funding for the State cost share, estimated at approximately $18.9 million, has been allocated within DWR's UFRR program using Proposition 1E (2006) bond funds. The State has provided self-certification to USACE that it has the financial capability to satisfy the Non-Federal Sponsor's obligations under the proposed PPA. A copy of this self-certification is included in the PPA.

9.0 PROJECT PARTNERSHIP AGREEMENT

The proposed PPA has been prepared by USACE in coordination with DWR and SBFCA for the Board's consideration. The PPA establishes obligations of the federal (USACE) and non-federal (State and SBFCA) parties agreeing to construct the Project. The PPA includes a Certificate of Authority, Certification Regarding Lobbying, and the Non-Federal Sponsor's Self-Certification of Financial Capability.

USACE currently estimates the total cost to construct the Project to be $77 million, with an estimated federal cost of $50 million and an estimated non-federal cost of $27 million. The total cost will be shared as follows:

Federal (USACE) – 65 percent ($50,050,000), and
Non-federal – 35 percent ($26,950,000).

The non-federal share is further divided as follows:

State – 70 percent (or 24.5 percent of the total cost at $18,865,000), and
SBFCA – 30 percent (or 10.5 percent of the total cost at $8,085,000).

These amounts are current USACE estimates only and are subject to further adjustment. If these projected amounts increase, such increases shall be subject to the written consent of USACE, the Board and SBFCA, and would likely require a PPA amendment.

On June 13, 2018, SBFCA's Board delegated authority to its Executive Director to execute the PPA. Upon Board approval, DWR will forward the PPA to USACE Sacramento District for final USACE execution. Once the three parties have signed the PPA a copy will be sent to the State Department of General Services (DGS) for final State contracting approval. Upon DGS approval, the State, through the Board and DWR, will be authorized to make cost share payments to USACE. USACE currently expects to advertise the construction contract this coming winter, and plans to begin construction in 2019, with completion anticipated in 2020.

DWR and SBFCA will prepare a Local Project Partnership Agreement (LPPA) to specify funding and other commitments and requirements between the non-federal sponsors for the Board's consideration as early as the August 24, 2018 Board meeting.

10.0 CEQA FINDINGS

The Feasibility Study resulted in a final report entitled *Sutter Basin Pilot Feasibility Final Report – Final Environmental Impact Report / Supplemental Environmental Impact Statement* (Feasibility Report) completed in 2013. The Report constituted a final EIR/SEIS with sections required for compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) (SCH No. 2011052085) (June 2013). USACE acted as the NEPA lead agency while SBFCA acted as the CEQA lead agency.

During preparation of the final EIR/SEIS, SBFCA prepared a Feather River West Levee Project (FRWLP) Draft EIS/EIR in December 2012. However, in March 2013 the NEPA and CEQA processes were separated and a stand-alone EIS (SCH No. 2013114003) and a stand-alone EIR (SCH No. 2011052062) were prepared.

USACE further analyzed potential impacts of the FRWLP in the Final 408 Permission Environmental Impact Statement (FEIS; June 2013). The Final EIS was approved by USACE and a ROD was signed on July 19, 2013, covering levee work proposed for construction in 2013 (FRWLP Reach 13). On September 13, 2013, USACE issued a second ROD which covered the entire 41-mile FRWLP.

Because the FRWLP Final EIS analyzed a project with similar features and environmental impacts to those of the Project, the actions proposed in the FRWLP Final EIS have been supplemented to include work associated with the Project, including an additional reach of levee improvements (Reaches 2 through 5 in SBFCA Project Area A) and impacts on vegetation. Consequently, the final Feasibility Report supplemented the analyses and conclusions reached by USACE in the FRWLP Final EIS. Further, this document incorporates by reference the FRWLP Final EIS where applicable.

For CEQA compliance, SBFCA, as the lead agency, prepared a Draft Environmental Impact Report (EIR) and Final EIR (SCH No. 2011052062, April 2013) to analyze potential impacts resulting from the FRWLP. In accordance with CEQA Guidelines §15092, SBFCA determined the project would have a significant effect on the environment and adopted Resolutions 2013-05 and 2013-06 on April 10, 2013 (including Statement of Facts, Findings, Impacts and Mitigation Measures, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program) (Attachment D) and subsequently filed a Notice of Determination with the State Clearinghouse on April 12, 2013. SBFCA found that the FRWLP will have significant, unavoidable impacts in the following resource areas: air quality, noise, vegetation and wetlands, visual resources, and cultural resources. The EIR also concludes that there will be cumulative effects on the environment in the following resource categories, due

to their combination with reasonably foreseeable past, present and future projects: air quality, wildlife, fish and aquatic resources, visual resources, and cultural resources.

In June 2016, SBFCA approved an addendum to the EIR to allow the California Department of Fish and Wildlife to issue an incidental take permit for the FRWLP under Section 2081 of the California Endangered Species Act. The addendum addressed mitigation measures related to effects on giant garter snake and cultural resources.

In April 2016, SBFCA prepared a Draft Supplemental EIR (SEIR) and Final Supplemental EIR (FSEIR) (June 2016, SCH No. 2011052062) to address potential environmental impacts associated with modifications to the project design for the Laurel Avenue Critical Repair and Gridley Bridge Erosion Repair sites. As detailed in the FSEIR and SBFCAs Findings document, the design modifications to the FRWLP will have significant, unavoidable impacts in the resource areas of air quality, noise, vegetation and wetlands, and tribal cultural resources. The Findings document concludes that the benefits of the FRWLP, as modified, including reduced flood risk for existing populations and addressing known deficiencies in the Feather River west levee, outweigh these unavoidable adverse impacts on the environment. On June 22, 2016, the SBFCA Board adopted Resolutions 2016-03 and 2016-04 which certified the FSEIR and adopted the Statement of Facts, Findings, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program (Attachment E).

The Board, as responsible agency, adopted CEQA findings for each previously approved FRWLP permitting action. On May 24, 2013, the Board adopted Resolution 2013-07, made findings pursuant to CEQA, and approved Permit Number 18793-1 for SBFCA's Project Area C, the first phase of the FRWLP. On February 28, 2014, the Board adopted Resolution 2014-01, made findings pursuant to CEQA, and approved Permit Numbers 18793-2 and 18793-3 for SBFCA Project Areas B and D. On June 24, 2016, the Board adopted Resolution 2016-15, made findings pursuant to CEQA, and approved Permit Number 18793-4 for the Laurel Avenue Repair Project. On August 18, 2017, the Board approved Permit Number 18793-5 for emergency repairs, and found the action to be exempt from CEQA under CEQA Guidelines section 15269 (b)(c) covering emergency repairs to publicly owned service facilities and specific actions necessary to prevent or mitigate an emergency.

The Board is a responsible agency under CEQA with regard to the PPA because of its discretionary funding authority. As a responsible agency, the Board's CEQA obligations are "more limited" than those of the lead agency (CEQA Guidelines, § 15096). The Board is bound by the legal presumption that SBFCA's FEIR and FSEIR for the FRWLP EIR fully comply with CEQA (CEQA Guidelines, § 15096, subd.(e)).

SBFCA, through its actions on April 10, 2013 and June 22, 2016, when it approved the FRWLP (which included adopting all required CEQA findings, MMRPs, and a Statement of Overriding Considerations) has identified, disclosed and adopted the mitigation measures recommended in the FEIR and FSEIR. SBFCA has the authority to implement those mitigation measures or to seek any required approvals for those mitigation measures identified in the CEQA Findings and MMRP. Board staff has independently reviewed and considered the FEIR and FSEIR, together with the related CEQA Findings and determined that the information and analyses contained in the FEIR and FSEIR, together with the related CEQA Findings, are adequate for the Board's use as a decision-making body as a responsible agency to approve the PPA, and for its consideration of discretionary actions necessary to implement the FRWLP within its jurisdiction. Since the FEIR and FSEIR were finalized, there have been no substantial changes to the FRWLP and no substantial changes in project circumstances that would require major revisions to the FEIR or FSEIR due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the FEIR and FSEIR.

Furthermore, Board staff has not identified any feasible alternative or additional feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect that the FRWL project would have on the environment.

Therefore, staff recommends the Board, as a responsible agency under CEQA, by Resolution 2018-04, adopt SBFCA's CEQA Findings for the FRWLP as its own findings under CEQA for its approval of the PPA. Resolution 2018-04 also adopts SBFCA's MMRP and Statement of Overriding Considerations made for the FEIR (2013) (Attachment D) and FSEIR (2016) (Attachment E) and reiterates the benefits of the project, which include increasing the level of flood protection for the Counties of Butte and Sutter and progress towards the State's mandate for 200-year flood protection for urban and urbanizing areas. The Board's adoption of SBFCA's Statement of Overriding Considerations is based on finding that these benefits outweigh the unavoidable adverse environmental effects of the project. As a result, the Board considers the unavoidable adverse environmental effects of the project to be acceptable.

11.0 STAFF RECOMMENDATION

Staff recommends that the Board adopt Resolution 2018-04 (in substantially the form provided in Attachment A), which:

Adopts:

- CEQA responsible agency findings

Approves:

- The Project Partnership Agreement in substantially the form provided

Delegates:

- The Board President to sign the PPA and Certification Regarding Lobbying; and

Directs:

- The Executive Officer to take the necessary actions to prepare and file a Notice of Determination pursuant to CEQA

12.0 LIST OF ATTACHMENTS

A. Resolution 2018-04

B. Project Partnership Agreement

C. Sutter Basin and Project Maps

   Figure 1, Sutter Basin

   Figure 2, USACE Project

   Figure 3, PPA Project

D. SBFCA Resolutions 2013-05 and 2013-06

E. SBFCA Resolutions 2016-03 and 2016-04

Prepared By:	Eric Butler, EIP/UFRR Project Manager, DWR, Ruth Darling, Board
DWR Staff Review:	Miles Claret, David Martasian, Kelly Briggs, Robert Scarborough
DWR Legal Review:	James Herink
Board Staff Review:	Ali Porbaha, Greg Harvey, Michael Wright
Board Legal Review:	Christina Morkner Brown, Jit Dua

Attachment A

Resolution 2018-04

STATE OF CALIFORNIA
NATURAL RESOURCES AGENCY
CENTRAL VALLEY FLOOD PROTECTION BOARD

RESOLUTION 2018-04
FOR EXECUTION OF A PROJECT PARTNERSHIP AGREEMENT FOR THE SUTTER BASIN, CALIFORNIA PROJECT

BACKGROUND:

A. **WHEREAS**, the Sutter Basin, California Project (Project) is a cooperative effort by the U.S. Army Corps of Engineers (USACE), the Central Valley Flood Protection Board (Board), and the Sutter Butte Flood Control Agency (SBFCA) to reduce flood risk for the Sutter Basin in Sutter County by making improvements to the Feather River west levee; and

B. **WHEREAS**, the Board is the State non-federal Project sponsor and a responsible agency under the California Environmental Quality Act (CEQA) for the Project, the USACE is the federal sponsor and Lead Agency under the National Environmental Policy Act (NEPA), and SBFCA is the local non-federal sponsor and lead agency under CEQA; and

C. **WHEREAS**, the Sutter Basin is home to approximately 95,000 people with over $7 billion in damageable assets, and significant flood events have occurred in 1909, 1914, 1940, 1955, 1964, 1970, 1986, and 1997, and

D. **WHEREAS**, after the 1997 event, the need for flood risk reduction improvements in the Sutter Basin was confirmed by the 1997 Flood Emergency Action Team report and agreed upon by federal, state, and local stakeholders; and

E. **WHEREAS**, State Proposition 1E passed in 2006 to provide State bond funding, and a local Proposition 218 election passed in 2010 to provide local funding; and

F. **WHEREAS**, USACE initiated the Sutter Basin, California, Feasibility Study in 2000 at the request of Sutter County through the Board, and

G. **WHEREAS**, in 2009 Levee District 1 constructed a 0.63-mile setback levee at Star Bend, with over $16.3 million in State cost share Early Implementation Program (EIP) funding; and

H. **WHEREAS**, SBFCA was formed in 2007 as a joint powers agency by the Counties of Butte and Sutter; the Cities of Biggs, Gridley, Live Oak and Yuba City; and Levee Districts 1 and 9, and

I. **WHEREAS**, SBFCA became a joint non-federal sponsor with the Board of the Feasibility Study in 2007, and the study area was redefined from the political boundaries of Sutter County to the Sutter Basin hydraulic boundaries, and

J. **WHEREAS**, a Record of Decision was signed on September 13, 2013, by the USACE Assistant Secretary of the Army which approved 41 miles of levee improvements proposed by SBFCA's Feather River West Levee Project (FRWLP); and

K. **WHEREAS**, the Water Resources Reform and Development Act (WRRDA) of 2014 (Public Law 113-121) authorized the Recommended Locally Preferred Plan for USACE to construct approximately 41 miles of improvements to the Feather River west levee from Thermalito Afterbay in Butte County downstream to Laurel Avenue south of Star Bend in Sutter County; and

L. **WHEREAS**, the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 (Public Law 114-322) deauthorized the Recommended Plan and authorized the National Economic Development Plan for USACE to construct approximately 27 miles of improvements to the Feather River west levee from Sunset Weir to Laurel Avenue south of Star Bend; and

M. **WHEREAS**, from 2013 through 2017 SBFCA, through its FRWLP cost-shared with the State Department of Water Resources, constructed improvements to approximately 36 miles of the Feather River west levee from Thermalito Afterbay to Laurel Avenue downstream of Star Bend, and

N. **WHEREAS**, the State has provided or committed over $230 million in State cost share funding to SBFCA to design, construct, and repair approximately 35 miles of the Feather River west levee; and

O. **WHEREAS**, in 2016 SBFCA and USACE entered into a Design Agreement to advance the required pre-construction engineering, design, and permitting activities necessary to construct the remaining 4.9-mile reach of authorized levee improvements; and

P. **WHEREAS**, on June 11, 2018 USACE released its Work Plan for Fiscal 2018 Civil Works appropriations which included selection of the Project for a "Construction new start" in federal fiscal year 2018, and allocated of $50 million to complete Project design and award a construction contract to construct the remaining features; and

Q. **WHEREAS**, the estimated State cost share of the Project construction cost is approximately $18.9 million; and

R. **WHEREAS**, USACE, as NEPA lead, analyzed potential environmental impacts of the Project through the Sutter Basin Pilot Feasibility Study Environmental Impact Report (EIR)/Supplemental Environmental Impact Statement (EIS); and

S. **WHEREAS**, USACE further analyzed potential impacts of the FRWLP in the Final 408 Permission Environmental Impact Statement (FEIS; June 2013); and

T. **WHEREAS**, SBFCA as lead agency under CEQA, Public Resources Code sections 21000 et seq. prepared an EIR and a Supplemental EIR, for the FRWLP, which describe and analyze the entire 41-mile FRWLP and all potential impacts resulting from the FRWLP; and

U. **WHEREAS,** the project description, project area, and impacts analysis as described in SBFCA's environmental documents certified for the FRWLP cover the Project, as described in the PPA; and

V. **WHEREAS**, the SBFCA Board certified the FRWLP Final EIR (FEIR) (SCH No. 2011052062) (April 2013) including Findings of Fact, Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Plan (MMRP), and filed a Notice of Determination (NOD) on April 12, 2013, and approved the FRWLP; and

W. **WHEREAS**, the SBFCA Board certified the FRWLP Supplemental FEIR (SCH No. 2011052062) (June 2016) and adopted the Findings of Fact, Statement of Overriding Considerations, and a MMRP and filed a NOD on June 22, 2016; and

X. **WHEREAS**, on April 10, 2013, and June 22, 2016, SBFCA adopted Findings as required by CEQA, including a MMRP, and a Statement of Overriding Considerations, and approved the FRWLP; and

Y. **WHEREAS**, the Board is a responsible agency under CEQA with regard to the PPA because of its discretionary funding authority; and

Z. **WHEREAS**, SBFCA has identified, disclosed and adopted the mitigation measures recommended in the FEIR and Supplemental FEIR. SBFCA has the authority to implement those mitigation measures or to seek any required approvals for those mitigation measures identified in the CEQA Findings; and

AA. **WHEREAS**, prior to approving discretionary actions necessary to support the implementation of the Project within its jurisdiction, the Board, as a responsible agency under CEQA, desires to make certain findings pursuant to California Code of Regulations, Title 14, Section 15096, promulgated under CEQA in connection with the reasonably foreseeable discretionary actions to be considered and taken by the Board in connection with the implementation of the Project.

NOW, THEREFORE, BE IT RESOLVED THAT THE BOARD:

1. Has independently reviewed and considered the 2013 FEIR and 2016 Supplemental FEIR, including comments and written responses received on the draft document and mitigation measures.

2. Finds that the 2013 FEIR and 2016 Supplemental FEIR were prepared, published, circulated and considered in accordance with the requirements of the CEQA and the State CEQA Guidelines, constitute adequate, accurate, objective, and complete FEIR and Supplemental FEIR in accordance with the requirements of CEQA and the State CEQA Guidelines, and reflect the independent judgment and analysis of the Board.

3. The Board has reviewed the CEQA Findings, and the Board determines and concludes the following:

a. SBFCA has identified, disclosed and adopted the mitigation measures recommended in the FEIR and Supplemental FEIR; and
b. SBFCA has the authority to implement those mitigation measures or to seek any required approvals for those mitigation measures identified in the CEQA Findings; and
c. The Board has independently reviewed and considered the FEIR and Supplemental FEIR together with the related CEQA Findings and determines that the information and analyses contained in the FEIR and Supplemental FEIR, together with the related CEQA Findings, are adequate for its use as a decision-making body for a responsible agency and for its consideration of discretionary actions necessary to implement the FRWLP within its jurisdiction; and
d. Since the FEIR and Supplemental FEIR were finalized, there have been no substantial changes to the FRWLP and no substantial changes in project circumstances that would require major revisions to the FEIR and Supplemental FEIR due to the involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the FEIR and Supplemental FEIR; and
e. The Board has not identified any feasible alternative or additional feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect that the FRWLP would have on the environment.

4. Therefore, the Board as a responsible agency under CEQA, adopts SBFCA's 2013 and 2016 CEQA Findings (Staff Report Attachments D and E respectively) for the FRWLP as its own findings under CEQA, and finds SBFCAs Findings are relevant to the Board's decision to approve discretionary actions necessary to implement the Project.

5. The Board also adopts SBFCA's MMRP and Statement of Overriding Considerations made for the FEIR (2013) and Supplemental FEIR (2016) (Staff Report Attachments D and E respectively) and reiterates the benefits of the Project which include increasing the level of flood protection for the Counties of Butte and Sutter and progress towards the state's mandate for 200-year flood protection for urban and urbanizing areas. The Board finds that these benefits outweigh the unavoidable adverse environmental effects of the Project. As a result, the Board considers the unavoidable adverse environmental effects of the Project to be acceptable.

6. Approves, in substantial form, the Project Partnership Agreement with USACE and SBFCA for the Project.

7. Delegates the Board President to sign the Project Partnership Agreement and Certification Regarding Lobbying.

8. Directs the Executive Officer to take the necessary actions to prepare and file a Notice of Determination pursuant to CEQA.

PASSED AND ADOPTED by vote of the Board on _____, 2018.

By: _____

William H. Edgar

President

By: _____

Jane Dolan

Secretary

Attachment B

Project Partnership Agreement and Certifications

PROJECT PARTNERSHIP AGREEMENT
BETWEEN
THE DEPARTMENT OF THE ARMY
AND
THE SUTTER BUTTE FLOOD CONTROL AGENCY
AND
THE CENTRAL VALLEY FLOOD PROTECTION BOARD
FOR
SUTTER BASIN, CALIFORNIA

THIS AGREEMENT is entered into this _____ day of _____, 2018, by and between the Department of the Army (hereinafter the "Government"), represented by the District Commander, Sacramento District, U.S. Army Corps of Engineers**,** the Sutter Butte Flood Control Agency (hereinafter "Sutter Butte"), represented by its Executive Director, and the State of California, acting by and through the Central Valley Flood Protection Board (hereinafter the "State"), represented by its Executive Officer (Sutter Butte and the State when referred to collectively are referred to as the "Non-Federal Sponsors").

WITNESSETH, THAT:

WHEREAS, construction of the Sutter Basin, California project (hereinafter the "Project", as defined in Article I.A. of this Agreement) was authorized by the Water Resources Reform and Development Act of 2014 (Public Law 113-121), Title VII, Section 7002(2) and amended by the Water Infrastructure Improvements for the Nation Act (Public Law 114-322) Title I, Subtitle B, Section 1305;

WHEREAS, Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2213), specifies the cost-sharing requirements applicable to the Project; and

WHEREAS, the Government and the Non-Federal Sponsors have the full authority and capability to perform in accordance with the terms of this Agreement and acknowledge that Section 221 of the Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), provides that this Agreement shall be enforceable in the appropriate district court of the United States.

NOW, THEREFORE, the parties agree as follows:

ARTICLE I - DEFINITIONS

A. The term "Project" means Sutter Basin levee improvement construction, as generally described in the Sutter Basin Pilot Feasibility Final Report – Final Environmental Impact Report / Supplemental Environmental Impact Statement, dated October, 2013 and approved by the Chief of Engineers on March 12, 2014.

B. The term "construction costs" means all costs incurred by the Government and Non-Federal Sponsors in accordance with the terms of this Agreement that are directly related to design and construction of the Project and cost shared. The term includes, but is not necessarily limited to: the Government's costs and the Non-Federal Sponsors' creditable contributions pursuant to the terms of the Design Agreement executed on August 2, 2016; the costs of historic preservation activities except for data recovery for historic properties; the Government's costs of engineering, design, and construction; the Government's supervision and administration costs; the Non-Federal Sponsors' creditable costs for providing real property interests, placement area improvements, and relocations and for providing in-kind contributions, if any. The term does not include any costs for operation, maintenance, repair, rehabilitation, or replacement; dispute resolution; participation in the Project Coordination Team; audits; or betterments; or the Non-Federal Sponsors' cost of negotiating this Agreement.

C. The term "real property interests" means lands, easements, and rights-of-way, including those required for relocations and borrow and dredged material placement areas. Acquisition of real property interests may require the performance of relocations.

D. The term "relocation" means the provision of a functionally equivalent facility to the owner of a utility, cemetery, highway, railroad (excluding existing railroad bridges and approaches thereto), or public facility when such action is required in accordance with applicable legal principles of just compensation. Providing a functionally equivalent facility may include the alteration, lowering, raising, or replacement and attendant demolition of the affected facility or part thereof.

E. The term "placement area improvements" means the improvements required on real property interests to enable the ancillary placement of material that has been dredged or excavated during construction, operation, and maintenance of the Project, including, but not limited to, retaining dikes, wasteweirs, bulkheads, embankments, monitoring features, stilling basins, and de-watering pumps and pipes.

F. The term "functional portion thereof" means a portion of the Project that has been completed and that can function independently, as determined in writing by the District Commander for Sacramento District (hereinafter the "District Commander"), although the remainder of the Project is not yet complete.

G. The term "in-kind contributions" means those materials or services provided by the Non-Federal Sponsors that are identified as being integral to the Project by the Division Commander for South Pacific Division (hereinafter the "Division Commander"). To be integral to the Project, the material or service must be part of the work that the Government would otherwise have undertaken for design and construction of the Project. The in-kind contributions also include any investigations performed by the Non-Federal Sponsors to identify the existence and extent of any hazardous substances that may exist in, on, or under real property interests required for the Project.

H. The term "betterment" means a difference in construction of an element of the Project that results from the application of standards that the Government determines exceed those that the Government would otherwise apply to construction of that element.

I. The term "fiscal year" means one year beginning on October 1st and ending on September 30th of the following year.

J. The term "Maximum Cost Limit" means the statutory limitation on the total cost of the Project, as determined by the Government in accordance with Section 902 of the Water Resources Development Act of 1986, as amended, if applicable to the Project, and Government regulations issued thereto.

ARTICLE II - OBLIGATIONS OF THE PARTIES

A. In accordance with Federal laws, regulations, and policies, the Government shall undertake construction of the Project using funds appropriated by the Congress and funds provided by the Non-Federal Sponsors.

B. The Non-Federal Sponsors shall contribute a minimum of 35 percent, up to a maximum of 50 percent, of construction costs, as follows:

1. The Non-Federal Sponsors shall pay 5 percent of construction costs, with an estimated $387,760 in funds already provided by the Non-Federal Sponsors pursuant to the Design Agreement creditable toward that amount.

2. In accordance with Article III, the Non-Federal Sponsors shall provide the real property interests, placement area improvements, and relocations required for construction, operation, and maintenance of the Project. If the Government determines that the Non-Federal Sponsors' estimated credits for real property interests, placement area improvements, and relocations will exceed 45 percent of construction costs, the Government, in its sole discretion, may acquire any of the remaining real property interests, construct any of the remaining placement area improvements, or perform any of the remaining relocations with the cost of such work included as a part of the Government's cost of construction. Nothing in this provision affects the Non-Federal Sponsors' responsibility under Article IV for the costs of any clean up and response related thereto.

3. In providing in-kind contributions, if any, the Non-Federal Sponsors shall obtain all applicable licenses and permits necessary for such work. As functional portions of the work are completed, the Non-Federal Sponsors shall begin operation and maintenance of such work. Upon completion of the work, the Non-Federal Sponsors shall so notify the Government and provide the Government with a copy of as-built drawings for the work.

4. After determining the amount to meet the 5 percent required by paragraph B.1., above, for the then current fiscal year and after considering the estimated amount of credit that will be afforded to the Non-Federal Sponsors pursuant to paragraphs B.2. and B.3., above,

the Government shall determine the estimated additional amount of funds required from the Non-Federal Sponsors to meet its minimum 35 percent cost share for the then-current fiscal year. No later than 30 calendar days after receipt of notification from the Government, the Non-Federal Sponsors shall provide the full amount of such required funds to the Government in accordance with Article VI.

5. No later than August 1st prior to each subsequent fiscal year, the Government shall provide the Non-Federal Sponsors with a written estimate of the full amount of funds required from the Non-Federal Sponsors during that fiscal year to meet its cost share. Not later than September 1st prior to that fiscal year, the Non-Federal Sponsors shall provide the full amount of such required funds to the Government in accordance with Article VI.

C. To the extent practicable and in accordance with Federal law, regulations, and policies, the Government shall afford the Non-Federal Sponsors the opportunity to review and comment on solicitations for contracts, including relevant plans and specifications, prior to the Government's issuance of such solicitations; proposed contract modifications, including change orders; and contract claims prior to resolution thereof. Ultimately, the contents of solicitations, award of contracts, execution of contract modifications, and resolution of contract claims shall be exclusively within the control of the Government.

D. The Government, as it determines necessary, shall undertake actions associated with historic preservation, including, but not limited to, the identification and treatment of historic properties as those properties are defined in the National Historic Preservation Act (NHPA) of 1966, as amended. All costs incurred by the Government for such work (including the mitigation of adverse effects other than data recovery) shall be included in construction costs and shared in accordance with the provisions of this Agreement. If historic properties are discovered during construction and the effect(s) of construction are determined to be adverse, strategies shall be developed to avoid, minimize or mitigate these adverse effects. In accordance with 54 U.S.C. 312507, up to 1 percent of the total amount authorized to be appropriated for the Project may be applied toward data recovery of historic properties and such costs shall be borne entirely by the Government. In the event that costs associated with data recovery of historic properties exceed 1 percent of the total amount authorized to be appropriated for the Project, the Government and Non-Federal Sponsors shall consult with each other and reach an agreement on how to fund such data recovery costs. Upon agreement in accordance with 54 U.S.C. 312508, the Government may seek a waiver from the 1 percent limitation under 54 U.S.C. 312507.

E. When the District Commander determines that construction of the Project, or a functional portion thereof, is complete, the District Commander shall so notify the Non-Federal Sponsors in writing and the Non-Federal Sponsors, at no cost to the Government, shall operate, maintain, repair, rehabilitate, and replace the Project, or such functional portion thereof. The Government shall furnish the Non-Federal Sponsors with an Operation, Maintenance, Repair, Rehabilitation, and Replacement Manual (hereinafter the "OMRR&R Manual") and copies of all as-built drawings for the completed work.

1. The Non-Federal Sponsors shall conduct its operation, maintenance, repair, rehabilitation, and replacement responsibilities in a manner compatible with the authorized

purpose of the Project and in accordance with applicable Federal laws and specific directions prescribed by the Government in the OMRR&R Manual and any subsequent updates or amendments thereto.

2. The Government may enter, at reasonable times and in a reasonable manner, upon real property interests that the Non-Federal Sponsors now or hereafter owns or controls to inspect the Project, and, if necessary, to undertake any work necessary to the functioning of the Project for its authorized purpose. If the Government determines that the Non-Federal Sponsors are failing to perform their obligations under this Agreement and the Non-Federal Sponsors do not correct such failures within a reasonable time after notification by the Government, the Government, at its sole discretion, may undertake any operation, maintenance, repair, rehabilitation, or replacement of the Project. No operation, maintenance, repair, rehabilitation, or replacement by the Government shall relieve the Non-Federal Sponsors of their obligations under this Agreement or preclude the Government from pursuing any other remedy at law or equity to ensure faithful performance of this Agreement.

F. Not less than once each year, the Non-Federal Sponsors shall inform affected interests of the extent of risk reduction afforded by the Project.

G. The Non-Federal Sponsors shall participate in and comply with applicable Federal floodplain management and flood insurance programs.

H. In accordance with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), the Non-Federal Sponsors shall prepare a floodplain management plan for the Project within one year after the effective date of this Agreement and shall implement such plan not later than one year after completion of construction of the Project. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to preserve the level of flood risk reduction provided by such work. The Non-Federal Sponsors shall provide an information copy of the plan to the Government.

I. The Non-Federal Sponsors shall publicize floodplain information in the area concerned and shall provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with the Project.

J. The Non-Federal Sponsors shall prevent obstructions or encroachments on the Project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) that might reduce the level of flood risk reduction the Project affords, hinder operation and maintenance of the Project, or interfere with the Project's proper function.

K. The Non-Federal Sponsors shall not use Federal Program funds to meet any of its obligations under this Agreement unless the Federal agency providing the funds verifies in writing that the funds are authorized to be used for the Project. Federal program funds are those funds provided by a Federal agency, plus any non-Federal contribution required as a matching share therefor.

L. In carrying out its obligations under this Agreement, the Non-Federal Sponsors shall comply with all the requirements of applicable Federal laws and implementing regulations, including, but not limited to: Section 601 of the Civil Rights Act of 1964 (P.L. 88-352), as amended (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto; the Age Discrimination Act of 1975 (42 U.S.C. 6102); and the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Army Regulation 600-7 issued pursuant thereto.

M. In addition to the ongoing, regular discussions of the parties in the delivery of the Project, the Government and the Non-Federal Sponsors may establish a Project Coordination Team to discuss significant issues or actions. The Government's costs for participation on the Project Coordination Team shall not be included in construction costs that are cost shared but shall be included in calculating the Maximum Cost Limit. The Non-Federal Sponsors' costs for participation on the Project Coordination Team shall not be included in construction costs that are cost shared and shall be paid solely by the Non-Federal Sponsors without reimbursement or credit by the Government.

N. The Non-Federal Sponsors may request in writing that the Government perform betterments on behalf of the Non-Federal Sponsors. Each request shall be subject to review and written approval by the Division Commander. If the Government agrees to such request, the Non-Federal Sponsors, in accordance with Article VI.F., must provide funds sufficient to cover the costs of such work in advance of the Government performing the work.

ARTICLE III - REAL PROPERTY INTERESTS, PLACEMENT AREA IMPROVEMENTS, RELOCATIONS, AND COMPLIANCE WITH PUBLIC LAW 91-646, AS AMENDED

A. The Government, after consultation with the Non-Federal Sponsors, shall determine the real property interests needed for construction, operation, and maintenance of the Project. The Government shall provide the Non-Federal Sponsors with general written descriptions, including maps as appropriate, of the real property interests that the Government determines the Non-Federal Sponsors must provide for construction, operation, and maintenance of the Project, and shall provide the Non-Federal Sponsors with a written notice to proceed with acquisition. The Non-Federal Sponsors shall acquire the real property interests and shall provide the Government with authorization for entry thereto in accordance with the Government's schedule for construction of the Project. The Non-Federal Sponsors shall ensure that real property interests provided for the Project are retained in public ownership for uses compatible with the authorized purposes of the Project.

B. The Government, after consultation with the Non-Federal Sponsors, shall determine the placement area improvements necessary for construction, operation, and maintenance of the Project, and shall provide the Non-Federal Sponsors with general written descriptions, including maps as appropriate, of such improvements and shall provide the Non-Federal Sponsors with a written notice to proceed with such improvements. The Non-Federal Sponsors shall construct the improvements in accordance with the Government's construction schedule for the Project.

C. The Government, after consultation with the Non-Federal Sponsors, shall determine the relocations necessary for construction, operation, and maintenance of the Project, and shall provide the Non-Federal Sponsors with general written descriptions, including maps as appropriate, of such relocations and shall provide the Non-Federal Sponsors with a written notice to proceed with such relocations. The Non-Federal Sponsors shall perform or ensure the performance of these relocations in accordance with the Government's construction schedule for the Project.

D. To the maximum extent practicable, not later than 30 calendar days after the Government provides to the Non-Federal Sponsors written descriptions and maps of the real property interests, placement area improvements, and relocations required for construction, operation, and maintenance of the Project, the Non-Federal Sponsors may request in writing that the Government acquire all or specified portions of such real property interests, construct placement area improvements, or perform the necessary relocations. If the Government agrees to such a request, the Non-Federal Sponsors, in accordance with Article VI.F., must provide funds sufficient to cover the costs of the acquisitions, placement area improvements, or relocations in advance of the Government performing the work. The Government shall acquire the real property interests, construct the placement area improvements, and perform the relocations, applying Federal laws, policies, and procedures. The Government shall acquire real property interests in the name of the Non-Federal Sponsors except, if acquired by eminent domain, the Government shall convey all of its right, title and interest to the Non-Federal Sponsors by quitclaim deed or deeds. The Non-Federal Sponsors shall accept delivery of such deed or deeds. The Government's providing real property interests, placement area improvements, or performing relocations on behalf of the Non-Federal Sponsors does not alter the Non-Federal Sponsors' responsibility under Article IV for the costs of any cleanup and response related thereto.

E. As required by Sections 210 and 305 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended (42 U.S.C. 4630 and 4655), and Section 24.4 of the Uniform Regulations contained in 49 C.F.R. Part 24, the Non-Federal Sponsors assures that (1) fair and reasonable relocation payments and assistance shall be provided to or for displaced persons, as are required to be provided by a Federal agency under Sections 4622, 4623 and 4624 of Title 42 of the U.S. Code; (2) relocation assistance programs offering the services described in Section 4625 of Title 42 of the U.S. Code shall be provided to such displaced persons; (3) within a reasonable period of time prior to displacement, comparable replacement dwellings will be available to displaced persons in accordance with Section 4625(c)(3) of Title 42 of the U.S. Code; (4) in acquiring real property, the Non-Federal Sponsors will be guided, to the greatest extent practicable under State law, by the land acquisition policies in Section 4651 and the provision of Section 4652 of Title 42 of the U.S. Code; and (5) property owners will be paid or reimbursed for necessary expenses as specified in Sections 4653 and 4654 of Title 42 of the U.S. Code.

ARTICLE IV - HAZARDOUS SUBSTANCES

A. The Non-Federal Sponsors shall be responsible for undertaking any investigations to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (hereinafter "CERCLA") (42 U.S.C. 9601-9675), that may exist in, on, or under real property interests required for construction, operation, and maintenance of the Project. However, for real property interests that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigations unless the District Commander provides the Non-Federal Sponsors with prior specific written direction, in which case the Non-Federal Sponsors shall perform such investigations in accordance with such written direction.

B. In the event it is discovered that hazardous substances regulated under CERCLA exist in, on, or under any of the required real property interests, the Non-Federal Sponsors and the Government, in addition to providing any other notice required by applicable law, shall provide prompt written notice to each other, and the Non-Federal Sponsors shall not proceed with the acquisition of such real property interests until the parties agree that the Non-Federal Sponsors should proceed.

C. If hazardous substances regulated under CERCLA are found to exist in, on, or under any required real property interests, the parties shall consider any liability that might arise under CERCLA and determine whether to initiate construction, or if already initiated, whether to continue construction, suspend construction, or terminate construction.

1. Should the parties initiate or continue construction, the Non-Federal Sponsors shall be responsible, as between the Government and the Non-Federal Sponsors, for the costs of cleanup and response, including the costs of any studies and investigations necessary to determine an appropriate response to the contamination. Such costs shall be paid solely by the Non-Federal Sponsors without reimbursement or credit by the Government.

2. In the event the parties cannot reach agreement on how to proceed or the Non-Federal Sponsors fail to provide any funds necessary to pay for cleanup and response costs or to otherwise discharge the Non-Federal Sponsors' responsibilities under this Article upon direction by the Government, the Government may suspend or terminate construction, but may undertake any actions it determines necessary to avoid a release of such hazardous substances.

D. The Non-Federal Sponsors and the Government shall consult with each other in an effort to ensure that responsible parties bear any necessary cleanup and response costs as defined in CERCLA. Any decision made pursuant to this Article shall not relieve any third party from any liability that may arise under CERCLA.

E. As between the Government and the Non-Federal Sponsors, the Non-Federal Sponsors shall be considered the operator of the Project for purposes of CERCLA liability. To the maximum extent practicable, the Non-Federal Sponsors shall operate, maintain, repair, rehabilitate, and replace the Project in a manner that will not cause liability to arise under CERCLA.

ARTICLE V - CREDIT FOR REAL PROPERTY INTERESTS, PLACEMENT AREA IMPROVEMENTS, RELOCATIONS, AND IN-KIND CONTRIBUTIONS

A. The Government shall include in construction costs, and credit towards the Non-Federal Sponsors' share of such costs, the value of Non-Federal Sponsors provided real property interests, placement area improvements, and relocations, and the costs of in-kind contributions determined by the Government to be required for the Project.

B. To the maximum extent practicable, no later than 6 months after it provides the Government with authorization for entry onto a real property interest or pays compensation to the owner, whichever occurs later, the Non-Federal Sponsors shall provide the Government with documents sufficient to determine the amount of credit to be provided for the real property interest in accordance with paragraphs C.1. of this Article. To the maximum extent practicable, no less frequently than on a semi-annual basis, the Non-Federal Sponsors shall provide the Government with documentation sufficient for the Government to determine the amount of credit to be provided for other creditable items in accordance with paragraph C. of this Article.

C. The Government and the Non-Federal Sponsors agree that the amount of costs eligible for credit that are allocated by the Government to construction costs shall be determined and credited in accordance with the following procedures, requirements, and conditions. Such costs shall be subject to audit in accordance with Article X.B. to determine reasonableness, allocability, and allowability of costs.

1. Real Property Interests.

a. General Procedure. The Non-Federal Sponsors shall obtain, for each real property interest, an appraisal of the fair market value of such interest that is prepared by a qualified appraiser who is acceptable to the parties. Subject to valid jurisdictional exceptions, the appraisal shall conform to the Uniform Standards of Professional Appraisal Practice. The appraisal must be prepared in accordance with the applicable rules of just compensation, as specified by the Government.

(1) Date of Valuation. For any real property interests owned by the Non-Federal Sponsors on the effective date of this Agreement and required for construction performed after the effective date of this Agreement, the date the Non-Federal Sponsors provides the Government with authorization for entry thereto shall be used to determine the fair market value. For any real property interests required for in-kind contributions covered by an In-Kind Memorandum of Understanding, the date of initiation of construction shall be used to determine the fair market value. The fair market value of real property interests acquired by the Non-Federal Sponsors after the effective date of this Agreement shall be the fair market value of such real property interests at the time the interests are acquired.

(2) Except for real property interests acquired through eminent domain proceedings instituted after the effective date of this Agreement, the Non-Federal Sponsors shall submit an appraisal for each real property interest to the Government for review

and approval no later than, to the maximum extent practicable, 60 calendar days after the Non-Federal Sponsors provide the Government with an authorization for entry for such interest or concludes the acquisition of the interest through negotiation or eminent domain proceedings, whichever occurs later. If after coordination and consultation with the Government, the Non-Federal Sponsors are unable to provide an appraisal that is acceptable to the Government, the Government shall obtain an appraisal to determine the fair market value of the real property interest for crediting purposes.

(3) The Government shall credit the Non-Federal Sponsors the appraised amount approved by the Government. Where the amount paid or proposed to be paid by the Non-Federal Sponsors exceeds the approved appraised amount, the Government, at the request of the Non-Federal Sponsors, shall consider all factors relevant to determining fair market value and, in its sole discretion, after consultation with the Non-Federal Sponsors, may approve in writing an amount greater than the appraised amount for crediting purposes.

b. Eminent Domain Procedure. For real property interests acquired by eminent domain proceedings instituted after the effective date of this Agreement, the Non-Federal Sponsors shall notify the Government in writing of its intent to institute such proceedings and submit the appraisals of the specific real property interests to be acquired for review and approval by the Government. If the Government provides written approval of the appraisals, the Non-Federal Sponsors shall use the amount set forth in such appraisals as the estimate of just compensation for the purpose of instituting the eminent domain proceeding. If the Government provides written disapproval of the appraisals, the Government and the Non-Federal Sponsors shall consult to promptly resolve the issues that are identified in the Government's written disapproval. In the event the issues cannot be resolved, the Non-Federal Sponsors may use the amount set forth in its appraisal as the estimate of just compensation for purpose of instituting the eminent domain proceeding. The fair market value for crediting purposes shall be either the amount of the court award for the real property interests taken or the amount of any stipulated settlement or portion thereof that the Government approves in writing.

c. Waiver of Appraisal. Except as required by paragraph C.1.b. of this Article, the Government may waive the requirement for an appraisal pursuant to this paragraph if, in accordance with 49 C.F.R. Section 24.102(c)(2):

(1) the owner is donating the real property interest to the Non-Federal Sponsors and releases the Non-Federal Sponsors in writing from its obligation to appraise the real property interest, and the Non-Federal Sponsors submits to the Government a copy of the owner's written release; or

(2) the Non-Federal Sponsors determine that an appraisal is unnecessary because the valuation problem is uncomplicated and the anticipated value of the real property interest proposed for acquisition is estimated at $25,000 or less, based on a review of available data. When the Non-Federal Sponsors determine that an appraisal is unnecessary, the Non-Federal Sponsors shall prepare the written waiver valuation required by 49 C.F.R. Section 24.102(c)(2) and submit a copy thereof to the Government for approval. When the anticipated

value of the real property interest exceeds $10,000, the Non-Federal Sponsors must offer the owner the option of having the Non-Federal Sponsors appraise the real property interest.

d. Incidental Costs. The Government shall include in construction costs and credit towards the Non-Federal Sponsors' share of such costs, the incidental costs the Non-Federal Sponsors incurred in acquiring any real property interests required pursuant to Article III for the Project within a five year period preceding the effective date of this Agreement, or at any time after the effective date of this Agreement, that are documented to the satisfaction of the Government. Such incidental costs shall include closing and title costs, appraisal costs, survey costs, attorney's fees, plat maps, mapping costs, actual amounts expended for payment of any relocation assistance benefits provided in accordance with Article III.E., and other payments by the Non-Federal Sponsors for items that are generally recognized as compensable, and required to be paid, by applicable state law due to the acquisition of a real property interest pursuant to Article III.

2. Placement Area Improvements. The Government shall include in construction costs and credit towards the Non-Federal Sponsors' share of such costs, the value of placement area improvements required for the Project. The value shall be equivalent to the costs, documented to the satisfaction of the Government, that the Non-Federal Sponsors incurred to provide any placement area improvements required for the Project. Such costs shall include, but not necessarily be limited to, actual costs of constructing the improvements; planning, engineering, and design costs; supervision and administration costs; and documented incidental costs associated with providing the improvements, but shall not include any costs associated with betterments, as determined by the Government.

3. Relocations. The Government shall include in construction costs and credit towards the Non-Federal Sponsors' share of such costs, the value of any relocations performed by the Non-Federal Sponsors that are directly related to construction, operation, and maintenance of the Project.

a. For a relocation other than a highway, the value shall be only that portion of relocation costs that the Government determines is necessary to provide a functionally equivalent facility, reduced by depreciation, as applicable, and by the salvage value of any removed items.

b. For a relocation of a highway, which is any highway, roadway, or street, including any bridge thereof, that is owned by a public entity, the value shall be only that portion of relocation costs that would be necessary to accomplish the relocation in accordance with the design standard that the State of California would apply under similar conditions of geography and traffic load, reduced by the salvage value of any removed items.

c. Relocation costs include actual costs of performing the relocation; planning, engineering, and design costs; supervision and administration costs; and documented incidental costs associated with performance of the relocation, as determined by the Government. Relocation costs do not include any costs associated with betterments, as determined by the

Government, nor any additional cost of using new material when suitable used material is available.

4. In-Kind Contributions. The Government shall include in construction costs and credit towards the Non-Federal Sponsors' share of such costs, the value of in-kind contributions that are integral to the Project.

a. The value shall be equivalent to the costs, documented to the satisfaction of the Government, that the Non-Federal Sponsors incurred to provide the in-kind contributions. Such costs shall include, but not necessarily be limited to, actual costs of constructing the in-kind contributions; engineering and design costs; supervision and administration costs; and documented incidental costs associated with providing the in-kind contributions, but shall not include any costs associated with betterments, as determined by the Government. Appropriate documentation includes invoices and certification of specific payments to contractors, suppliers, and the Non-Federal Sponsors' employees.

b. No credit shall be afforded for interest charges, or any adjustment to reflect changes in price levels between the time the in-kind contributions are completed and credit is afforded; for the value of in-kind contributions obtained at no cost to the Non-Federal Sponsors; for any in-kind contributions performed prior to the effective date of this Agreement unless covered by an In-Kind Memorandum of Understanding between the Government and Non-Federal Sponsors; or for costs that exceed the Government's estimate of the cost for such in-kind contributions if they had been provided by the Government.

5. Compliance with Federal Labor Laws. Any credit afforded under the terms of this Agreement is subject to satisfactory compliance with applicable Federal labor laws covering non-Federal construction, including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (labor standards originally enacted as the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act, and the Copeland Anti-Kickback Act), and credit may be withheld, in whole or in part, as a result of the Non-Federal Sponsors' failure to comply with its obligations under these laws.

D. Notwithstanding any other provision of this Agreement, the Non-Federal Sponsors shall not be entitled to credit for real property interests that were previously provided as an item of local cooperation for another Federal project.

ARTICLE VI – PAYMENT OF FUNDS

A. As of the effective date of this Agreement, construction costs are projected to be $77,000,000, with the Government's share of such costs projected to be $50,000,000 and the Non-Federal Sponsors' share of such costs projected to be $27,000,000, which includes the 5 percent contribution of funds projected to be $3,850,000, creditable real property interests, relocations, and placement area improvements projected to be $0, creditable in-kind contributions projected to be $0, and the additional amount of funds required to meet the minimum 35 percent cost share projected to be $23,150,000. Costs for betterments are projected

to be $0. These amounts are estimates only that are subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsors.

B. The Government shall provide the Non-Federal Sponsors with quarterly reports setting forth the estimated construction costs and the Government's and Non-Federal Sponsors' estimated shares of such costs; costs incurred by the Government, using both Federal and Non-Federal Sponsors funds, to date; the amount of funds provided by the Non-Federal Sponsors to date; the estimated amount of any creditable real property interests, placement area improvements, and relocations; the estimated amount of any creditable in-kind contributions; and the estimated amount of funds required from the Non-Federal Sponsors during the upcoming fiscal year.

C. The Non-Federal Sponsors shall provide the funds required to meet its share of construction costs by delivering a check payable to "FAO, USAED, Sacramento District EROC L2" to the District Commander, or verifying to the satisfaction of the Government that the Non-Federal Sponsors has deposited such required funds in an escrow or other account acceptable to the Government, with interest accruing to the Non-Federal Sponsors, or by providing an Electronic Funds Transfer of such required funds in accordance with procedures established by the Government.

D. The Government shall draw from the funds provided by the Non-Federal Sponsors to cover the non-Federal share of construction costs as those costs are incurred. If the Government determines at any time that additional funds are needed from the Non-Federal Sponsors to cover the Non-Federal Sponsors' required share of such construction costs, the Government shall provide the Non-Federal Sponsors with written notice of the amount of additional funds required. Within 60 calendar days from receipt of such notice, the Non-Federal Sponsors shall provide the Government with the full amount of such additional required funds.

E. Upon completion of construction and resolution of all relevant claims and appeals and eminent domain proceedings, the Government shall conduct a final accounting and furnish the Non-Federal Sponsors with the written results of such final accounting. Should the final accounting determine that additional funds are required from the Non-Federal Sponsors, the Non-Federal Sponsors, within 60 calendar days of receipt of written notice from the Government, shall provide the Government with the full amount of such additional required funds. Such final accounting does not limit the Non-Federal Sponsors' responsibility to pay its share of construction costs, including contract claims or any other liability that may become known after the final accounting. If the final accounting determines that funds provided by the Non-Federal Sponsors exceed the amount of funds required to meet its share of construction costs, the Government shall refund such excess amount, subject to the availability of funds for the refund. In addition, if the final accounting determines that the Non-Federal Sponsors' credit for real property interests, placement area improvements, and relocations combined with credit for in-kind contributions exceed its share of construction costs for the Project, the Government, subject to the availability of funds, shall enter into a separate agreement to reimburse the difference to the Non-Federal Sponsors.

F. If there are real property interests, placement area improvements, relocations, or betterments provided on behalf of the Non-Federal Sponsors, the Government shall provide written notice to the Non-Federal Sponsors of the amount of funds required to cover such costs. No later than 30 calendar days of receipt of such written notice, the Non-Federal Sponsors shall make the full amount of such required funds available to the Government by delivering a check payable to "FAO, USAED, Sacramento District EROC L2" to the District Commander, or by providing an Electronic Funds Transfer of such funds in accordance with procedures established by the Government. If at any time the Government determines that additional funds are required to cover such costs, the Non-Federal Sponsors shall provide those funds within 30 calendar days from receipt of written notice from the Government.

ARTICLE VII - TERMINATION OR SUSPENSION

A. If at any time the Non-Federal Sponsors fail to fulfill their obligations under this Agreement, the Government may suspend or terminate construction of the Project unless the Assistant Secretary of the Army (Civil Works) determines that continuation of such work is in the interest of the United States or is necessary in order to satisfy agreements with other non-Federal interests.

B. If the Government determines at any time that the Federal funds made available for construction of the Project are not sufficient to complete such work, the Government shall so notify the Non-Federal Sponsors in writing, and upon exhaustion of such funds, the Government shall suspend construction until there are sufficient funds appropriated by the Congress and funds provided by the Non-Federal Sponsors to allow construction to resume. In addition, the Government may suspend construction if the Maximum Cost Limit is exceeded.

C. If hazardous substances regulated under CERCLA are found to exist in, on, or under any required real property interests, the parties shall follow the procedures set forth in Article IV.

D. In the event of termination, the parties shall conclude their activities relating to construction of the Project. To provide for this eventuality, the Government may reserve a percentage of available funds as a contingency to pay the costs of termination, including any costs of resolution of real property acquisition, resolution of contract claims, and resolution of contract modifications.

E. Any suspension or termination shall not relieve the parties of liability for any obligation incurred. Any delinquent payment owed by the Non-Federal Sponsors pursuant to this Agreement shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13 week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3 month period if the period of delinquency exceeds 3 months.

ARTICLE VIII - HOLD AND SAVE

The Non-Federal Sponsors shall hold and save the Government free from all damages arising from design, construction, operation, maintenance, repair, rehabilitation, and replacement of the Project, except for damages due to the fault or negligence of the Government or its contractors.

ARTICLE IX - DISPUTE RESOLUTION

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to the parties. Each party shall pay an equal share of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

ARTICLE X - MAINTENANCE OF RECORDS AND AUDITS

A. The parties shall develop procedures for the maintenance by the Non-Federal Sponsors of books, records, documents, or other evidence pertaining to costs and expenses for a minimum of three years after the final accounting. The Non-Federal Sponsors shall assure that such materials are reasonably available for examination, audit, or reproduction by the Government.

B. The Government may conduct, or arrange for the conduct of, audits of the Project. Government audits shall be conducted in accordance with applicable Government cost principles and regulations. The Government's costs of audits shall not be included in construction costs, but shall be included in calculating the Maximum Cost Limit.

C. To the extent permitted under applicable Federal laws and regulations, the Government shall allow the Non-Federal Sponsors to inspect books, records, documents, or other evidence pertaining to costs and expenses maintained by the Government, or at the request of the Non-Federal Sponsors, provide to the Non-Federal Sponsors or independent auditors any such information necessary to enable an audit of the Non-Federal Sponsors' activities under this Agreement. The costs of non-Federal audits shall be paid solely by the Non-Federal Sponsors without reimbursement or credit by the Government.

ARTICLE XI - RELATIONSHIP OF PARTIES

In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsors each act in an independent capacity, and neither is to

be considered the officer, agent, or employee of the other. Neither party shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights a party may have to seek relief or redress against that contractor.

ARTICLE XII - NOTICES

A. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and delivered personally or mailed by registered or certified mail, with return receipt, as follows:

If to the Non-Federal Sponsors:

Sutter Butte Flood Control Agency
Executive Director
P.O. Box M
Yuba City, CA 95991

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

If to the Government:
U.S. Army Corps of Engineers
District Commander, Sacramento District
1325 J Street
Sacramento, CA 95814-2922

B. A party may change the recipient or address to which such communications are to be directed by giving written notice to the other party in the manner provided in this Article.

ARTICLE XIII - CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

ARTICLE XIV - THIRD PARTY RIGHTS, BENEFITS, OR LIABILITIES

Nothing in this Agreement is intended, nor may be construed, to create any rights, confer any benefits, or relieve any liability, of any kind whatsoever in any third person not a party to this Agreement.

ARTICLE XV – OBLIGATIONS OF FUTURE APPROPRIATIONS

The Non-Federal Sponsors intend to fulfill fully their obligations under this Agreement. Nothing herein shall constitute, nor be deemed to constitute, an obligation of future appropriations by the California State Legislature or the Sutter Butte Board of Directors where creating such an obligation would be inconsistent with Article 13B of the California Constitution

or any other relevant provisions of California law. If the Non-Federal Sponsors are unable to, or do not, fulfill their obligations under this Agreement, the Government may exercise any legal rights it has to protect the Government's interests.

ARTICLE XVI – JOINT AND SEVERAL RESPONSIBILITY OF THE NON-FEDERAL SPONSORS

The obligations and responsibilities of the Non-Federal Sponsors shall be joint and several, such that each Non-Federal Sponsor shall be liable for the whole performance of the obligations and responsibilities of the Non-Federal Sponsors under the terms and provisions of this Agreement. The Government may demand the whole performance of said obligations and responsibilities from any of the entities designated herein as one of the Non-Federal Sponsors.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the District Commander.

DEPARTMENT OF THE ARMY

BY: _____
David G. Ray, P.E.
Colonel, U.S. Army
District Commander

DATE: _____

THE SUTTER BUTTE FLOOD CONTROL AGENCY

BY: _____
Mike Inamine
Executive Director

DATE: _____

THE STATE OF CALIFORNIA
CENTRAL VALLEY FLOOD PROTECTION BOARD

BY: _____
William Edgar
President,
Central Valley Flood Protection Board

DATE: _____

CERTIFICATE OF AUTHORITY

I, Kanwarjit Dua, do hereby certify that I am the principal legal officer of the State of California Central Valley Flood Protection Board, that the State of California Central Valley Flood Protection Board is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and the State of California Central Valley Flood Protection Board in connection with the Sutter Basin, California project, and to pay damages, if necessary, in the event of the failure to perform in accordance with the terms of the Agreement, as required by Section 221 of the Flood Control Act of 1970, as amended (42 U.S.C. 1962d-5b), and that the person who executed the Agreement on behalf of the State of California Central Valley Flood Protection Board acted within his statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this _____ day of_____20___.

_____

Kanwarjit Dua,
Board Counsel,
State of California Central Valley Flood Projection Board

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____

William H. Edgar
President,
Central Valley Flood Protection Board

DATE: _____

NON-FEDERAL SPONSOR'S
SELF-CERTIFICATION OF FINANCIAL CAPABILITY
FOR AGREEMENTS

I, Leslie M. Gallagher, do hereby certify that I am the Executive Officer of the State of California Central Valley Flood Protection Board ("the Non-Federal Sponsor"); that I am aware of the financial obligations of the Non-Federal Sponsor for the Sutter Basin, California Project; and that the Non-Federal Sponsor has the financial capability to satisfy the Non-Federal Sponsor's obligations under the Project Partnership Agreement Amendment between the Department of the Army and the Sutter Butte Flood Control Agency and the Central Valley Flood Protection Board for Sutter Basin, California.

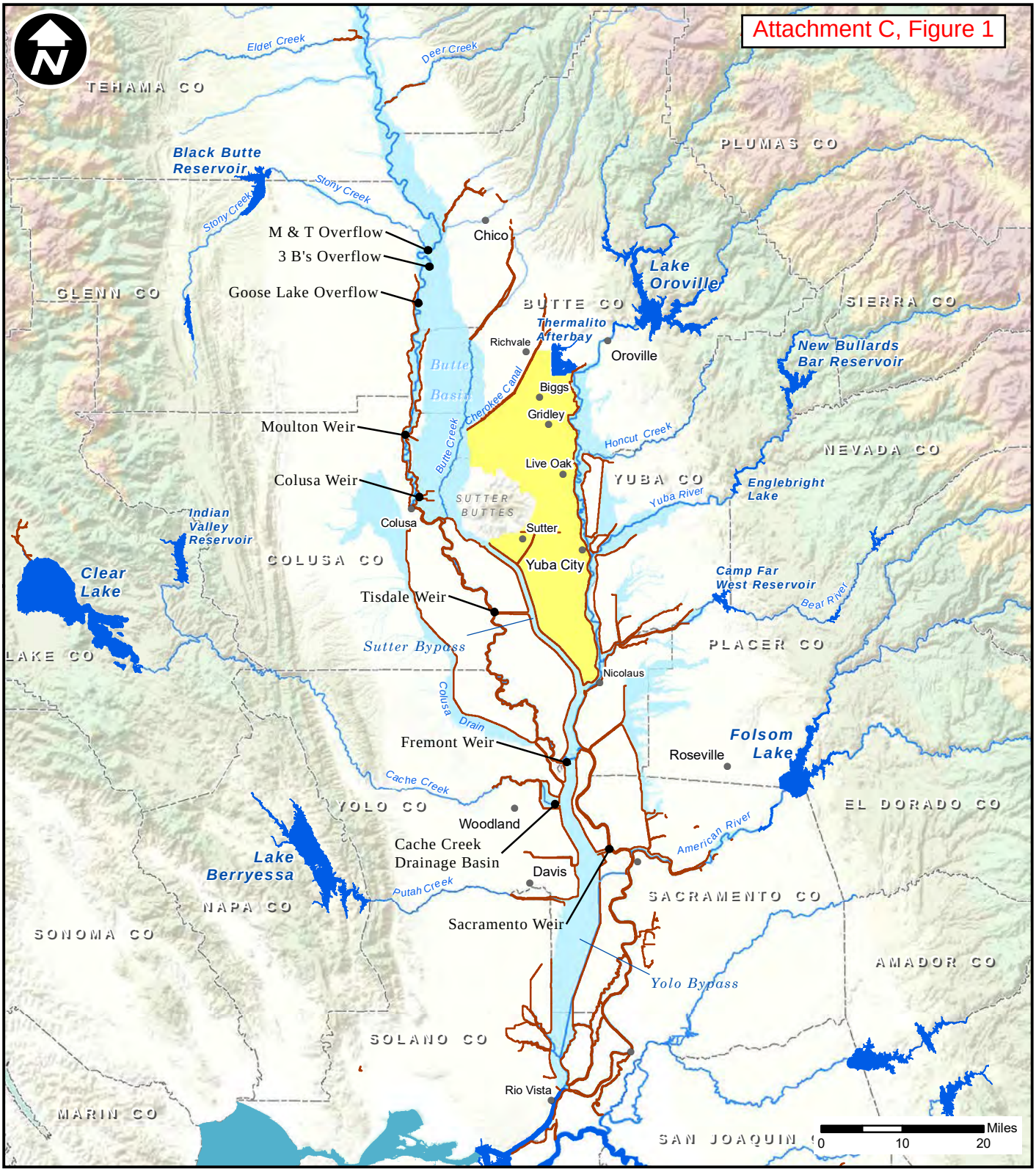
IN WITNESS WHEREOF, I have made and executed this certification this fifth day of July, 2018.

BY: _____ for _____
Leslie M. Gallagher
Executive Officer, State of California
Central Valley Flood Protection Board

DATE: 7/5/18

Attachment C

Figures



Legend

- Study Area Extent
- Designated Floodway
- Lake or Reservoir
- River or Stream
- Federal Levee
- County Boundary
- City

SUTTER BASIN FEASIBILITY STUDY
SUTTER BASIN, CALIFORNIA

SACRAMENTO RIVER FLOOD CONTROL PROJECT

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by Jim Mars

FEB 2013

PLATE 1

Attachment C, Figure 2

PROJECT AREA D1 (REACHES 38-41)
PROJECT AREA D2B (REACHES 35-37)
PROJECT AREA D2A (REACHES 29-34)
PROJECT AREA D (D1 & D2) (PERMIT 18793-3)
PROJECT AREA D3
PROJECT AREA C
PROJECT AREA B (PERMIT 18793-2)
PROJECT AREA A1
PROJECT AREA A2

Reach 41
Reach 40
Reach 39
Reach 38
Reach 37
Reach 36
Reach 35
Reach 34
Reach 33
Reach 32
Reach 31
Reach 30
Reach 29
Reach 28
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Reach 3
Reach 2
Reach 1

2308+00
2300+00
2200+00
2100+00
2000+00
1900+00
1800+00
1700+00
1600+00
1500+00
1400+00
1300+00
1200+00
1100+00
1000+00
900+00
800+00
700+00
600+00
500+00
400+00
300+00
200+00
100+00
10+00

STA 2368+28
STA 1765+00
STA 1674+37
STA 1625+00
STA 845+00
STA 832+40
STA 512+00
STA 478+68
STA 202+50

Upstream Limit: LPP Plan
Upstream Limit: NED Plan
Downstream Limit: LPP and NED Plans

M.A.-7
M.A.-16
M.A.-3
L.D.-9
L.D.-1

OROVILLE
OROVILLE WILDLIFE AREA
THERMALITO AFTERBAY
BIGGS
GRIDLEY
LIVE OAK
YUBA CITY
MARYSVILLE
MARYSVILLE L.D.
SUNSET PUMP STATION
SHANGHAI BEND
STAR BEND
WHEATLAND
(PERMIT 18793-1)

Legend

- Area A1, PED Phase Project
- Area A2, Future
- Area B, EIP/UFRR
- Area C, EIP/UFRR
- Area D, EIP/UFRR
- Area D3, No Repairs Planned
- No Levee Work Reaches

700+00 Levee Stationing
Reach 1 Reach Number
Major Streams
SBFCA Boundary
DWR Maintenance Areas
Levee Districts
Cities

DATA: ESRI ArcGIS Online; ESRI Maps and Data, 2008; USGS and © 2007 National Geographic Society; URS, 2010

SUBJECT TO CHANGE

SBFCA "Project Area A1" is equivalent to the USACE Sutter Basin Project remaining Improvements

0 1 2 3 4 5 Miles
1 in = 1.5 miles

N

HDR ONE COMPANY | *Many Solutions* SM

Flood Protection Improvements: Sutter Basin Feather River West Levee Project Phases

Original map provided by SBFCA, modified by FPO October 2016

Path: G:\1436\18_Sutter_Butte\map_docs\mxd\Arc10\Construction_Phasing\FRWL_Const_phasing_Exhibit_20141212.mxd Date Saved: 12/16/2014 1:55:59 PM User: aarnold

Attachment C, Figure 3

US ARMY CORPS OF ENGINEERS

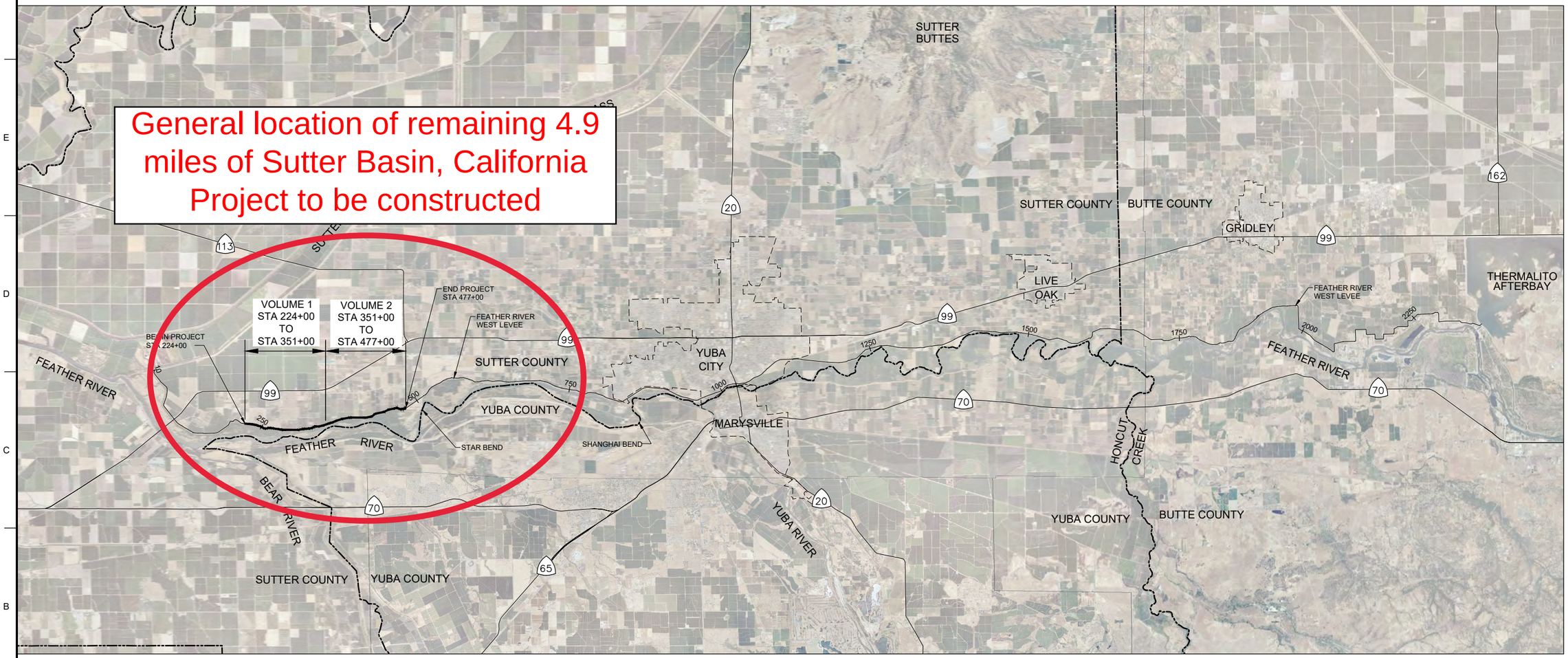
SUTTER BASIN FLOOD RISK MANAGEMENT PROJECT

CYPRESS AVENUE TO TUDOR ROAD
VOLUME 1: STA 224+00 TO 351+00
VOLUME 2: STA 351+00 TO 477+00

N

8000 4000 0 8000 16000

SCALE: 1"=8000'



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. NETTLETON
DRAWN BY: A. JACKSON
CHECKED BY: D. JABBOUR
SUBMITTED BY: C. KRIVANEC
ISSUE DATE: APRIL 2018
SOLICITATION NO.: W91238-XX-X-XXXX
CONTRACT NO.: W91238-XX-X-XXXX
DESIGN FILE NO: 4-04-0642
FILE NAME: 21G-002.dwg
SPEC NO: 2147
SHEET NO: 11417

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO, CA 95814-2922

HDR

SUTTER COUNTY, CALIFORNIA
SUTTER BASIN FLOOD RISK MANAGEMENT PROJECT
CYPRESS AVENUE TO TUDOR ROAD (VOLUME 1 OF 2)
STA 224+00 TO 351+00

BASIN MAP

SHEET ID

G-002

100% SUBMITTAL

Attachment D

SBFCA 2013 Board Resolutions

Attachment D

Sutter Butte Flood Control Agency

A Partnership for Flood Safety

April 10, 2013

TO: Board of Directors

FROM: Mike Inamine, Executive Director
Andrea Clark, General Counsel

SUBJECT: Certification of EIR and Adoption of Findings and Mitigation Monitoring and Reporting Plan for Feather River West Levee Project

---

Recommendation

That the Board of Directors approve: (i) a resolution certifying the Environmental Impact Report for the Feather River West Levee Project as having been prepared in compliance with the California Environmental Quality Act (CEQA) and (ii) a resolution adopting findings, adopting a mitigation monitoring and reporting plan and approving the Feather River West Levee Project.

Background

SBFCA has proposed the Feather River West Levee Project (FRWLP or Project) to rehabilitate Feather River levees with the goal of achieving a minimum of 200-year flood protection for urbanized areas and 100-year flood protection for rural agricultural areas in SBFCA's jurisdiction. Pursuant to CEQA, an EIR was prepared for the Project to analyze the environmental effects of the Project.

The EIR was prepared in conjunction with the Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA), with the U.S. Army Corps of Engineers as lead for the EIS. The EIS and EIR were prepared jointly and released together as a Draft EIR/EIS. The documents were then split into a separate EIR and EIS. Today the Board is addressing only the EIR.

SBFCA conducted a thorough public information program during the environmental review process. A Notice of Preparation (NOP) of the EIR, including the initial study, was distributed to the California State Clearinghouse and other potentially interested parties on May 20, 2011. The release of the NOP initiated a 30-day public comment period that ended on June 19, 2011, and was extended to July 8, 2011. A Draft EIR was subsequently released in December 2012, and comments were accepted on the Draft EIR over a 45-day review period pursuant to CEQA Guidelines §15105. The review period closed on February 13, 2013. Interactions with the public have included public meetings on the scope of the EIR and public informational meetings on January 15 and January 16, 2013 in Gridley and Yuba City.

Under CEQA, prior to approving a project an agency must certify that the EIR was completed in compliance with CEQA and that the agency reviewed and considered the information in the Final EIR. The Final EIR reflects the Agency's independent judgment and analysis.

In addition, when a project may have significant impacts on the environment, an agency must make written findings for each significant effect of the Project. The findings must state that mitigation measures will avoid or substantially lessen the significant effect, or that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the Final EIR. If the benefits of a project outweigh unavoidable adverse impacts, the adverse environmental impacts may be considered acceptable. This determination made in a statement of overriding considerations, which is part of the findings document. Agencies must also adopt a mitigation monitoring and reporting plan that describes the mitigation measures required as part of a project. Proposed findings and a mitigation monitoring and reporting plan are attached to Resolution 2013-06 as exhibits.

As detailed in the Final EIR and the Findings document, the FRWLP will have significant, unavoidable impacts in the resource areas of air quality, noise, vegetation and wetlands, and cultural resources. The Findings document concludes that the benefits of the Project, including reduced flood risk for existing populations and addressing known deficiencies in the Feather River west levees, outweigh these unavoidable adverse impacts on the environment.

Attached to this staff report are the following documents:

A. Resolution Certifying the Final Environmental Impact Report for the Feather River West Levee Project

B. Resolution Adopting Findings and Approving the Mitigation Monitoring and Reporting Plan for the Feather River West Levee Project

Exhibit A: Findings
Exhibit B: Mitigation Monitoring and Reporting Plan

Fiscal Impact

Approval of the two resolutions will complete CEQA compliance for the FRWLP and will have little, if any, additional cost. There will be continued, budgeted costs for additional regulatory permitting needed to complete the project.

RESOLUTION NO. 2013-5

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SUTTER BUTTE FLOOD CONTROL AGENCY CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE FEATHER RIVER WEST LEVEE PROJECT

WHEREAS, Sutter Butte Flood Control Agency ("SBFCA") proposes the Feather River West Levee Project (the "Project") to reduce flood risk in the Sutter Basin;

WHEREAS, SBFCA is the lead agency for environmental review of the Project under the California Environmental Quality Act ("CEQA");

WHEREAS, a Notice of Preparation for a Draft Environmental Impact Report ("Draft EIR") was prepared and released for public comment on May 20, 2011;

WHEREAS, the release of the Notice of Preparation initiated a 30-day public comment period that ended on June 19, 2011. SBFCA invited members of the public to provide additional comment through July 8, 2011;

WHEREAS, During the public review period, public scoping meetings were held on June 27 and June 28, 2011 at 3:30 pm and 6:30 pm on each day, to receive agency and public comments regarding the scope of the environmental analysis for the EIR. Notice of these meetings was given in accordance with Government Code Sections 65355 and 65453;

WHEREAS, a Draft EIR was prepared and circulated for public review and comment between December 28, 2012, and February 13, 2013;

WHEREAS, on January 15, 2013, and January 16, 2013, SBFCA held three public comment meetings during which it received and considered testimony from the public, concerning the Project and the Draft EIR. Notice of these meetings was given in accordance with Government Code Sections 65355 and 65453;

WHEREAS, SBFCA received written comments on the Draft EIR from individuals, organizations and public agencies;

WHEREAS, a Final Environmental Impact Report ("Final EIR") that incorporated the Draft EIR by reference and provided responses to public comments was prepared and distributed to the public on April 1, 2013; and

WHEREAS, SBFCA discussed the Final EIR during its meeting on April 10, 2013 and provided the opportunity for the public to give comments on the Final EIR during that meeting;

NOW, THEREFORE, the Board of Directors of the Sutter Butte Flood Control Agency resolves as follows:

1. The Final EIR is hereby certified as being completed in compliance with the provisions of the California Environmental Quality Act and its implementing regulations.

2. The Final EIR was presented to the Board on April 1, 2013 and the Board discussed the contents of the Final EIR during its meeting on April 10, 2013.

3. The Board has reviewed and considered the information contained in the Final EIR prior to taking any action to approve or disapprove the Project.

4. The Board hereby ratifies and adopts the conclusions of the Final EIR. The Final EIR represents the independent judgment and analysis of the Board.

5. The Board hereby directs staff to file a Notice of Determination pursuant to the requirements of the California Environmental Quality Act.

ADOPTED this 10th day of April, 2013.

James Gallagher, Chair

RESOLUTION NO. 2013-06

RESOLUTION OF THE SUTTER BUTTE FLOOD CONTROL AGENCY ADOPTING FINDINGS, APPROVING THE MITIGATION MONITORING AND REPORTING PLAN, AND APPROVING THE FEATHER RIVER WEST LEVEE PROJECT

WHEREAS, the Sutter Butte Flood Control Agency ("SBFCA") proposes the Feather River West Levee Project (the "Project") to reduce flood risk in the Sutter Basin;

WHEREAS, SBFCA is the lead agency for environmental review of the Project under the California Environmental Quality Act ("CEQA");

WHEREAS, a Notice of Preparation for a Draft Environmental Impact Report ("Draft EIR") was prepared and released for public comment on May 20, 2011;

WHEREAS, the release of the Notice of Preparation initiated a 30-day public comment period that ended on June 19, 2011. SBFCA invited members of the public to provide additional comment through July 8, 2011;

WHEREAS, During the public review period, public scoping meetings were held on June 27 and June 28, 2011, at 3:30 pm and 6:30 pm on each day, to receive agency and public comments regarding the scope of the environmental analysis for the EIR. Notice of these meetings was given in accordance with Government Code Sections 65355 and 65453;

WHEREAS, a Draft EIR was prepared and circulated for public review and comment between December 28, 2012 and February 13, 2013;

WHEREAS, on January 15, 2013, and January 16, 2013, SBFCA held three public comment meetings during which it received and considered testimony from the public, concerning the Project and the Draft EIR. Notice of these meetings was given in accordance with Government Code Sections 65355 and 65453;

WHEREAS, SBFCA received written comments on the Draft EIR from individuals, organizations and public agencies;

WHEREAS, a Final Environmental Impact Report ("Final EIR") that incorporated the Draft EIR by reference and provided responses to public comments was prepared and distributed to the public on April 1, 2013;

WHEREAS, SBFCA discussed the Final EIR during its meeting on April 10, 2013 and provided the opportunity for the public to give comments on the Final EIR during that meeting;

WHEREAS, SBFCA has, by means of Resolution No. 2013-05, certified that the EIR has been prepared in full compliance with the terms of the California Environmental Quality Act,

that the Board has reviewed and considered the information contained in the EIR prior to taking any action to approve or disapprove the Project, and that the EIR represents the independent judgment and analysis of the Board;

WHEREAS, pursuant to CEQA the Board must make and adopt written findings for each significant effect of the Project, accompanied by a brief explanation of the rationale for each finding. The written findings state that for each significant impact of the Project, either changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR, or 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 Final EIR;

WHEREAS, pursuant to CEQA SBFCA must adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects;

WHEREAS, the District through this resolution wishes to adopt its Findings and the related Mitigation Monitoring and Reporting Plan.

NOW, THEREFORE, THE SUTTER BUTTE FLOOD CONTROL AGENCY RESOLVES AS FOLLOWS:

1. SBFCA hereby approves and adopts the Findings attached hereto as Attachment A, which are incorporated herein, pursuant to CEQA Guidelines §§ 15091, 15092 and 15093.

2. SBFCA hereby approves and adopts the Mitigation Monitoring and Reporting Plan, which is attached hereto as Attachment B and incorporated herein by reference.

3. SBFCA hereby approves the Feather River West Levee Project.

ADOPTED this 10th day of April, 2013.

James Gallagher, Chair

Findings of the Sutter Butte Flood Control Agency Related to the Approval of the Final Environmental Impact Report for the Feather River West Levee Project

I. INTRODUCTION

SBFCA is proposing the Feather River West Levee Project (FRWLP, or Project) to reduce flood risk in the Sutter Basin, which includes portions of Sutter and Butte Counties in the Sacramento Valley of California. To protect human health and safety and prevent adverse effects on property and the regional economy, SBFCA was formed as a joint powers authority in 2007 through a joint exercise of powers agreement by the Counties of Sutter and Butte; the Cities of Yuba City, Gridley, Live Oak, and Biggs; and Levee Districts (LDs) 1 and 9. SBFCA was established to coordinate the planning and construction of flood protection facilities and to finance the local share of flood management projects. SBFCA's member agencies as well as the State of California are responsible for the operations and maintenance of the detention basins, pump stations, and levees that protect the area.

In partnership with the State of California (through the Department of Water Resources [DWR] and Central Valley Flood Protection Board [CVFPB]), SBFCA embarked on a comprehensive evaluation of the condition of the levees protecting the area in 2007, the results of which are also being used by the U.S. Army Corps of Engineers (USACE). The evaluation was necessary to identify the magnitude and severity of deficiencies and determine measures to address the deficiencies. The results of the comprehensive evaluation revealed that substantial construction is necessary to meet current flood protection standards.

In light of the flood risk to the area, SBFCA is leading the planning, design, and construction of the FRWLP, in partnership with DWR. This project is being conducted in coordination and parallel with a separate planning study led by USACE in partnership with SBFCA, and the CVFPB, to determine the Federal interest in a flood risk reduction project in the Sutter Basin. This project is termed the Sutter Basin Pilot Feasibility Study or Sutter Basin Feasibility Study.

The FRWLP is being advanced by SBFCA to expeditiously reduce flood risk before the feasibility study is completed and an anticipated recommendation is made to Congress for project authorization and eventual appropriation—typically a lengthy process that may take 10 or more years. SBFCA anticipates that (1) rehabilitation of remaining segments of the levee system (not of covered by FRWLP) would be implemented by USACE and (2) the non-Federal costs SBFCA incurs for the FRWLP will be credited against the remaining non-Federal share of the cost of the project approved under the feasibility study. To construct the FRWLP, SBFCA is requesting permission from USACE pursuant to Section 14 of the Rivers and Harbors Act of 1899 (Title 33 of the United States Code [USC], Section 408, [33 USC 408])—hereinafter referred to as Section 408—for the alteration of a levee as part of the Sacramento River Flood Control Project, a Federal work. USACE's authority to grant permission for the FRWLP under Section 408 triggers the requirement for USACE to comply with the National Environmental Policy Act (NEPA). The project is also subject to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, whose authorities also lie under USACE. SBFCA, in conjunction with USACE, prepared a joint EIS/EIR to assess the environmental impacts of the Project. The EIS and EIR were split after public review of the Draft EIS/EIR.

The purpose of these Findings is to comply with the requirements of the California Environmental Quality Act (CEQA) related to a public entity's approval and certification of an Environmental Impact Report (EIR). Specifically, these Findings represent the SBFCA Board of Director's conclusions about the Project's significant impacts on the environment.

II. ENVIRONMENTAL REVIEW OF THE PROJECT

Pursuant to the California Environmental Quality Act, Public Resources Code §§21000 *et seq*. and the CEQA guidelines, Cal. Code Regs. Tit. 14, §§1500 *et seq.* (collectively, "CEQA") an EIR was prepared for the Project to analyze the environmental effects of the Project. The EIR was prepared in conjunction with the Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA), with the U.S. Army Corps of Engineers as lead for the EIS. The Draft EIR/EIS was circulated for public review and comment and accordance with CEQA and NEPA. The documents were then split into a separate Final EIR and Final EIS.

SBFCA conducted a thorough public information program during the environmental review process. The initial decision to prepare an EIR for the Project was made following completion of an Initial Study. A Notice of Preparation (NOP), including the initial study, was distributed to the California State Clearinghouse and other potentially interested parties May 20, 2011. The release of the NOP initiated a 30-day public comment period that ended on June 19, 2011, and was extended to July 8, 2011. During the public review period, a public scoping meeting was held in Yuba City and Gridley on June 27 and 28, 2011, to receive agency and public comments regarding the scope of the environmental analysis for the EIR. Comments on the NOP and Initial Study were received from state agencies, regional and local governmental agencies, regional authorities, and other non-governmental organizations. SBFCA considered the comments received in refining the scope of analysis for the EIR.

The Draft EIR was subsequently released in December 2012, and comments were accepted on the Draft EIR over a 45-day review period pursuant to CEQA Guidelines §15105. The review period closed on February 13, 2013. Interactions with the public have included public meetings on the scope of the EIR and public informational meetings on January 15 and January 16, 2013 in Gridley and Yuba City. Listed below are the various public meetings/hearings that have been held during this process. At these meetings/hearings, SBFCA provided information about the Project, the potential environmental impacts and the CEQA review process. At each meeting/hearing, members of the public had the opportunity to ask questions, convey their concerns or express support for the Project.

Public Meetings Held During the CEQA Process

Date	Event
June 27, 2012	Scoping Meetings (2), Yuba City
June 28, 2012	Scoping Meetings (2), Gridley
January 15, 2013	Public Information Meeting, Gridley
January 16, 2013	Public Information Meetings (2), Yuba City

III. DESCRIPTION OF THE PROPOSED ACTION

General Description

SBFCA's goal is to achieve a minimum of 200-year flood protection for the more urbanized areas with population centers and 100-year flood protection for the remaining more rural agricultural parts of the planning area. A 200-year flood is a flood that has a 0.5% chance of occurring in any given year, also referred to as a 0.5% annual exceedance probability (AEP). A 100-year flood has a 1% AEP. The target of 100-year protection for the more rural, agriculture parts of the planning area, specifically the southern portion of the basin downstream of Yuba City, is driven by the goal to maintain viability and sustainability of agriculture by avoiding FEMA restrictions that would hinder construction or upgrade of agricultural infrastructure (such as farm residences, barns, silos, dryers, seasonal worker housing) and supporting business.

The primary purpose of the FRWLP is to reduce flood risk for the entire planning area by addressing known levee deficiencies along the Feather River West Levee from Thermalito Afterbay downstream to approximately 4 miles upstream of the confluence with the Sutter Bypass. While the FRWLP would not by itself reduce all flood risks affecting the planning area, it would address the most immediate risk based on the following.

- The proximity of the Feather River to population centers and key infrastructure.
- The nature of Feather River West Levee being the longest and most contiguous portion of the planning area perimeter.
- The location of known levee deficiencies and the clarity and feasibility of available measures to address them.

The Project consists of a blend of flood management measures – slurry cutoff walls, slope flattening, stability berms, levee reconstruction, seepage berms, relief wells, depression/ditch infilling, limited encroachment removal, and canal seepage treatment – to address deficiencies in the Feather River West Levee. The measures have been optimized to avoid and minimize environmental effects.

Project Objectives

The following objectives provide additional detail in support of the project purpose above.

- Protect existing populations and minimize exposure to flooding for agricultural commodities, infrastructure use, and other property.

- Reduce flood risk from Feather River toward a target of 200-year protection for Yuba City and to the north of the planning area, in compliance with Senate Bill (SB) 5 mandates for 200-year protection for urbanized areas and in avoidance of FEMA restrictions that would compromise agricultural sustainability.
- Address known deficiencies and observed performance issues.
- Construct a project as soon as possible to reduce flood risk as quickly as possible.
- Construct a project that is economically, environmentally, politically, and socially acceptable.
- Facilitate compatibility with the CVFPP and Sutter Basin Feasibility Study such that proposed activities would be "no regrets" and not inconsistent with any future plans.
- Facilitate compatibility with recreation and restoration goals in the planning area and incorporate multiple benefits in addition to flood-risk reduction, such as fish and wildlife habitat and recreation. In regard to this last objective, SBFCA has identified several multi-benefit floodplain actions targeted at floodplain habitat restoration in combination with flood management. These actions are not part of the project analyzed in this EIS/EIR. SBFCA seeks to partner with other public agencies and environmental organizations to implement these actions.

IV. DESCRIPTION OF THE RECORD

For purposes of CEQA and these Findings, the record before the SBFCA Board of Directors includes, without limitation, the following:

A. All applications for approvals related to the Project;

B. The Draft EIR for the Feather River West Levee Project and all appendices to the Draft EIR;

C. The Final EIR for the Feather River West Levee Project and all appendices to the Final EIR;

D. All staff reports and presentation materials related to the Project;

E. All studies conducted for the Project and contained in, or referenced by, staff reports, the Draft EIR, or the Final EIR;

F. All documentary and oral evidence received and reviewed at public hearings and workshops related to the Project, the Draft EIR, and the Final EIR;

G. For documentary and informational purposes, all locally-adopted land use plans and ordinances, including, without limitation, general plans, specific plans and ordinances, together with environmental review documents, Findings, mitigation monitoring programs and all other documentation relevant to planned growth in the area.

V. GENERAL FINDINGS

A. Certification of the Final EIR

In accordance with CEQA, in adopting these Findings, the SBFCA Board of Directors certifies that the Final EIR has been completed in compliance with CEQA and that it was presented to the Board of Directors, which reviewed and considered the information in the Final EIR prior to approving the Project. By these Findings, the Board of Directors ratifies and adopts the Findings and conclusions of the Final EIR as set forth in these Findings. The Final EIR and these Findings represent the independent judgment and analysis of the Board of Directors.

The Final EIR concludes that certain Project impacts are potentially significant but can be mitigated to a less than significant level with the implementation of recommended mitigation measures, while certain impacts will remain significant even after feasible mitigation measures are implemented. General Findings are set forth in this Section V. Findings regarding potentially significant impacts that can be mitigated to a less than significant level are set forth in Section VI. Further Findings regarding impacts that will remain significant after mitigation are set forth in Section VII (Statement of Overriding Considerations).

B. Changes to the Draft EIR

In the course of responding to comments received during the public review and comment period on the Draft EIR, certain portions of the Draft EIR have been modified and some new information has been added. The Draft EIR has been the subject of review and comment by the public and responsible agencies prior to the adoption of these Findings. No information has revealed the existence of: (1) a significant new environmental impact that would result from the Project or an adopted mitigation measure; (2) a substantial increase in the severity of an environmental impact; (3) a feasible project alternative or mitigation measure not adopted that is considerably different from others analyzed in the

Draft EIR that would clearly lessen the significant environmental impacts of the Project; or (4) information that indicates that the public was deprived of a meaningful opportunity to review and comment on the Draft EIR. SBFCA finds that the changes and modifications made to the Draft EIR after the Draft EIR was circulated for public review and comment do not collectively or individually constitute significant new information within the meaning of Public Resources Code §21092.1 and CEQA Guidelines §15088.5.

C. Evidentiary Basis for Findings

These Findings are based upon substantial evidence in the entire record before the SBFCA Board of Directors. The references to the Draft EIR and Final EIR set forth in the Findings are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these Findings.

D. Findings Regarding Mitigation Measures

1. Mitigation Measures Adopted. Except as otherwise noted, the mitigation measures herein referenced are those identified in the Final EIR and adopted by the Board of Directors set forth in the Mitigation Monitoring and Reporting Plan (MMRP).

2. Impact After Implementation of Mitigation Measures. Except as otherwise stated in these Findings, in accordance with CEQA Guidelines §15092, the Board of Directors finds that environmental effects of the Project will not be significant or will be mitigated to a less than significant level by the adopted mitigation measures. SBFCA has substantially lessened or eliminated all significant environmental effects where feasible. The Board of Directors has determined that any remaining significant effects on the environment that are found to be unavoidable under CEQA Guidelines §15091, and are acceptable due to overriding considerations as described in CEQA Guidelines §15093. These overriding considerations consist of specific environmental, economic, legal, social, technological, and other benefits of the Project, which justify approval of the Project and outweigh the unavoidable adverse environmental effects of the Project, as more fully stated in Section X (Statement of Overriding Considerations). Except as otherwise stated in these Findings, the Board of Directors finds that the mitigation measures incorporated into and imposed upon the Project will not have new significant environmental impacts that were not analyzed in the Draft EIR.

E. Location and Custodian of Records

Pursuant to Public Resource Code §15091, SBFCA is the custodian of the documents and other material that constitute the record of proceedings upon which the decision is based, and such documents and other materials are located at SBFCA's offices, 1227 Bridge Street, Suite C, Yuba City CA 95991. A copy of the Final EIR is also available for review at the SBFCA website (www.sutterbutteflood.org), and at the following local libraries: Butte County Library – Main Branch, Oroville; City of Biggs Branch Library; Gridley Branch Library; Sutter County Library – Main Branch, Yuba City.

VI. FINDINGS REGARDING POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED BELOW A LEVEL OF SIGNIFICANCE

WITH MITIGATION MEASURES

The following Findings are made with respect to potentially significant environmental effects analyzed in the Final EIR. The Draft EIR identified the following potential impacts on the environment that are deemed to be potentially significant, but will have less than significant impacts with the implementation of appropriate mitigation measures.

Public Resources Code § 21081 states that no public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant effects, unless the public agency makes one or more of the following findings:

1. Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment.

2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

3. Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measure or alternatives identified in the EIR, and overriding economic, legal, social, technological, or other benefits of the Project outweigh the significant effects on the environment.

The Board of Directors hereby finds, pursuant to the Public Resources Code §21081 and CEQA Guidelines §§15091-15093, that with regard to each of the following potentially significant impacts identified in the Final EIR, that changes or alterations have been required in or incorporated into the proposed project that avoid or lessen the potentially significant impacts identified in the Draft EIR to levels below the thresholds of significance identified in the Draft EIR. These mitigation measures are set forth in the Mitigation Monitoring and Reporting Plan proposed for adoption by SBFCA. Specific findings of SBFCA for each category of such impacts are set forth in detail below.

A. Flood Control and Geomorphic Conditions

1. FC-6 Implementation of levee degrades and reconstructions would involve disturbance to the entire levee. Drainage infrastructure maintained by local landowners or agencies and local surface runoff patterns could be impacted, causing or exacerbating localized flooding.

   (a) Potential Impact. The Project could cause or exacerbate localized flooding. This potential impact is discussed in the Final EIR at page 3.1-22.

   (b) Impact Prior to Mitigation. Significant.

   (c) Mitigation Measure. The Project will incorporate mitigation measure FC-MM-1, which involves coordination with owners and operators of local drainage systems and landowners served by the systems to evaluate pre- and post-project drainage needs and to remediate drainage disruption or alternation in runoff that would increase the potential for localized flooding. If substantial alteration in runoff patterns or disruption of local drainage systems could result from the project, a drainage study will be

prepared to develop appropriate plans to ensure equivalent functioning of the system during and after construction.

(d) Findings: Because any necessary features to remediate project-induced drainage problems will be installed before the project is completed or as part of the project, with mitigation there will be no impact.

(e) Conclusion. The potential impact of the Project on flood control and geomorphic conditions is less than significant.

B. Water Quality and Groundwater Resources

1. WQ-3

(a) Potential Impact: Project construction will involve trenching and excavation associated with a cutoff wall and/or levee reconstruction. These activities could expose the water table and create a path to the groundwater basin that would allow contaminants to enter the groundwater system. While dewatering of the construction area is not anticipated, if it is necessary it could result in the release of contaminants to surface or groundwater. This potential impact is discussed in the Final EIR at page 3.2-18.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The project proponents would adhere to environmental commitments of the Stormwater Pollution Protection Plan (SWPPP), the Spill Prevention, ,Control, and Counter-Measure Plan (SPCCP), and the Bentonite Slurry Spill Contingency Plan (BSSCP). In addition, the Project will incorporate mitigation measure WQ-MM-1, which involves obtaining a Low Threat Discharge and Dewatering National Pollutant Discharge Elimination System (NPDES) permit from the Central Valley Regional Water Quality Control Board (RWQCB) if the dewatering is not covered under the Central Valley RWQCB's NPDES Construction General Permit. The permit requires water quality monitoring to adhere to strict criteria and the design and implementation of measures to meet the discharge limits.

(d) Findings: Because SBFCA will verify that coverage under the appropriate NPDES permit has been obtained prior to any dewatering activities and perform routine inspections of the construction area to verify that water quality control measures are property implemented, any remaining impact will be less than significant.

(e) Conclusion: The potential impact of the Project on water quality and groundwater resources is less than significant.

C. Air Quality

1. AQ-3

(a) Potential Impact: The Project could cause exceedance of the Federal General Conformity Thresholds during construction. This potential impact is discussed in the Final EIR at page 3.5-21.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures AQ-MM 1 through AQ-MM -4. AQ-MM -1 involves providing advance notification of the proposed construction schedule to all residences and other air-quality sensitive uses within 500 feet of the construction site, as well as a publicly visible sign with the phone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. AQ-MM -2 involves implementation of fugitive dust control measures as required by FRAQMD and BCAQMD, including submitting a dust control plan, watering unpaved areas, prohibiting certain activities during dry conditions, and others discussed on page 3.5-18 of the Final EIR. AQ-MM -3 involves general measures to reduce emissions such as no open burning of removed vegetation, development of a traffic plan, reducing use, trips and unnecessary idling of heavy equipment, and other measures listed on page 3.5-19 of the Final EIR. AQ-MM-4 involves various fleet-wide emission reductions for large off-road equipment as discussed on page 3.5-19 of the Final EIR.

(d) Findings: With application of these mitigation measures, construction of the Project would not exceed applicable federal de minimis thresholds and General Conformity requirements would be met. The Project would not cause or contribute to new or worsening violations of the ambient air quality standards. Any remaining impact will be less than significant.

(e) Conclusion: The potential impact of the Project with respect to the Federal General Conformity thresholds is less than significant.

D. Vegetation and Wetlands

1. VEG-1

(a) Potential Impact: The Project would disturb or remove a total of 134 riparian trees on the water side of the levee. This potential impact is discussed in the Final EIR at page 3.8-24.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project would incorporate mitigations measures VEG-MM-1 through VEG-MM-4. VEG-MM-1 involves compensation for the loss of woody riparian trees to ensure no net loss of habitat functions and values. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources.

(d) Findings: In the long term, after establishment of compensatory vegetation, this impact will be less than significant.

(e) Conclusion: The long-term impact of the Project on waterside trees is less than significant.

2. VEG-2

(a) Potential Impact: The Project could result in the loss of seasonal wetlands and other waters of the United States. This potential impact is discussed in the Final EIR at page 3.8-29.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project would incorporate mitigations measures VEG-MM-2 through VEG-MM-5 in addition to the environmental commitment to develop a SWPPP. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. VEG-MM-5 involves compensation for the loss of wetlands through restoring or enhancing in-kind wetland habitat to ensure no net loss of habitat functions and values.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on seasonal wetlands and other waters of the United States is less than significant.

3. VEG-3

(a) Potential Impact: The Project could result in disturbance or removal of up to 5,118 trees protected under local ordinances or that meet the definition of oaks. This potential impact is discussed in the Final EIR at page 3.8-31.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project would incorporate mitigations measures VEG-MM-2 through VEG-MM-4 and VEG-MM-6, in addition to the environmental commitment to comply with each city tree ordinance and where applicable, Public Resources Code Section 21083.4. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. VEG-MM-6 involves compensation for the loss of protected trees by applying for a tree permit for tree removal and replace removed trees with trees at or near the location of the effect. SBFCA will also replace any replacement trees that die within 3 years of the initial planting..

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on protected trees is less than significant.

E. Wildlife

1. WILD-1

(a) Potential Impact: The Project could result in mortality of or loss of habitat for Antioch Dunes anthicid, Sacramento anthicid, and Sacramento Valley tiger beetle. This potential impact is discussed in the Final EIR at page 3.9-35.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project would incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, and WILD-MM-1. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-

MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-1 involves fencing and avoiding habitat for these three beetle species, and if avoidance is not possible, a qualified entomologist will survey the suitable habitat for the beetle species' presence and, if recommended, the beetles may be relocated to suitable habitat.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on the Antioch Dunes anthicid, Sacramento anthicid, and Sacramento Valley tiger beetle is less than significant.

2. WILD-2

(a) Potential Impact: The Project could result in mortality or disturbance of VELB and its habitat (elderberry shrubs). This potential impact is discussed in the Final EIR at page 3.9-36.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project would incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, WILD-MM-2, WILD-MM-3 and WILD-MM-4. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-2 involves surveys by a qualified biologist of elderberry shrubs to be transplanted, and in order to compensate for loss of VELB SBFCA will plant seedlings/cuttings and associated native plants prior to transplantation of elderberry shrubs. WILD-MM-3 involves implementing measures to protect VELB and its habitat, including protection of shrubs within 100 feet of construction and placement of orange construction barrier fencing at the edge of the respective buffer areas. Additional measures are described in the Final EIR on page 3.9-36 and 3.9-37. WILD-MM-4 involves compensation for effects on VELB and its habitat through transplanting of shrubs that cannot be avoided to a USFWS-approved

conservation area, in accordance with USFWS-approved procedures.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on VELB is less than significant.

3. WILD-3

(a) Potential Impact: The Project could cause mortality or disturbance of Western pond turtles. This impact is discussed in the Final EIR at page 3.9-38.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, and WILD-MM-5. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-5 involves preconstruction surveys for Western pond turtle by a qualified biologist one week before and within 24 hours of beginning work. If turtles are observed a biological monitor will be present during construction to capture and remove, if possible, any entrapped turtle.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on Western pond turtle is less than significant.

4. WILD-4

(a) Potential Impact: The Project could result in disturbance or mortality of and loss of suitable habitat for Giant Garter Snake. This impact is discussed in the Final EIR at page 3.9-39.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, and WILD-MM-6, WILD-MM-7, WILD-MM-8, and WILD-MM-9. VEG-MM-2 involves installation of

exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-6 involves avoidance and minimization of construction effects on Giant Garter Snake through timing considerations, protective measures determined during consultation with USFWS, installation of exclusion fencing, preconstruction surveys, vegetation clearing, confining haul routes, escape ramps, and relocation of PG&E facilities. WILD-MM-7 involves ensuring through an operations and maintenance plan that impacts to suitable habitat for Giant Garter Snake and Western burrowing owl along the levee are minimized to the maximum extent feasible. Measures include minimization of vegetation control by burning, reduction of maintenance activities near toe drains, avoidance of grouting of burrows, preparation of a database of sensitive areas, and staff training. WILD-MM-8 involves compensation for permanent loss of suitable Giant Garter Snake habitat by purchasing preservation credits at a USFWS and DFW approved conservation bank in perpetuity. WILD-MM-9 involves restoration of temporarily disturbed aquatic and upland habitat to pre-project conditions.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on Giant Garter Snake is less than significant.

5. WILD-5

(a) Potential Impact: The Project could result in the loss or disturbance of nesting Swainson's hawk and loss of nesting and foraging habitat. This impact is discussed in the Final EIR at page 3.9-42.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, and WILD-MM-10, WILD-MM-11, and WILD-MM-12. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing

and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. Where this is not possible, preconstruction surveys and additional protective measures will be implemented per WILD-MM-13. WILD-MM-11 involves conducting focused surveys for nesting Swainson's hawk prior to construction and implementing protective measures during construction, such as maintenance of a buffer area and presence of a qualified biologist during construction. WILD-MM-12 involves compensation for the permanent loss of foraging habitat for Swainson's hawk by providing offsite habitat management lands or purchasing mitigation credits from a DFW-approved mitigation or conservation bank.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on Swainson's hawk is less than significant.

6. WILD-6

(a) Potential Impact: The Project could result in mortality or disturbance of nesting special-status and non-special-status birds and removal of suitable breeding habitat. This impact is discussed in the Final EIR at page 3.9-44.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, WILD-MM-10, and WILD-MM-13. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. Where this is not possible, preconstruction surveys and additional protective measures will be implemented per WILD-MM-13. WILD-MM-13 involves retaining a qualified wildlife biologist to conduct

nesting surveys before the start of construction. At least three separate surveys will be conducted, and if active nests are found, no-disturbance buffers will be established around the nest sites until the end of the breeding season or otherwise determined by a qualified wildlife biologist.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on nesting special-status and non-special status birds is less than significant.

7. WILD-7

(a) Potential Impact: The Project could result in loss or disturbance of Western Burrowing Owl and loss of nesting and foraging habitat. This impact is discussed in the Final EIR at page 3.9-45.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, WILD-MM-7, WILD-MM-10, WILD-MM-14 and WILD-MM-15. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-7 involves ensuring through an operations and maintenance plan that impacts to suitable habitat for Giant Garter Snake and Western burrowing owl along the levee are minimized to the maximum extent feasible. Measures include minimization of vegetation control by burning, reduction of maintenance activities near toe drains, avoidance of grouting of burrows, preparation of a database of sensitive areas, and staff training. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. Where this is not possible, preconstruction surveys and additional protective measures will be implemented per WILD-MM-13. WILD-MM-14 involves conducting surveys for western burrowing owl prior to construction whenever burrowing owl habitat is present on or within 500 feet of the project site. If burrowing owls are found, compensatory measures will be put in place, including nondisturbance of burrows, buffer areas, visible markers, worker awareness programs, additional take avoidance surveys, and ongoing

surveillance. Take avoidance surveys will be conducted regardless of survey results. WILD-MM-15 involves compensation for the loss of occupied western burrowing owl habitat through restoration of the disturbed area and/or permanent conservation of vegetation communities similar to burrowing owl habitat or conservation easements. SBFCA may consult with DFW to develop appropriate mitigation alternatives with the standard of full mitigation for permanent impacts.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on western burrowing owl is less than significant.

8. WILD-8

(a) Potential Impact: The Project could result in injury, mortality or disturbance of tree-roosting bats and removal of roosting habitat. This impact is discussed in the Final EIR at page 3.9-48.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, WILD-MM-10, and WILD-MM-16. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. Where this is not possible, preconstruction surveys and additional protective measures will be implemented per WILD-MM-13. WILD-MM-16 involves identification of suitable roosting habitat for bats where tree removal/trimming cannot be conducted between September 15 and October 30 (prior to hibernation). Identification will be performed by qualified biologists, and measures to avoid and minimize impacts to sensitive bat species will be determined in coordination with DFW. Such measures may include timing of tree removal, removal in pieces, and monitoring of tree trimming/removal.

(d) Findings: Incorporation of these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on tree-roosting bats is less than significant.

F. Population, Housing and Environmental Justice

1. POP-1

(a) Potential Impact: The Project could displace existing housing units wince it requires the permanent acquisition of five existing residences to accommodate the expanded footprint of the flood control system. This impact is discussed in the Final EIR at page 3.12-13.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure POP-MM-1, which provides that permanent acquisition, relocation and compensation services will be conducted in compliance with federal and state relocation laws. These laws require appropriate compensation and relocation to comparable replacement housing, and where construction is temporarily disruptive to nearby residents, SBFCA will develop a Temporary Resident Relocation Plan to guide temporary relocation services and compensation.

(d) Findings: Incorporation of this mitigation measure will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on population, housing and environmental justice is less than significant.

G. Utilities and Public Service

1. UTL-1

(a) Potential Impact: The Project could temporarily disrupt irrigation/drainage facilities and agricultural and domestic water supply through modifications to irrigation, drainage, and domestic water supply infrastructure. This impact is discussed in the Final EIR at page 3.15-10.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure UTL-MM-1, involving coordination with water supply users before and during all infrastructure modifications, and implementation of measures to minimize interruptions of supply, such as coordination of timing, work during non-irrigation season, provision for alternative water supply as necessary, and ensuring that

water users do not experience a substantial interruption in supply.

(d) Findings: Incorporation of this mitigation measure will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on irrigation/drainage facilities and agricultural and domestic water supply is less than significant.

2. UTL-2

(a) Potential Impact: The Project could damage public utility infrastructure and disrupt service where encroachments within the levee prism require repair, relocation or replacement. This impact is discussed in the Final EIR at page 3.15-11.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure UTL-MM-2, involving verification of utility locations, obtaining utility excavation or encroachment permits as necessary prior to initiating work that could affect utility lines, coordination with utility providers and providing notification of potential interruptions in service, preparation of a response plan to address potential accidental damage to a utility line, and conducting worker training.

(d) Findings: Incorporation of this mitigation measure will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact on public utility infrastructure is less than significant.

H. Public Health and Environmental Hazards

1. PH-1

(a) Potential Impact: The Project could result in temporary exposure to or release of hazardous materials such as fuels and lubricants from the operation of construction equipment and vehicles during construction. This impact is discussed in the Final EIR at page 3.16-9.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate the environmental commitment of a SWPPP (described in the Final EIR at page 2-37), which describes the best management practices implemented to control accelerated erosion, sedimentation, and other pollutants during and after project construction. The SWPPP would be prepared prior to commencing earth-moving construction activities.

(d) Findings: Incorporation of this environmental commitment will reduce this impact to a less-than-significant level by controlling the release of pollutants and hazardous materials during construction.

(e) Conclusion: The Project's impact with respect to release of fuels and lubricants from the operation of construction equipment is less than significant.

2. PH-2

(a) Potential Impact: The Project could result in exposure of construction workers, the public, or the environment during ground-disturbing activities to hazardous materials such as petroleum hydrocarbons, pesticides, herbicides, fertilizers, contaminated debris, or other hazardous contaminants that would otherwise remain buried in or near the levee. This impact is discussed in the Final EIR at page 3.16-9.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure PH-MM-2 in addition to a Stormwater Pollution Protection Plan (SWPPP). PH-MM-1 involves a Phase I environmental assessment and, if necessary, a Phase II environmental assessment. Recommendations from these assessments will be implemented prior to ground-disturbing activities. PH-MM-2 involves implementation of a toxic release contingency plan. Implementation of this plan will ensure the effective and efficient use of resources in the areas of traffic and crowd control; firefighting; hazardous materials response and cleanup; radio and communications control; and provision of medical emergency services. If a release were to occur, the environmental commitment to prepare a SWPPP, Mitigation Measure PH-MM-1, and Mitigation Measure PH-MM-2 would be implemented to ensure that water quality would be returned to baseline conditions and that any threat to public health would be met with an effective response.

(d) Findings: Implementation of this environmental commitment (SWPPP) and these mitigation measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact with respect to exposure of the environment to hazardous materials during ground-disturbing activities is less than significant.

3. PH-3

(a) Potential Impact: The Project could result in temporary exposure of construction workers and the public to safety

hazards from vehicles and other mechanical equipment if used improperly. This impact is discussed in the Final EIR at page 3.16-11.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures PH-MM-3 and PH-MM-4. PH-MM-3 involves implementation of construction site safety measures such as ensuring that workers are properly trained to use equipment. PH-MM-4 involves implementation of an emergency response plan to ensure that any accidents that occur at the construction site are handled appropriately.

(d) Findings: Implementation of these mitigation measures will ensure that construction workers and the public are not exposed to safety hazards, and that if there are accidents, they will be handled appropriately. The measures will reduce this impact to a less-than-significant level.

(e) Conclusion: The Project's impact with respect to exposure of construction workers and the public to safety hazards is less than significant.

The Board hereby finds that SBFCA has eliminated or substantially lessened all significant effects on the environment where feasible as shown in these Findings.

VII. FINDINGS REGARDING SIGNIFICANT AND UNAVOIDABLE IMPACTS ON THE ENVIRONMENT

The EIR identified the following significant impacts on the environment that are deemed to remain significant even after the adoption of mitigation measures. These impacts are overridden by the Project's benefits, as set forth in Section X (Statement of Overriding Considerations).

A. Air Quality

1. AQ-2

(a) Potential Impact. The Project could result in exceedance of applicable thresholds for construction emissions for ROG, in the FRAQMD. This impact is discussed in the Final EIR at page 3.5-17.

(b) Impact Prior to Mitigation. Significant.

(c) Mitigation Measure. The Project will incorporate mitigation measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4, and AQ-MM-5. AQ-MM -1 involves providing advance notification of the proposed construction schedule to all residences and other air-quality sensitive uses within 500 feet of the construction site, as well as a

publicly visible sign with the phone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. AQ-MM -2 involves implementation of fugitive dust control measures as required by FRAQMD and BCAQMD, including submitting a dust control plan, watering unpaved areas, prohibiting certain activities during dry conditions, and others discussed on page 3.5-18 of the Final EIR. AQ-MM -3 involves general measures to reduce emissions such as no open burning of removed vegetation, development of a traffic plan, reducing use, trips and unnecessary idling of heavy equipment, and other measures listed on page 3.5-19 of the Final EIR. AQ-MM-4 involves various fleet-wide emission reductions for large off-road equipment as discussed on page 3.5-19 of the Final EIR. AQ-MM-5 involves payment of offsite mitigation fees to FRAQMD and BCAQMD to offset NOx emissions. SBFCA will also consult with FRAQMD and BCAQMD prior to issuance of grading permits to define the best construction information and computational tools to be used for the calculations.

(d) Findings: Because ROG emissions would remain in excess of FRAQMD's threshold, even after incorporation of the above mitigation measures this impact is considered significant and unavoidable.

(e) Conclusion. The impact of the Project with respect to exceedance of applicable thresholds for construction emissions is significant and unavoidable.

B. Noise

1. NOI-1

(a) Potential Impact: The Project could expose sensitive receptors to construction noise exceeding 60 dBA-L during daytime hours and 45 dBA-L during nighttime hours. This impact is discussed in the Final EIR at page 3.7-27.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure NOI-MM-1, which involves employment of noise-reducing construction practices, such as locating equipment as far away as practical from residences, equipping construction equipment with mufflers, and establishing haul routes that avoid residential uses.

(d) Findings: Although implementation of this mitigation measure will reduce the effect, feasible measures will not likely be available in all situations to reduce noise to below the applicable noise ordinance limit, so the effect remains significant and unavoidable.

(e) Conclusion: The Project's impact with respect to exposure of sensitive receptors to temporary construction-related noise is significant and unavoidable.

2. NOI-2

(a) Potential Impact: The Project could expose sensitive receptors to construction vibration. This impact is discussed in the Final EIR at page 3.7-30.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure NOI-MM-2, which involves employment of vibration-reducing construction practices such as maintaining a minimum distance of 150 feet of vibration including equipment and occupied buildings and other measures described in the Final EIR at page 3.7-21.

(d) Findings: Even though it is anticipated that construction equipment will not operate within 30 feet of residences and structures, there may be situations where this is required and where ground vibration could exceed 0.2 inch per second. Even with implementation of NOI-MM-2, feasible measures will not likely be available in all situations to reduce vibration to below the applicable levels, so the effect remains significant and unavoidable.

(e) Conclusion: The Project's impact with respect to exposure of sensitive receptors to temporary construction-related vibration is significant and unavoidable.

C. Vegetation and Wetlands

1. VEG-1

(a) Potential Impact: The Project would disturb or remove a total of 134 riparian trees on the water side of the levee. This potential impact is discussed in the Final EIR at page 3.8-24.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-1 through VEG-MM-4. VEG-MM-1 involves compensation for the loss of woody riparian trees to ensure no net loss of habitat functions and values. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and

penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources.

(d) Findings: In the short term, the loss of woody riparian trees is a significant and unavoidable impact, even with implementation of the mitigation measures described herein.

(e) Conclusion: The short-term impact of the Project on waterside trees is significant and unavoidable.

2. VEG-4

(a) Potential Impact: The Project could result in the potential loss of special-status plant populations caused by habitat loss. Although there are no known occurrences of special-status plants in the construction footprint, there is potential for their presence and if they are present, project construction would result in their removal. This impact is discussed in the Final EIR at page 3.8-33.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, VEG-MM-7 and VEG-MM-8. VEG-MM-2 involves installation of exclusion fencing and/or K-rails along the perimeter of construction work and implementation of general measures such as having a biological monitor on-site during installation of the fencing and explanatory signage. VEG-MM-3 involves mandatory contractor/worker awareness training on avoiding effects on sensitive biological resources and penalties for noncompliance. VEG-MM-4 involves retaining a qualified biologist to monitor construction activities adjacent to sensitive biological resources. VEG-MM-7 involves retaining qualified botanists to conduct appropriately-timed floristic surveys for special-status plants before project implementation. If special-status plants are identified during the surveys, SBFCA will complete relevant forms to submit to the CNDDB. VEG-MM-8 involves avoidance or compensation for effects on special-status plants through redesign or modification of proposed project components to avoid effects, or, of avoidance is not feasible, effects would be compensated for by offsite preservation at a ratio required by the resource agencies.

(d) Findings: Because the effectiveness of mitigation measures to reduce this effect to a lesser level is not known at this time, because the extent (if any) of special-status plants is not known, the effect is considered significant and unavoidable.

(e) Conclusion: The impact of the Project on special-status plant populations is significant and unavoidable.

D. Cultural Resources

1. CR-1

(a) Potential Impact: The Project could result in effects in identified archaeological sites resulting from levee construction through ground-disturbing excavation or by placement of large, durable new features such as seepage berms or stability berms over these resources. This impact is discussed in the Final EIR at page 3.17-11.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure CR-MM-1, which involves performing data recovery to retrieve information useful in research. Data recovery involves excavations to retrieve samples of affected portions of sites in order to retrieve scientifically important material. The method of retrieval and analysis will vary according to the type of material present. After completion of excavations a data recovery report will be prepared and filed with relevant authorities. A detailed analysis of why preservation in place is not feasible for these identified historic resources can be found in the Final EIR's Cultural Resources chapter and in Appendix I.

(d) Findings: Even with this mitigation measure, since these sites cannot be preserved in place and mitigation cannot guarantee that all effects would be avoided, the impact remains significant and unavoidable.

(e) Conclusion: The Project's impact on identified archaeological sites is significant and unavoidable.

2. CR-2

(a) Potential Impact: The Project could result in disturbance of unidentified archaeological sites in areas that remain inaccessible. This impact is described in the Final EIR at page 3.17-16.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure CR-MM-2, which involves completion of surveys prior to construction once rights of entry have been obtained. Inventory and evaluation work will be supervised by cultural resources specialists. SBFCA will evaluate the eligibility of identified resources for listing on the CRHR and determine if the resources can feasibly be preserved in place pursuant to the CEQA Guidelines.

SBFCA will also implement of a cultural resources discovery plan that includes worker training, archaeological monitoring of construction, and specific plans for inadvertent archaeological discoveries during construction.

(d) Findings: Even with implementation of this mitigation measure, it cannot be ensured that all effects on archaeological sites would be avoided. For example, there may be inadvertent discoveries during construction of sites not previously identified due to their depth. The impact thus remains significant and unavoidable.

(e) Conclusion: The Project's effect on unidentified archaeological resources is significant and unavoidable.

3. CR-3

(a) Potential Impact: The Project could inadvertently disturb human remains during ground-disturbing work. For example, slurry cutoff walls could disturb cultural remains at depths where the resource cannot be identified even during monitoring. This impact is discussed in the Final EIR at page 3.17-18.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project would incorporate mitigation measure CR-MM-3, which involves monitoring of culturally sensitive areas during construction and following state and federal laws governing human remains if such resources are discovered. For example, if human remains are discovered, work will cease in the immediate vicinity and SBFCA will coordinate with the county coroner and NAHC to make appropriate determinations regarding the origin of the remains. These procedures will be covered in training of construction workers prior to construction activities.

(d) Findings: Implementation of this mitigation measure would reduce the severity of this impact, but it cannot guarantee that the impact would be avoided. Therefore the effect remains significant and unavoidable.

(e) Conclusion: The Project's effect on human remains is significant and unavoidable.

4. CR-4

(a) Potential Impact: The Project could have direct and indirect effects on built environment resources (historical buildings) through demolition or damage from vibration. This impact is discussed in the Final EIR at page 3.17-19.

(b) Impact Prior to Mitigation: Significant.

(c) Mitigation Measure: The Project will incorporate mitigation measure CR-MM-4, which involves completion of an inventory of built environment resources for parcels that remain inaccessible to SBFCA, evaluation of identified properties, assessment of effects, and preparation of treatment to resolve and mitigate effects.

(d) Findings: Implementation of this mitigation measure will reduce the Project's effects on built environment resources, but it cannot guarantee that all effects will be avoided. Therefore the effect remains significant and unavoidable.

(e) Conclusion: The Project's effect on built environment resources is significant and unavoidable.

VIII. FINDINGS REGARDING ALTERNATIVES

In accordance with CEQA Guidelines §15126.6, SBFCA developed a reasonable range of alternatives for analysis in the Draft EIR (see Draft EIR, Chapter 2 and Final EIR, Chapter 2). This process involved assessing the basic feasibility of various types of measures and generally evaluating their ability to meet the project objectives.

SBFCA established and applied seven criteria to qualitatively evaluate measures and alternatives and eliminate those that did not adequately meet the criteria. The criteria are below, along with the options for evaluation. Public feedback, including that gained through the NEPA and CEQA process, is considered as part of the evaluation in screening.

- Meet the project objectives.
- Geography and jurisdictional authority.
- Avoidance of hydraulic effects.
- Land use compatibility.
- Avoidance, minimization, and mitigation of environmental effects.
- Facilitation of multi-use objectives.
- Cost.

The outcome of this process was the identification of the preferred project, or proposed action, and two alternatives to the preferred project, as well as a no action scenario pursuant to CEQA. These alternatives are summarized below:

Alternative 1

This alternative is focused on measures that would predominantly keep within the existing footprint of the Feather River West Levee. The alternative primarily uses cutoff walls as a technique to address the levee's deficiencies while minimizing change in the existing levee footprint. Specifically, Alternative 1 entails constructing a cutoff wall along the centerline of the existing levee to a varying depth and a seepage berm along a portion of the landside levee toe.

This alternative meets the project objective of reducing flood risk by addressing levee deficiencies and achieving the target levels of protection. It would be in the area and

scope of authority of SBFCA, and it would not likely induce hydraulic effects within or outside the planning area. Alternative 1 minimizes land use changes and has potential to minimize environmental effects (i.e., impacts to riparian trees) by remaining in the footprint of the levee. However, this alternative will not avoid significant, unavoidable impacts in the resource areas of air quality, noise, vegetation and wetlands, and cultural resources. Moreover, this alternative involves substantial economic implications because of its emphasis on cutoff walls, which are costly to construct.

Alternative 2

This alternative removes the constraints of the existing footprint of the levee. It primarily entails constructing seepage and stability berms along the landside toe of the levee and a shallow cutoff wall along only a portion of the centerline of the levee. Alternative 2 would include the filling of the existing canal adjacent to the levee in Reaches 22, 24, 26, 27, 28 and 31 with water during periods of high water surface elevation in the river, which would require the construction of regulating structures within the canal. Alternative 2 would meet the project objectives of reducing flood risk and would be in the area and scope of authority of SBFCA. Alternative two would not likely induce hydraulic effects within or outside of the planning area. However, Alternative 2 requires considerable land acquisition which could result in relocation of a large number of homes and infrastructure. Moreover, Alternative 2 will not avoid significant, unavoidable impacts in the resource areas of air quality, noise, vegetation and wetlands, and cultural resources. It will have additional significant, unavoidable impacts on visual resources.

Alternative 3 (Preferred Project)

Alternative 3 is a blend of flood management measures (e.g., cutoff wall, slope flattening, stability berms) optimized based on specific screening criteria. This alternative proposes a combination of cutoff walls and berms (along with other measures) that avoids and minimizes environmental impacts. This alternative is considered the environmentally preferable alternative because it balances borrow material import needs, emissions, real estate acquisition and land use change, habitat effects, and construction-related disturbance. This alternative is the least impactful as a composite across all resource categories.

No Project Alternative

The no project alternative consists of continuation of current conditions and operation and maintenance practices that would be expected to occur in the foreseeable future if the Project was not implemented. Under this alternative, SBFCA would not implement flood risk-reduction measures, but the levees protecting the Sutter Basin would continue to require risk-reduction measures to meet current levee standards, FEMA's minimum acceptable level of flood protection, and State requirements for 200-year flood protection for urbanized areas. The risk of a catastrophic flood and its impacts would remain high. As described in the Alternatives chapter of the Draft and Final EIR (Chapter 2), the consequences of a levee failure are widespread: flooding, damage to residential, commercial, agricultural and industrial structures, and potential loss of life and property.

Moreover, FEMA's RiskMAP process could result in remapping of Sutter Basin areas into zones that require flood insurance and trigger constraints on further development in the basin. Depending on the future of the USACE levee vegetation policy, that policy could either require removal of woody vegetation within the levee prism or within 15 feet of the waterside and landside levee toes, or future application of a variance.

The Board finds that this alternative attains none of the Project objectives.

Alternatives Considered but Not Carried Forward for Analysis

SBFCA analyzed the following measures and alternatives based on specific criteria listed above, and determined for the following reasons that these measures/alternatives would not be carried forward for more in-depth analysis.

Alternative Levee Alignments

SBFCA analyzed setback levees, ring levees and J-levees. Setback levees do not rate well in the categories of land use compatibility, environmental effects, and costs when compared to actions that focus on addressing deficiencies of the existing levee. Ring levees fail to meet the project objectives (reducing risk for the entire planning area) and may increase the risk of flooding outside the area protected by the ring levee. J-levees may not meet all of the project objectives (reducing risk for the entire planning area) and may not avoid hydraulic effects outside the project area. For these reasons and as explained more fully in Chapter 2 of the Final EIR, these alternative levee alignments were not carried forward for additional analysis.

Reoperation of Upstream Reservoirs and Bypasses

Reoperation of reservoirs and bypasses to optimize attenuation of flood flows could potentially reduce flood risk to SBFCA, but may compromise the ability to meet other mandated management objectives and may not reduce risk for the entire planning area. Reoperation of upstream reservoirs and bypasses could not be planned and implemented within SBFCA's area and scope of authority. For these reasons and as explained more fully in Chapter 2 of the Final EIR, this alternative was not carried forward for additional analysis.

Development of Additional Upstream Storage

Similar to reoperation of upstream reservoirs, it is uncertain whether this measure would meet the project objectives of reducing risk for the entire planning area, and SBFCA does not own or control upstream properties for developing additional storage. This measure is less favorable for land use if reservoirs and bypasses would need an increased footprint to allow additional capacity. For these reasons and as explained more fully in Chapter 2 of the Final EIR, this alternative was not carried forward for additional analysis.

SBFCA also analyzed as alternatives construction of the Feather River bypass, raising building pads and river dredging per the criteria described above and were not carried forward for analysis.

IX. FINDINGS RELATED TO CUMULATIVE IMPACTS

A. Cumulative Impact Analysis

CEQA Guidelines section 15130 provides the framework for analysis of impacts associated with implementation of a project and its cumulative impacts. A discussion of cumulative impacts includes the combination of significant and less than significant project-related impacts and all levels of impacts from other past, present, and reasonably foreseeable future projects. Cumulative impacts need not be described where the Project has no physical impacts on the environment. Consistent with these requirements, cumulative impacts are discussed in Chapter 4 of the Final EIR.

The EIR's cumulative impacts discussion includes the following list of past, current and likely future projects, including other flood protection projects affecting the Feather River

and the Sacramento River system, projects affecting fish and wildlife that use the proposed project area, and relevant land use plans:

- Central Valley Flood Protection Act
- Sacramento River Flood Control System Evaluation
- Sacramento-San Joaquin Rivers Comprehensive Study
- Sacramento River Bank Protection Project
- Flood Control and Coastal Storm Emergency Act
- Sutter Basin Project
- Yuba Basin Project
- American River Common Features Project
- West Sacramento General Reevaluation Report
- Lower Feather River Corridor Management Program
- Three Rivers Levee Improvement Program
- Natomas Levee Improvement Program
- West Sacramento Levee Improvement Program
- Butte County General Plan 2030
- City of Biggs General Plan 1997-2015
- City of Gridley General Plan
- Sutter County 2030 General Plan
- City of Yuba City General Plan
- City of Live Oak General Plan
- CALFED Ecosystem Restoration Program
- Bay Delta Conservation Plan
- PG&E's Palermo to East Nicolaus

The Project, in combination with the related projects listed above, is anticipated to cause cumulatively significant impacts in the following resource areas:

- Air Quality
- Wildlife
- Fish and Aquatic Resources
- Visual Resources
- Cultural Resources

X. STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires a public agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. SBFCA proposes to approve the project despite certain significant unavoidable adverse impacts identified in the Feather River West Levee Project EIR. The entire EIR includes 3 volumes: (1) the Draft EIR, (2) the Final EIR, and (3) the Responses to Comments document.

A. Impacts of the Project

As detailed in this Findings document and in the EIR, the EIR concludes that the Project will have significant, unavoidable impacts in the following resource areas: air quality, noise, vegetation and wetlands, visual resources, and cultural resources.

The EIR also concludes that there will be cumulative effects on the environment in the following resource categories, due to their combination with reasonably foreseeable past, present and future projects listed in Chapter 6 of the Draft EIR: air quality, wildlife, fish and aquatic resources, visual resources, and cultural resources.

B. Environmental Commitments and Mitigation Measures

The mitigation measures incorporated into the EIR and the Mitigation Monitoring and Reporting Plan demonstrate a commitment by the Board to avoid, minimize, and compensate for environmental impacts of the Project. Environmental commitments include the following:

- Avoidance measures for valley elderberry longhorn beetle.
- Avoidance measures for Giant garter snake.
- Avoidance measures for Swainson's hawk.
- Avoidance measures for Raptors.
- Measures for protected and riparian trees.
- Invasive plant species prevention measures.
- Construction limitations near residences.
- Use of native wildflower species in erosion control seed mix.
- Soil borrow site reclamation plan.
- Post-construction operations and maintenance.
- Stormwater pollution prevention plan.
- Bentonite slurry spill contingency plan.
- Spill prevention, control and counter-measure plan.
- Monitoring of turbidity in adjacent water bodies.
- Replant trees and shrubs along PG&E utility line relocations, in conformance with utility line vegetation clearance zones.

Mitigation measures incorporated into the Project, and discussed in the Mitigation Monitoring and Reporting Plan, include the following:

<u>Flood Control and Geomorphic Conditions</u>

- FC-MM-1: Coordinate with owners and operators, prepare drainage studies as needed, and remediate effects through project design

Water Quality and Groundwater Resources

- WQ-MM-1: Implement provisions for dewatering

Air Quality

- AQ-MM-1: Provide advance notification of construction schedule and 24-hour hotline to residents
- AQ-MM-2: Implement fugitive dust control plan if unmitigated emissions exceed PM10 or PM2.5 thresholds
- AQ-MM-3: General measures to reduce emissions
- AQ-MM-4: Fleet-wide emission reductions for large off-road equipment
- AQ-MM-5: Pay required fees to FRAQMD and BCAQMD to offset annual construction NOx emissions to net zero for emissions in excess of General Conformity de minimis thresholds or to quantities below applicable FRAQMD and BCAQMD CEQA thresholds (where applicable)

Climate Change and Greenhouse Gas

- CC-MM-1: Implement measures to minimize GHG emissions during construction

Noise

- NOI-MM-1: Employ noise-reducing construction practices
- NOI-MM-2: Employ vibration-reducing construction practices

Vegetation and Wetlands

- VEG-MM-1: Compensate for the loss of woody riparian trees
- VEG-MM-2: Install exclusion fencing and/or K-rails along the perimeter of the construction work area and implement general measures to avoid effects on sensitive natural communities and special-status species
- VEG-MM-3: Conduct mandatory contractor/worker awareness training for construction personnel
- VEG-MM-4: Retain a biological monitor
- VEG-MM-5: Compensate for the loss of wetlands and other waters
- VEG-MM-6: Compensate for loss of protected trees
- VEG-MM-7: Retain qualified botanists to conduct floristic surveys for special-status plants during appropriate identification periods
- VEG-MM-8: Avoid or compensate for substantial effects on special-status plants

Wildlife

- WILD-MM-1: Fence and avoid habitat for Antioch Dunes anthicid, Sacramento anthicid, and Sacramento Valley tiger beetle and implement protective measures
- WILD-MM-2: Conduct VELB surveys prior to elderberry shrub transplantation
- WILD-MM-3 Implement measures to protect VELB and its habitat
- WILD-MM-4: Compensate for effects on VELB and its habitat
- WILD-MM-5: Conduct preconstruction surveys for Western pond turtle and monitor construction activities if turtles are observed
- WILD-MM-6: Avoid and minimize construction effects on Giant Garter Snake
- WILD-MM-7: Avoid and minimize potential maintenance impacts on suitable habitat for Giant Garter Snake and Western Burrowing Owl
- WILD-MM-8: Compensate for permanent loss of suitable Giant Garter Snake habitat
- WILD-MM-9: Restore temporarily disturbed Giant Gartner Snake aquatic and upland habitat to pre-project conditions
- WILD-MM-10: Conduct vegetation removal activities outside the breeding season for birds
- WILD-MM-11: Conduct focused surveys for nesting Swainson's hawk prior to construction and implement protective measures during construction
- WILD-MM-12: Compensate for the permanent loss of foraging habitat for Swainson's hawk
- WILD-MM-13: Conduct nesting surveys for special-status and non-special-status birds and implement protective measures during construction
- WILD-MM-14: Conduct surveys for western burrowing owl prior to construction and implement protective measures if found
- WILD-MM-15: Compensate for the loss of occupied western burrowing owl habitat
- WILD-MM-16: Identify suitable roosting habitat for bats and implement avoidance and protective measures

Population, Housing and Environmental Justice

- POP-MM-1: Property acquisition compensation and resident relocation plan

Utilities and Public Services

- UTL-MM-1: Coordinate with water supply users before and during all water supply infrastructure modifications and implement measures to minimize interruptions to supply

- UTL-MM-2: Verify utility locations, coordinate with utility providers, prepare a response plan, and conduct worker training

Public Health and Environmental Hazards

- PH-MM-1: Complete Phase I and Phase II (if necessary) environmental site assessment investigations and implement required measures
- PH-MM-2: Employment of a toxic release contingency plan
- PH-MM-3: Implementation of construction safety measures
- PH-MM-4: Implementation of an emergency response plan

Cultural Resources

- CR-MM-1: Perform data recovery to retrieve information useful in research
- CR-MM-2: Complete surveys prior to construction, implement a cultural resources discovery plan, provide related training to construction workers, and conduct construction monitoring
- CR-MM-3: Monitor culturally sensitive areas during construction and follow state and federal laws governing human remains if such resources are discovered
- CR-MM-4: Complete inventory of built environment resources in inaccessible parcels, evaluate identified properties, assess effects, and prepare treatment to resolve and mitigate significant effects

C. Benefits of the Project

The Project will enhance public safety in the Sutter Basin by addressing known levee deficiencies on the Feather River. USACE, DWR and SBFCA have commissioned studies to determine the type, location and severity of deficiencies in the SBFCA project area. The Feather River west levee suffers from risks of the following levee failure mechanisms: through seepage, under seepage, slope stability and geometry, erosion, and levee encroachments.

SBFCA was formed to proactively reduce flood risk reduction in the basin. At that time, FEMA was revising its Flood Insurance Rate Maps (FIRMs) in the study area in a way that would likely lead to the study area being mapped within the 100-year floodplain. This would make flood insurance mandatory for all Federally guaranteed loans as well as impose significant restrictions on development. SBFCA began by comprehensively evaluating the Feather River west levee to determine the magnitude and severity of any deficiencies and the resulting level of flood protection.

SBFCA has proposed the Project to address the identified deficiencies and reduce flood risk for the Sutter basin communities. Specifically, the Project has the following benefits:

- Protects existing populations and minimizes exposure to flooding for agricultural commodities, infrastructure use, and other property.

- Reduces flood risk from Feather River toward a target of 200-year protection for Yuba City and to the north of the planning area in compliance with state mandates for 200-year protection for urbanized areas and in avoidance of FEMA restrictions that would compromise agricultural sustainability.
- Addresses known deficiencies and observed performance issues.
- Constructs a project as soon as possible to reduce flood risk as quickly as possible.
- Constructs a project that is economically, environmentally, politically and socially acceptable.
- Facilitates compatibility with the CVFPP and Sutter Basin Feasibility Study such that proposed activities would be "no regrets" and not inconsistent with any future plans.
- Facilitates compatibility with recreation and restoration goals in the planning area.

The Board hereby finds that any remaining significant effects on the environmental found to be unavoidable as described in these Findings are acceptable due to overriding concerns as described above.

D. Conclusion

Having reduced the effects of the proposed project by adopting mitigation measures, and balanced the benefits of the proposed project against the project's potential unavoidable adverse impacts, the SBFCA Board of Directors hereby determine that the specific overriding economic, legal, social, technological, or other benefits of the proposed project outweigh the potential unavoidable adverse effects on the environment.

Feather River West Levee Project
Mitigation Monitoring and Reporting Program

This document is the Mitigation Monitoring and Reporting Program (MMRP) prepared by the Sutter Butte Flood Control Agency (SBFCA) for the Feather River West Levee Project (FRWLP, or project). SBFCA was formed as a joint powers authority in 2007 through a joint exercise of powers agreement by the Counties of Sutter and Butte; the Cities of Yuba City, Gridley, Live Oak, and Biggs; and Levee Districts 1 and 9 (LD 1, LD 9). SBFCA is the Lead Agency for the FRWLP. The MMRP addresses the mitigation measures that would be implemented by SBFCA or its construction contractor.

Table 1. Mitigation Monitoring and Reporting Program for the Feather River West Levee Project

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect FC-6: Alteration of the Existing Drainage Pattern of the Site or Area	*FC-MM-1*: Coordinate with Owners and Operators, Prepare Drainage Studies as Needed, and Remediate Effects through Project Design	SFBCA and its engineering and design contractor	SFBCA and its engineering and design contractor	During final project design	During final project design, project engineers will coordinate with owners and operators of local drainage systems and landowners served by the systems to evaluate pre- and post-project drainage needs and design features to remediate any project-related substantial drainage disruption or alteration in runoff that would increase the potential for localized flooding. If substantial alteration of runoff patterns or disruption of a local drainage system could result from a project feature, a drainage study will be prepared as part of final project design. The study will consider the design flows of any existing facilities that would be crossed by project features and develop appropriate plans for relocation or other modification of these facilities and construction of new facilities, as needed, to ensure equivalent functioning of the system during and after construction. If no drainage facilities (e.g., ditches, canals) would be affected, but project features would have a substantial adverse effect on runoff amounts and/or patterns, new drainage systems will be included in the design of project alternatives to ensure that the project would not result in new or increased localized flooding. Any necessary features to remediate project-induced drainage problems will be installed before the project is completed or as part of the project, depending on site-specific conditions.
Effect WQ-3: Effects on Groundwater or Surface Water Quality Resulting from Contact with the Water Table	*WQ-MM-1*: Implement Provisions for Dewatering	SBFCA or its construction contractor	SBFCA or its construction contractor	Permit to be obtained prior to discharging dewatered effluent to surface water. Ongoing inspections of construction area will occur frequently during construction to verify water quality control measures are properly implemented and maintained.	Before discharging any dewatered effluent to surface water, SBFCA or its contractors will obtain a Low Threat Discharge and Dewatering NPDES permit from the Central Valley RWQCB if the dewatering is not covered under the Central Valley RWQCB's NPDES Construction General Permit. As part of the permit, the permittee will design and implement measures as necessary so that the discharge limits identified in the relevant permit are met. For example, if dewatering is needed during the construction of any cutoff walls, the Low Threat Discharge and Dewatering NPDES permit would require treatment or proper disposal of the water prior to discharge. Treatment measures will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. Implemented measures could include the retention of 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 SBFCA. SBFCA will verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. SBFCA or its agent will perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. SBFCA will notify its contractors immediately if there is a non-compliance issue and will require compliance.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-1*: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents	SBFCA and its construction contractor	SBFCA and its construction contractor	Ongoing during construction. Written notification of proposed construction activities delivered to residents and other uses prior to commencing construction activities. Liaison respond to complaints within 48 hours.	SBFCA will provide advance written notification of the proposed construction activities to all residences and other air quality–sensitive uses within 500 feet of the construction site. Notification will include a brief overview of the proposed project and its purpose, as well as the proposed construction activities and schedule. It also will include the name and contact information of SBFCA's project manager or a representative for ensuring that reasonable measures are implemented to address a problem. The construction contractor will post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the appropriate air quality agency (FRAQMD or BCAQMD) also will be visible to ensure compliance with the agencies' regulations.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-2*: Implement Fugitive Dust Control Plan If Unmitigated Emissions Exceed PM10 or PM 2.5 Thresholds	SBFCA's construction contractor	SBFCA's construction contractor	Measures to be implemented ongoing during construction. Dust control plan to be submitted prior to	The construction contractor will implement all applicable and feasible fugitive dust control measures required by FRAQMD and BCAQMD, including those listed below. This requirement will be incorporated into the construction contract. 1) Prior to mobilizing to the job site the construction contractor will submit a dust control plan to FRAQMD and BCAQMD. 2) Water active unpaved areas at all construction sites at least twice daily in dry conditions or more frequently as required, with the frequency of watering based on the type of operation, soil, and wind

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
				construction. Watering to occur at least twice daily or more during dry conditions.	exposure. 3) Prohibit all grading activities and water all areas of disturbed soil under windy conditions (more than 20 miles per hour). 4) Limit onsite vehicles to a speed that prevents visible dust emissions to extend beyond unpaved roads. 5) Cover all trucks hauling dirt, sand, or loose materials. 6) Cover active and inactive storage piles where appropriate. 7) Cover or hydroseed unpaved areas that will remain inactive for extended periods. 8) Apply soil stabilizers to active and inactive areas where appropriate. 9) Install wheel washers at the entrance to construction sites for all exiting trucks. 10) Sweep streets if visible soil material is carried out from the construction site. Sweeping will be done at least once per day unless conditions warrant a more frequent application. 11) Install wind fencing and phase grading operations where appropriate.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-3*: General Measures to Reduce Emissions	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing during construction.	1) No open burning of removed vegetation. Vegetative material will be chipped or delivered to waste or energy facilities. 2) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. 3) Reduce use, trips, and unnecessary idling of heavy equipment. Shut down idling equipment that is not used for more than 5 consecutive minutes as required by California law. 4) Construction equipment exhaust emissions will not exceed 40% opacity or Ringelmann 2.0. Operators of vehicles and equipment found to exceed opacity limits will take action to repair the equipment within 72 hours or remove the equipment from service. 5) Maintain all construction equipment in proper tune according to manufacturer's specifications. 6) Locate stationary diesel-powered equipment and haul truck staging areas as far as practical from sensitive receptors. 7) Use existing power sources (e.g., power lines) or clean fuel generators rather than conventional diesel generators, when feasible. 8) Substitute gasoline-powered for diesel-powered equipment when feasible. 9) Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require ARB Portable Equipment Registration with the state or a local district permit. The owner/operator will be responsible for arranging appropriate consultations with ARB or the air districts to determine registration and permitting requirements prior to equipment operation at the site.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-4*: Fleet-Wide Emission Reductions for Large Off-Road Equipment	SBFCA's construction contractor	SBFCA's construction contractor	Equipment inventory to be completed prior to start of construction. Plan submitted to FRAQMD and BCAQMD prior to start of construction.	Prior to mobilizing to the job site, the construction contractor will assemble a comprehensive inventory list (make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that will be used an aggregate of 40 or more hours for the construction project. The construction contractor then will apply the following mitigation measure to those pieces of equipment. The construction contractor will provide a plan, for approval by FRAQMD and BCAQMD, demonstrating that the heavy-duty off-road equipment to be used at the project sites, including owned, leased, and subcontractor equipment, will achieve a project-wide fleet-average reduction of 20% for NOX and 45% for DPM, compared to the most recent ARB fleet average at time of construction. SBFCA will use the construction mitigation calculator downloaded from the Sacramento Metropolitan Air Quality Management District web site (or similar tool approved by FRAQMD and BCAQMD) to perform the fleet average evaluation (Sacramento Metropolitan Air Quality Management District 2009). Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (Carl Moyer Guidelines), or installation of after-treatment emission control devices. FRAQMD and BCAQMD will be contacted to review and approve the alternative measures.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-5*: Pay Required Fees to FRAQMD and BCAQMD to Offset NOX Emissions to Net Zero (0) for Emissions in Excess of General Conformity de minimis thresholds or to Quantities below Applicable FRAQMD and BCAQMD CEQA thresholds (where applicable)	SBFCA's construction contractor	SBFCA's construction contractor	Consultation with FRAQMD and BCAQMD prior to receiving grading permits.	After implementing the general tailpipe emission control measures listed in AQ-MM-4 to reduce daily-average construction emissions, SBFCA will pay offsite mitigation fees to FRAQMD and BCAQMD to offset NOX emissions. Emissions in excess of the federal de minimis thresholds shall be reduced to net zero (0). Emissions not in excess of the de minimis thresholds, but above applicable air district CEQA thresholds shall be reduced to quantities below the numeric thresholds. Prior to issuance of grading permits for the project, SBFCA will consult with FRAQMD and BCAQMD to define the best construction information and the appropriate computational tools to be used for the calculations. SBFCA will submit calculations to FRAQMD and BCAQMD documenting the tons of NOX to be offset over the duration of the construction phase of the project. SBFCA will consult with FRAQMD and BCAQMD to define the required fee payment based on the most recent Carl Moyer program cost value. Prior to the approval of project plans or the issuance of grading permits, the SBFCA will submit proof that the offsite air quality mitigation fee has been paid to FRAQMD and BCAQMD, and that the construction air quality mitigation plan has been approved by FRAQMD, BCAQMD, and SBFCA.
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-1*: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents	See *Effect AQ-2*, *AQ-MM-1*	See *Effect AQ-2*, *AQ-MM-1*	See *Effect AQ-2*, *AQ-MM-1*	See *Effect AQ-2*, *AQ-MM-1*
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-2*: Implement Fugitive Dust Control Plan If Unmitigated Emissions Exceed PM10 or PM 2.5 Thresholds	See *Effect AQ-2*, *AQ-MM-2*	See *Effect AQ-2*, *AQ-MM-2*	See *Effect AQ-2*, *AQ-MM-2*	See *Effect AQ-2*, *AQ-MM-2*
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-3*: General Measures to Reduce Emissions	See *Effect AQ-2*, *AQ-MM-3*	See *Effect AQ-2*, *AQ-MM-3*	See *Effect AQ-2*, *AQ-MM-3*	See *Effect AQ-2*, *AQ-MM-3*
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-4*: Fleet-Wide Emission Reductions for Large Off-Road Equipment	See *Effect AQ-2*, *AQ-MM-4*	See *Effect AQ-2*, *AQ-MM-4*	See *Effect AQ-2*, *AQ-MM-4*	See *Effect AQ-2, AQ-MM-4*
Effect CC-1: Increase in GHG Emissions during Construction Exceeding Threshold	*CC-MM-1*: Implement Measures to Minimize GHG Emissions during Construction	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing during project construction	The following measures should be considered to lower GHG emissions during construction. 1) Comply with all applicable future GHG regulations at the time of project-level permitting and construction. 2) Use biodiesel fuel to fuel a substantial portion of the diesel-powered equipment and vehicles. 3) Encourage construction workers to carpool. 4) Recycle at least 50% of construction waste and demolition debris. 5) Purchase at least 10% of the building materials and imported soil from sources within 100 miles of the project site. 6) Use electricity from utility power lines rather than fossil fuel, where appropriate. 7) Purchase GHG offset for project GHG emissions (direct emissions plus indirect emissions from on-road haul trucks plus commute vehicles) exceeding future Federal, state, or local significance thresholds applicable at the time of construction. If no GHG significance thresholds have been formally adopted at the time of permitting, a presumptive GHG threshold of 7,000 MT per year of CO2e (amortized over the 50-year life of the levee project) should be used to define the offset requirement. The 7,000 MT/year presumptive threshold matches the lowest industrial project threshold that has been proposed by any air quality agency in California as of the date of this study. All purchased offsets must be verifiable under protocols set by the California Climate Action Registry, the Chicago Climate Exchange, or comparable auditing programs.
Effect NOI-1: Exposure of Sensitive Receptors to	*NOI-MM-1*: Employ Noise-Reducing Construction	SBFCA's construction contractor	SBFCA's construction	Ongoing during construction.	To the extent feasible construction contractors shall control noise from construction activity such that noise does not exceed applicable noise standards specified by the Cities of Yuba City, Marysville, Live Oak, and Biggs;

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Temporary Construction-Related Noise	Practices		contractor		Sutter County; and Butte County. Where there is not a specific noise standard noise will be limited to 60 dBA-Leq at noise-sensitive uses between the hours of 7:00 a.m. and 10:00 p.m. or 45 dBA-Leq between the hours of 10:00 p.m. and 7:00 a.m. Measures that can be implemented to control noise include the following. 1) Locate noise-generating equipment as far away as practical from residences and other noise-sensitive uses. 2) Equip all construction equipment with standard noise attenuation devices such as mufflers to reduce noise and equip all internal combustion engines with intake and exhaust silencers in accordance with manufacturer's standard specifications. 3) Establish equipment and material haul routes that avoid residential uses to the extent practical, limit hauling to the hours between 7:00 a.m. and 10:00 p.m., and specify maximum acceptable speeds for each route. 4) Employ electrically powered equipment in place of equipment with internal combustion engines where practical, where electric equipment is readily available, and where this equipment accomplishes project work as effectively and efficiently as equipment powered with internal combustion engines. 5) Restrict the use of audible warning devices such as bells, whistles, and horns to those situations that are required by law for safety purposes. 6) Provide a noise-reducing enclosure around stationary noise-generating equipment. 7) Provide temporary construction noise barriers between active construction sites that are in close proximity to residential and other noise-sensitive uses. Temporary barriers can be constructed or created with parked truck trailers, soil piles, or material stock piles.
Effect NOI-2: Exposure of Sensitive Receptors to Temporary Construction-Related Vibration	*NOI-MM-2*: Employ Vibration-Reducing Construction Practices	SBFCA's construction contractor	SBFCA's construction contractor A qualified acoustical consultant or engineering firm to conduct vibration monitoring. A designated complaint coordinator to respond to noise complaints received during construction.	Ongoing during construction. Inspection of potentially affected buildings to be conducted prior to construction and following completion of construction.	The construction contractor will, to the extent feasible, maintain a minimum distance of 150 feet between pile driving equipment and occupied or vibration-sensitive buildings or structures. To the extent feasible, a minimum distance of 50 feet will be maintained between other construction equipment and occupied or vibration-sensitive buildings or structures. For cases where this is not feasible, residents or property owners will be notified in writing prior to construction activity that construction may occur in close proximity to their buildings. SBFCA will inspect the potentially affected buildings prior to construction to inventory existing cracks in paint, plaster, concrete, and other building elements. SBFCA will retain a qualified acoustical consultant or engineering firm to conduct vibration monitoring at potentially affected buildings to measure the actual vibration levels during construction. Following completion of construction, SBFCA will conduct a second inspection to inventory changes in existing cracks and new cracks or damage, if any, that occurred as a result of construction-induced vibration. If new damage is found, then SBFCA will promptly arrange to have the damaged repaired or will reimburse the property owner for appropriate repairs. In addition, if construction activity is required within 100 feet of residences or other vibration-sensitive buildings, a designated complaint coordinator will be responsible for handling and responding to any complaints received during such periods of construction. A reporting program will be required that documents complaints received, actions taken, and the effectiveness of these actions in resolving disputes.
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-1*: Compensate for the Loss of Woody Riparian Trees	SBFCA	SBFCA	Mitigation will be implement- ted during Fall 2013. Riparian tree restoration areas will be monitored annually during years 1 through five following completion of mitigation project implementa- tion	For direct effects on woody riparian trees that cannot be avoided, SBFCA will compensate for the loss of riparian habitat to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with the appropriate state and Federal agencies during the permitting process. Compensation will be provided based on the ratio determined (e.g., 2:1 = 2 acres restored/created/enhanced or credits purchased for every 1 acre removed). SBFCA is preparing a mitigation and monitoring plan. Mitigation will consist of off-site, in-kind replacement habitat that is a combination of permittee-responsible mitigation and mitigation bank credits to allow for economy of scale and higher quality habitat due to large patch size. The plan identifies how and where mitigation will occur, monitoring and maintenance activities, success criteria, and funding assurances. The final mitigation and monitoring plan will be approved by the appropriate regulatory agencies prior to the removal of any riparian habitat.
Effect VEG-1: Disturbance or	*VEG-MM-2*: Install	SBFCA or its	SBFCA or its	Exclusion fencing	To clearly demarcate the project boundary and prevent special-status species from moving through the

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Removal of Riparian Trees	Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	construction contractor	construction contractor A qualified biologist hired by SBFCA	installed one week prior to start of construction activities and removed after construction of project phase is complete.	project area, SBFCA or its contractors will install temporary exclusion fencing along the project boundaries (including access roads, staging areas, etc.) 1 week prior to the start of construction activities. SBFCA will ensure that the temporary fencing is continuously maintained until all construction activities are completed and that construction equipment is confined to the designated work areas, including any offsite mitigation areas and access thereto. The fence will be made of suitable material that will not allow any of the special-status wildlife with potential to occur in the project area to pass through or over, and the bottom will be buried to a depth of at least 4 inches to ensure that these species cannot crawl under the fence. A USFWS- and a DFG-approved biological monitor will be onsite during installation of the fencing to survey and relocate wildlife outside the work area boundaries. Federally and state-listed species will be relocated only if authorized by the USFWS and DFG. The exclusion fencing will be removed only after construction of the project phase is completed. Exclusionary construction fencing and explanatory signage will also be placed around the perimeter of sensitive vegetation communities that could be affected by construction activities throughout the period during which such effects occur. Signage will explain the nature of the sensitive resource and warn that no effect on the community is allowed. The fencing will include a buffer zone of at least 20 feet between the resource and construction activities. All exclusionary fencing will be maintained in good condition throughout the construction period.
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	A qualified biologist hired by SBFCA	A qualified biologist hired by SBFCA	Training will occur for construction personnel when they are first brought on the job during the construction period.	A qualified biologist will conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the need to avoid effects on sensitive biological resources (e.g., riparian habitat, special-status species, special-status wildlife habitat) and the penalties for not complying with permit requirements. The biologist will inform all construction personnel about the life history of special-status species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of the BO or other authorizing document. Proof of this instruction will be submitted to USFWS, DFG, or other overseeing agency, as appropriate. The training also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on special-status species during project construction. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions.
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-4*: Retain a Biological Monitor	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	Ongoing during the construction period	SBFCA or its contractors will retain qualified biologists to monitor construction activities adjacent to sensitive biological resources (e.g., special-status species, riparian habitat, wetlands, elderberry shrubs). The biologists will assist the construction crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologists will be responsible for ensuring that SBFCA or its contractors maintain the exclusion fencing adjacent to sensitive biological resources.
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-4*: Retain a Biological Monitor	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*
Effect VEG-2: Loss of Wetlands	*VEG-MM-5*: Compensate for	SBFCA	SBFCA	Mitigation will be	Compensation for the loss of wetlands will include restoring or enhancing in-kind wetland habitat at a

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
and Other Waters of the United States as a Result of Project Construction	the Loss of Wetlands and Other Waters			implement- ted during Fall 2013. Monitoring activities will begin immediately following.	mitigation ratio that will be developed in coordination with regulatory agencies to ensure no net loss of habitat functions and values. SBFCA is preparing a mitigation and monitoring plan Mitigation will consist of off-site, in-kind replacement habitat that is a combination of permittee-responsible mitigation and mitigation bank credits to allow for economy of scale and higher quality habitat due to large patch size. The plan identifies how and where mitigation will occur, monitoring and maintenance activities, success criteria, and funding assurances. The final mitigation and monitoring plan will be approved by the appropriate regulatory agencies before the loss of any wetlands or waters.
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-4*: Retain a Biological Monitor	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-6*: Compensate for Loss of Protected Trees	SBFCA	SBFCA	Mitigation will be implement- ted during Fall 2013. Riparian tree restoration areas will be monitored annually during years 1 through five following completion of mitigation project implementa- tion	For impacts on protected trees that fall under the jurisdiction of a local tree ordinance, SBFCA will apply for a tree permit for the removal of any protected trees during construction. SBFCA will replace trees that must be removed with trees at or near the location of the effect or another location approved by the appropriate party (e.g., tree administrator, parks and recreation department). SBFCA also will replace any replacement trees that die within 3 years of the initial planting. Replacement trees are required at a ratio of 1:1 (i.e., 1-inch diameter of replacement tree for every 1-inch diameter of tree removed). Effects on trees also may be mitigated through payment of an in-lieu fee. Mitigation will be subject to approval by the appropriate party and will take into account species affected, replacement species, location, health and vigor, habitat value, and other factors to determine fair compensation for tree loss. For impacts on protected trees in oak woodlands under a county's jurisdiction, the project applicant will implement one of the four CEQA oak woodlands mitigation alternatives to compensate for the loss of projected trees and the planting of oaks will not constitute more than 50% of the required mitigation.
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat	*VEG-MM-3*: Conduct Mandatory Contractor/Worker	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Loss Resulting from Project Construction	Awareness Training for Construction Personnel				
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-4*: Retain a Biological Monitor	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-7*: Retain Qualified Botanists to Conduct Floristic Surveys for Special-Status Plants during Appropriate Identification Periods	SBFCA	A qualified botanist hired by SBFCA	Surveys will be conducted prior to project construction and during reported blooming or other periods when special-status plants are evident and identifiable.	SBFCA will retain qualified botanists to survey the biological study area to document the presence of special-status plants before project implementation. The botanists will conduct a floristic survey that follows the DFG botanical survey guidelines (California Department of Fish and Game 2009). 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. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the reported blooming period. To account for different special status–plant identification periods, one or more series of field surveys may be required in spring and summer. If any special-status plants are identified during the surveys, the botanist will photograph and map locations of the plants, document the location and extent of the special status–plant population on a CNDDB Survey Form, and submit the completed Survey Form to the CNDDB. The amount of compensatory mitigation required will be based on the results of these surveys.
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-8*: Avoid or Compensate for Substantial Effects on Special-Status Plants	SBFCA	SBFCA	During pre-construction survey timeframe.	If one or more special-status plants are identified in the study area during preconstruction surveys, SBFCA will redesign or modify proposed project components of the project to avoid indirect or direct effects on special-status plants wherever feasible. If special-status plants can be avoided by redesigning projects, implementation of Mitigation Measures *VEG-MM-2* (barrier fencing), *VEG-MM-3* (awareness training), and *VEG-MM-4* (biological monitor) would avoid significant effects on special-status plants. If complete avoidance of special-status plants is not feasible, the effects of the project on special-status plants would be compensated for by offsite preservation at a ratio to be negotiated with the resource agencies. Suitable habitat for affected special status–plant species will be purchased in a conservation area, preserved, and managed in perpetuity. Detailed information will be provided to the agencies on the location and quality of the preservation area, the feasibility of protecting and managing the area in perpetuity, and the responsible parties. Other pertinent information also will be provided, to be determined through future coordination with the resource agencies.
Effect WILD-1: Potential Mortality of or Loss of Habitat for Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle	*WILD-MM-1*: Fence and Avoid Habitat for Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle and Implement Protective Measures	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	During the construction period.	The area of potentially suitable habitat will be identified on construction plans and fenced prior to the start of construction. No foot or vehicle traffic will be allowed in the fenced area. The fencing will be removed when construction is complete. If avoidance is not possible, or new areas of potential habitat are identified and cannot be avoided, a qualified entomologist will survey the suitable habitat areas for the presence of these three beetle species to determine their presence. If recommended by the entomologist and supported by the wildlife agencies, the beetles may be relocated to suitable habitat prior to the start of construction in the habitat to be affected.
Effect WILD-2: Potential Mortality or Disturbance of VELB and its Habitat (Elderberry Shrubs)	*WILD-MM-2*: Conduct VELB Surveys Prior to Elderberry Shrub Transplantation	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	During the construction period.	A qualified biologist will survey elderberry shrubs to be transplanted prior to transplantation. Surveys will be conducted in accordance with the Conservation Guidelines for the VELB (U.S. Fish and Wildlife Service 1999b). The biologist will survey the area surrounding the shrub to be transplanted to ensure that there aren't additional elderberry shrubs that need to be removed. Surveys will consist of counting and measuring the diameter of each stem, and examining elderberry shrubs for the presence of VELB exit holes.
Effect WILD-2: Potential Mortality or Disturbance of VELB and its Habitat (Elderberry Shrubs)	*WILD-MM-3*: Implement Measures to Protect VELB and its Habitat	SBFCA or its construction contractor	A qualified biologist with VELB/elderberry experience hired by SBFCA	Buffer area fences around elderberry shrubs will be inspected weekly by a qualified biologist during ground-disturbing activities and monthly after ground-disturbing	Elderberry shrubs/clusters within 100 feet of the construction area that will not be removed will be protected during construction. A qualified biologist will mark the elderberry shrubs and clusters that will be protected during construction. Orange construction barrier fencing will be placed at the edge of the respective buffer areas. The buffer area distances will be proposed by the biologist and approved by USFWS. No construction activities will be permitted in the buffer zone other than those activities necessary to erect the fencing. Signs will be posted along fencing for the duration of construction. In some cases, where the elderberry shrub dripline is within 10 feet of the work area, k-rails will be placed at the shrub's dripline to provide additional

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
				activities until project construction is complete or until the fences are removed.	protection to the shrub from construction equipment and activities. Temporary fences around the elderberry shrubs and k-rails at shrub driplines will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and later removed, as shown on the plans, as specified in the special provisions, and as directed by the project engineer. Temporary fencing will be 4 feet (1.2 meters) high, commercial-quality woven polypropylene, orange in color. Buffer area fences around elderberry shrubs will be inspected weekly by a qualified biologist during ground-disturbing activities and monthly after ground-disturbing activities until project construction is complete or until the fences are removed, as approved by the biological monitor and the resident engineer. The biological monitor will be responsible for ensuring that the contractor maintains the buffer area fences around elderberry shrubs throughout construction. SBFCA will ensure that the project site will be watered down as necessary to prevent dust from becoming airborne and accumulating on elderberry shrubs in and adjacent to the project site. Biological inspection reports will be provided to the project lead and USFWS.
Effect WILD-2: Potential Mortality or Disturbance of VELB and its Habitat (Elderberry Shrubs)	*WILD-MM-4*: Compensate for Effects on VELB and its Habitat	SBFCA	A qualified biologist with VELB/elderberry experience hired by SBFCA	Transplanting will take place before construction begins. Elderberry shrubs within the project construction area that cannot be avoided will be transplanted during the plant's dormant phase (November through the first 2 weeks of February).	Before construction begins, SBFCA will compensate for direct effects on elderberry shrubs by transplanting shrubs that cannot be avoided to a USFWS-approved conservation area (i.e., the Star Bend Mitigation Area). Elderberry seedlings or cuttings and associated native species will also be planted in the conservation area.
Effect WILD-3: Potential Mortality or Disturbance of Western Pond Turtle	*WILD-MM-5*: Conduct Preconstruction Surveys for Western Pond Turtle and Monitor Construction Activities if Turtles are Observed	SBFCA or its construction contractor	A qualified biologist familiar with turtles hired by SBFCA	A biologist will conduct surveys for western pond turtle in one before and within 24 hours of beginning work in suitable aquatic habitat. Surveys will be timed to coincide with the time of day and year when turtles are most likely to be active (during the cooler part of the day between 8 a.m. and 12 p.m. during spring and summer).	A qualified biologist will conduct surveys for western pond turtle one week and 24 hours prior to beginning work in suitable aquatic habitat. Prior to conducting the surveys, the biologist should locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to quietly observe turtles. Each survey should include a 30-minute wait time after arriving on site to allow startled turtles to return to open basking areas. The survey should consist of a minimum 15-minute observation time per area where turtles could be observed. If western pond turtles are observed during either survey, a biological monitor should be present during construction activities in the aquatic habitat where the turtle was observed and will capture and remove, if possible, any entrapped turtle. The biological monitor also will be mindful of suitable nesting and overwintering areas in proximity to suitable aquatic habitat and periodically inspect these areas for nests and turtles. The biological monitor's DFG scientific collecting permit will include capture and relocation of turtles.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-6*: Avoid and Minimize Construction Effects on Giant Garter Snake	SBFCA or its construction contractor	A qualified biologist familiar with giant garter snakes hired by SBFCA	During the construction period of May 1 through October 1 (giant garter snake active period) to the extent feasible.	To the maximum extent possible, all construction activity in giant garter snake aquatic and upland habitat within 200 feet of aquatic habitat will be conducted during the snake's active period (between May 1 and October 1).
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-7*: Avoid and Minimize Potential Maintenance Impacts on Suitable Habitat for Giant Garter Snake and Western Burrowing Owl	SBFCA or its construction contractor	SBFCA or its construction contractor	Plan to be developed prior to construction. Burning and vegetation mowing to take place from May 1–October 1.	SBFCA will ensure, through an operations and maintenance plan or other plan, that maintenance activities that impact suitable habitat along the levee are minimized to the maximum extent feasible. The plan should include measures that avoid and reduce potential injury and mortality of giant garter snake and western burrowing owl, and minimize the loss of burrows that these species utilize. The plan should be developed in coordination with USFWS and DFG and may include some of the following measures. 1) Minimize vegetation control by burning and conduct vegetation mowing during the active period (May 1–October 1) of giant garter snake. 2) No maintenance activities (i.e., mowing, rodenticide use, burrow filling or removal) should occur within

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
				Grouting of burrows to take place during May 1–October 1.	200 feet of toe drains at the base of the levee, as these areas are more likely to be used by giant garter snake and thus have a higher level of sensitivity. 3) Avoid grouting of burrows. If grouting must occur, conduct during the active period of giant garter snake (May 1-October 1). A qualified biologist will examine the burrow to be grouted for evidence of use by western burrowing owl and conduct early morning surveys of the burrow to confirm it is not occupied by western burrowing owl. Once the burrow is determined to be unoccupied by western burrowing owl, install exclusion fencing with a one-way exit so that any giant garter snakes can exit the burrow and not go back in. The exclusion fencing and one-way exit should be left in place for 24 hours before grouting. 4) Prepare a database of sensitive areas along the levee and requirements for maintenance personnel to utilize when planning and conducting maintenance activities. 5) Train staff to recognize western burrowing owl and their sign and to avoid removing burrows in areas where owls or their sign are observed. 6) Coordinate compensation for permanent loss of burrow habitat for giant garter snake and western burrowing owl through regional habitat conservation plans/ natural community conservation plans.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-8*: Compensate for Permanent Loss of Suitable Giant Garter Snake Habitat	SBFCA	SBFCA	Before construction activities are initiated.	Compensation for permanent effects on giant garter snake aquatic and upland habitat will follow the guidance in the Programmatic Consultation. SBFCA will compensate for the permanent loss of suitable aquatic habitat and upland habitat for giant garter snake by purchasing preservation credits equal at a USFWS and DFG approved conservation bank. The habitat at the conservation bank will be protected in perpetuity for giant garter snake. Prior to the start of construction (excluding Reach 13, as there is no giant garter snake habitat in this reach), SBFCA will provide funding to the conservation bank for giant garter snake habitat preservation credits. The transaction will take place through a purchase and sale agreement, and funds must be transferred within 30 days, and before any construction activities are initiated. SBFCA will provide the USFWS and CDFW with copies of the credit sale agreement and fund transfer.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-9:* Restore Temporarily Disturbed Aquatic and Upland Habitat to Pre-Project Conditions	SBFCA	SBFCA	Upon completion of construction.	Upon completion of the construction, SBFCA will restore temporarily affected suitable and upland habitat for giant garter snake to pre-project conditions. Restoration of aquatic vegetation and annual grassland will be detailed in a mitigation and monitoring plan that will be reviewed and approved by USACE and USFWS prior to the start of construction. If additional giant garter snake habitat will be temporarily removed because of PG&E facility relocations, consultation with USFWS would be reinitiated and PG&E will restore temporarily affected habitat to pre-project conditions.
Effect WILD-5: Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	SBFCA or its construction contractor	SBFCA or its construction contractor	During the construction period of September 1 through January 31 to the extent feasible.	To the maximum extent feasible, SBFCA will schedule vegetation (trees, shrubs, ruderal areas) removal/trimming during the nonbreeding season of birds (September 1–January 31). If vegetation removal cannot be removed in accordance with this timeframe, preconstruction surveys for nesting birds and additional protective measures will be implemented (see Mitigation Measure WILD-MM-13). SBFCA will not remove trees with active Swainson's hawk or other active raptor nests. Because white-tailed kite is fully protected, removal of trees with active nests and activities that may result in loss of white-tailed kites are prohibited. Removal of vegetation for relocation of PG&E facilities will be conducted during the nonbreeding season of birds (September 1–January 31) to the maximum extent feasible. When this is not possible, preconstruction surveys for nesting birds and additional protective measures will be implemented as described in Mitigation Measure WILD-MM-13.
Effect WILD-5: Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat	*WILD-MM-11*: Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction and Implement Protective Measures during Construction	SBFCA or its construction contractor	A qualified biologist (with raptor behavior experience)	Surveys to be conducted between February and July the spring prior to construction. Daily monitoring to be conducted during construction activities occurring during the breeding season to watch for any signs of stress.	During the spring prior to construction, focused surveys for Swainson's hawk will be conducted in the project area and in a buffer area up to 0.5 mile around the project area. The size of the buffer area surveyed will be based on the type of habitat present and line of sight from the construction area to surrounding suitable breeding habitat. Buffer areas containing unsuitable nesting habitat and/or with an obstructed line of sight to the project area will not be surveyed. Biologists will focus on suitable nest trees within and immediately adjacent to the project area that have the highest likelihood for disturbance. The number of surveys needed to determine the status of nesting will be dependent on the conditions during the surveys and behavior of the hawks. If needed, biologists will coordinate with DFG regarding the extent and number of surveys. Surveys would generally be conducted between February and July. Survey methods and results will be reported to DFG.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
					If active nests are found, SBFCA will maintain a 0.25-mile buffer or other distance determined appropriate through consultation with DFG, between construction activities and the active nest(s) until it has been determined that young have fledged. In addition, a qualified biologist (experienced with raptor behavior) will be present on site (daily) during construction activities occurring during the breeding season to watch for any signs of stress. If nesting birds are observed to exhibit agitated behavior indicating that they are experiencing stress, construction activities will cease until the qualified biologist, in consultation with DFG, determines that young have fledged.
Effect WILD-5: Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat	*WILD-MM-12*: Compensate for the Permanent Loss of Foraging Habitat for Swainson's Hawk	SBFCA or its construction contractor	SBFCA or its construction contractor	After conducting pre-construction surveys for Swainson's hawks.	Permanent removal of suitable foraging habitat for Swainson's hawks will be mitigated by providing offsite habitat management lands as described in DFG's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (California Department of Fish and Game 1994). The final acreage of off-site management lands to be provided will depend on the distance between the project area and the nearest active nest site. The mitigation ratio varies from 0.5:1 to 1:1 of habitat preserved for each acre lost. If acceptable to DFG, SBFCA also may be able to purchase mitigation credits for Swainson's hawk foraging habitat from a DFG-approved mitigation or conservation bank. Information on the nearest nest will be collected during Swainson's hawk surveys conducted under Mitigation Measure WILD-MM-11 to determine the appropriate mitigation ratio. If no active nests are found during this survey, a search of the CNDDB will be conducted, and DFG will be contacted to determine the nearest active nest.
Effect WILD-6: Potential Mortality or Disturbance of Nesting Special-Status and Non–Special Status Birds and Removal of Suitable Breeding Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*
Effect WILD-6: Potential Mortality or Disturbance of Nesting Special-Status and Non–Special Status Birds and Removal of Suitable Breeding Habitat	*WILD-MM-13*: Conduct Nesting Surveys for Special-Status and Non–Special Status Birds and Implement Protective Measures during Construction	SBFCA or its construction contractor	A quailed biologist hired by SBFCA	Surveys will be conducted prior to the start of construction and between February 1 and June 1.	SBFCA will retain qualified wildlife biologists with knowledge of the relevant species to conduct nesting surveys before the start of construction. A minimum of three separate surveys will be conducted between February 1 and June 1. Surveys will include a search of all suitable nesting habitat (trees, shrubs, ruderal areas, field crops) in the construction area. In addition, a 500-foot area around the project area will be surveyed for nesting raptors, and a 50-foot buffer area will be surveyed for other nesting birds. If no active nests are detected during these surveys, no additional measures are required. If active nests are found in the survey area, no-disturbance buffers will be established around the nest sites to avoid disturbance or destruction of the nest site until the end of the breeding season (approximately September 1) or until a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of the buffers will be determined by the biologists in coordination with USFWS and DFG and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. Larger buffer areas or other protective measures may be required for state-listed species (bald eagle, western yellow-billed cuckoo, or bank swallow) to ensure that mortality does not occur if SBFCA does not obtain an incidental take permit for these species. Because some bird species are difficult to detect (i.e., western yellow-billed cuckoo), measures such as avoiding work adjacent to suitable habitat during the early portion of the breeding season may be required, even if active nests are not found.
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-7*: Avoid and Minimize Potential Maintenance Impacts on Suitable Habitat for Giant Garter Snake and Western Burrowing Owl	See *Effect WILD-4, WILD-MM-7*	See *Effect WILD-4, WILD-MM-7*	See *Effect WILD-4, WILD-MM-7*	See *Effect WILD-4, WILD-MM-7*
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Nesting and Foraging Habitat	Breeding Season for Birds				
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-14*: Conduct Surveys for Western Burrowing Owl prior to Construction and Implement Protective Measures if Found	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	Conduct surveys between February 15 and April 15, and April 15 and July 15, and September 1 to January 31.	DFG recommends western burrowing owl surveys whenever burrowing owl habitat is present on or within 500 feet of a project site. Breeding season and non-breeding season surveys will be conducted in accordance with DFG's 2012 Staff Report on Burrowing Owl Mitigation (2012 Staff Report) (California Department of Fish and Game 2012c). Breeding season will have four surveys: 1) one survey between February 15 and April 15 and 2) a minimum of three surveys at least three weeks apart between April 15 and July 15, with at least one survey after June 15. Non-breeding season surveys will consist of four surveys spread evenly throughout the non-breeding season (September 1 to January 31). A survey report will be prepared at the conclusion of surveys for submission to DFG. The report will include, but is not limited to, a description of the proposed project or proposed activity, proposed project start and end dates, and a description of disturbances or other activities occurring onsite or nearby (see Appendix D of the 2012 Staff Report). If burrowing owls are found during any of the surveys, compensatory mitigation best practices as described below will be used. Because ample lead time is necessary for putting compensation in place, these efforts should begin as soon as possible after presence of burrowing owls is determined. Regardless of results from the surveys described above, an initial take avoidance (preconstruction) surveys will be conducted no less than 14 days prior to and 24 hours before initiating ground disturbing activities. SBFCA will retain a qualified biologist to conduct preconstruction surveys for active burrows according to methodology in the 2012 Staff Report. Burrowing owls may re-colonize a site after only a few days. As such, subsequent take avoidance surveys will be conducted if a few days pass between project activities. If no burrowing owls are found, no further mitigation is required. If burrowing owls are found, SBFCA will use avoidance, minimization measures, monitoring, and reporting of such measures as described in the 2012 Staff Report (Mitigation Methods) and summarized below. 1) Do not disturb occupied burrows during the breeding season (February 1–August 31). 2) Establish a 250-foot-wide buffer where no construction will occur around occupied burrows unless a qualified biologist determines through non-invasive methods that egg laying and incubation have not begun or that juveniles are foraging independently and are capable of independent survival. 3) Avoid affecting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls. 4) Avoid destruction of unoccupied burrows and place visible markers near burrows to ensure they are not collapsed. 5) Develop and use a worker awareness program to increase the onsite worker recognition of and commitment to burrowing owl protection. 6) Conduct additional take avoidance surveys as described above. 7) Conduct ongoing surveillance of the project site for burrowing owls during project activities. 8) Minimize effects on burrowing owls and their habitat by using buffer zones, visual screens, and other measures during project activities. Recommended buffer distances in the 2012 Staff Report will be used or site-specific buffers and visual screens will be determined through information collected during site-specific monitoring and consultation with DFG.
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-15*: Compensate for the Loss of Occupied Western Burrowing Owl Habitat	SBFCA or its construction contractor	SBFCA or its contractor	Best practices to be develop, as needed, after pre-construction surveys are conducted for western burrowing owl.	If western burrowing owls have been documented to occupy burrows at the project site in the last 3 years, current scientific literature supports the conclusion that the site should be considered occupied and mitigation is required. The current scientific literature also provides best practices. If best practices cannot be used, SBFCA may consult with the DFG to develop effective mitigation alternatives.
Effect WILD-8: Potential Injury, Mortality or Disturbance of Tree-Roosting Bats and Removal of Roosting Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*
Effect WILD-8: Potential Injury, Mortality or Disturbance of	*WILD-MM-16*: Identify Suitable Roosting Habitat	SBFCA or its construction	A qualified biologist hired by	Conduct tree removal/trimming	If tree removal/trimming cannot be conducted between September 15 and October 30, qualified biologists will examine trees to be removed or trimmed for suitable bat roosting habitat before removal/trimming. High-

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Tree-Roosting Bats and Removal of Roosting Habitat	for Bats and Implement Avoidance and Protective Measures	contractor	SBFCA	between September 15 and October 30.	quality habitat features (large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch, etc.) will be identified and the area around these features searched for bats and bat sign (guano, culled insect parts, staining, etc.). Riparian woodland, orchards, and stands of mature broadleaf trees should be considered potential habitat for solitary foliage–roosting bat species. Passive monitoring using full spectrum bat detectors may be needed if identification of bat species is required. Survey methods should be discussed with DFG prior to the start of surveys. Measures to avoid and minimize impacts to sensitive bats species will be determined in coordination with DFG
Effect POP-1: Displacement of Existing Housing Units	*POP-MM-1*: Property Acquisition Compensation and Resident Relocation Plan	SBFCA	SBFCA	As needed during the construction period.	Permanent acquisition, relocation, and compensation services will be conducted in compliance with Federal and state relocation laws, which are the Uniform Act of 1970 (42 USC 4601 et seq.) and implementing regulation, 49 CFR Part 24; and California Government Code Section 7267 et seq. These laws require that appropriate compensation be provided to displaced landowners and tenants, and that residents may be relocated to comparable replacement housing. A review of Census Tract information for the affected residences shows that there are adequate vacant residences (see Table 3.12-2) within the same Census Tracts for resident relocations. In cases where project construction is temporarily disruptive to nearby residents, SBFCA will provide assistance for residents to relocate temporarily during construction activities and provide compensation to residents for reasonable rent and living expenses incurred as a result of relocation. SBFCA will develop a Temporary Resident Relocation Plan to guide temporary relocation services and compensation. The Temporary Resident Relocation Plan will, at a minimum, serve the following functions. 1) Outline the process for providing notice of relocation. 2) Provide guidelines for relocation services and compensation. 3) Ensure that 24-hour security for vacated homes is provided. 4) Provide for temporary occasional access of vacated homes by residents (for long-duration construction periods). 5) Ensure all compensation and relocation activities are conducted in compliance with Federal and state relocation laws, which are identified above. 6) Ensure that the Temporary Resident Relocation Plan in no way offsets, eliminates, or reduces rights to compensation and relocation assistance resulting from required property rights. 7) Ensure that the properties are returned to the property owners in an undamaged, clean condition , unaffected by residual dust or debris, in a manner consistent with the condition of the property prior to commencement of construction. 8) Provide for cleaning or restoration of affected property improvements.
Effect UTL-1: Potential Temporary Disruption of Irrigation/Drainage Facilities and Agricultural and Domestic Water Supply	*UTL-MM-1*: Coordinate with Water Supply Users before and during All Water Supply Infrastructure Modifications and Implement Measures to Minimize Interruptions of Supply	SBFCA	SBFCA	Implemented as needed before and during all water supply infrastructure modifications during construction activities.	The project proponent will ensure the following measures are implemented to avoid and minimize potential for domestic and irrigation water supply interruptions during construction activities. 1) Coordinate the timing of all modifications to domestic and irrigation water supply infrastructure with the affected infrastructure owners and water supply users. 2) Include detailed scheduling of the phases of modifications or replacement of existing domestic and irrigation water supply infrastructure components in project design and in construction plans and specifications. 3) Plan and complete modifications of irrigation infrastructure for the non-irrigation season to the extent feasible. 4) Provide for alternative water supply, if necessary, when modification or replacement of irrigation infrastructure must be conducted during a period when it otherwise would be in normal use by an irrigator. 5) Ensure either that users of irrigation water supply do not, as a result of physical interference associated with the project, experience a substantial interruption in irrigation supply when such supply is needed for normal, planned farming operations; or compensate users of irrigation water supply that experience a substantial decrease in an existing level of service (that meets the established standards for the project area) in kind for losses associated with the reduction in level of service.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect UTL-2: Damage of Public Utility Infrastructure and Disruption of Service	*UTL-MM-2*: Verify Utility Locations, Coordinate with Utility Providers, Prepare a Response Plan, and Conduct Worker Training	SBFCA	SBFCA	All activities will be conducted prior to beginning construction.	The project proponent will ensure the following measures are implemented to avoid and minimize potential damage to utilities and service disruptions during construction. Implementing these measures will help ensure that existing utilities are not damaged and that service interruptions are minimized. 1) Obtain utility excavation or encroachment permits as necessary before initiating any work with the potential to affect utility lines, and include all necessary permit terms in construction contract specifications. 2) Before starting construction, coordinate with the CVFPB and utility providers in the area to locate existing lines and to implement orderly relocation of utilities that need to be removed or relocated. Avoid relocating utilities when possible. Provide notification of potential interruptions in services to the appropriate agencies. 3) Before starting construction, verify utility locations through field surveys and the use of the Underground Service Alert services. Clearly mark any buried utility lines in the area of construction before any earthmoving activity. 4) Before starting construction, prepare a response plan to address potential accidental damage to a utility line. The plan will identify chain-of-command rules for notifying authorities and appropriate actions and responsibilities to ensure the safety of the public and the workers. Contractors will conduct worker training to respond to these situations. 5) Stage utility relocations to minimize service interruptions.
Effect PH-1: Temporary Exposure or Release of Hazardous Materials During Construction	Environmental Commitment: Stormwater Pollution Prevention Plan	SBFCA	SBFCA		Because ground disturbance for the project would be greater than 1 acre, SBFCA would obtain coverage under the U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) general construction activity stormwater permit. The Central Valley Regional Water Quality Control Board (RWQCB) administers the NPDES storm water permit program in Sutter and Butte counties. Obtaining coverage under the NPDES general construction activity permit generally requires that the project applicant prepare a stormwater pollution prevention plan (SWPPP) that describes the BMPs that would be implemented to control accelerated erosion, sedimentation, and other pollutants during and after project construction. The SWPPP would be prepared prior to commencing earth-moving construction activities. The specific BMPs that would be incorporated into the erosion and sediment control plan and SWPPP would be site-specific and would be prepared by the construction contractor in accordance with the California RWQCB Field Manual. However, the plan likely would include one or more of the following standard erosion and sediment control BMPs. Timing of construction. The construction contractor would conduct all construction activities during the typical construction season to avoid ground disturbance during the rainy season. Staging of construction equipment and materials. To the extent possible, equipment and materials would be staged in areas that have already been disturbed. Minimize soil and vegetation disturbance. The construction contractor would minimize ground disturbance and the disturbance/destruction of existing vegetation. This would be accomplished in part through the establishment of designated equipment staging areas, ingress and egress corridors, and equipment exclusion zones prior to the commencement of any grading operations. Stabilize grading spoils. Grading spoils generated during construction would be temporarily stockpiled in staging areas. Silt fences, fiber rolls, or similar devices would be installed around the base of the temporary stockpiles to intercept runoff and sediment during storm events. If necessary, temporary stockpiles may be covered with an appropriate geotextile to increase protection from wind and water erosion. Install sediment barriers. The construction contractor may install silt fences, fiber rolls, or similar devices to prevent sediment-laden runoff from leaving the construction area. Stormwater drain inlet protection. The construction contractor may install silt fences, drop inlet sediment traps, sandbag barriers, and/or other similar devices. Permanent site stabilization. The construction contractor would install structural and vegetative methods to permanently stabilize all graded or otherwise disturbed areas once construction is complete. Structural methods may include the installation of biodegradable fiber rolls and erosion control blankets. Vegetative methods may involve the application of organic mulch and tackifier and/or the application of an erosion control seed mix. Implementation of a SWPPP would substantially minimize the potential for project-related

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
					erosion and associated adverse effects on water quality. Offsite Tracking. Install rumble plates and crushed rock at project site entrance and exit locations to control offsite tracking of mud from construction vehicles.
Effect PH-2: Exposure of the Environment to Hazardous Materials during Ground-Disturbing Activities	*PH-MM-1*: Complete Phase I and Phase II (if Necessary) Environmental Site Assessment Investigations and Implement Required Measures	SBFCA or its contractor	SBFCA or its contractor	Assessments will be conducted prior to beginning construction. Measures will be implemented before ground-disturbing or demolition activities begin.	SBFCA will conduct Phase I Environmental Site Assessments and, if necessary, Phase II Environmental Site Assessments or other appropriate testing. If necessary, before construction activities begin, the assessment will include an analysis of soil or groundwater samples for the potential contamination sites that were not covered by previous investigations. Recommendations in Phase I and Phase II Environmental Site Assessments to address any contamination that is found will be implemented before initiating ground-disturbing activities. In addition, SBFCA will implement the following measures before ground-disturbing or demolition activities begin, in order to reduce health hazards associated with potential exposure to hazardous substances. 1) Prepare a site plan that identifies any necessary remediation activities appropriate for proposed land uses, including excavation and removal of contaminated soils, and redistribution of clean fill material on the project site. The plan will include measures that ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site, as well as any other hazardous materials. In the event that contaminated groundwater is encountered during site excavation activities, the contractor will report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. The contractor will be required to comply with the plan and applicable Federal, state, and local laws. 2) Retain licensed contractors to remove all underground storage tanks. 3) Notify the appropriate Federal, state, and local agencies if evidence of previously undiscovered soil or groundwater contamination is encountered during construction activities. Any contaminated areas will be cleaned up in accordance with the recommendations of the Environmental Health Division for Sutter, Butte, and Yuba Counties, Central Valley RWQCB, California Department of Toxic Substances Control, or other appropriate Federal, state or local regulatory agencies. 4) Prepare a worker health and safety plan before the start of construction activities that identifies, at a minimum, all contaminants that could be encountered during construction activity; all appropriate worker, public health, and environmental protection equipment and procedures to be used during project activities; emergency response procedures; the most direct route to the nearest hospitals; and a site safety officer. The plan will describe actions to be taken should hazardous materials be encountered onsite, including protocols for handling hazardous materials and preventing their spread, and emergency procedures to be taken in the event of a spill.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect PH-2: Exposure of the Environment to Hazardous Materials during Ground-Disturbing Activities	*PH-MM-2*: Employment of a Toxic Release Contingency Plan	SBFCA's construction contractor	SBFCA's construction contractor	Implemented prior to beginning construction.	The construction contractor will coordinate with regional and local planning agencies to incorporate a toxic release contingency plan, pursuant to California Government Code Section 8574.16, which requires that regional and local planning agencies incorporate such a measure within their planning. Implementation of this plan will ensure the effective and efficient use of resources in the areas of traffic and crowd control; firefighting; hazardous materials response and cleanup; radio and communications control; and provision of medical emergency services.
Effect PH-3: Temporary Exposure to Safety Hazards from the Construction Site and Vehicles	*PH-MM-3*: Implementation of Construction Site Safety Measures	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing throughout the construction period.	The construction contractor will ensure that all workers are properly trained to operate equipment. Safety precautions will be followed at all times during construction to avoid accidents. The construction contractor will also require that all workers have valid drivers' licenses and insurance. Proper signage and detours will be provided to ensure public safety.
Effect PH-3: Temporary Exposure to Safety Hazards from the Construction Site and Vehicles	*PH-MM-4*: Implementation of an Emergency Response Plan	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing throughout the construction period.	Development of an emergency response plan will ensure that any accidents that occur at the construction site will be responded to in the appropriate manner. The construction contractor will develop the emergency response plan, taking into consideration the location of nearby emergency response agencies as well as emergency response access routes and response times.
Effect CR-1: Effects on Identified Archaeological Sites Resulting From Construction of Levee Construction and Ancillary Facilities	*CR-MM-1*: Perform Data Recovery to Retrieve Information Useful in Research	SBFCA	SBFCA	Data recovery plan to be prepared prior to commencing data recovery activities.	Prior to data recovery SBFCA will prepare a brief data recovery plan that describes how SBFCA will perform the following steps (CEQA Guidelines § 15126.4(B)(3)[c]). SBFCA will perform the following steps to retrieve the material associated with these sites that is useful in research: 1) Data recovery excavations will be performed to retrieve a sample of the affected portion of these sites, in order to retrieve scientifically important material. Excavation will be conducted in arbitrary levels, and material removed will be divided and screened through a combination of ¼" and 1/8 " mesh screen, so as to capture both the gross cultural constituents and the finer material that can only be captured in fine mesh. Excavation will be conducted in 10-centimeter levels so that the horizontal association of different cultural materials is recorded. Removed material will be segregated by type and bagged with labels noting their horizontal and vertical location relative to an established datum point. The datum point will be recorded in the field with GPS to at least 10-centimer horizontal and vertical accuracy. 2) Faunal material (animal bone) will be segregated and studied by a qualified faunal analyst to identify the species pursued, relative abundance and diversity of different species present, and the manner in which the prey were processed by the prehistoric occupants. 3) Obsidian glass will be retrieved and studied through both X-ray fluorescence (a method that allows the source of the obsidian to be identified) and obsidian hydration analysis (a method that allows approximate determination of the time when the material was subject to human modification). 4) Soil samples will be retrieved, with their horizontal and vertical location recorded, for flotation analysis (a method of separating light organic material such as fine plant remains from the deposit, in order to identify plant species pursued by prehistoric populations). 5) Because some of the resources subject to treatment contain human remains, provisions for such remains are necessary. If human remains are discovered in these deposits during data recovery, the county coroner will be contacted as required in California Health and Safety Code Section 7050.5. After the coroner confirms the remains are of prehistoric origin, the NAHC will be contacted and given the opportunity to identify a most likely descendant (MLD). The MLD will be given the opportunity to reinter the remains with appropriate dignity. If the NAHC fails to identify the MLD or if the parties cannot reach agreement as to how to reinter the remains as described in California PRC Section 5097.98(e), the landowner will reinter the remains at a location not subject to further disturbance. SBFCA will ensure the protections prescribed in California PRC Section 5097.98(e), are performed. 6) If, in the course of data recovery excavations, it is determined that, contrary to available evidence, the resource lacks integrity, data recovery excavations will cease. 7) After completion of data recovery excavations SBFCA will prepare a data recovery report and summarize the results of these studies relative to regional research questions in the data recovery report. The report will be filed with the relevant information center of the CHRIS. SBFCA will also store the recovered material (other than human remains) at an appropriate facility for curation.
Effect CR-2: Potential to	*CR-MM-2*: Complete	SBFCA	SBFCA and a	Surveys completed prior	SBFCA will complete the following management steps for currently inaccessible areas once rights of entry

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Disturb Unidentified Archaeological Sites	Surveys Prior to Construction, Implement a Cultural Resources Discovery Plan, Provide Related Training to Construction Workers, and Conduct Construction Monitoring		qualified archaeological monitor	to start of construction. Archaeological monitor on-site during construction at sensitive geographic locations.	have been obtained: 1) SBFCA will complete an inventory and evaluation report for cultural resources, including archaeological resources. 2) The work will be led or supervised by cultural resources specialists who meet the Secretary of the Interior's professional qualification standards provided in 36 CFR Part 61. 3) All newly identified resources will be mapped and described on DPR forms. Mapping will be completed by recording data points with GPS hardware through which data can be imported and managed digitally. Mapping of previously identified resources will be limited to updates of existing records where necessary to describe the current boundaries of the resource. 4) SBFCA will evaluate the eligibility of identified resources for listing on the CRHR and determine if these resources can feasibly be preserved in place, or if data recovery following Mitigation Measure CR-MM-1, above, is appropriate. The methods of preservation in place shall be considered in the order of priority provided in CEQA Guidelines § 15126.4(b)(3). Prior to ground-disturbing construction, FRWLP proponents will include a cultural resources discovery plan in the contract conditions of the construction contractor, incorporating the following actions to be taken in the event of the inadvertent discovery of cultural resources. 1) An archaeological monitor will be present to observe construction at geographic locations that are sensitive for unidentified cultural resources. Such locations will consist of construction areas near identified cultural resource(s) sites (within a 200-foot radius around the known boundaries of identified resources) and where ground-disturbing construction will occur within 1,500 feet of major water features. 2) In the event of an archaeological resource discovery, work will cease in the immediate vicinity of the find, based on the direction of the archaeological monitor or the apparent distribution of cultural resources if no monitor is present. A qualified archaeologist will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. 3) Discovered resources will be mapped and described on DPR forms. Mapping will be completed by recording data points digitally with GPS hardware. 4) SBFCA will evaluate identified resources to determine if they are unique archaeological sites or historical resources. Treatment will follow the standards and order of priority described in CEQA Guidelines §15126.4(b)(3). 5) If human remains are discovered as part of the deposit, SBFCA will coordinate with the county coroner and NAHC to make the determinations and perform the management steps prescribed in California Health and Safety Code Section 7050.5 and PRC §5097.98. 6) If Native American human remains are discovered on Federal land, work in the immediate vicinity will cease, and SBFCA will contact the relevant representative of the Federal agency where the remains were discovered, as prescribed in 25 USC §3002(d) (NAGPRA). After notification from the relevant agency representative and treatment of the remains as required under NAGPRA, work may continue. Disposition of the remains will follow the ownership priority described in NAGPRA (25 USC §3002[a]). SBFCA will develop a list of cultural resources staff who can respond to cultural resources discoveries; SBFCA will also develop training materials for construction workers regarding management direction following discoveries. The staff list and training materials will be provided to the supervisory field staff. SBFCA will conduct training for construction workers that provides an overview of cultural resources identification and this mitigation measure.
Effect CR-3: Potential to Disturb Human Remains	*CR-MM-3*: Monitor Culturally Sensitive Areas during Construction, Follow State and Federal Law Governing Human Remains if Such Resources are Discovered during	SBFCA	A qualified archaeologist hired by SBFCA	Archaeological monitor on-site during construction at sensitive geographic locations.	SBFCA will retain a qualified archaeologist to monitor areas of sensitivity for previously unidentified archaeological resources and human remains, as required under Mitigation Measure CR-MM-2. The following actions will be taken. 1) If human remains are discovered as part of the deposit or in isolation, work will cease in the immediate vicinity and within the radius necessary to avoid further disturbance. SBFCA, and the contractors will coordinate with the county coroner and NAHC to make the determinations and perform the management steps prescribed in California Health and Safety Code §7050.5 and PRC §5097.98. This coordination

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
	Construction				requires the following steps. a) The county coroner will be notified so that he/she may determine if an investigation regarding the cause of death is required. If the coroner determines that the remains are of prehistoric Native American origin, the coroner will notify the NAHC. b) Upon notification, the NAHC will identify the most likely descendant (MLD), and the MLD will be given the opportunity to reinter the remains with appropriate dignity. If the NAHC fails to identify the MLD or if the parties cannot reach agreement as to how to reinter the remains as described in PRC §5097.98(e), the landowner will reinter the remains at a location not subject to further disturbance. SBFCA will ensure the protections prescribed in PRC §5097.98(e) are performed, such as the use of conservation easements and recording of the location with the relevant county. 2) If Native American human remains are discovered on Federal land, work in the immediate vicinity will cease, and SBFCA will contact the relevant representative of the Federal agency where the remains were discovered, as prescribed in 25 USC §3002(d) (NAGPRA). After notification from the relevant agency representative and treatment of the remains as required under NAGPRA, work may continue. Disposition of the remains will follow the ownership priority described in NAGPRA (25 USC §3002[a]). 3) SBFCA will include an overview of the potential for encountering human remains and an overview of this mitigation measure in the training performed under Mitigation Measure CR-MM-2.
Effect CR-4: Direct and Indirect Effects on Built Environment Resources Resulting from Construction Activities	*CR-MM-4*: Complete Inventory of Built Environment Resources in Inaccessible Parcels, Evaluate Identified Properties, Assess Effects, and Prepare Treatment to Resolve and Mitigate Significant Effects	SBFCA	SBFCA	Inventory and evaluation report to be prepared prior to construction.	SBFCA will ensure that an inventory and evaluation report is completed for all areas currently inaccessible areas where effects on built environment resources may occur. 1) The scope of the inventory will include the entire area where effects may occur. Such effects consist of direct disturbance, damage through vibration, and/or changes to the setting. 2) The work will be led or supervised by architectural historians who meet the Secretary of the Interior's professional qualification standards provided in 36 CFR Part 61. 3) Inventory methods and evaluation will include pedestrian surveys, photographic documentation, and historical research using primary and secondary sources, interviews, and oral histories. 4) Identified resources will be mapped and described on forms provided by DPR. Mapping will be performed by recording data points digitally with GPS hardware. 5) For all identified resources, SBFCA will determine if they are historical resources (State CEQA Guidelines §15064.5[a]), significant historical resources under CEQA (PRC §21084.1), and/or eligible for local registers. 6) The recorded resources and the resource evaluations will be summarized in an inventory report. In the inventory report, SBFCA will also determine if individual resources qualifying as historical resources will be subject to significant effects. SBFCA will make such a finding if the FRWLP would result in any of the following actions. a) Demolish or materially alter the qualities that make the resource eligible for listing in the CRHR (State CEQA Guidelines §15064.5[b][2][A],[C]). b) Demolish or materially alter the qualities that justify the inclusion of the resource on a local register or its identification in a historical resources survey meeting the requirements of PRC §5024.1(g), unless SBFCA establishes by a preponderance of evidence that the resource is not historically or culturally significant (State CEQA Guidelines §15064.5[b][2][B]). c) Cause a substantial significant change in the significance of a historical resource (PRC §21084.1). 7) For all resources subject to significant effects SBFCA will develop and implement treatment. Treatment will prioritize avoidance and preservation in place or relocation of individual CRHR-eligible buildings (non-contributing or unaffected buildings would remain in place). Where avoidance or relocation is not feasible, standard treatment such as documentation through the Historic American Buildings Survey, Historic American Landscape Survey, Historic American Engineering Record, or district documentation will be completed. Interpretive displays, online resource, and historic contexts or walking tours may also be used, as appropriate.

Attachment E

SBFCA 2016 Board Resolutions

Attachment E

Sutter Butte Flood Control Agency

A Partnership for Flood Safety

June 22, 2016

TO: Board of Directors

FROM: Mike Inamine, Executive Director
Andrea Clark, General Counsel

SUBJECT: Certification of Supplemental EIR and Adoption of Findings and Mitigation Monitoring and Reporting Plan for Feather River West Levee Project

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Recommendation

That the Board of Directors approve: (i) a resolution certifying the Supplemental Environmental Impact Report for the Feather River West Levee Project as having been prepared in compliance with the California Environmental Quality Act (CEQA) and (ii) a resolution adopting findings, adopting a mitigation monitoring and reporting plan and approving the proposed modifications to the Feather River West Levee Project.

Background

In 2012, SBFCA proposed the Feather River West Levee Project (FRWLP or Project) to rehabilitate Feather River levees with the goal of achieving a minimum of 200-year flood protection for urbanized areas and 100-year flood protection for rural agricultural areas in SBFCA's jurisdiction. Pursuant to CEQA, an EIR was prepared for the Project and certified on April 10, 2013 (2013 EIR).

SBFCA approved an addendum to the EIR in June of 2015 to allow the California Department of Fish and Wildlife to issue an incidental take permit for the FRWLP under Section 2081 of the California Endangered Species Act. The addendum addressed mitigation measures related to effects on giant garter snake and cultural resources.

In order to achieve the goals of the FRWLP, SBFCA has identified two modifications to the previously approved Alternative 3. These are the Laurel Avenue Critical Repair and the Gridley Bridge Erosion Repair. The objective of both project modifications is to repair these sites to address levee deficiencies and bring them into conformance with levee design standards and the overall FRWLP. SBFCA has prepared a Supplemental EIR to analyze and address impacts on the environment.

Section 15162 of the CEQA Guidelines states that when an EIR has been certified for a project, a subsequent EIR need not be prepared unless a substantial change in the project, a substantial change in the surrounding circumstances, or new information of substantial importance comes to light which shows that the project will have one or more significant effects not discussed in the previous EIR. When only minor additions or changes would be necessary to make the previous EIR adequate to describe the project in the changed situation, a supplement to the previous EIR may be prepared (Section 15163 of the CEQA Guidelines). The alternatives analyzed in the previous EIR and found to be infeasible in the project findings (Section 15091 of the CEQA Guidelines) do not need to be reanalyzed

unless there is substantial evidence that they are now feasible. There is no such evidence here.

The Supplemental EIR revisits each resource topic from the 2013 FEIR, including cumulative effects, to determine whether the project modifications or new information would result in new or substantially more severe significant effects that were not analyzed in the 2013 FEIR. Effects previously analyzed in the 2013 FEIR are also evaluated as they pertain to the two project modifications.

A Notice of Preparation (NOP) of the Supplemental EIR was distributed to the California State Clearinghouse and other potentially interested parties on October 1, 2015. A Draft Supplemental EIR was subsequently released on April 20, 2016, and comments were accepted on the Draft EIR over a 45-day review period pursuant to CEQA Guidelines §15105. The review period closed on June 3, 2016.

Under CEQA, prior to approving a project an agency must certify that the Supplemental EIR was completed in compliance with CEQA and that the agency reviewed and considered the information in the Final Supplemental EIR. The Final Supplemental EIR reflects the agency's independent judgment and analysis.

In addition, when a project may have significant impacts on the environment, an agency must make written findings for each significant effect of the Project. The findings must state that mitigation measures will avoid or substantially lessen the significant effect, or that specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the Final EIR. If the benefits of a project outweigh unavoidable adverse impacts, the adverse environmental impacts may be considered acceptable. This determination is made in a statement of overriding considerations, which is part of the Findings document. Agencies must also adopt a mitigation monitoring and reporting plan that describes the mitigation measures required as part of a project. Proposed findings and a mitigation monitoring and reporting plan are attached to Resolution as exhibits.

As detailed in the Final Supplemental EIR and the Findings document, the modifications to the FRWLP will have significant, unavoidable impacts in the resource areas of air quality, noise, vegetation and wetlands, and tribal cultural resources. The Findings document concludes that the benefits of the Project, as modified, including reduced flood risk for existing populations and addressing known deficiencies in the Feather River west levees, outweigh these unavoidable adverse impacts on the environment.

Attached to this staff report are the following documents:

A. Resolution Certifying the Final Supplemental Environmental Impact Report for Modifications to the Feather River West Levee Project

B. Resolution Adopting Findings, Approving the Mitigation Monitoring and Reporting Plan, and Approving Modifications to the Feather River West Levee Project

   Exhibit A: Findings
   Exhibit B: Mitigation Monitoring and Reporting Plan

C. The SEIR is posted on SBFCA's website: http://sutterbutteflood.org/notices-documents/

Fiscal Impact

The certification of an EIR commits an Agency to comply with any mitigation measures as identified in a Mitigation, Monitoring and Reporting plan should the Agency move forward with the project's implementation. However, certification of an EIR in and of itself does obligate funds for this purpose. As the Agency implements the Project, contracts and task orders will be issued with entities to ensure compliance with the required mitigations identified within the EIR. These contracts will be brought before the Board for approval and the specific fiscal impact of each contract will be detailed at that time. Given this, there is no net impact to the approved budget as a result of the Board's approval of staff's recommended action.

RESOLUTION NO. 2016-03____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SUTTER BUTTE FLOOD CONTROL AGENCY CERTIFYING THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR MODIFICATIONS TO THE FEATHER RIVER WEST LEVEE PROJECT

WHEREAS, the Sutter Butte Flood Control Agency ("SBFCA") proposes modifications to the Feather River West Levee Project (the "Project") to reduce flood risk in the Sutter Basin;

WHEREAS, SBFCA is the lead agency for environmental review of the Project under the California Environmental Quality Act ("CEQA");

WHEREAS, a Notice of Preparation for a Draft Supplemental Environmental Impact Report ("Draft SEIR") was prepared and released for public comment on October 1, 2015;

WHEREAS, the release of the Notice of Preparation initiated a 30-day public comment period that ended on October 1, 2015;

WHEREAS, a Draft SEIR was prepared and circulated for public review and comment between April 20, 2016 and June 3, 2016;

WHEREAS, SBFCA received written comments on the Draft SEIR;

WHEREAS, a Final Supplemental Environmental Impact Report ("Final SEIR") that incorporated the Draft SEIR by reference and provided responses to public comments was prepared and distributed to the public on June 17, 2016;

WHEREAS, SBFCA discussed the Final SEIR during its meeting on June 22, 2016 and provided the opportunity for the public to give comments on the Final SEIR during that meeting;

NOW, THEREFORE, the Board of Directors of the Sutter Butte Flood Control Agency resolves as follows:

1. The Final SEIR is hereby certified as being completed in compliance with the provisions of the California Environmental Quality Act and its implementing regulations.

2. The Final SEIR was presented to the Board on June 22, 2016 and the Board discussed the contents of the Final SEIR during that meeting.

3. The Board has reviewed and considered the information contained in the Final SEIR prior to taking any action to approve or disapprove the Project modifications.

4. The Board hereby ratifies and adopts the conclusions of the Final SEIR. The Final SEIR represents the independent judgment and analysis of the Board.

5. The Board hereby directs staff to file a Notice of Determination pursuant to the requirements of the California Environmental Quality Act.

APPROVED THIS 22ND DAYOF JUNE 2016.

AYES: LeVake, Lamon, Sheppard, Buckland, Gill, Silva, Hoppin, Hall, Baland, Munger, Schmidl, Connelly, Lambert

NOES: None

ABSTAIN: None

ABSENT: Dukes

ATTEST:

Chair, SBFCA Board

SBFCA Board Secretary

APPROVED AS TO FORM

GENERAL COUNSEL

BY:

RESOLUTION NO. 2016-03____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SUTTER BUTTE FLOOD CONTROL AGENCY CERTIFYING THE FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR MODIFICATIONS TO THE FEATHER RIVER WEST LEVEE PROJECT

WHEREAS, the Sutter Butte Flood Control Agency ("SBFCA") proposes modifications to the Feather River West Levee Project (the "Project") to reduce flood risk in the Sutter Basin;

WHEREAS, SBFCA is the lead agency for environmental review of the Project under the California Environmental Quality Act ("CEQA");

WHEREAS, a Notice of Preparation for a Draft Supplemental Environmental Impact Report ("Draft SEIR") was prepared and released for public comment on October 1, 2015;

WHEREAS, the release of the Notice of Preparation initiated a 30-day public comment period that ended on October 1, 2015;

WHEREAS, a Draft SEIR was prepared and circulated for public review and comment between April 20, 2016 and June 3, 2016;

WHEREAS, SBFCA received written comments on the Draft SEIR;

WHEREAS, a Final Supplemental Environmental Impact Report ("Final SEIR") that incorporated the Draft SEIR by reference and provided responses to public comments was prepared and distributed to the public on June 17, 2016;

WHEREAS, SBFCA discussed the Final SEIR during its meeting on June 22, 2016 and provided the opportunity for the public to give comments on the Final SEIR during that meeting;

NOW, THEREFORE, the Board of Directors of the Sutter Butte Flood Control Agency resolves as follows:

1. The Final SEIR is hereby certified as being completed in compliance with the provisions of the California Environmental Quality Act and its implementing regulations.

2. The Final SEIR was presented to the Board on June 22, 2016 and the Board discussed the contents of the Final SEIR during that meeting.

3. The Board has reviewed and considered the information contained in the Final SEIR prior to taking any action to approve or disapprove the Project modifications.

4. The Board hereby ratifies and adopts the conclusions of the Final SEIR. The Final SEIR represents the independent judgment and analysis of the Board.

5. The Board hereby directs staff to file a Notice of Determination pursuant to the requirements of the California Environmental Quality Act.

ORIGINAL

ADOPTED this 22nd day of June, 2016.

Kash Gill

Kash Gill, Chair

RESOLUTION NO. 2016-04 _____

RESOLUTION OF THE SUTTER BUTTE FLOOD CONTROL AGENCY ADOPTING FINDINGS, APPROVING THE MITIGATION MONITORING AND REPORTING PLAN, AND APPROVING MODIFICATIONS TO THE FEATHER RIVER WEST LEVEE PROJECT

WHEREAS, the Sutter Butte Flood Control Agency ("SBFCA") proposes modifications to the Feather River West Levee Project (the "Project") to reduce flood risk in the Sutter Basin;

WHEREAS, SBFCA is the lead agency for environmental review of the Project under the California Environmental Quality Act ("CEQA");

WHEREAS, a Notice of Preparation for a Draft Supplemental Environmental Impact Report ("Draft SEIR") was prepared and released for public comment on October 1, 2015;

WHEREAS, a Draft SEIR was prepared and circulated for public review and comment between April 20, 2016 and June 3, 2016;

WHEREAS, SBFCA received written comments on the Draft SEIR;

WHEREAS, a Final Supplemental Environmental Impact Report ("Final SEIR") that incorporated the Draft SEIR by reference and provided responses to public comments was prepared and distributed to the public on June 17, 2016;

WHEREAS, SBFCA discussed the Final SEIR during its meeting on June 22, 2016 provided the opportunity for the public to give comments on the Final SEIR during that meeting;

WHEREAS, SBFCA has, by means of Resolution No. _2016-03_____, certified that the SEIR has been prepared in full compliance with the terms of the California Environmental Quality Act, that the Board has reviewed and considered the information contained in the SEIR prior to taking any action to approve or disapprove the Project modifications, and that the SEIR represents the independent judgment and analysis of the Board;

WHEREAS, pursuant to CEQA the Board must make and adopt written findings for each significant effect of the modifications to the Project, accompanied by a brief explanation of the rationale for each finding. The written findings state that for each significant impact of the Project modifications, either changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final SEIR, or 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 Final SEIR;

WHEREAS, pursuant to CEQA SBFCA must adopt a program for reporting on or monitoring the changes which it has either required in the Project or made a condition of approval to avoid or substantially lessen significant environmental effects;

WHEREAS, the District through this resolution wishes to adopt its Findings and the related Mitigation Monitoring and Reporting Plan.

NOW, THEREFORE, THE SUTTER BUTTE FLOOD CONTROL AGENCY RESOLVES AS FOLLOWS:

1. SBFCA hereby approves and adopts the Findings attached hereto as Attachment A, which are incorporated herein, pursuant to CEQA Guidelines §§ 15091, 15092 and 15093.

2. SBFCA hereby approves and adopts the Mitigation Monitoring and Reporting Plan, which is attached hereto as Attachment B and incorporated herein by reference.

3. SBFCA hereby approves the modifications to the Feather River West Levee Project.

APPROVED THIS 22ND DAYOF JUNE 2016.

AYES: LeVake, Lamon, Sheppard, Buckland, Gill, Silva, Hoppin, Hall, Baland, Munger, Schmidl, Connelly, Lambert

NOES: None

ABSTAIN: None

ABSENT: Dukes

Chair, SBFCA Board

ATTEST:

SBFCA Board Secretary

APPROVED AS TO FORM

GENERAL COUNSEL

BY:

RESOLUTION NO. 2016-04 _____

RESOLUTION OF THE SUTTER BUTTE FLOOD CONTROL AGENCY ADOPTING FINDINGS, APPROVING THE MITIGATION MONITORING AND REPORTING PLAN, AND APPROVING MODIFICATIONS TO THE FEATHER RIVER WEST LEVEE PROJECT

WHEREAS, the Sutter Butte Flood Control Agency ("SBFCA") proposes modifications to the Feather River West Levee Project (the "Project") to reduce flood risk in the Sutter Basin;

WHEREAS, SBFCA is the lead agency for environmental review of the Project under the California Environmental Quality Act ("CEQA");

WHEREAS, a Notice of Preparation for a Draft Supplemental Environmental Impact Report ("Draft SEIR") was prepared and released for public comment on October 1, 2015;

WHEREAS, a Draft SEIR was prepared and circulated for public review and comment between April 20, 2016 and June 3, 2016;

WHEREAS, SBFCA received written comments on the Draft SEIR;

WHEREAS, a Final Supplemental Environmental Impact Report ("Final SEIR") that incorporated the Draft SEIR by reference and provided responses to public comments was prepared and distributed to the public on June 17, 2016;

WHEREAS, SBFCA discussed the Final SEIR during its meeting on June 22, 2016 provided the opportunity for the public to give comments on the Final SEIR during that meeting;

WHEREAS, SBFCA has, by means of Resolution No. _2016-04_____, certified that the SEIR has been prepared in full compliance with the terms of the California Environmental Quality Act, that the Board has reviewed and considered the information contained in the SEIR prior to taking any action to approve or disapprove the Project modifications, and that the SEIR represents the independent judgment and analysis of the Board;

WHEREAS, pursuant to CEQA the Board must make and adopt written findings for each significant effect of the modifications to the Project, accompanied by a brief explanation of the rationale for each finding. The written findings state that for each significant impact of the Project modifications, either changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final SEIR, or 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 Final SEIR;

ORIGINAL

WHEREAS, pursuant to CEQA SBFCA must adopt a program for reporting on or monitoring the changes which it has either required in the Project or made a condition of approval to avoid or substantially lessen significant environmental effects;

WHEREAS, the District through this resolution wishes to adopt its Findings and the related Mitigation Monitoring and Reporting Plan.

NOW, THEREFORE, THE SUTTER BUTTE FLOOD CONTROL AGENCY RESOLVES AS FOLLOWS:

1. SBFCA hereby approves and adopts the Findings attached hereto as Attachment A, which are incorporated herein, pursuant to CEQA Guidelines §§ 15091, 15092 and 15093.

2. SBFCA hereby approves and adopts the Mitigation Monitoring and Reporting Plan, which is attached hereto as Attachment B and incorporated herein by reference.

3. SBFCA hereby approves the modifications to the Feather River West Levee Project.

ADOPTED this 22nd day of June, 2016

Kash Gill

Kash Gill, President

Findings of the Sutter Butte Flood Control Agency Related to the Approval of the Final Supplemental Environmental Impact Report for Modifications to the Feather River West Levee Project

I. INTRODUCTION

In 2013 SBFCA proposed the Feather River West Levee Project (FRWLP, or Project) to reduce flood risk in the Sutter Basin, which includes portions of Sutter and Butte Counties in the Sacramento Valley of California. On April 10, 2013, SBFCA completed and certified an Environmental Impact Report (2013 FEIR) and approved the Project

In order to address the identified levee deficiencies and reduce risk of flooding consistent with current Federal and state standards, SBFCA adopted Alternative 3 as presented in the 2013 FEIR. Alternative 3 involves a combination of levee slope flattening, levee reconstruction, filling ditches and depressions, limited encroachment removal, canal seepage treatment, and construction of slurry cutoff walls, stability berms, and relief wells. Construction of the FRWLP began in the summer of 2013 and is still underway.

In order to achieve the goals of the FRWLP, SBFCA has identified two modifications to the previously approved Alternative 3. These are the Laurel Avenue Critical Repair and the Gridley Bridge Erosion Repair. The objective of both project modifications is to repair these sites to address levee deficiencies and bring them into conformance with levee design standards and the overall FRWLP.

SBFCA has prepared a supplement to the 2013 FEIR (State Clearinghouse Number 2011052062) which updates the project's California Environmental Quality Act (CEQA) documentation to allow issuance of permits from state agencies for modifications to the originally analyzed project.

The purpose of these Findings is to comply with the requirements of CEQA related to a public entity's approval and certification of an Environmental Impact Report (EIR). Specifically, these Findings represent the SBFCA Board of Directors' conclusions about the Project modifications' significant impacts on the environment.

A Notice of Preparation (NOP) was distributed to the California State Clearinghouse and other potentially interested parties on October 1, 2015.

The Draft Supplemental EIR (Draft SEIR) was subsequently released on April 20, 2016, and comments were accepted on the Draft SEIR until June 3, 2016.

Section 15162 of the CEQA Guidelines states that when an EIR has been certified for a project, a subsequent EIR need not be prepared unless a substantial change in the project, a substantial change in the surrounding circumstances, or new information of substantial importance comes to light which shows that the project will have one or more significant effects not discussed in the previous EIR. When only minor additions or changes would be necessary to make the previous EIR adequate to describe the project in the changed situation, a supplement to the previous EIR may be prepared (Section 15163 of the CEQA Guidelines). The Supplemental EIR revisits each

resource topic from the 2013 FEIR, including cumulative effects, to determine whether the project modifications or new information would result in new or substantially more severe significant effects that were not analyzed in the 2013 FEIR. Effects previously analyzed in the 2013 FEIR are also evaluated as they pertain to the Project modifications.

II. DESCRIPTION OF THE PROPOSED ACTION

General Description

The primary purpose of the FRWLP is to reduce flood risk for the entire planning area by addressing known levee deficiencies along the Feather River West Levee from Thermalito Afterbay downstream to approximately 3 miles upstream of the confluence with the Sutter Bypass.

The Project overall (i.e., 2013 Alternative 3) consists of a blend of flood management measures – slurry cutoff walls, slope flattening, stability berms, levee reconstruction, seepage berms, relief wells, depression/ditch infilling, limited encroachment removal, and canal seepage treatment – to address deficiencies in the Feather River West Levee. The measures have been optimized to avoid and minimize environmental effects for the entire Project, including the modifications addressed in the SEIR and briefly described below.

The Laurel Avenue site in Sutter County is 4,900 feet long. The proposed Laurel Avenue Critical Repair modifies the Alternative 3 levee repair design along the southernmost 2,450 feet of the levee that was previously analyzed as part of the FRWLP, and extends the slurry cutoff wall southward by an additional 2,450 feet from the original project boundary.

The Gridley Bridge Erosion Repair site consists of two areas within the FRWLP boundary along the Feather River near the Gridley Bridge in Butte County. Erosion is occurring in these areas along the riverbank below the levee toe. One of the erosion features is upstream of the bridge, and the other is just downstream from the bridge. The two sites where erosion is occurring are approximately 600 linear feet in combined length and are collectively referred to as the Gridley Bridge Erosion Repair site. Arresting this erosion is considered critical because the erosion has compromised existing levee geometry and integrity.

III. DESCRIPTION OF THE RECORD

For purposes of CEQA and these Findings, the record before the SBFCA Board of Directors includes, without limitation, the following:

A. All applications for approvals related to the Project modifications;

B. The Final EIR for the Feather River West Levee Project and all appendices thereto.

C. The Draft Supplemental EIR for the Feather River West Levee Project modifications and all appendices to the Draft Supplemental EIR;

D. The Final Supplemental EIR for the Feather River West Levee Project modifications

and all appendices to the Final Supplemental EIR;

E. All staff reports and presentation materials related to the Project modifications;

F. All studies conducted for the Project modifications and contained in, or referenced by, staff reports, the Final EIR, the Draft Supplemental EIR, or the Final Supplemental EIR;

G. All documentary and oral evidence received and reviewed at public hearings and workshops related to the Project modifications, the Final EIR, the Draft Supplemental EIR, and the Final Supplemental EIR;

For documentary and informational purposes, all locally adopted land use plans and ordinances, including, without limitation, general plans, specific plans and ordinances, together with environmental review documents, Findings, mitigation monitoring programs and all other documentation relevant to planned growth in the area.

IV. GENERAL FINDINGS

A. Certification of the Final Supplemental EIR

In accordance with CEQA, in adopting these Findings, the SBFCA Board of Directors certifies that the Final SEIR has been completed in compliance with CEQA and that it was presented to the Board of Directors, which reviewed and considered the information in the Final SEIR prior to approving the Project modifications. By these Findings, the Board of Directors ratifies and adopts the Findings and conclusions of the Final EIR as set forth in these Findings. The Final SEIR and these Findings represent the independent judgment and analysis of the Board of Directors.

The Final SEIR concludes that certain impacts of Project modifications are potentially significant but can be mitigated to a less than significant level with the implementation of recommended mitigation measures, while certain impacts will remain significant even after feasible mitigation measures are implemented. General Findings are set forth in this Section IV. Findings regarding potentially significant impacts that can be mitigated to a less than significant level are set forth in Section V. Findings regarding cumulative impacts are set forth in Section VI. Further Findings regarding impacts that will remain significant after mitigation are set forth in Section VII, and the Statement of Overriding Considerations is set forth in Section VIII.

B. Changes to the Draft EIR

In the course of responding to comments received during the public review and comment period on the Draft SEIR, certain portions of the Draft SEIR have been modified and some new information has been added. The Draft SEIR has been the subject of review and comment by the public and responsible agencies prior to the adoption of these Findings. No information has revealed the existence of: (1) a significant new environmental impact that would result from the Project modifications or an adopted mitigation measure; (2) a substantial increase in the severity of an environmental impact; (3) a feasible project alternative or mitigation measure not adopted that is considerably different from others analyzed in the Draft SEIR that would clearly lessen

the significant environmental impacts of the Project modifications; or (4) information that indicates that the public was deprived of a meaningful opportunity to review and comment on the Draft SEIR. SBFCA finds that the changes and modifications made to the Draft SEIR after the Draft SEIR was circulated for public review and comment do not collectively or individually constitute significant new information within the meaning of Public Resources Code §21092.1 and CEQA Guidelines §15088.5.

C. Evidentiary Basis for Findings

These Findings are based upon substantial evidence in the entire record before the SBFCA Board of Directors. The references to the Draft SEIR and Final SEIR set forth in the Findings are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these Findings.

D. Findings Regarding Mitigation Measures

1. Mitigation Measures Adopted. Except as otherwise noted, the mitigation measures herein referenced are those identified in the Final SEIR and adopted by the Board of Directors as set forth in the Mitigation Monitoring and Reporting Plan (MMRP).

2. Impact After Implementation of Mitigation Measures. Except as otherwise stated in these Findings, in accordance with CEQA Guidelines §15092, the Board of Directors finds that environmental effects of the Project modifications will not be significant or will be mitigated to a less than significant level by the adopted mitigation measures. SBFCA has substantially lessened or eliminated all significant environmental effects where feasible. The Board of Directors has determined that any remaining significant effects on the environment that are found to be unavoidable under CEQA Guidelines §15091 are acceptable due to overriding considerations as described in CEQA Guidelines §15093. These overriding considerations consist of specific environmental, economic, legal, social, technological, and other benefits of the Project modifications, which justify approval of the Project modifications and outweigh the unavoidable adverse environmental effects of the Project, as more fully stated in Section VIII (Statement of Overriding Considerations). Except as otherwise stated in these Findings, the Board of Directors finds that the mitigation measures incorporated into and imposed upon the Project modifications will not have new significant environmental impacts that were not analyzed in the Draft SEIR.

E. Location and Custodian of Records

Pursuant to Public Resource Code §15091, SBFCA is the custodian of the documents and other material that constitute the record of proceedings upon which the decision is based, and such documents and other materials are located at SBFCA's offices, 1441 Garden Highway, Yuba City CA 95991. A copy of the Final EIR is also available for review at the SBFCA website (www.sutterbutteflood.org).

V. FINDINGS REGARDING POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED BELOW A LEVEL OF SIGNIFICANCE WITH MITIGATION MEASURES

The following Findings are made with respect to potentially significant environmental effects analyzed in the Final SEIR. The Draft SEIR identified the following potential impacts on the environment that are deemed to be potentially significant, but will have less than significant impacts with the implementation of appropriate mitigation measures.

Public Resources Code § 21081 states that no public agency shall approve or carry out a project for which an SEIR has been completed which identifies one or more significant effects, unless the public agency makes one or more of the following findings:

1. Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant effects on the environment.

2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

3. Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measure or alternatives identified in the SEIR, and overriding economic, legal, social, technological, or other benefits of the Project outweigh the significant effects on the environment.

The Board of Directors hereby finds, pursuant to the Public Resources Code §21081 and CEQA Guidelines §§15091-15093, that with regard to each of the following potentially significant impacts identified in the Final SEIR, that changes or alterations have been required in or incorporated into the proposed Project modifications that avoid or lessen the potentially significant impacts identified in the Draft SEIR to levels below the thresholds of significance identified in the Draft SEIR. These mitigation measures are set forth in the Mitigation Monitoring and Reporting Plan proposed for adoption by SBFCA. Specific findings of SBFCA for each category of such impacts are set forth in detail below.

A. Flood Control and Geomorphic Conditions

1. FC-6 Implementation of the Project modifications could alter the existing drainage pattern of the site or area

   a. Potential Impact. Implementation of the Project modifications could result in levee disturbance that could affect drainage infrastructure and local surface runoff patterns. This potential impact is discussed in the Draft SEIR at page 3.1-5.

   b. Impact Prior to Mitigation. Significant

   c. Mitigation Measure. The Project modifications will incorporate mitigation measure FC-MM-1, which involves coordination with owners and operators, preparation of drainage studies as needed, and remediation of effects through project design.

   d. Findings. Implementation of Mitigation Measure FC-MM-1 would ensure that the level of this effect on existing drainage patterns would remain less than significant.

   e. Conclusion. The potential impact of Project modifications on flood control and geomorphic conditions is less than significant.

B. Water Quality and Groundwater Resources

1. WQ-3 Implementation of the Project modifications could affect groundwater or surface water quality resulting from contact with the water table.

   a. Potential Impact. Implementation of the Project modifications could affect groundwater or surface water quality resulting from contact with the water table. This potential impact is discussed in the Draft SEIR at page 3.2-4.

   b. Impact Prior to Mitigation. Significant

   c. Mitigation Measure. The Project modifications will incorporate mitigation measure WQ-MM-1, which involves implementation of provisions for dewatering.

   d. Findings. With implementation of the environmental commitments to prepare and apply a SWPPP, a SPCCP, a BSSCP, and a turbidity monitoring program (described in Sections 2.4.12 through 2.4.15 of the 2013 FEIR), and mitigation Measure WQ-MM-1, this effect would remain less than significant.

   e. Conclusion. The potential impact of Project modifications on water quality and groundwater resources is less than significant.

2. WQ-5 Implementation of the Project modifications could allow the spread or introduction of aquatic invasive species.

a. Potential Impact. Operation at the Gridley Bridge Erosion Repair site of barges and other in-water equipment originating from outside the project area could result in the introduction and spread of aquatic invasive species. This potential impact is discussed in the Draft SEIR at page 3.2-5.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measure WQ-MM-2, which involves implementation of certain actions at the Gridley Bridge Erosion Repair site to prevent the potential spread or introduction of aquatic invasive species, including a biological survey before the start of construction; preparation of an aquatic invasive species memorandum describing the species and best management practices; approval of the memorandum; and education of construction personnel in the recognition, prevention of the spread, treatment, and disposal of aquatic invasive species.

d. Findings: Implementation WQ-MM-2 will reduce the potentially significant impact to less than significant by preventing the spread or introduction of aquatic invasive species.

e. Conclusion. The potential impact of the Project modifications on water quality and groundwater resources is less than significant.

C. Air Quality

1. AQ-3 Exceedance of the Federal General Conformity Thresholds during Construction

a. Potential Impact. Implementation of the Project modifications could result in exceedance of the Federal General Conformity Thresholds during construction. This potential impact is discussed in the Draft SEIR at page 3.5-12.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures AQ-MM-1 through AQ-MM-4. AQ-MM-1 involves providing advance notification of the construction schedule and a 24-hour hotline to residents. AQ-MM-2 involves implementation of a fugitive dust control plan if unmitigated emissions exceed PM10 or PM 2.5 thresholds. AQ-MM-3 provides for general measures to reduce emissions. AQ-MM-4 provides for fleet-wide emission reductions for large off-road equipment.

d. Findings. With implementation of the mitigation measures described above, the Project modifications would not cause, or contribute to, new or worsening violations of the ambient air quality standards. The effect would remain less than significant with mitigation.

e. Conclusion. The potential impact of Project modifications on air quality is less than significant.

D. Vegetation and Wetlands

1. VEG-2 Loss of Wetlands and Other Waters of the United States as a Result of Project Construction

a. Potential Impact. Implementation of the Project modifications could result in the loss of wetlands and other waters of the United States. This potential impact is discussed in the Draft SEIR at page 3.8-7.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures VEG-MM-2 through VEG-MM-5. VEG-MM-2, as modified from the 2013 FEIR, involves installation of exclusion fencing and/or K-rails along the perimeter of construction areas and implementation of general measures to avoid effects on sensitive natural communities and special status species. VEG-MM-3 involves conducting mandatory contractor/worker awareness training for construction personnel. VEG-MM-4 involves retaining a biological monitor. VEG-MM-5 involves compensation for the loss of wetlands and other waters.

d. Findings. Implementation of the mitigation measures described above will reduce the impact on wetlands and other waters of the United States to less than significant.

e. Conclusion. The potential impact of Project modifications on vegetation and wetlands, specifically wetlands and waters of the US, is less than significant.

2. VEG-3 Disturbance or Removal of Protected Trees as a Result of Project Construction

a. Potential Impact. Implementation of the Project modifications could result in the disturbance or removal of protected trees. This potential impact is discussed in the Draft SEIR at page 3.8-8.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures VEG-MM-2 through VEG-MM-4 and VEG-MM-6. VEG-MM-2, as modified from the 2013 FEIR, involves installation of exclusion fencing and/or K-rails along the perimeter of construction areas and implementation of general measures to avoid effects on sensitive natural communities and special status species. VEG-MM-3 involves conducting mandatory contractor/worker awareness training for construction personnel. VEG-MM-4 involves retaining a biological monitor. VEG-MM-6 involves compensation for the loss of protected trees.

d. Findings. Implementation of the mitigation measures described above will reduce the impact on protected trees to less than significant.

e. Conclusion. The potential impact of Project modifications on vegetation and wetlands, specifically protected trees, is less than significant.

E. Wildlife

1. WILD-1 Potential mortality of or loss of habitat for Antioch Dunes Anthicid, Sacramento Anthicid and Sacramento Valley Tiger Beetle.

a. Potential Impact. Implementation of the Project modifications could result in the mortality of or loss of habitat for Antioch Dunes Anthicid, Sacramento Anthicid and Sacramento Valley Tiger Beetle. This potential impact is discussed in the Draft SEIR at page 3.9-5.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measure WILD-MM-1, which involves fencing and avoiding habitat for Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle and implementation of protective measures.

d. Findings. Implementation of WILD-MM-1 will reduce the impact on Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle to less than significant.

e. Conclusion. The potential impact of Project modifications on Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle is less than significant.

2. WILD-2 Potential Mortality or Disturbance of Valley Elderberry Longhorn Beetle (VELB) and its Habitat (Elderberry Shrubs)

a. Potential Impact. Implementation of the Project modifications could result in the mortality of or disturbance of VELB and its habitat (Elderberry shrubs). This potential impact is discussed in the Draft SEIR at page 3.9-6.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measure WILD-MM-2 through WILD-MM-4. WILD-MM-2 involves conducting VELB surveys prior to Elderberry shrub transplantation. WILD-MM-3 involves implementing measures to protect VELB and its habitat. WILD-MM-4 involves compensation for effects on VELB and its habitat.

d. Findings. Implementation of WILD-MM-2 through WILD-MM-4 will reduce the impact on VELB and its habitat to less than significant.

e. Conclusion. The potential impact of Project modifications on VELB and its habitat is less than significant.

3. WILD-3 Potential Mortality or Disturbance of Western Pond Turtle

a. Potential Impact. Implementation of the Project modifications could result in the mortality of or disturbance of Western Pond turtle. This potential impact is discussed in the Draft SEIR at page 3.9-6.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measure WILD-MM-5, which involves conducting preconstruction surveys for Western Pond turtle and monitoring construction activities if turtles are observed.

d. Findings. Implementation of WILD-MM-5 will reduce the impact on Western Pond turtle to less than significant.

e. Conclusion. The potential impact of Project modifications on Western Pond turtle is less than significant.

4. WILD-4 Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake

a. Potential Impact. Implementation of the Project modifications could result in the disturbance or mortality of and loss of suitable habitat for Giant Garter Snake. This potential impact is discussed in the Draft SEIR at page 3.9-7.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures WILD-MM-6 through WILD-MM-9, WILD-MM-17 and WILD-MM-18. WILD-MM-6, as modified from the 2013 FEIR, involves avoidance and minimization of construction effects on Giant Garter Snake. WILD-MM-7 involves avoidance and minimization of potential maintenance impacts on suitable habitat for Giant Garter Snake and Western Burrowing Owl. WILD-MM-8 involves compensation for permanent loss of suitable Giant Garter Snake habitat. WILD-MM-9 involves restoration of temporarily disturbed Giant Garter Snake aquatic and upland habitat to pre-Project conditions. WILD-MM-17 would implement additional protective measures during work in suitable habitat during the Giant Garter Snake dormant period. WILD-MM-18 involves monitoring work in Giant Garter Snake upland habitat during the active period and/or compensation for temporary loss of suitable Giant Garter Snake habitat.

d. Findings. Implementation of WILD-MM-6 through WILD-MM-9, WILD-MM-17 and WILD-MM-18 will reduce the impact on Giant Garter Snake to less than significant.

e. Conclusion. The potential impact of Project modifications on Giant Garter Snake is less than significant.

5. WILD-5 Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat

a. Potential Impact. Implementation of the Project modifications could result in the loss or disturbance of nesting Swainson's Hawk and loss of nesting and foraging habitat. This potential impact is discussed in the Draft SEIR at page 3.9-11.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures WILD-MM-10 through WILD-MM-12. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. WILD-MM-11 involves conducting focused surveys for nesting Swainson's Hawk prior to construction and implementation of protective measures during construction. WILD-MM-12 involves compensation for the permanent loss of foraging habitat for Swainson's Hawk.

d. Findings. With implementation of Mitigation Measures WILD-MM-10, WILD-MM-11, and WILD-MM-12, and purchase of an additional 0.15 acre of foraging habitat for Swainson's hawk, this effect would remain less than significant.

e. Conclusion. The potential impact of Project modifications on Swainson's Hawk is less than significant.

6. WILD-6 Potential Mortality or Disturbance of Nesting Special-Status and Non–Special Status Birds and Removal of Suitable Breeding Habitat

a. Potential Impact. Implementation of the Project modifications could result in mortality or disturbance of nesting special-status and non-special status birds and removal of suitable breeding habitat. This potential impact is discussed in the Draft SEIR at page 3.9-12.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures WILD-MM-10, WILD-MM-12 and WILD-MM-13. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. WILD-MM-12 involves compensation for the permanent loss of foraging habitat for Swainson's Hawk. WILD-MM-13 involves conducting nesting surveys for special-status and non-special status birds and implementation of protective measures during construction.

d. Findings. With implementation of Mitigation Measures WILD-MM-10, WILD-MM-12, and WILD-MM-13, this effect would remain less than significant.

e. Conclusion. The potential impact of Project modifications on nesting special-status and non-special status birds is less than significant.

7. WILD-7 Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat

a. Potential Impact. Implementation of the Project modifications could result in the loss or disturbance of Western Burrowing Owl and loss of nesting and foraging habitat. This potential impact is discussed in the Draft SEIR at page 3.9-13.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures WILD-MM-7, WILD-MM-10, WILD-MM-14 and WILD-MM-15. WILD-MM-7 involves avoidance and minimization of potential maintenance impacts on suitable habitat for Giant Garter Snake and Western Burrowing Owl. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. WILD-MM-14 involves conducting surveys for Western Burrowing Owl prior to construction and implementation of protective measures if found. WILD-MM-15 involves compensation for the loss of occupied Western Burrowing Owl habitat.

d. Findings. With implementation of Mitigation Measures WILD-MM-7, WILD-MM-10, WILD-MM-14, and WILD-MM 15, this effect would remain less than significant.

e. Conclusion. The potential impact of Project modifications on Western Burrowing Owl is less than significant.

8. WILD-8 Potential Injury, Mortality or Disturbance of Tree-Roosting Bats and Removal of Roosting Habitat

a. Potential Impact. Implementation of the Project modifications could result in the potential injury, mortality or disturbance of tree-roosting bats and removal of roosting habitat. This potential impact is discussed in the Draft SEIR at page 3.9-13.

b. Impact Prior to Mitigation. Significant

c. Mitigation Measure. The Project modifications will incorporate mitigation measures WILD-MM-10 and WILD-MM-16. WILD-MM-10 involves conducting vegetation removal activities outside the breeding season for birds. WILD-MM-16, as modified from the 2013 FEIR, involves identification of suitable roosting habitat for bats and implementation of avoidance and protective measures.

d. Findings. With implementation of Mitigation Measures WILD-MM-10, and WILD-MM 16, this effect would remain less than significant.

e. Conclusion. The potential impact of Project modifications on tree-roosting bats is less than significant.

F. Fish and Aquatic Resources

1. FISH-1 Implementation of Project modifications could result in the loss or degradation or riparian and shaded riverine aquatic cover.

a. Potential Impact. Implementation of the Gridley Bridge Erosion Repair would require placement of rock slope protection below the ordinary high water mark of the Feather River, which would eliminate or modify key components of the designated critical habitat for the threatened California Central Valley steelhead and southern distinct population segment green sturgeon. This potential impact is discussed in the Draft SEIR at page 3.10-5.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measure FISH-MM-1, which involves implementation of off-site measures to compensate for permanent loss of riparian vegetation and shaded riverine aquatic cover on the waterside slope of the levee. Compensation for riparian and SRA cover losses will be achieved through implementation of the riparian mitigation and Sutter Butte Flood Control Agency Fish and Aquatic Resources monitoring plan described under Mitigation Measure VEG-MM-1 in the 2013 FEIR. Specific to the Gridley Bridge Erosion Repair, SBFCA will compensate for the permanent loss of 0.30 acre of riparian scrub-shrub habitat, 0.02 acre of riparian forest habitat, and 106 linear feet (0.2 acre) of SRA cover by purchasing mitigation credits at a 2:1 ratio at Wildland's Freemont Landing Conservation Bank in Yolo County to fulfill the requirements of ESA Section 7 consultation. Mitigation credits will be purchased prior to commencement of construction activities.

d. Findings: The effect on riparian and shaded riverine aquatic cover would be reduced to a less-than-significant level with implementation of FISH-MM-1 because any such losses will be compensated for.

e. Conclusion. The potential impact of the Project modifications fish and aquatic resources is less than significant.

G. Utilities and Public Services

1. UTL-1 Potential Temporary Disruption of Irrigation/Drainage Facilities and Agricultural and Domestic Water Supply

a. Potential Impact. Implementation of the Project modifications could temporarily disrupt irrigation/drainage facilities and agricultural and domestic water supplies. This potential impact is discussed in the Draft SEIR at page 3.15-3.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measure UTL-MM-1, which involves coordination with water supply users before and during all water supply infrastructure modifications and implementation of measures to minimize interruptions of supply.

d. Findings: With the incorporation of UTL-MM-1, this impact is reduced to less than significant.

e. Conclusion. The potential impact of the Project modifications with respect to disruption of irrigation/drainage facilities and agricultural and domestic water supplies is less than significant.

2. UTL-2 Damage of Public Utility Infrastructure and Disruption of Service

a. Potential Impact. Implementation of the Project modifications could damage public utility infrastructure and disrupt service. This potential impact is discussed in the Draft SEIR at page 3.15-4.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measure UTL-MM-2, which involves verification of utility locations, coordination with utility providers, preparation of a response plan, and conducting worker training.

d. Findings: With the incorporation of UTL-MM-2, this impact is reduced to less than significant.

e. Conclusion. The potential impact of the Project modifications with respect to damage to public utility infrastructure and disruption of service is less than significant.

H. Public Health and Environmental Hazards

1. PH-2 Exposure of the Environment to Hazardous Materials during Ground-Disturbing Activities

a. Potential Impact. Implementation of the Project modifications could expose the environment to hazardous materials during ground-disturbing activities. This potential impact is discussed in the Draft SEIR at page 3.16-4.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measures PH-MM-1 and PH-MM-2. PH-MM-1 involves completion of Phase I and Phase II (if necessary) environmental site assessment investigations and implementation of required measures. PH-MM-2 involves employment of a toxic release contingency plan.

d. Findings: With the incorporation of PH-MM-1 and PH-MM-2, this impact is reduced to less than significant.

e. Conclusion. The potential impact of the Project modifications on the exposure of the environment to hazardous materials is less than significant.

2. PH-3 Temporary Exposure to Safety Hazards from the Construction Site

a. Potential Impact. Implementation of the Project modifications could result in the temporary exposure of workers and the public to safety hazards from the construction site. This potential impact is discussed in the Draft SEIR at page 3.16-4.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measures PH-MM-3 and PH-MM-4. PH-MM-3 involves implementation of construction site safety measures, and PH-MM-4 involves implementation of an emergency response plan.

d. Findings: With the incorporation of PH-MM-3 and PH-MM-4, this impact is reduced to less than significant.

e. Conclusion. The potential impact of the Project modifications on the exposure of workers and the public to safety hazards is less than significant.

VI. FINDINGS REGARDING SIGNIFICANT AND UNAVOIDABLE IMPACTS ON THE ENVIRONMENT

The SEIR identified the following significant impacts on the environment that are deemed to remain significant even after the adoption of mitigation measures. These impacts are overridden by the Project modifications' benefits, as set forth in Section VIII (Statement of Overriding Considerations).

A. Air Quality

1. AQ-2

a. Potential Impact. The Project modifications could result in exceedance of applicable thresholds for construction emissions for ROG, in the FRAQMD. This impact is discussed in the Draft SEIR at page 3.5-10.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4, and AQ-MM-5. AQ-MM -1 involves providing advance notification of the proposed construction schedule to all residences and other air-quality sensitive uses within 500 feet of the construction site, as well as a publicly visible sign with the phone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. AQ-MM -2 involves implementation of fugitive dust control measures as required by FRAQMD and BCAQMD, including submitting a dust control plan, watering unpaved areas, prohibiting certain activities during dry conditions, and others discussed on page 3.5-18 of the 2013 FEIR. AQ-MM -3 involves general measures to reduce emissions such as no open burning of removed vegetation, development of a traffic plan, reducing use, trips and unnecessary idling of heavy equipment, and other measures listed on page 3.5-19 of the 2013 FEIR. AQ-MM-4 involves various fleet-wide emission reductions for large off-road equipment as discussed on page 3.5-19 of the 2013 FEIR. AQ-MM-5 involves payment of offsite mitigation fees to FRAQMD and BCAQMD to offset NOx emissions. SBFCA will also consult with FRAQMD and BCAQMD prior to issuance of grading permits to define the best construction information and computational tools to be used for the calculations.

d. Findings: Because ROG emissions would remain in excess of FRAQMD's threshold, even after incorporation of the above mitigation measures this impact is considered significant and unavoidable.

e. Conclusion. The impact of the Project modifications with respect to exceedance of applicable thresholds for construction emissions is significant and unavoidable.

B. Noise

1. NOI-1

a. Potential Impact: The Project modifications could expose sensitive receptors to construction noise exceeding 60 dBA-L during daytime hours and 45 dBA-L during nighttime hours. This impact is discussed in the Final SEIR at page 3.7-3.

b. Impact Prior to Mitigation: Significant.

c. Mitigation Measure: The Project modifications will incorporate mitigation measure NOI-MM-1, which involves employment of noise-reducing construction practices, such as locating equipment as far away as practical from residences, equipping construction equipment with mufflers, and establishing haul routes that avoid residential uses.

d. Findings: Although implementation of this mitigation measure will reduce the effect, feasible measures will not likely be available in all situations to reduce noise to below the applicable noise ordinance limit, so the effect remains significant and unavoidable.

e. Conclusion: The Project modifications' impact with respect to exposure of sensitive receptors to temporary construction-related noise is significant and unavoidable.

2. NOI-2

a. Potential Impact: The Project modifications could expose sensitive receptors to construction vibration. This impact is discussed in the Final SEIR at page 3.7-5.

b. Impact Prior to Mitigation: Significant.

c. Mitigation Measure: The Project modifications will incorporate mitigation measure NOI-MM-2, which involves employment of vibration-reducing construction practices such as maintaining a minimum distance of 50 feet, to the extent feasible, between equipment and occupied buildings and other measures described in the 2013 FEIR at page 3.7-21.

d. Findings: Even though it is anticipated that construction equipment will not operate within close proximity of residences and structures, there may be situations where this is required and where ground vibration could exceed 0.2 inch per second. Even with implementation of NOI-MM-2, feasible measures will not likely be available in all situations to reduce vibration to below the applicable levels, so the effect remains significant and unavoidable.

e. Conclusion: The Project modifications' impact with respect to exposure of sensitive receptors to temporary construction-related vibration is significant and unavoidable.

C. Vegetation and Wetlands

1. VEG-1 The Project modifications could result in disturbance or removal of riparian trees.

a. Potential Impact. Construction of the Laurel Avenue Critical Repair would likely require trimming or removal of up to 20 riparian trees. At the Gridley Bridge Erosion Repair site, up to 21 trees within approximately 0.46 of riparian scrub-shrub and 0.11 acre of riparian forest land cove types would be permanently removed, and two trees with 0.26 acre of riparian forest would be affected by trimming. This impact is discussed in the Final SEIR starting at page 3.8-5.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measure VEG-MM-1, VEG-MM-2, VEG-MM-3, and VEG-MM-4. VEG-MM-1 involves compensation for the loss of woody riparian trees. VEG-MM-2 involves the installation of exclusion fencing and/or K-rails along the perimeter of the construction work area and implementation of general measures to avoid effects on sensitive natural communities and special-status species. VEG-MM-3 involves mandatory contractor/worker awareness training for construction personnel. VEG-MM-4 involves retention of a biological monitor.

d. Findings: Even with implementation of VEG-MM1, VEG-MM-2 (as modified from the 2013 FEIR), VEG-MM-3 and VEG-MM-4, this effect would remain significant and unavoidable in the short term and less than significant in the long term.

e. Conclusion. The impact of the Project modifications with respect to disturbance or removal of riparian trees remains significant and unavoidable.

2. VEG-4 The Project modifications could result in the loss of special-status plant populations caused by habitat loss resulting from construction activities.

a. Potential Impact. Construction activities at both the Laurel Avenue and Gridley Bridge Erosion Repair sites would require ground disturbance, which could result in the potential loss of special-status plant populations through removal of their habitat. This impact is discussed in the Draft SEIR starting at page 3.8-8.

b. Impact Prior to Mitigation. Significant.

c. Mitigation Measure. The Project modifications will incorporate mitigation measures VEG-MM-2, VEG-MM-3, VEG-MM-4, VEG-MM-7, and VEG-MM-8. VEG-MM-2 involves the installation of exclusion fencing and/or K-rails along the perimeter of the construction work area and implementation of general measures to avoid effects on sensitive natural communities and special-status species. VEG-MM-3 involves mandatory contractor/worker awareness training for construction personnel. VEG-MM-4 involves retention of a biological monitor. VEG-MM-7 involves floristic surveys conducted during appropriate identification periods by qualified botanists. VEG-MM-8 involves avoidance of or compensation for substantial effects on special-status plants.

d. Findings: Even with implementation of VEG-MM-2 (as modified from the 2013 FEIR), VEG-MM-3, VEG-MM-4, VEG-MM-7, and VEG-MM-8, this effect would remain significant and unavoidable.

e. Conclusion. The impact of the Project modifications with respect to loss of special-status plant populations remains significant and unavoidable.

D. Cultural Resources

1. CR-1 The Project modifications could affect identified archaeological sites.

a. Potential Impact: The Project modifications could affect identified archaeological sites resulting from construction of levee improvements and ancillary facilities. This impact is discussed in the Final SEIR, in Appendix A, at page 3.7-17.

b. Impact Prior to Mitigation: Significant.

c. Mitigation Measure: The Project modifications will incorporate mitigation measure CR-MM-1 (as modified from the 2013 FEIR, and from the Draft SEIR), which, after avoidance as the preferred treatment, involves performing data recovery or alternative mitigation to retrieve information useful in research.

d. Findings: With implementation of CR-MM-1, this effect would remain significant and unavoidable. However, because elements of the Wollok District, identified exclusively by UAIC and unknown at the time of the 2013 FEIR was prepared, are known to exist within the Laurel Avenue Critical Repair area, this effect would be more severe than as was identified in the 2013 FEIR.

e. Conclusion: The Project modifications' impact with respect to identified archaeological sites remains significant and unavoidable.

2. CR-2 The Project modifications could disturb unidentified or known but not located archaeological sites.

a. Potential Impact: The Project modifications could disturb unidentified or known but not located archaeological sites. This impact is discussed in the Final SEIR at page 3.17-20.

b. Impact Prior to Mitigation: Significant.

c. Mitigation Measure: The Project modifications will incorporate mitigation measure CR-MM-2, as modified from the 2013 FEIR in the Final SEIR (see Appendix A), which involves implementation of cultural resources discovery measures, provision of related training to construction workers, and construction monitoring as described in detail in the Final SEIR.

d. Findings: Implementation of CR-MM-2 would not reduce this effect to less than significant; moreover, for the reasons described in the SEIR related to the Laurel Avenue site falling within the boundaries of the Wollok District, the effect to that portion of the modified Project would be more severe than as identified in the 2013 FEIR.

e. Conclusion: The Project modifications' impact with respect to disturbance of unidentified or known but not located archaeological sites remains significant and unavoidable.

3. CR-3 The Project modifications have potential to disturb human remains, including known tribal cemeteries than cannot be located.

a. Potential Impact: The Project modifications have potential to disturb human remains, including known tribal cemeteries that cannot be located. This potential impact is discussed in the Final SEIR, in Appendix A, at page 3.17-24.

b. Impact Prior to Mitigation: Significant.

c. Mitigation Measure: The Project modifications will incorporate mitigation measure CR-MM-3, as modified from the 2013 FEIR in the Final SEIR (see Appendix A), which involves monitoring of culturally sensitive areas during construction and following State and Federal laws governing human remains if such resources are discovered.

d. Findings: Mitigation Measure CR-MM-3, would reduce the severity of this effect, but it cannot guarantee the effect would be avoided. Therefore, the identified effect would remain significant and unavoidable with implementation of the proposed Project modifications. However, for the reasons described in the SEIR relevant to the Laurel Avenue site falling within the boundaries of the Wollok District, the effect to that portion of the modified project would be more severe than as identified in the 2013 FEIR.

e. Conclusion: The Project modifications' impact with respect to the potential to disturb human remains remains significant and unavoidable.

4. CR-4 The Project modifications could have direct and indirect effects on built environment resources resulting from construction activities.

   a. Potential Impact: The Project modifications could have direct and indirect effects on built environment resources (historical buildings) through demolition or damage from vibration. This impact is discussed in the Final SEIR, in Appendix A, at page 3.17-26.

   b. Impact Prior to Mitigation: Significant.

   c. Mitigation Measure: The Project will incorporate mitigation measure CR-MM-4, as modified from the 2013 FEIR in the Final SEIR (see Appendix A), which involves completion of an inventory of built environment resources for parcels that remain inaccessible to SBFCA, evaluation of identified properties, assessment of effects, and preparation of treatment to resolve and mitigate effects.

   d. Findings: Implementation of this mitigation measure will reduce the Project modifications' effects on built environment resources, but it cannot guarantee that all effects will be avoided. Implementation of the Project modifications will not result in a substantially more severe effect on built environment resources than identified in the 2013 EIR. Therefore the effect remains significant and unavoidable.

   e. Conclusion: The Project's effect on built environment resources remains significant and unavoidable.

5. CR-5 The Project modifications could affect identified tribal cultural resources, including those that are known but cannot be located.

   a. Potential Impact: The proposed project modifications would impact a portion of the Wollok District, a tribal cultural resource within the Sutter County portion of the FRWLP. This impact is discussed in the Final SEIR, in Appendix A, at page 3.17-28.

   b. Impact Prior to Mitigation: Significant.

   c. Mitigation Measure: The Project modifications will incorporate mitigation measures CR-MM-1, CR-MM-2, and CR-MM-3, as described earlier in these findings. In addition, the Project modifications will incorporate mitigation measures CR-MM-5 through CR-MM-10, as modified from the Draft SEIR in the Final SEIR (see Appendix A). CR-MM-5 involves design alternatives to avoid or lessen the potential damage to resources before ground-disturbing activities commence. CR-MM-6 involves adoption of a tribal consultation policy. CR-MM-7 involves repatriation of human remains. CR-MM-8 involves development of a burial treatment agreement with United Auburn Indian Community. CR-MM-9 involves development of a cultural resources treatment agreement with United Auburn Indian Community, including a

cultural resources monitoring program. CR-MM-10 involves conducting an ethnographic study.

d. Findings: Incorporation and implementation of mitigation measures CR-MM-1 through CR-MM-3, and CR-MM-5 through CR-MM-10 will reduce the impact to tribal cultural resources but the effect remains significant and unavoidable.

e. Conclusion: The impact of the Project modifications on tribal cultural resources is significant and unavoidable.

VII. FINDINGS RELATED TO CUMULATIVE IMPACTS

A. Cumulative Impact Analysis

CEQA Guidelines section 15130 provides the framework for analysis of impacts associated with implementation of a project and its cumulative impacts. A discussion of cumulative impacts includes the combination of significant and less than significant project-related impacts and all levels of impacts from other past, present, and reasonably foreseeable future projects. Cumulative impacts need not be described where the Project modifications have no physical impacts on the environment. Consistent with these requirements, cumulative impacts are discussed in Chapter 4 of the Draft SEIR.

The SEIR's cumulative impacts discussion builds on the 2013 FEIR's discussion by adding two specific projects to the list of projects described in the 2013 FEIR:

- Yuba Goldfields 200-Year Flood Protection Project
- Oroville Wildlife Area Flood Stage Reduction Project

The Project modifications, in combination with the related projects listed above, are anticipated to cause cumulatively significant impacts on cultural resources and tribal cultural resources.

VIII. STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires a public agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. SBFCA proposes to approve the Project modifications despite certain significant unavoidable adverse impacts identified in the Feather River West Levee Project SEIR. The entire SEIR includes 3 volumes: (1) the Draft SEIR, (2) the Final SEIR, and (3) the Responses to Comments document.

A. Impacts of the Project Modifications

As detailed in this Findings document and in the SEIR, the SEIR concludes that the Project modifications will have significant, unavoidable impacts in the following resource areas: air quality, noise, vegetation and wetlands and cultural resources.

The EIR also concludes that there will be cumulative effects on the environment in the following resource category, due to their combination with reasonably foreseeable past, present and future projects as described in Chapter 4 of the Draft EIR: cultural resources and tribal cultural resources.

B. Mitigation Measures

The mitigation measures incorporated into the SEIR and the Mitigation Monitoring and Reporting Plan demonstrate a commitment by the Board to avoid, minimize, and compensate for environmental impacts of the Project. Mitigation measures incorporated into the Project modifications are identified in the Mitigation Monitoring and Reporting Plan.

C. Benefits of the Project

The Project overall will enhance public safety in the Sutter Basin by addressing known levee deficiencies on the Feather River. USACE, DWR and SBFCA have commissioned studies to determine the type, location and severity of deficiencies in the SBFCA project area. The Feather River west levee suffers from risks of the following levee failure mechanisms: through seepage, under seepage, slope stability, erosion, and levee encroachments.

SBFCA proposed the Project to address the identified deficiencies and reduce flood risk for the Sutter basin communities. Specifically, the overall Project has the following benefits:

- Protects existing populations and minimizes exposure to flooding for agricultural commodities, infrastructure use, and other property.
- Reduces flood risk from Feather River toward a target of 200-year protection for Yuba City and in the north of the planning area in compliance with State mandates for 200-year protection for urbanized areas and in avoidance of FEMA restrictions that would compromise agricultural and economic sustainability.
- Addresses known deficiencies and observed performance issues.
- Constructs a project as soon as possible to reduce flood risk as quickly as possible for areas that have unacceptably low levels of flood protection.
- Constructs a project that is economically, environmentally, politically and socially acceptable.
- Facilitates compatibility with the CVFPP and Sutter Basin Feasibility Study such that proposed activities would be “no regrets” and not inconsistent with any future plans.
- Facilitates compatibility with recreation and ecosystem restoration goals in the planning area.

The benefits of the Project modifications specifically align with the benefits listed above. Moreover, there are specific areas of concern at the Laurel and Gridley sites that warrant the Project modifications. At Laurel Avenue, there are subsurface conditions that contribute to underseepage and resulting boils; slope stability deficiencies; ditches along the levee that exacerbate underseepage, seismic vulnerability caused by potentially liquefiable sediments, and a history of poor performance during flood events. The Project modifications will address these problems and thus contribute to the overall Project’s protection of existing populations from

flooding. At the Gridley Bridge Erosion Repair site, erosion has compromised the existing levee geometry and integrity. Specifically, the Project modifications would:

- Reduce flood risk from the critically eroded levee adjacent to the Gridley Bridge. In addition to protecting the lives and property of 31,000 people, this erosion repair also ensures the safety of Gridley Bridge--a critical evacuation route for the Sutter basin during a flood event.
- Reduce flood risk from the highest hazard levee in the Sutter Basin. This high levee protects the lives and property of 23,000 people, and has a long history of catastrophic failures and flood fights.

The Board hereby finds that any remaining significant effects on the environmental found to be unavoidable as described in these Findings are acceptable due to overriding concerns as described above, notably the public safety benefits of the Project modifications.

D. Conclusion

Having reduced the effects of the proposed project modifications by adopting mitigation measures, and balanced the benefits of the proposed Project modifications against the Project modifications' potential unavoidable adverse impacts, the SBFCA Board of Directors hereby determines that the specific overriding economic, legal, social, technological, or other benefits of the proposed Project modifications outweigh the potential unavoidable adverse effects on the environment.

Feather River West Levee Project Final Revised **Mitigation Monitoring and Reporting Program**

This document is the Final Revised Mitigation Monitoring and Reporting Program (MMRP) prepared by the Sutter Butte Flood Control Agency (SBFCA) for the modifications to the Feather River West Levee Project (FRWLP, or project). In order to achieve the goals of the FRWLP, SBFCA has identified two modifications to the previously approved Alternative 3. These are the Laurel Avenue Critical Repair and the Gridley Bridge Erosion Repair. SBFCA was formed as a joint powers authority in 2007 through a joint exercise of powers agreement by the Counties of Sutter and Butte; the Cities of Yuba City, Gridley, Live Oak, and Biggs; and Levee Districts 1 and 9 (LD 1, LD 9). SBFCA is the Lead Agency for the FRWLP. The Draft Revised MMRP addresses the mitigation measures that would be implemented by SBFCA or its construction contractor for the project modifications.

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Table 1. Draft Revised Mitigation Monitoring and Reporting Program for the Feather River West Levee Project

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect FC-6: Alteration of the Existing Drainage Pattern of the Site or Area	*FC-MM-1*: Coordinate with Owners and Operators, Prepare Drainage Studies as Needed, and Remediate Effects through Project Design	SFBCA and its engineering and design contractor	SFBCA and its engineering and design contractor	During final project design	During final project design, project engineers will coordinate with owners and operators of local drainage systems and landowners served by the systems to evaluate pre- and post-project drainage needs and design features to remediate any project-related substantial drainage disruption or alteration in runoff that would increase the potential for localized flooding. If substantial alteration of runoff patterns or disruption of a local drainage system could result from a project feature, a drainage study will be prepared as part of final project design. The study will consider the design flows of any existing facilities that would be crossed by project features and develop appropriate plans for relocation or other modification of these facilities and construction of new facilities, as needed, to ensure equivalent functioning of the system during and after construction. If no drainage facilities (e.g., ditches, canals) would be affected, but project features would have a substantial adverse effect on runoff amounts and/or patterns, new drainage systems will be included in the design of project alternatives to ensure that the project would not result in new or increased localized flooding. Any necessary features to remediate project-induced drainage problems will be installed before the project is completed or as part of the project, depending on site-specific conditions.
Effect WQ-3: Effects on Groundwater or Surface Water Quality Resulting from Contact with the Water Table	*WQ-MM-1*: Implement Provisions for Dewatering	SBFCA or its construction contractor	SBFCA or its construction contractor	Permit to be obtained prior to discharging dewatered effluent to surface water. Ongoing inspections of construction area will occur frequently during construction to verify water quality control measures are properly implemented and maintained.	Before discharging any dewatered effluent to surface water, SBFCA or its contractors will obtain a Low Threat Discharge and Dewatering NPDES permit from the Central Valley RWQCB if the dewatering is not covered under the Central Valley RWQCB's NPDES Construction General Permit. As part of the permit, the permittee will design and implement measures as necessary so that the discharge limits identified in the relevant permit are met. For example, if dewatering is needed during the construction of any cutoff walls, the Low Threat Discharge and Dewatering NPDES permit would require treatment or proper disposal of the water prior to discharge. Treatment measures will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. Implemented measures could include the retention of 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 SBFCA. SBFCA will verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. SBFCA or its agent will perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. SBFCA will notify its contractors immediately if there is a non-compliance issue and will require compliance.
Effect WQ-5: Allow the Spread or Introduction of Aquatic Invasive Species	*WQ-MM-2*: Prevent the Spread or Introduction of Aquatic Invasive Species	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	Survey of Gridley project area to be conducted prior to construction. Aquatic Invasive Species Memo developed prior to construction. Environmental Education conducted prior to construction. Monitoring ongoing during construction.	SBFCA or its contractors will implement the following actions at the Gridley Bridge Erosion site to prevent the potential spread or introduction of aquatic invasive species associated with the operation of barges and other in-water equipment originating outside the FRWLP project area. Species of concern related to the operation of barges and other equipment in the Feather River include invasive mussels (e.g., quagga mussels [Dreissena bugensis] and zebra mussels [Dreissena polymorpha]) and aquatic plants (e.g., Brazilian waterweed [Egeria densa] and hydrilla [Hydrilla verticillata]) (California Department of Fish and Game 2008). SBFCA or its contractors will comply with the following: 1) A biologist who is experienced in identifying aquatic invasive species will survey the project area before construction begins and identify the presence and type(s) of aquatic invasive species that could be spread by project activities. The biologist will contact DFW's Invasive Species Program to discuss the findings and determine what best management practices (BMPs) will be implemented to prevent the spread or introduction of aquatic invasive species. An aquatic invasive species memo will be written describing the aquatic invasive species and the BMPs and will be submitted to SBFCA for approval. 2) When the aquatic invasive species memo is approved and before construction begins, a biologist will educate construction supervisors, managers, equipment operators, and construction personnel in the recognition and proper prevention, treatment, and disposal of aquatic invasive species and about the importance of controlling and preventing the spread of aquatic invasive species. The biologist will emphasize the importance of following the BMPs and the biological monitor on the project will ensure that contractors are following the BMPs to prevent the spread of aquatic invasive species.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-1*: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents	SBFCA and its construction contractor	SBFCA and its construction contractor	Ongoing during construction. Written notification of proposed construction activities delivered to residents and other uses prior to commencing construction activities. Liaison respond to complaints within 48 hours.	SBFCA will provide advance written notification of the proposed construction activities to all residences and other air quality–sensitive uses within 500 feet of the construction site. Notification will include a brief overview of the proposed project and its purpose, as well as the proposed construction activities and schedule. It also will include the name and contact information of SBFCA's project manager or a representative for ensuring that reasonable measures are implemented to address a problem. The construction contractor will post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person will respond and take corrective action within 48 hours. The phone number of the appropriate air quality agency (FRAQMD or BCAQMD) also will be visible to ensure compliance with the agencies' regulations.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-2*: Implement Fugitive Dust Control Plan If Unmitigated Emissions Exceed PM10 or PM 2.5 Thresholds	SBFCA's construction contractor	SBFCA's construction contractor	Measures to be implemented ongoing during construction. Dust control plan to be submitted prior to construction. Watering to occur at least twice daily or more during dry conditions.	The construction contractor will implement all applicable and feasible fugitive dust control measures required by FRAQMD and BCAQMD, including those listed below. This requirement will be incorporated into the construction contract. 1) Prior to mobilizing to the job site the construction contractor will submit a dust control plan to FRAQMD and BCAQMD. 2) Water active unpaved areas at all construction sites at least twice daily in dry conditions or more frequently as required, with the frequency of watering based on the type of operation, soil, and wind exposure. 3) Prohibit all grading activities and water all areas of disturbed soil under windy conditions (more than 20 miles per hour). 4) Limit onsite vehicles to a speed that prevents visible dust emissions to extend beyond unpaved roads. 5) Cover all trucks hauling dirt, sand, or loose materials. 6) Cover active and inactive storage piles where appropriate. 7) Cover or hydroseed unpaved areas that will remain inactive for extended periods. 8) Apply soil stabilizers to active and inactive areas where appropriate. 9) Install wheel washers at the entrance to construction sites for all exiting trucks. 10) Sweep streets if visible soil material is carried out from the construction site. Sweeping will be done at least once per day unless conditions warrant a more frequent application. 11) Install wind fencing and phase grading operations where appropriate.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-3*: General Measures to Reduce Emissions	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing during construction.	1) No open burning of removed vegetation. Vegetative material will be chipped or delivered to waste or energy facilities. 2) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. 3) Reduce use, trips, and unnecessary idling of heavy equipment. Shut down idling equipment that is not used for more than 5 consecutive minutes as required by California law. 4) Construction equipment exhaust emissions will not exceed 40% opacity or Ringelmann 2.0. Operators of vehicles and equipment found to exceed opacity limits will take action to repair the equipment within 72 hours or remove the equipment from service. 5) Maintain all construction equipment in proper tune according to manufacturer's specifications. 6) Locate stationary diesel-powered equipment and haul truck staging areas as far as practical from sensitive receptors. 7) Use existing power sources (e.g., power lines) or clean fuel generators rather than conventional diesel generators, when feasible. 8) Substitute gasoline-powered for diesel-powered equipment when feasible.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
					9) Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require ARB Portable Equipment Registration with the state or a local district permit. The owner/operator will be responsible for arranging appropriate consultations with ARB or the air districts to determine registration and permitting requirements prior to equipment operation at the site.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-4*: Fleet-Wide Emission Reductions for Large Off-Road Equipment	SBFCA's construction contractor	SBFCA's construction contractor	Equipment inventory to be completed prior to start of construction. Plan submitted to FRAQMD and BCAQMD prior to start of construction.	Prior to mobilizing to the job site, the construction contractor will assemble a comprehensive inventory list (make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that will be used an aggregate of 40 or more hours for the construction project. The construction contractor then will apply the following mitigation measure to those pieces of equipment. The construction contractor will provide a plan, for approval by FRAQMD and BCAQMD, demonstrating that the heavy-duty off-road equipment to be used at the project sites, including owned, leased, and subcontractor equipment, will achieve a project-wide fleet-average reduction of 20% for NOX and 45% for DPM, compared to the most recent ARB fleet average at time of construction. SBFCA will use the construction mitigation calculator downloaded from the Sacramento Metropolitan Air Quality Management District web site (or similar tool approved by FRAQMD and BCAQMD) to perform the fleet average evaluation (Sacramento Metropolitan Air Quality Management District 2009). Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology (Carl Moyer Guidelines), or installation of after-treatment emission control devices. FRAQMD and BCAQMD will be contacted to review and approve the alternative measures.
Effect AQ-2: Exceedance of Applicable Thresholds for Construction Emissions	*AQ-MM-5*: Pay Required Fees to FRAQMD and BCAQMD to Offset NOX Emissions to Net Zero (0) for Emissions in Excess of General Conformity de minimis thresholds or to Quantities below Applicable FRAQMD and BCAQMD CEQA thresholds (where applicable)	SBFCA's construction contractor	SBFCA's construction contractor	Consultation with FRAQMD and BCAQMD prior to receiving grading permits.	After implementing the general tailpipe emission control measures listed in AQ-MM-4 to reduce daily-average construction emissions, SBFCA will pay offsite mitigation fees to FRAQMD and BCAQMD to offset NOX emissions. Emissions in excess of the federal de minimis thresholds shall be reduced to net zero (0). Emissions not in excess of the de minimis thresholds, but above applicable air district CEQA thresholds shall be reduced to quantities below the numeric thresholds. Prior to issuance of grading permits for the project, SBFCA will consult with FRAQMD and BCAQMD to define the best construction information and the appropriate computational tools to be used for the calculations. SBFCA will submit calculations to FRAQMD and BCAQMD documenting the tons of NOX to be offset over the duration of the construction phase of the project. SBFCA will consult with FRAQMD and BCAQMD to define the required fee payment based on the most recent Carl Moyer program cost value. Prior to the approval of project plans or the issuance of grading permits, the SBFCA will submit proof that the offsite air quality mitigation fee has been paid to FRAQMD and BCAQMD, and that the construction air quality mitigation plan has been approved by FRAQMD, BCAQMD, and SBFCA.
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-1*: Provide Advance Notification of Construction Schedule and 24-Hour Hotline to Residents	See *Effect AQ-2*, *AQ-MM-1*	See *Effect AQ-2*, *AQ-MM-1*	See *Effect AQ-2*, *AQ-MM-1*	See *Effect AQ-2*, *AQ-MM-1*
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-2*: Implement Fugitive Dust Control Plan If Unmitigated Emissions Exceed PM10 or PM 2.5 Thresholds	See *Effect AQ-2*, *AQ-MM-2*	See *Effect AQ-2*, *AQ-MM-2*	See *Effect AQ-2*, *AQ-MM-2*	See *Effect AQ-2*, *AQ-MM-2*
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-3*: General Measures to Reduce Emissions	See *Effect AQ-2*, *AQ-MM-3*	See *Effect AQ-2*, *AQ-MM-3*	See *Effect AQ-2*, *AQ-MM-3*	See *Effect AQ-2*, *AQ-MM-3*

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect AQ-3: Exceedance of the Federal General Conformity Thresholds during Construction	*AQ-MM-4*: Fleet-Wide Emission Reductions for Large Off-Road Equipment	See *Effect AQ-2*, *AQ-MM-4*	See *Effect AQ-2*, *AQ-MM-4*	See *Effect AQ-2*, *AQ-MM-4*	See *Effect AQ-2, AQ-MM-4*
Effect CC-1: Increase in GHG Emissions during Construction Exceeding Threshold	*CC-MM-1*: Implement Measures to Minimize GHG Emissions during Construction	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing during project construction	The following measures should be considered to lower GHG emissions during construction. 1) Comply with all applicable future GHG regulations at the time of project-level permitting and construction. 2) Use biodiesel fuel to fuel a substantial portion of the diesel-powered equipment and vehicles. 3) Encourage construction workers to carpool. 4) Recycle at least 50% of construction waste and demolition debris. 5) Purchase at least 10% of the building materials and imported soil from sources within 100 miles of the project site. 6) Use electricity from utility power lines rather than fossil fuel, where appropriate. 7) Purchase GHG offset for project GHG emissions (direct emissions plus indirect emissions from on-road haul trucks plus commute vehicles) exceeding future Federal, state, or local significance thresholds applicable at the time of construction. If no GHG significance thresholds have been formally adopted at the time of permitting, a presumptive GHG threshold of 7,000 MT per year of CO2e (amortized over the 50-year life of the levee project) should be used to define the offset requirement. The 7,000 MT/year presumptive threshold matches the lowest industrial project threshold that has been proposed by any air quality agency in California as of the date of this study. All purchased offsets must be verifiable under protocols set by the California Climate Action Registry, the Chicago Climate Exchange, or comparable auditing programs.
Effect NOI-1: Exposure of Sensitive Receptors to Temporary Construction-Related Noise	*NOI-MM-1*: Employ Noise-Reducing Construction Practices	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing during construction.	To the extent feasible construction contractors shall control noise from construction activity such that noise does not exceed applicable noise standards specified by the Cities of Yuba City, Marysville, Live Oak, and Biggs; Sutter County; and Butte County. Where there is not a specific noise standard noise will be limited to 60 dBA-Leq at noise-sensitive uses between the hours of 7:00 a.m. and 10:00 p.m. or 45 dBA-Leq between the hours of 10:00 p.m. and 7:00 a.m. Measures that can be implemented to control noise include the following. 1) Locate noise-generating equipment as far away as practical from residences and other noise-sensitive uses. 2) Equip all construction equipment with standard noise attenuation devices such as mufflers to reduce noise and equip all internal combustion engines with intake and exhaust silencers in accordance with manufacturer's standard specifications. 3) Establish equipment and material haul routes that avoid residential uses to the extent practical, limit hauling to the hours between 7:00 a.m. and 10:00 p.m., and specify maximum acceptable speeds for each route. 4) Employ electrically powered equipment in place of equipment with internal combustion engines where practical, where electric equipment is readily available, and where this equipment accomplishes project work as effectively and efficiently as equipment powered with internal combustion engines. 5) Restrict the use of audible warning devices such as bells, whistles, and horns to those situations that are required by law for safety purposes. 6) Provide a noise-reducing enclosure around stationary noise-generating equipment. 7) Provide temporary construction noise barriers between active construction sites that are in close proximity to residential and other noise-sensitive uses. Temporary barriers can be constructed or created with parked truck trailers, soil piles, or material stock piles.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect NOI-2: Exposure of Sensitive Receptors to Temporary Construction-Related Vibration	*NOI-MM-2*: Employ Vibration-Reducing Construction Practices	SBFCA's construction contractor	SBFCA's construction contractor A qualified acoustical consultant or engineering firm to conduct vibration monitoring. A designated complaint coordinator to respond to noise complaints received during construction.	Ongoing during construction. Inspection of potentially affected buildings to be conducted prior to construction and following completion of construction.	The construction contractor will, to the extent feasible, maintain a minimum distance of 150 feet between pile driving equipment and occupied or vibration-sensitive buildings or structures. To the extent feasible, a minimum distance of 50 feet will be maintained between other construction equipment and occupied or vibration-sensitive buildings or structures. For cases where this is not feasible, residents or property owners will be notified in writing prior to construction activity that construction may occur in close proximity to their buildings. SBFCA will inspect the potentially affected buildings prior to construction to inventory existing cracks in paint, plaster, concrete, and other building elements. SBFCA will retain a qualified acoustical consultant or engineering firm to conduct vibration monitoring at potentially affected buildings to measure the actual vibration levels during construction. Following completion of construction, SBFCA will conduct a second inspection to inventory changes in existing cracks and new cracks or damage, if any, that occurred as a result of construction-induced vibration. If new damage is found, then SBFCA will promptly arrange to have the damaged repaired or will reimburse the property owner for appropriate repairs. In addition, if construction activity is required within 100 feet of residences or other vibration-sensitive buildings, a designated complaint coordinator will be responsible for handling and responding to any complaints received during such periods of construction. A reporting program will be required that documents complaints received, actions taken, and the effectiveness of these actions in resolving disputes.
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-1*: Compensate for the Loss of Woody Riparian Trees	SBFCA	SBFCA	Mitigation will be implemented during Fall 2013. Riparian tree restoration areas will be monitored annually during years 1 through five following completion of mitigation project implementation	For direct effects on woody riparian trees that cannot be avoided, SBFCA will compensate for the loss of riparian habitat to ensure no net loss of habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with the appropriate state and Federal agencies during the permitting process. Compensation will be provided based on the ratio determined (e.g., 2:1 = 2 acres restored/created/enhanced or credits purchased for every 1 acre removed). SBFCA is preparing a mitigation and monitoring plan. Mitigation will consist of off-site, in-kind replacement habitat that is a combination of permittee-responsible mitigation and mitigation bank credits to allow for economy of scale and higher quality habitat due to large patch size. The plan identifies how and where mitigation will occur, monitoring and maintenance activities, success criteria, and funding assurances. The final mitigation and monitoring plan will be approved by the appropriate regulatory agencies prior to the removal of any riparian habitat.
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	SBFCA or its construction contractor	SBFCA or its construction contractor A qualified biologist hired by SBFCA	Exclusion fencing installed one week prior to start of construction activities and removed after construction of project phase is complete.	To clearly demarcate the project boundary and prevent special-status species from moving through the project area, SBFCA or its contractors will install temporary exclusion fencing along the project boundaries (including access roads, staging areas, etc.) 1 week prior to the start of construction activities. The fence will be made of suitable material that will not allow any of the special-status wildlife with potential to occur in the project area to pass through or over, and the bottom will be buried to a depth of at least 4 inches to ensure that these species cannot crawl under the fence. One-way escape routes will be installed in the silt fence or gaps will be left in the fencing during initial clearing and grubbing to allow animals to escape from the project area. Sandbags will be placed along the gaps to protect water quality and the gaps will be replaced with fencing once initial ground clearing is complete. The fencing requirements will be included in the construction specifications and a USFWS- and a DFW-approved biological monitor will be onsite to direct and monitor exclusion fence installation, and relocate wildlife outside the work area boundaries. Federally and state-listed species will be relocated only if authorized by the USFWS and DFW. SBFCA will ensure that the temporary fencing is continuously maintained until all construction activities are completed and that construction equipment is confined to the designated work areas, including any offsite mitigation areas and access thereto. The exclusion fencing will be removed only after construction of the project phase is completed. Exclusionary construction fencing and explanatory signage will also be placed around the perimeter of sensitive vegetation communities that could be affected by construction activities throughout the period during which such effects occur. Signage will explain the nature of the sensitive resource and warn that no effect on the community is allowed. The fencing will include a buffer zone of at least 20 feet between the resource and construction activities. All exclusionary fencing will be maintained in good condition throughout the construction period.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	A qualified biologist hired by SBFCA	A qualified biologist hired by SBFCA	Training will occur for construction personnel when they are first brought on the job during the construction period.	A qualified biologist will conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the need to avoid effects on sensitive biological resources (e.g., riparian habitat, special-status species, special-status wildlife habitat) and the penalties for not complying with permit requirements. The biologist will inform all construction personnel about the life history of special-status species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of the BO or other authorizing document. Proof of this instruction will be submitted to USFWS, DFG, or other overseeing agency, as appropriate. The training also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on special-status species during project construction. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions.
Effect VEG-1: Disturbance or Removal of Riparian Trees	*VEG-MM-4*: Retain a Biological Monitor	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	Ongoing during the construction period	SBFCA or its contractors will retain qualified biologists to monitor construction activities adjacent to sensitive biological resources (e.g., special-status species, riparian habitat, wetlands, elderberry shrubs). The biologists will assist the construction crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologists will be responsible for ensuring that SBFCA or its contractors maintain the exclusion fencing adjacent to sensitive biological resources.
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-4*: Retain a Biological Monitor	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*
Effect VEG-2: Loss of Wetlands and Other Waters of the United States as a Result of Project Construction	*VEG-MM-5*: Compensate for the Loss of Wetlands and Other Waters	SBFCA	SBFCA	Mitigation will be implement- ted during Fall 2013. Monitoring activities will begin immediately following.	Compensation for the loss of wetlands will include restoring or enhancing in-kind wetland habitat at a mitigation ratio that will be developed in coordination with regulatory agencies to ensure no net loss of habitat functions and values. SBFCA is preparing a mitigation and monitoring plan Mitigation will consist of off-site, in-kind replacement habitat that is a combination of permittee-responsible mitigation and mitigation bank credits to allow for economy of scale and higher quality habitat due to large patch size. The plan identifies how and where mitigation will occur, monitoring and maintenance activities, success criteria, and funding assurances. The final mitigation and monitoring plan will be approved by the appropriate regulatory agencies before the loss of any wetlands or waters.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-4*: Retain a Biological Monitor	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*
Effect VEG-3: Disturbance or Removal of Protected Trees as a Result of Project Construction	*VEG-MM-6*: Compensate for Loss of Protected Trees	SBFCA	SBFCA	Mitigation will be implement- ted during Fall 2013. Riparian tree restoration areas will be monitored annually during years 1 through five following completion of mitigation project implementation	For impacts on protected trees that fall under the jurisdiction of a local tree ordinance, SBFCA will apply for a tree permit for the removal of any protected trees during construction. SBFCA will replace trees that must be removed with trees at or near the location of the effect or another location approved by the appropriate party (e.g., tree administrator, parks and recreation department). SBFCA also will replace any replacement trees that die within 3 years of the initial planting. Replacement trees are required at a ratio of 1:1 (i.e., 1-inch diameter of replacement tree for every 1-inch diameter of tree removed). Effects on trees also may be mitigated through payment of an in-lieu fee. Mitigation will be subject to approval by the appropriate party and will take into account species affected, replacement species, location, health and vigor, habitat value, and other factors to determine fair compensation for tree loss. For impacts on protected trees in oak woodlands under a county's jurisdiction, the project applicant will implement one of the four CEQA oak woodlands mitigation alternatives to compensate for the loss of projected trees and the planting of oaks will not constitute more than 50% of the required mitigation.
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-2*: Install Exclusion Fencing and/or K-rails along the Perimeter of the Construction Work Area and Implement General Measures to Avoid Effects on Sensitive Natural Communities and Special-Status Species	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*	See *Effect VEG-1, VEG-MM-2*
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-3*: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*	See *Effect VEG-1, VEG-MM-3*

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-4*: Retain a Biological Monitor	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*	See *Effect VEG-1, VEG-MM-4*
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-7*: Retain Qualified Botanists to Conduct Floristic Surveys for Special-Status Plants during Appropriate Identification Periods	SBFCA	A qualified botanist hired by SBFCA	Surveys will be conducted prior to project construction and during reported blooming or other periods when special-status plants are evident and identifiable.	SBFCA will retain qualified botanists to survey the biological study area to document the presence of special-status plants before project implementation. The botanists will conduct a floristic survey that follows the DFG botanical survey guidelines (California Department of Fish and Game 2009). 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. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the reported blooming period. To account for different special status–plant identification periods, one or more series of field surveys may be required in spring and summer. If any special-status plants are identified during the surveys, the botanist will photograph and map locations of the plants, document the location and extent of the special status–plant population on a CNDDB Survey Form, and submit the completed Survey Form to the CNDDB. The amount of compensatory mitigation required will be based on the results of these surveys.
Effect VEG-4: Potential Loss of Special-Status Plant Populations Caused by Habitat Loss Resulting from Project Construction	*VEG-MM-8*: Avoid or Compensate for Substantial Effects on Special-Status Plants	SBFCA	SBFCA	During pre-construction survey timeframe.	If one or more special-status plants are identified in the study area during preconstruction surveys, SBFCA will redesign or modify proposed project components of the project to avoid indirect or direct effects on special-status plants wherever feasible. If special-status plants can be avoided by redesigning projects, implementation of Mitigation Measures *VEG-MM-2* (barrier fencing), *VEG-MM-3* (awareness training), and *VEG-MM-4* (biological monitor) would avoid significant effects on special-status plants. If complete avoidance of special-status plants is not feasible, the effects of the project on special-status plants would be compensated for by offsite preservation at a ratio to be negotiated with the resource agencies. Suitable habitat for affected special status–plant species will be purchased in a conservation area, preserved, and managed in perpetuity. Detailed information will be provided to the agencies on the location and quality of the preservation area, the feasibility of protecting and managing the area in perpetuity, and the responsible parties. Other pertinent information also will be provided, to be determined through future coordination with the resource agencies.
Effect WILD-1: Potential Mortality of or Loss of Habitat for Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle	*WILD-MM-1*: Fence and Avoid Habitat for Antioch Dunes Anthicid, Sacramento Anthicid, and Sacramento Valley Tiger Beetle and Implement Protective Measures	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	During the construction period.	The area of potentially suitable habitat will be identified on construction plans and fenced prior to the start of construction. No foot or vehicle traffic will be allowed in the fenced area. The fencing will be removed when construction is complete. If avoidance is not possible, or new areas of potential habitat are identified and cannot be avoided, a qualified entomologist will survey the suitable habitat areas for the presence of these three beetle species to determine their presence. If recommended by the entomologist and supported by the wildlife agencies, the beetles may be relocated to suitable habitat prior to the start of construction in the habitat to be affected.
Effect WILD-2: Potential Mortality or Disturbance of VELB and its Habitat (Elderberry Shrubs)	*WILD-MM-2*: Conduct VELB Surveys Prior to Elderberry Shrub Transplantation	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	During the construction period.	A qualified biologist will survey elderberry shrubs to be transplanted prior to transplantation. Surveys will be conducted in accordance with the Conservation Guidelines for the VELB (U.S. Fish and Wildlife Service 1999b). The biologist will survey the area surrounding the shrub to be transplanted to ensure that there aren't additional elderberry shrubs that need to be removed. Surveys will consist of counting and measuring the diameter of each stem, and examining elderberry shrubs for the presence of VELB exit holes.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect WILD-2: Potential Mortality or Disturbance of VELB and its Habitat (Elderberry Shrubs)	*WILD-MM-3*: Implement Measures to Protect VELB and its Habitat	SBFCA or its construction contractor	A qualified biologist with VELB/elderberry experience hired by SBFCA	Buffer area fences around elderberry shrubs will be inspected weekly by a qualified biologist during ground-disturbing activities and monthly after ground-disturbing activities until project construction is complete or until the fences are removed.	Elderberry shrubs/clusters within 100 feet of the construction area that will not be removed will be protected during construction. A qualified biologist will mark the elderberry shrubs and clusters that will be protected during construction. Orange construction barrier fencing will be placed at the edge of the respective buffer areas. The buffer area distances will be proposed by the biologist and approved by USFWS. No construction activities will be permitted in the buffer zone other than those activities necessary to erect the fencing. Signs will be posted along fencing for the duration of construction. In some cases, where the elderberry shrub dripline is within 10 feet of the work area, k-rails will be placed at the shrub's dripline to provide additional protection to the shrub from construction equipment and activities. Temporary fences around the elderberry shrubs and k-rails at shrub driplines will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and later removed, as shown on the plans, as specified in the special provisions, and as directed by the project engineer. Temporary fencing will be 4 feet (1.2 meters) high, commercial-quality woven polypropylene, orange in color. Buffer area fences around elderberry shrubs will be inspected weekly by a qualified biologist during ground-disturbing activities and monthly after ground-disturbing activities until project construction is complete or until the fences are removed, as approved by the biological monitor and the resident engineer. The biological monitor will be responsible for ensuring that the contractor maintains the buffer area fences around elderberry shrubs throughout construction. SBFCA will ensure that the project site will be watered down as necessary to prevent dust from becoming airborne and accumulating on elderberry shrubs in and adjacent to the project site. Biological inspection reports will be provided to the project lead and USFWS.
Effect WILD-2: Potential Mortality or Disturbance of VELB and its Habitat (Elderberry Shrubs)	*WILD-MM-4*: Compensate for Effects on VELB and its Habitat	SBFCA	A qualified biologist with VELB/elderberry experience hired by SBFCA	Transplanting will take place before construction begins. Elderberry shrubs within the project construction area that cannot be avoided will be transplanted during the plant's dormant phase (November through the first 2 weeks of February).	Before construction begins, SBFCA will compensate for direct effects on elderberry shrubs by transplanting shrubs that cannot be avoided to a USFWS-approved conservation area (i.e., the Star Bend Mitigation Area). Elderberry seedlings or cuttings and associated native species will also be planted in the conservation area.
Effect WILD-3: Potential Mortality or Disturbance of Western Pond Turtle	*WILD-MM-5*: Conduct Preconstruction Surveys for Western Pond Turtle and Monitor Construction Activities if Turtles are Observed	SBFCA or its construction contractor	A qualified biologist familiar with turtles hired by SBFCA	A biologist will conduct surveys for western pond turtle in one before and within 24 hours of beginning work in suitable aquatic habitat. Surveys will be timed to coincide with the time of day and year when turtles are most likely to be active (during the cooler part of the day between 8 a.m. and 12 p.m. during spring and summer).	A qualified biologist will conduct surveys for western pond turtle one week and 24 hours prior to beginning work in suitable aquatic habitat. Prior to conducting the surveys, the biologist should locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to quietly observe turtles. Each survey should include a 30-minute wait time after arriving on site to allow startled turtles to return to open basking areas. The survey should consist of a minimum 15-minute observation time per area where turtles could be observed. If western pond turtles are observed during either survey, a biological monitor should be present during construction activities in the aquatic habitat where the turtle was observed and will capture and remove, if possible, any entrapped turtle. The biological monitor also will be mindful of suitable nesting and overwintering areas in proximity to suitable aquatic habitat and periodically inspect these areas for nests and turtles. The biological monitor's DFG scientific collecting permit will include capture and relocation of turtles.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-6*: Avoid and Minimize Construction Effects on Giant Garter Snake	SBFCA or its construction contractor	A qualified biologist familiar with giant garter snakes hired by SBFCA	During the construction period of May 1 through October 1 (giant garter snake active period) to the extent feasible.	The following measures will be implemented to avoid, minimize, and compensate for effects on giant garter snake and its habitat. 1) To the maximum extent possible, all construction activity in giant garter snake aquatic and upland habitat within 200 feet of aquatic habitat will be conducted during the snake's active period (between May 1 and October 1). During this timeframe, potential for injury and mortality are lessened because snakes are actively moving and avoiding danger. Giant garter snakes are more vulnerable to danger during their inactive period because they are occupying underground burrows or crevices and are more susceptible to direct effects, especially during excavation. Small irrigation ditches on the landside of the levee that need to be moved outward from the existing levee will be completely dried, removed, and relocated during the May 1–October 1 timeframe. 2) To reduce the likelihood of snakes entering the construction area, SBFCA will install exclusion fencing and orange construction barrier fencing along the edge of the construction area that is within 200 feet of suitable habitat. The exclusion and barrier fencing will be installed during the active period for giant garter snakes (May 1 to October 1) to reduce the potential for injury and mortality during this activity. The exclusion fencing will consist of 3-foot-tall silt fencing buried 4–6 inches below ground level. One-way escape routes will be installed in the silt fence, or gaps will be left in the fencing during initial clearing and grubbing, to allow snakes to escape from the project area. Sandbags will be placed along the gaps to protect water quality and the gaps will be replaced with fencing once initial ground clearing is complete. To prevent snakes and other ground-dwelling animals from being caught in the orange construction fencing, it will be placed such that there is a 1-foot gap between the ground and the bottom of the orange construction fencing. The fencing requirements will be included in the construction specifications and a USFWS- and CDFW-approved biological monitor will be onsite to direct and monitor exclusion fence installation. The exclusion fencing will ensure that giant garter snakes are excluded from the construction area and that suitable upland and aquatic habitat is protected throughout construction cannot be conducted between May 1 and October 1, additional protective measures will be determined during consultation with USFWS. (i.e., mowing, rodenticide use, burrow filling or removal) should occur within 200 feet of toe drains at the base of the levee, as these areas are more likely to be used by giant garter snake and thus have a higher level of sensitivity. 3) A USFWS-approved biologist will conduct a preconstruction survey in suitable habitat no more than 24 hours before construction. Prior to construction activities each morning, construction personnel will inspect exclusion and E facilities in giant garter snake habitat will be conducted during the snake's active period (between May 1 and October 1). Because PG&E facilities will need to be relocated in advance of construction activities, preactivity surveys will be conducted prior to relocation activities when these occur in suitable habitat for giant garter snake.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-7*: Avoid and Minimize Potential Maintenance Impacts on Suitable Habitat for Giant Garter Snake and Western Burrowing Owl	SBFCA or its construction contractor	A qualified biologist familiar with giant garter snakes and western burrowing owls hired by SBFCA	Plan to be developed prior to construction. Burning and vegetation mowing to take place from May 1–October 1. Grouting of burrows to take place during May 1–October 1.	SBFCA will ensure, through an operations and maintenance plan or other plan, that maintenance activities that impact suitable habitat along the levee are minimized to the maximum extent feasible. The plan should include measures that avoid and reduce potential injury and mortality of giant garter snake and western burrowing owl, and minimize the loss of burrows that these species utilize. The plan should be developed in coordination with USFWS and DFG and may include some of the following measures. 1) Minimize vegetation control by burning and conduct vegetation mowing during the active period (May 1–October 1) of giant garter snake. 2) No maintenance activities (i.e., mowing, rodenticide use, burrow filling or removal) should occur within 200 feet of toe drains at the base of the levee, as these areas are more likely to be used by giant garter snake and thus have a higher level of sensitivity. 3) Avoid grouting of burrows. If grouting must occur, conduct during the active period of giant garter snake (May 1-October 1). A qualified biologist will examine the burrow to be grouted for evidence of use by western burrowing owl and conduct early morning surveys of the burrow to confirm it is not occupied by western burrowing owl. Once the burrow is determined to be unoccupied by western burrowing owl, install exclusion fencing with a one-way exit so that any giant garter snakes can exit the burrow and not go back in. The exclusion fencing and one-way exit should be left in place for 24 hours before grouting.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
					4) Prepare a database of sensitive areas along the levee and requirements for maintenance personnel to utilize when planning and conducting maintenance activities. 5) Train staff to recognize western burrowing owl and their sign and to avoid removing burrows in areas where owls or their sign are observed. 6) Coordinate compensation for permanent loss of burrow habitat for giant garter snake and western burrowing owl through regional habitat conservation plans/ natural community conservation plans.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-8*: Compensate for Permanent Loss of Suitable Giant Garter Snake Habitat	SBFCA	SBFCA	Before construction activities are initiated.	Compensation for permanent effects on giant garter snake aquatic and upland habitat will follow the guidance in the Programmatic Consultation. SBFCA will compensate for the permanent loss of suitable aquatic habitat and upland habitat for giant garter snake by purchasing preservation credits equal at a USFWS and DFG approved conservation bank. The habitat at the conservation bank will be protected in perpetuity for giant garter snake. Prior to the start of construction (excluding Reach 13, as there is no giant garter snake habitat in this reach), SBFCA will provide funding to the conservation bank for giant garter snake habitat preservation credits. The transaction will take place through a purchase and sale agreement, and funds must be transferred within 30 days, and before any construction activities are initiated. SBFCA will provide the USFWS and CDFW with copies of the credit sale agreement and fund transfer.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-9*: Restore Temporarily Disturbed Giant Garter Snake Aquatic and Upland Habitat to Pre-Project Conditions	SBFCA	SBFCA	Upon completion of construction.	SBFCA will restore temporarily affected suitable and upland habitat for giant garter snake to pre-project conditions. Restoration of aquatic vegetation and annual grassland will be detailed in a mitigation and monitoring plan that will be reviewed and approved by USACE and USFWS prior to the start of construction. If additional giant garter snake habitat will be temporarily removed because of PG&E facility relocations, consultation with USFWS would be reinitiated and PG&E will restore temporarily affected habitat to pre-project conditions.
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-17*: Implement Additional Protective Measures During Work in Suitable Habitat during the Giant Garter Snake Dormant Period	SBFCA or its construction contractor	A qualified biologist familiar with giant garter snakes hired by SBFCA	During the construction period of October 2 through April 30 (giant garter snake dormant period).	SBFCA will implement the following additional protective measures when work must occur during the giant garter snake dormant period (i.e., between October 2 and April 30), when snakes are more vulnerable to injury and mortality. Only work authorized by USFWS and CDFW may be conducted in giant garter snake habitat during the dormant period. 1) A full-time USFWS- and CDFW-approved biological monitor will be onsite for the duration of construction activities. 2) A USFWS- and CDFW-approved biologist will assist the contractor or archeologist in avoiding disturbance of burrows in upland habitat during the dormant period. Archeological testing and data recovery sites will be placed to avoid excavating or collapsing burrows to the maximum extent possible. If burrows cannot be avoided, they will be carefully excavated by hand by a USFWS- and CDFW-approved biologist. The burrow will be visually examined before hand-excavation begins. Flexible tubing (such as pipe insulation) or empty water bottles will be placed in the burrow to keep it open while the burrow is excavated with hand tools. Once the burrow is excavated to the end of the tube or water bottles, the burrow will be visually examined and then the tubing or water bottles will be reinserted further into the burrow and the next section will be excavated. If a giant garter snake is found inside the burrow, excavation will stop and the biologist will immediately contact USFWS and CDFW. A biologist with a 10(a)1(A) permit for giant garter snake will be contacted to relocate the snake to another suitable burrow outside of the work area. 3) Temporarily disturbed habitat will be revegetated with native species when construction activities are complete.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect WILD-4: Potential Disturbance or Mortality of and Loss of Suitable Habitat for Giant Garter Snake	*WILD-MM-18*: Monitor Work in Giant Garter Snake Upland Habitat during the Active Period and/or Compensate for Temporary Loss of Suitable Giant Garter Snake Habitat	SBFCA or its construction contractor	A qualified biologist familiar with giant garter snakes hired by SBFCA	During the construction period of May 1 through October 1 (giant garter snake active period).	Per CDFW requirements, one or more biological monitors will be present during ground disturbing activities and vegetation removal in upland habitat during the active period and mitigation for temporary effects on upland habitat will be provided at a 0.5:1 ratio or mitigation for temporary effects on upland habitat will be provided at a 1:1 ratio without the monitoring requirement. For the proposed modifications, SBFCA will provide monitoring and compensate for the temporary loss of 13.93 acres of suitable upland habitat for giant garter snake by purchasing credits equal to 6.97 acres at a USFWS- and CDFW-approved conservation bank. The habitat at the conservation bank will be protected in perpetuity for giant garter snake. Prior to the start of construction, SBFCA will provide funding to the conservation bank for giant garter snake habitat credits. The transaction will take place through a purchase and sale agreement, and funds must be transferred within 30 days, and before any construction activities are initiated. SBFCA will provide the USFWS and CDFW with copies of the credit sale agreement and fund transfer.
Effect WILD-5: Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	SBFCA or its construction contractor	SBFCA or its construction contractor	During the construction period of September 1 through January 31 to the extent feasible.	To the maximum extent feasible, SBFCA will schedule vegetation (trees, shrubs, ruderal areas) removal/trimming during the nonbreeding season of birds (September 1–January 31). If vegetation removal cannot be removed in accordance with this timeframe, preconstruction surveys for nesting birds and additional protective measures will be implemented (see Mitigation Measure WILD-MM-13). SBFCA will not remove trees with active Swainson's hawk or other active raptor nests. Because white-tailed kite is fully protected, removal of trees with active nests and activities that may result in loss of white-tailed kites are prohibited. Removal of vegetation for relocation of PG&E facilities will be conducted during the nonbreeding season of birds (September 1–January 31) to the maximum extent feasible. When this is not possible, preconstruction surveys for nesting birds and additional protective measures will be implemented as described in Mitigation Measure WILD-MM-13.
Effect WILD-5: Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat	*WILD-MM-11*: Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction and Implement Protective Measures during Construction	SBFCA or its construction contractor	A qualified biologist (with raptor behavior experience)	Surveys to be conducted between February and July the spring prior to construction. Daily monitoring to be conducted during construction activities occurring during the breeding season to watch for any signs of stress.	During the spring prior to construction, focused surveys for Swainson's hawk will be conducted in the project area and in a buffer area up to 0.5 mile around the project area. The size of the buffer area surveyed will be based on the type of habitat present and line of sight from the construction area to surrounding suitable breeding habitat. Buffer areas containing unsuitable nesting habitat and/or with an obstructed line of sight to the project area will not be surveyed. Biologists will focus on suitable nest trees within and immediately adjacent to the project area that have the highest likelihood for disturbance. The number of surveys needed to determine the status of nesting will be dependent on the conditions during the surveys and behavior of the hawks. If needed, biologists will coordinate with DFG regarding the extent and number of surveys. Surveys would generally be conducted between February and July. Survey methods and results will be reported to DFG. If active nests are found, SBFCA will maintain a 0.25-mile buffer or other distance determined appropriate through consultation with DFG, between construction activities and the active nest(s) until it has been determined that young have fledged. In addition, a qualified biologist (experienced with raptor behavior) will be present on site (daily) during construction activities occurring during the breeding season to watch for any signs of stress. If nesting birds are observed to exhibit agitated behavior indicating that they are experiencing stress, construction activities will cease until the qualified biologist, in consultation with DFG, determines that young have fledged.
Effect WILD-5: Potential Loss or Disturbance of Nesting Swainson's Hawk and Loss of Nesting and Foraging Habitat	*WILD-MM-12*: Compensate for the Permanent Loss of Foraging Habitat for Swainson's Hawk	SBFCA or its construction contractor	SBFCA or its construction contractor	After conducting pre-construction surveys for Swainson's hawks.	Permanent removal of suitable foraging habitat for Swainson's hawks will be mitigated by providing offsite habitat management lands as described in DFG's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (California Department of Fish and Game 1994). The final acreage of off-site management lands to be provided will depend on the distance between the project area and the nearest active nest site. The mitigation ratio varies from 0.5:1 to 1:1 of habitat preserved for each acre lost. If acceptable to DFG, SBFCA also may be able to purchase mitigation credits for Swainson's hawk foraging habitat from a DFG-approved mitigation or conservation bank. Information on the nearest nest will be collected during Swainson's hawk surveys conducted under Mitigation Measure WILD-MM-11 to determine the appropriate mitigation ratio. If no active nests are found during this survey, a search of the CNDDB will be conducted, and DFG will be contacted to determine the nearest active nest.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect WILD-6: Potential Mortality or Disturbance of Nesting Special-Status and Non–Special Status Birds and Removal of Suitable Breeding Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*
Effect WILD-6: Potential Mortality or Disturbance of Nesting Special-Status and Non–Special Status Birds and Removal of Suitable Breeding Habitat	*WILD-MM-12*: Compensate for Permanent Loss of Foraging Habitat for Swainson's Hawk	See *Effect WILD-5, WILD-MM-12*	See *Effect WILD-5, WILD-MM-12*	See *Effect WILD-5, WILD-MM-12*	See *Effect WILD-5, WILD-MM-12*
Effect WILD-6: Potential Mortality or Disturbance of Nesting Special-Status and Non–Special Status Birds and Removal of Suitable Breeding Habitat	*WILD-MM-13*: Conduct Nesting Surveys for Special-Status and Non–Special Status Birds and Implement Protective Measures during Construction	SBFCA or its construction contractor	A quailed biologist hired by SBFCA	Surveys will be conducted prior to the start of construction and between February 1 and June 1.	SBFCA will retain qualified wildlife biologists with knowledge of the relevant species to conduct nesting surveys before the start of construction. A minimum of three separate surveys will be conducted between February 1 and June 1. Surveys will include a search of all suitable nesting habitat (trees, shrubs, ruderal areas, field crops) in the construction area. In addition, a 500-foot area around the project area will be surveyed for nesting raptors, and a 50-foot buffer area will be surveyed for other nesting birds. If no active nests are detected during these surveys, no additional measures are required. If active nests are found in the survey area, no-disturbance buffers will be established around the nest sites to avoid disturbance or destruction of the nest site until the end of the breeding season (approximately September 1) or until a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of the buffers will be determined by the biologists in coordination with USFWS and DFG and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. Larger buffer areas or other protective measures may be required for state-listed species (bald eagle, western yellow-billed cuckoo, or bank swallow) to ensure that mortality does not occur if SBFCA does not obtain an incidental take permit for these species. Because some bird species are difficult to detect (i.e., western yellow-billed cuckoo), measures such as avoiding work adjacent to suitable habitat during the early portion of the breeding season may be required, even if active nests are not found.
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-7*: Avoid and Minimize Potential Maintenance Impacts on Suitable Habitat for Giant Garter Snake and Western Burrowing Owl	See *Effect WILD-4, WILD-MM-7*	See *Effect WILD-4, WILD-MM-7*	See *Effect WILD-4, WILD-MM-7*	See *Effect WILD-4, WILD-MM-7*
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-14*: Conduct Surveys for Western Burrowing Owl prior to Construction and Implement Protective Measures if Found	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	Conduct surveys between February 15 and April 15, and April 15 and July 15, and September 1 to January 31.	DFG recommends western burrowing owl surveys whenever burrowing owl habitat is present on or within 500 feet of a project site. Breeding season and non-breeding season surveys will be conducted in accordance with DFG's 2012 Staff Report on Burrowing Owl Mitigation (2012 Staff Report) (California Department of Fish and Game 2012c). Breeding season will have four surveys: 1) one survey between February 15 and April 15 and 2) a minimum of three surveys at least three weeks apart between April 15 and July 15, with at least one survey after June 15. Non-breeding season surveys will consist of four surveys spread evenly throughout the non-breeding season (September 1 to January 31). A survey report will be prepared at the conclusion of surveys for submission to DFG. The report will include, but is not limited to, a description of the proposed project or proposed activity, proposed project start and end dates, and a description of disturbances or other activities occurring onsite or nearby (see Appendix D of the 2012 Staff Report). If burrowing owls are found during any of the surveys, compensatory mitigation best practices as described below will be used. Because ample lead time is necessary for putting compensation in place, these efforts should begin as soon as possible after presence of burrowing owls is determined. Regardless of results from the surveys described above, an initial take avoidance (preconstruction) surveys will be conducted no less than 14 days prior to and 24 hours before initiating ground disturbing activities. SBFCA will retain a qualified biologist to conduct preconstruction surveys for active burrows according to methodology in the 2012 Staff Report. Burrowing owls may re-colonize a site after only a few days. As such, subsequent take avoidance surveys will be conducted if a few days pass between project activities. If no burrowing owls are found, no further mitigation is required. If burrowing owls are found, SBFCA will use avoidance, minimization measures, monitoring, and reporting of such measures as described in the 2012 Staff Report (Mitigation Methods) and summarized below. 1) Do not disturb occupied burrows during the breeding season (February 1–August 31). 2) Establish a 250-foot-wide buffer where no construction will occur around occupied burrows unless a qualified biologist determines through non-invasive methods that egg laying and incubation have not begun or that juveniles are foraging independently and are capable of independent survival. 3) Avoid affecting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls. 4) Avoid destruction of unoccupied burrows and place visible markers near burrows to ensure they are not collapsed. 5) Develop and use a worker awareness program to increase the onsite worker recognition of and commitment to burrowing owl protection. 6) Conduct additional take avoidance surveys as described above. 7) Conduct ongoing surveillance of the project site for burrowing owls during project activities. 8) Minimize effects on burrowing owls and their habitat by using buffer zones, visual screens, and other measures during project activities. Recommended buffer distances in the 2012 Staff Report will be used or site-specific buffers and visual screens will be determined through information collected during site-specific monitoring and consultation with DFG.
Effect WILD-7: Potential Loss or Disturbance of Western Burrowing Owl and Loss of Nesting and Foraging Habitat	*WILD-MM-15*: Compensate for the Loss of Occupied Western Burrowing Owl Habitat	SBFCA or its construction contractor	SBFCA or its contractor	Best practices to be develop, as needed, after pre-construction surveys are conducted for western burrowing owl.	If western burrowing owls have been documented to occupy burrows at the project site in the last 3 years, current scientific literature supports the conclusion that the site should be considered occupied and mitigation is required. The current scientific literature also provides best practices. If best practices cannot be used, SBFCA may consult with the DFG to develop effective mitigation alternatives.
Effect WILD-8: Potential Injury, Mortality or Disturbance of Tree-Roosting Bats and Removal of Roosting Habitat	*WILD-MM-10*: Conduct Vegetation Removal Activities outside the Breeding Season for Birds	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*	See *Effect WILD-5, WILD-MM-10*

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect WILD-8: Potential Injury, Mortality or Disturbance of Tree-Roosting Bats and Removal of Roosting Habitat	*WILD-MM-16*: Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures	SBFCA or its construction contractor	A qualified biologist hired by SBFCA	Conduct tree removal/trimming between September 15 and October 30.	If tree removal/trimming cannot be conducted between September 15 and October 30, qualified biologists will examine trees to be removed or trimmed for suitable bat roosting habitat before removal/trimming. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch) will be identified and the area around these features searched for bats and bat sign (e.g., guano, culled insect parts, staining). Riparian woodland, orchards, and stands of mature broadleaf trees should be considered potential habitat for solitary foliage-roosting bat species. Bridges, buildings, and other structures that may provide suitable roosting habitat for bats will be examined by a biologist prior to disturbance or removal. Passive monitoring using full spectrum bat detectors may be needed if identification of bat species is required. Survey methods should be discussed with CDFW prior to the start of surveys. Measures to avoid and minimize impacts to sensitive bats species will be determined in coordination with CDFW and may include the following. 1) Removal or disturbance of trees and structures providing bat roosting habitat will be avoided between April 1 and September 15 (i.e., the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary). 2) Removal of trees and structures providing bat roosting habitat will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for nonvolant (i.e., non-flying) young. 3) Trees will be removed in pieces rather than felling an entire tree. 4) If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or a qualified biologist has determined the roost is no longer active. 5) If avoidance of nonmaternity roost habitat is not possible, and roost disturbance or removal must occur between October 30 and August 31, qualified biologists will monitor the disturbance or removal of the habitat. If possible, roost habitat disturbance or removal should occur in the late afternoon or evening when it is closer to the time that bats would normally arouse. Prior to trimming or removal of trees providing suitable roosting habitat, each tree will be shaken gently and several minutes should pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the project lead and CDFW. 6) Other methods to deter or exclude bats from a structure prior to removal or disturbance may be determined through coordination with CDFW. 7) The need for replacement roost habitat depends on the species present and the extent of the effect, and would be determined in consultation with CDFW.
Effect FISH-1: Loss or Degradation of Riparian and SRA Cover (including Critical Habitat)	*FISH-MM-1:* Compensate for Loss of California Central Valley Steelhead, Southern DPS North American Green Sturgeon, and Central Valley Spring-Run Chinook Salmon Critical Habitat	SBFCA or its construction contractor	SBFCA or its construction contractor	Mitigation credits will be purchased within 6 months after construction activities have ended.	SBFCA will implement off-site measures to compensate for permanent losses of riparian vegetation and SRA cover on the waterside slope of the levee. Compensation for riparian and SRA cover losses will be achieved through implementation of the riparian mitigation and monitoring plan described under Mitigation Measure VEG-MM-1 in the Final EIR. Specific to the Gridley Bridge Erosion Repair, SBFCA will compensate for the permanent loss of 0.30 acre of riparian scrub-shrub habitat, 0.02 acre of riparian forest habitat, and 106 linear feet (0.2 acre) of SRA cover by purchasing mitigation credits at a 2:1 ratio at Wildland's Freemont Landing Conservation Bank in Yolo County to fulfill the requirements of ESA Section 7 consultation. Mitigation credits will be purchased prior to commencement of construction activities.

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
Effect UTL-1: Potential Temporary Disruption of Irrigation/Drainage Facilities and Agricultural and Domestic Water Supply	*UTL-MM-1*: Coordinate with Water Supply Users before and during All Water Supply Infrastructure Modifications and Implement Measures to Minimize Interruptions of Supply	SBFCA	SBFCA	Implemented as needed before and during all water supply infrastructure modifications during construction activities.	The project proponent will ensure the following measures are implemented to avoid and minimize potential for domestic and irrigation water supply interruptions during construction activities. 1) Coordinate the timing of all modifications to domestic and irrigation water supply infrastructure with the affected infrastructure owners and water supply users. 2) Include detailed scheduling of the phases of modifications or replacement of existing domestic and irrigation water supply infrastructure components in project design and in construction plans and specifications. 3) Plan and complete modifications of irrigation infrastructure for the non-irrigation season to the extent feasible. 4) Provide for alternative water supply, if necessary, when modification or replacement of irrigation infrastructure must be conducted during a period when it otherwise would be in normal use by an irrigator. 5) Ensure either that users of irrigation water supply do not, as a result of physical interference associated with the project, experience a substantial interruption in irrigation supply when such supply is needed for normal, planned farming operations; or compensate users of irrigation water supply that experience a substantial decrease in an existing level of service (that meets the established standards for the project area) in kind for losses associated with the reduction in level of service.
Effect UTL-2: Damage of Public Utility Infrastructure and Disruption of Service	*UTL-MM-2*: Verify Utility Locations, Coordinate with Utility Providers, Prepare a Response Plan, and Conduct Worker Training	SBFCA	SBFCA	All activities will be conducted prior to beginning construction.	The project proponent will ensure the following measures are implemented to avoid and minimize potential damage to utilities and service disruptions during construction. Implementing these measures will help ensure that existing utilities are not damaged and that service interruptions are minimized. 1) Obtain utility excavation or encroachment permits as necessary before initiating any work with the potential to affect utility lines, and include all necessary permit terms in construction contract specifications. 2) Before starting construction, coordinate with the CVFPB and utility providers in the area to locate existing lines and to implement orderly relocation of utilities that need to be removed or relocated. Avoid relocating utilities when possible. Provide notification of potential interruptions in services to the appropriate agencies. 3) Before starting construction, verify utility locations through field surveys and the use of the Underground Service Alert services. Clearly mark any buried utility lines in the area of construction before any earthmoving activity. 4) Before starting construction, prepare a response plan to address potential accidental damage to a utility line. The plan will identify chain-of-command rules for notifying authorities and appropriate actions and responsibilities to ensure the safety of the public and the workers. Contractors will conduct worker training to respond to these situations. 5) Stage utility relocations to minimize service interruptions.
Effect PH-2: Exposure of the Environment to Hazardous Materials during Ground-Disturbing Activities	*PH-MM-1*: Complete Phase I and Phase II (if Necessary) Environmental Site Assessment Investigations and Implement Required Measures	SBFCA or its contractor	SBFCA or its contractor	Assessments will be conducted prior to beginning construction. Measures will be implemented before ground-disturbing or demolition activities begin.	SBFCA will conduct Phase I Environmental Site Assessments and, if necessary, Phase II Environmental Site Assessments or other appropriate testing. If necessary, before construction activities begin, the assessment will include an analysis of soil or groundwater samples for the potential contamination sites that were not covered by previous investigations. Recommendations in Phase I and Phase II Environmental Site Assessments to address any contamination that is found will be implemented before initiating ground-disturbing activities. In addition, SBFCA will implement the following measures before ground-disturbing or demolition activities begin, in order to reduce health hazards associated with potential exposure to hazardous substances. 1) Prepare a site plan that identifies any necessary remediation activities appropriate for proposed land uses, including excavation and removal of contaminated soils, and redistribution of clean fill material on the project site. The plan will include measures that ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site, as well as any other hazardous materials. In the event that contaminated groundwater is encountered during site excavation activities, the contractor will report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. The contractor will be required to comply with the plan and applicable Federal, state, and local laws. 2) Retain licensed contractors to remove all underground storage tanks. 3) Notify the appropriate Federal, state, and local agencies if evidence of previously undiscovered soil or groundwater contamination is encountered during construction activities. Any contaminated areas will be

Project Effect	Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Monitoring Schedule	Monitoring Details
					cleaned up in accordance with the recommendations of the Environmental Health Division for Sutter, Butte, and Yuba Counties, Central Valley RWQCB, California Department of Toxic Substances Control, or other appropriate Federal, state or local regulatory agencies. 4) Prepare a worker health and safety plan before the start of construction activities that identifies, at a minimum, all contaminants that could be encountered during construction activity; all appropriate worker, public health, and environmental protection equipment and procedures to be used during project activities; emergency response procedures; the most direct route to the nearest hospitals; and a site safety officer. The plan will describe actions to be taken should hazardous materials be encountered onsite, including protocols for handling hazardous materials and preventing their spread, and emergency procedures to be taken in the event of a spill.
Effect PH-2: Exposure of the Environment to Hazardous Materials during Ground-Disturbing Activities	*PH-MM-2*: Employment of a Toxic Release Contingency Plan	SBFCA's construction contractor	SBFCA's construction contractor	Implemented prior to beginning construction.	The construction contractor will coordinate with regional and local planning agencies to incorporate a toxic release contingency plan, pursuant to California Government Code Section 8574.16, which requires that regional and local planning agencies incorporate such a measure within their planning. Implementation of this plan will ensure the effective and efficient use of resources in the areas of traffic and crowd control; firefighting; hazardous materials response and cleanup; radio and communications control; and provision of medical emergency services.
Effect PH-3: Temporary Exposure to Safety Hazards from the Construction Site and Vehicles	*PH-MM-3*: Implementation of Construction Site Safety Measures	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing throughout the construction period.	The construction contractor will ensure that all workers are properly trained to operate equipment. Safety precautions will be followed at all times during construction to avoid accidents. The construction contractor will also require that all workers have valid drivers' licenses and insurance. Proper signage and detours will be provided to ensure public safety.
Effect PH-3: Temporary Exposure to Safety Hazards from the Construction Site and Vehicles	*PH-MM-4*: Implementation of an Emergency Response Plan	SBFCA's construction contractor	SBFCA's construction contractor	Ongoing throughout the construction period.	Development of an emergency response plan will ensure that any accidents that occur at the construction site will be responded to in the appropriate manner. The construction contractor will develop the emergency response plan, taking into consideration the location of nearby emergency response agencies as well as emergency response access routes and response times.
Effect CR-1: Effects on Identified and CRHR-eligible Archaeological Sites Resulting from Construction of Levee Improvements and Ancillary Facilities	*CR-MM-1:*Perform Data Recovery or Alternative Mitigation to Retrieve Information Useful in Research	SBFCA's qualified archaeologist	SBFCA	Ongoing throughout the construction period, if necessary and as follows. Option 1: Data recovery plan to be prepared and approved prior to commencing data recovery activities that includes a reporting schedule; or Option 2: Alternate Mitigation plan prepared and approved prior to implementation that includes a reporting schedule.	Prior to data recovery, SBFCA will prepare a brief data recovery plan or alternative mitigation plan that describes how SBFCA will retrieve the material associated with these sites that is useful in research(CEQA Guidelines § 15126.4(B)(3)[c]), which will include one of the following options in order to preserve and/or restore resources to the maximum extent feasible: • Option 1: if UAIC (for Native American sites or tribal cultural resources associated with the Wollok District) or either UAIC or Enterprise (for Native American sites or tribal cultural resources not associated with the Wollok District) agree that data recovery excavation is appropriate and the USACE agrees, or if mitigation is necessary for non-Native American archaeological sites is necessary, then the following general parameters will apply: ○ Data recovery excavations will be performed to retrieve a sample of the affected portion of these sites, in order to retrieve scientifically important material. Excavation will be conducted in arbitrary levels, and material removed will be divided and screened through a combination of 1/4" and 1/8" mesh screen, so as to capture both the gross cultural constituents and the finer material that can only be captured in fine mesh. Excavation will be conducted in 10-centimeter levels so that the horizontal association of different cultural materials is recorded. Removed material will be segregated by type and bagged with labels noting their horizontal and vertical location relative to an established datum point. The datum point will be recorded in the field with GPS to at least 10-centimer horizontal and vertical accuracy. ○ Faunal material (animal bone) will be segregated and studied by a qualified faunal analyst to identify the species pursued, relative abundance and diversity of different species present, and the manner in which the prey were processed by the occupants. ○ For Native American sites, if data recovery is allowed by tribes, obsidian glass will be retrieved and studied through both X-ray fluorescence (a method that allows the source of the obsidian to be identified) and obsidian hydration analysis (a method that allows approximate determination of the time when the material was subject to human modification).

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					○ Soil samples will be retrieved, with their horizontal and vertical location recorded, for flotation analysis (a method of separating light organic material such as fine plant remains from the deposit, in order to identify plant species pursued by historic populations). ○ If, in the course of data recovery excavations, it is determined that, contrary to available evidence, the resource lacks integrity, data recovery excavations will cease. ○ After completion of data recovery excavations SBFCA will prepare a data recovery report and summarize the results of these studies relative to regional research questions in the data recovery report. The report will be filed with the relevant information center of the CHRIS. For Native American sites, if data recovery is allowed by the tribes, SBFCA will then turn over the recovered material to UAIC (for Native American sites or tribal cultural resources associated with the Wollok District) or either UAIC or Enterprise (for Native American sites or tribal cultural resources not associated with the Wollok District) for reburial or storage at an appropriate curation facility, to the extent consistent with NHPA Section 106 and USACE requirements. For non-Native American sites that are subjected to data recovery, artifacts will be analyzed and curated at a USACE-approved curation facility. • Option 2: if, through consultation, UAIC (for Native American sites or tribal cultural resources associated with the Wollok District) or either UAIC or Enterprise (for Native American sites or tribal cultural resources not associated with the Wollok District) do not support recovery or analysis of materials from tribal cultural resources, then alternative mitigation to data recovery and analysis will include any or all of the following options, subject to approval from the USACE: ○ Writing a report based on any field notes and catalog information that may have been recorded during archaeological excavations to provide a descriptive record of the archaeological deposits ○ Analysis of culturally appropriate existing collections that are currently housed in curation facilities and are available for study from other archaeological sites of comparable size and antiquity to the affected sites ○ Hiring an ethnographer or other appropriate professional to work with the affected tribe(s) to further document the sites and project area. ○ Other tribal history recording, reproduction, or form of public interpretation developed in collaboration with the affected tribe(s). Construction will also be monitored, and discoveries made during construction will be managed per Mitigation Measures CR-MM-2 and CR-MM-3.
Effect CR-2: Potential to Disturb Unidentified or Known but not Located Archaeological Sites	*CR-MM-2:* Implement a Cultural Resources Discovery Plan, Provide Related Training to Construction Workers, and Conduct Construction Monitoring	SBFCA's qualified archaeologist	SBFCA	Completion of inventory and evaluation report of inaccessible areas prior to construction commencing in that previously inaccessible area.	SBFCA will complete the following management steps for currently inaccessible areas once rights of entry have been obtained: • After legal right-of-entry or access is obtained, and in consultation with UAIC and Enterprise Rancheria (for Sutter County and Butte County, respectively), SBFCA will complete an inventory and evaluation report for cultural resources, including archaeological resources. • The work will be led or supervised by cultural resources specialists who meet the Secretary of the Interior's professional qualification standards provided in 36 CFR Part 61 and UAIC and Enterprise Rancheria monitors will be afforded the opportunity to participate. • All newly identified resources will be mapped and described on DPR forms in consultation with UAIC and Enterprise Rancheria. Mapping will be completed by recording data points with GPS hardware through which data can be imported and managed digitally. Mapping of previously identified resources will be limited to updates of existing records where necessary to describe the current boundaries of the resource. • In consultation with UAIC and Enterprise Rancheria, SBFCA will evaluate the eligibility of identified resources for listing on the CRHR and determine if these resources can feasibly be preserved in place, or if data recovery or alternative mitigation following Mitigation Measure CR-MM-1, above, is appropriate. The methods of preservation in place shall be considered in the order of priority provided in CEQA Guidelines § 15126.4(b)(3).

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Effect CR-2: Potential to Disturb Unidentified or Known but not Located Archaeological Sites	*CR-MM-2:* Implement a Cultural Resources Discovery Plan, Provide Related Training to Construction Workers, and Conduct Construction Monitoring (continued)	SBFCA's qualified archaeologist	SBFCA	Qualified staff list developed prior to ground-disturbing activities commencing. Contractor training delivered no sooner than one week prior to and no later than the first day of ground-disturbing activities commencing, documented on an attendance roster.	SBFCA will develop a list of cultural resources staff who can respond to cultural resources discoveries; SBFCA, in consultation with the tribes, will also develop training materials for construction workers regarding management direction following discoveries. The staff list and training materials will be provided to the supervisory field staff. SBFCA will conduct training for construction workers that provides an overview of cultural resources identification and this mitigation measure. Prior to and during ground-disturbing construction, SBFCA will take the following actions in the event of inadvertent discovery of cultural resources. • All ground-disturbing work will be monitored by a qualified professional archaeologist and a tribal monitor from UAIC or Enterprise Rancheria for work in Sutter and Butte Counties, respectively. The monitors' tasks will include observing the active excavation of materials, as well as periodically checking excavated substrate and ensuring the respectful and culturally-appropriate treatment of finds. The tribal monitor will be provided sufficient work space and an unobstructed view of excavations. SBFCA will authorize the tribal monitor to pause construction, through the construction manager, periodically as needed for a closer examination of exposed sediments and/or artifacts. The tribal monitor will record their daily observations on a standard field form and may take photographs of project-related ground disturbance or activities that affect tribal resources or cultural items as needed. • In the event that potential tribal cultural items or human remains are discovered, all work at the specific location will cease immediately. The tribal monitor(s) are empowered to stop and relocate excavation activities, through the construction manager, pending further investigation by coordinating with SBFCA's construction inspector. The tribal monitor and, if present, the on-site consulting archaeologist, will assess whether the discovery is an archaeological and/or tribal resource. If a consulting archaeologist is not present, the SBFCA employee, construction inspector, or contractor will immediately contact the SBFCA Project Manager and the consulting archaeologist. • The tribal monitor, in cooperation with the consulting archaeologist, may photograph and describe the discovery and document its location. The discovery will be analyzed to determine whether it includes Burials, Burial Soils, Burial Objects, tribal cultural items or whether it is a non-tribal archaeological resource. Based on this analysis, the tribal monitor will recommend one of the following procedures: ○ If the tribal monitor determines that the discovery does not include Burials, Burial Soils, Burial Objects, or tribal cultural items, and if the consulting archaeologist determines that the discovery is not a non-tribal archaeological resource, then project-related ground disturbance may continue in the location of the discovery without Tribal involvement and once unanticipated discovery measures are carried through. ○ If the tribal monitor determines that the discovery includes Burials, Burial Soils, Burial Objects, or tribal cultural items, a 100-foot protective buffer area will immediately be established. SBFCA, in consultation with the Tribe, will take the necessary steps to protect the discovery and SBFCA will immediately initiate consultation with the tribes on feasible alternatives. Although immediate steps will be taken to protect the discovery from further damage, such as covering the discovery with a tarp, reburial, and cordoning-off a 100-foot area around the discovery from future ground disturbance, additional steps to be taken to protect the discovery will be determined through discussion between SBFCA, USACE, SHPO, and UAIC or Enterprise Rancheria. The SBFCA Project Manager will contact the USACE Archaeologist. They will consult with the Tribe and SHPO concerning the nature, significance, and extent of the discovery. The Parties will develop and implement a plan to accommodate modifications to project activities and/or reburial. Neither ground-disturbing excavations nor other, non-ground-disturbing activities may continue at the location of the discovery until the SBFCA Project Manager receives approval from USACE after the appropriate consultation between the USACE, SHPO, and affected tribe(s) has occurred. Authorization from the USACE will take the form of an email or hard copy document. Ground-disturbing activities are defined as those that have the potential to uncover cultural resources that may not be currently visible on the surface, and include the following: major or minor grading or earthwork; new or enlarged excavation for installation of fences, gates, utility poles, or culverts; and project activities defined as ground

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					disturbing in the revised draft Project Historic Property Treatment Plan (HPTP) and revised draft Resource Specific Treatment Plans (RSTPs). Non-ground-disturbing activities include: repaving and associated minor grading, fence, pole, or culvert replacement, when such work or replacement does not displace or expose soils determined by SBFCA and the appropriate tribe to be composed of culturally sensitive fill material; installation of material and equipment that occurs solely above-ground; removal of project environmental and erosion control measures; equipment demobilization; and other project closeout activities that do not displace or expose soils determined to be composed of culturally sensitive fill material. However, unusual circumstances may render the above categories inapplicable for some activities in some locations. For example, many of the activities above could be considered ground-disturbing if done near or within a known cemetery or recorded archaeological site. If there is any question, SBFCA will consult with the appropriate tribe prior to work occurrence. • In the event that suspected Native American human remains in any state of decomposition or skeletal completeness are found during project activities, SBFCA shall immediately contact the applicable County Coroner. The Coroner shall ensure that notification is provided to the NAHC as required by California Health & Safety Code § 7050.5 and Public Resources Code § 5097.98(a). Health and Safety Code Section 7050.5 establishes the authority of the County Coroner regarding the discovery of human remains and the role of the NAHC if the coroner determines that the remains are that of a Native American. Public Resources Code § 5097.98 deals with the notification process used by the Native American Heritage Commission for the discovery of Native American human remains, descendants, and also provides guidance for the appropriate and dignified disposition of human remains and associated grave goods. The procedures in the Burial Treatment Agreement (Mitigation Measure CR-MM-8) between the UAIC and SBFCA shall be followed. In the case of Enterprise Rancheria as the tribal monitor, SBFCA shall consult with the tribe on appropriate treatment. • If the discovery is determined to not be a tribal resource by the tribal monitor, but is determined by the consulting archaeologist or SBFCA to be a non-tribal cultural or archaeological resource subject to the terms of the Programmatic Agreement or any of its implementing documents, then the consulting archaeologist shall follow the procedures therein and as generally described above, without further involvement by the tribal monitor or tribe(s). • All tribal monitor decisions about whether discoveries are tribal resources will be documented in writing. If there is a dispute about a tribal monitor's decision, including disputes arising from SBFCA's refusal to acknowledge or respect the tribal monitor's decision or conflicting recommendations from tribal staff or monitors, SBFCA must consult with the tribe to confirm or reject the tribal monitor's decision. • If the discovery is an archaeological site not related to Native American culture, the Wollok District, or both, then SBFCA shall consult with the USACE on appropriate treatment, which will be in general conformance with CR-MM-1.
Effect CR-3; Potential to Disturb Human Remains, Including Known Tribal Cemeteries that Cannot be Located	*CR-MM-3:* Monitor Culturally Sensitive Areas during Construction and Follow State and Federal Laws Governing Human Remains if Such Resources are Discovered	SBFCA's qualified archaeologist; UAIC tribal monitor (Sutter County) and Enterprise tribal monitor (Butte County)	SBFCA	Archaeological monitor on-site during ground-disturbing activities at sensitive geographic locations.	SBFCA will retain a qualified archaeologist and UAIC and/or Enterprise Rancheria monitor(s), as applicable, to monitor areas of sensitivity for previously unidentified archaeological resources and human remains, as required under Mitigation Measure CR-MM-2. The following actions will be taken. • If human remains are discovered as part of the deposit or in isolation, work will cease in the immediate vicinity and within the radius necessary to avoid further disturbance, and the procedures in CR-MM-2 will apply. SBFCA, and the contractors will coordinate with the Butte or Sutter County coroner, as appropriate, and NAHC to make the determinations and perform the management steps prescribed in California Health and Safety Code §7050.5 and PRC §5097.98. This coordination requires the following steps. ○ The local county coroner will be notified so that he/she may determine if an investigation regarding the cause of death is required. If the coroner determines that the remains are of prehistoric Native American origin, the coroner will notify the NAHC. ○ Upon notification, the NAHC will identify the MLD, and the MLD will be given the opportunity to provide recommendations, including reinterment of the remains with appropriate dignity. If the NAHC fails to identify the MLD or if the parties cannot reach agreement as to how to reinter the remains as described in PRC §5097.98(e), the landowner will reinter the remains at a location not subject to further disturbance. SBFCA will ensure the protections prescribed in PRC §5097.98(e) are performed, such as the use of conservation easements and recording of the location with the relevant county.

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					SBFCA will include an overview of the potential for encountering human remains and an overview of this mitigation measure in the training performed under Mitigation Measure CR-MM-2.
Effect CR-4: Direct and Indirect Effects on Built Environment Resources Resulting from Construction Activities	*CR-MM-4:* Complete Inventory of Built Environment Resources in Inaccessible Parcels, Evaluate Identified Properties, Assess Effects, and Prepare Treatment to Resolve and Mitigate Significant Effects	SBFCA's qualified cultural resources consultant	SBFCA	Completion of inventory and evaluation report of inaccessible areas prior to construction commencing in that previously inaccessible area.	SBFCA will ensure that an inventory and evaluation report is completed for all currently inaccessible areas where effects on non-Native American built environment resources may occur. 1) The scope of the inventory will include the entire area where effects may occur. Such effects consist of direct disturbance, damage through vibration, and/or changes to the setting. 2) The work will be led or supervised by architectural historians who meet the Secretary of the Interior's professional qualification standards provided in 36 CFR Part 61. 3) Inventory methods and evaluation will include pedestrian surveys, photographic documentation, and historical research using primary and secondary sources, interviews, and oral histories. 4) Identified resources will be mapped and described on forms provided by DPR. Mapping will be performed by recording data points digitally with GPS hardware. 5) For all identified resources, SBFCA will determine if they are historical resources (State CEQA Guidelines §15064.5[a]), significant historical resources under CEQA (PRC §21084.1), and/or eligible for local registers. 6) The recorded resources and the resource evaluations will be summarized in an inventory report. In the inventory report, SBFCA will also determine if individual resources qualifying as historical resources will be subject to significant effects. SBFCA will make such a finding if the FRWLP would result in any of the following actions. • Demolish or materially alter the qualities that make the resource eligible for listing in the CRHR (State CEQA Guidelines §15064.5[b][2][A],[C]). • Demolish or materially alter the qualities that justify the inclusion of the resource on a local register or its identification in a historical resources survey meeting the requirements of PRC §5024.1(g), unless SBFCA establishes by a preponderance of evidence that the resource is not historically or culturally significant (State CEQA Guidelines §15064.5[b][2][B]). • Cause a substantial significant change in the significance of a historical resource (PRC §21084.1). 7) For all resources subject to significant effects, SBFCA will develop and implement treatment. Treatment will prioritize avoidance and preservation in place or relocation of individual CRHR-eligible buildings (non-contributing or unaffected buildings would remain in place). Where avoidance or relocation is not feasible, standard treatment such as documentation through the Historic American Buildings Survey, Historic American Landscape Survey, Historic American Engineering Record, or district documentation will be completed. Interpretive displays, online resource, and historic contexts or walking tours may also be used, as appropriate.
Effect CR-5: Effects on Identified Tribal Cultural Resources, Including those that are Known but Cannot be Located	*CR-MM-5:*Design Alternatives	SBFCA	SBFCA	Review of design alternatives prior to start of construction. Ongoing throughout the construction period.	SBFCA has analyzed and will continue to analyze and explore with the UAIC design alternatives on all components of the project that could avoid or lessen the potential damage to the cemeteries, burial grounds and ceremonial sites before ground-disturbing activities commence and/or begin. This may include, but is not limited to, discussions of alternatives as part of consultation meetings, providing copies of proposed project plans, and making adjustments to plans and construction methods during construction. Unforeseen discoveries of cultural resources may occur despite advance exploration, requiring the consideration of design adjustments during construction. Depending on the specific geotechnical conditions encountered during excavation activities, SBFCA will analyze and explore design modifications to the alignment and grade of these excavations to avoid or mitigate cultural resource effects, in consultation with UAIC.
Effect CR-5: Effects on Identified Tribal Cultural Resources, Including those that are Known but Cannot be Located	*CR-MM-6:* Tribal Consultation Policy	SBFCA	SBFCA	Policy approved by SBFCA board prior to start of construction.	With and in agreement with the culturally affiliated tribes to the FRWLP, SBFCA must develop a tribal consultation policy. The policy shall include statements regarding the importance of pre-project planning consultation and a commitment to meaningful consultation with all applicable tribes. SBFCA shall afford UAIC an opportunity to comment on the policy statement prior to adoption by the board of directors. The policy shall be in effect prior to ground-disturbing work commencing under the Supplemental EIR.

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Effect CR-5: Effects on Identified Tribal Cultural Resources, Including those that are Known but Cannot be Located	*CR-MM-7:* Repatriate Human Remains	SBFCA	SBFCA	Ongoing throughout the construction period.	SBFCA shall immediately repatriate all previously excavated human remains, burial goods, and soils from the Project site for which UAIC is the designated MLD, without further scientific testing or analysis, to the UAIC, and to allow for reburial as close to the original location they were obtained. This measure also applies to any additional human remains, burial goods and soils which may be encountered as indicated in Mitigation Measure CR-MM-8 below. Repatriation shall occur prior to ground-disturbing work commencing under the Supplemental EIR.
Effect CR-5: Effects on Identified Tribal Cultural Resources, Including those that are Known but Cannot be Located	*CR-MM-8:* Develop a Burial Treatment Agreement with UAIC	SBFCA	SBFCA	Agreement developed in agreement with UAIC prior to start of construction.	SBFCA will develop in agreement with UAIC a Burial Treatment Agreement (BTA) based on the draft agreement authored by UAIC. The BTA will govern the disposition and treatment of all human remains, objects, and soil disturbed or removed from the project areas for which UAIC has been or is later designated as the MLD. The BTA shall include provisions for reburial without scientific handling, testing, or analysis as close as possible to the original location from which they were obtained, and must be mutually agreed-upon by both SBFCA and UAIC prior to the commencement of ground-disturbing activities associated with the proposed project modifications. This BTA shall be approved by both parties prior to ground-disturbing work commencing under the Supplemental EIR.
Effect CR-5: Effects on Identified Tribal Cultural Resources, Including those that are Known but Cannot be Located	*CR-MM-9:* Develop a Cultural Resources Agreement with UAIC	SBFCA, UAIC tribal monitor (Sutter County), Enterprise tribal monitor (Butte County)	SBFCA	Agreement developed in agreement with UAIC prior to start of construction. Tribal monitor on-site during construction at sensitive geographic locations.	SBFCA shall develop in agreement with UAIC a Cultural Resources Treatment Agreement, which will include a tribal monitoring program for UAIC representatives to participate in all survey and ground-disturbing work performed on the FRWLP to which they are culturally affiliated. This Agreement shall be agreed upon by both parties prior to ground-disturbing work commencing on the FRWLP. All ground-disturbing activities shall be monitored by an appropriate number of qualified tribal monitors. By mutual agreement of the Tribes, the UAIC shall monitor the Laurel Avenue site and Enterprise Rancheria shall monitor the Gridley Bridge Erosion site. SBFCA shall provide 7 calendar days' notice to tribes of planned ground-disturbing activities. The monitors' tasks will include observing the active excavation of materials, as well as periodically checking excavated substrate and ensuring respectful and culturally-appropriate treatment. SBFCA will authorize the tribal monitor to pause construction, through the construction manager, periodically as needed for a closer examination of exposed sediments and/or artifacts. The tribal monitor will record their daily observations on a daily monitoring log and may take photographs of Project-related ground disturbance or activities that affect tribal resources or cultural items as needed. In the event that potential tribal cultural items or human remains are discovered, all work at the specific location will cease immediately. The tribal monitor is empowered to stop and relocate excavation activities, through the construction manager, pending further investigation by coordinating with SBFCA's construction inspector. The tribal monitor and, if present, the on-site consulting archaeologist, will assess whether the discovery is an archaeological and/or tribal resource. If the determination is made that the find represents a cultural resource or tribal cultural resource, then the provisions in CR-MM-2 for unanticipated discoveries shall apply.
Effect CR-5: Effects on Identified Tribal Cultural Resources, Including those that are Known but Cannot be Located	*CR-MM-10:* Ethnographic Study	SBFCA's qualified anthropologist	SBFCA	Ethnography report finalized and distributed within 2 years of the completion of the project modifications.	An ethnographic study of the FRWLP will be conducted by an anthropologist who meets the Historic Preservation Professional Qualifications Standards for Cultural Anthropology, published by the National Park Service. Goals of the study will be to document the traditional lifeways of Native American groups with ties to the lower Feather River watershed and address the Wollok District. The study will include, but not be limited to, interviews with tribal elders, review of existing ethnographic literature, oral histories, historic documentation, historic maps, linguistic studies, and archaeological research. The ethnography will follow the Seven Principles of the American Anthropological Association's Statement on Ethics. The ethnography shall be completed and the ethnographic report finalized and distributed within 2 years of the completion of the project modifications and work authorized under this Supplemental EIR.