

EXHIBIT A

FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS

FOR

UPDATED LOCAL FUNDING MECHANISMS FOR SACRAMENTO AREA FLOOD CONTROL IMPROVEMENTS

I. INTRODUCTION

The Sacramento Area Flood Control Agency (“SAFCA”), as lead agency under the California Environmental Quality Act (“CEQA”), Public Resources Code section 21000 et seq., has prepared a Subsequent Program Environmental Impact Report (“SEIR”) on Updated Local Funding Mechanisms for Sacramento Area Flood Control Improvements (“program”) (State Clearinghouse No. 2006072098). The SEIR is a program-level environmental impact report (“EIR”) pursuant to section 15168 of the CEQA Guidelines (14 CCR § 15000 et seq.). The SEIR consists of the February 2016 Draft SEIR and Appendices and the April 2016 Final SEIR document.

In determining whether to approve the changes in SAFCA’s local funding mechanisms for flood control improvements (“program changes”), which are described in Section II, below, SAFCA makes and adopts findings of fact and a statement of overriding considerations, and adopts and incorporates into the program the mitigation measures identified in the SEIR, all based on substantial evidence in the administrative record as a whole. Pursuant to CEQA Guidelines section 15096(a), the Final SEIR was presented to SAFCA, and SAFCA reviewed and considered the information contained in the Final SEIR prior to making the findings below. The conclusions presented in these findings are based on the SEIR and other evidence in the record.

II. PROJECT DESCRIPTION

The SEIR evaluates a restructuring of SAFCA’s existing local funding mechanisms involving creation of a new assessment district to replace the existing consolidated capital assessment district (“CCAD”) and updating the existing Development Impact Fee (“DIF”). These changes are necessary to support improvements required to meet current State and Federal flood risk management standards. CCAD2 would be based on new California Department of Water Resources (“DWR”) floodplain mapping data, developed pursuant to the requirements of the Central Valley Flood Control Improvement Act of 2008, and 2010 United States Army Corps of Engineers (“USACE”) depth damage curves. CCAD2 would replace the existing CCAD following redemption of existing CCAD bonds. The updated DIF program would expand the potential uses of DIF revenues to include support for the ongoing State/Federal/local effort to increase the conveyance capacity of the Sacramento and Yolo Bypass Systems.

As fully described in Chapter 3 of the Draft SEIR and summarized below, the program changes would allow for funding of three additional components (“funded

facilities”) that were not evaluated in other EIRs and that would be eligible to be funded by CCAD2 or the updated DIF: lower Sacramento River erosion control, Yolo and Sacramento Bypass system improvements, and levee modernization.¹ The objectives of the program changes, as for the program as a whole, are to: (1) complete the projects necessary to provide 100-year flood protection for developed areas in Sacramento’s major floodplains as quickly as possible; (2) achieve the State of California’s 200-year flood protection standard for these areas within the timeframe mandated by the Legislature; and (3) improve the resiliency, robustness and structural integrity of the flood control system over time so that the system can safely contain flood events larger than a 200-year flood.

A. Lower Sacramento River Erosion Control

- Implement up to about 10 miles of rock bank protection and launchable rock trenches along the banks of the Sacramento River East Levee between Freeport and the mouth of the American River to prevent erosion of flood control structures during sustained high flow events.

B. Yolo and Sacramento Bypass System Improvements

- Lengthen the existing Sacramento Weir by approximately 1,500 to 1,800 feet extending northward from the northerly end of the existing weir along the current alignment of the Sacramento River West Levee.
- Construct new setback levees along (1) approximately 2 miles of the north side of the Sacramento Bypass between the lengthened Sacramento Weir and the Yolo Bypass, and (2) approximately 5 miles of the east side of the Yolo Bypass between Interstate 5 (I-5) and the new Sacramento Bypass North Levee. Seasonal agricultural use of the land in the areas enclosed by the new levee setbacks would be maintained.
- Relocate water and drainage infrastructure pumps and related facilities at various locations along the existing Sacramento Bypass North Levee and the existing Yolo Bypass East Levee downstream of I-5 to appropriate locations along the new setback levee.
- Remove the Old Bryte Landfill through disposal and recycling at licensed facilities of the wastes contained in the landfill based on waste characterization results, and restore the site for potential agricultural use. Landfill contents that are not characterized as Class I hazardous waste could be disposed at the Kiefer Landfill (Sacramento County), the L and D Landfill (Sacramento County), the Yolo County Central Landfill, and the Potrero Landfill (Solano County). Hazardous waste from the

¹ Chapter 2 of the Draft SEIR describes the remaining activities that would continue to be funded and were the subject of prior environmental review in a SAFCA 2007 program-level EIR (see Part III, below).

Old Bryte Landfill would likely be disposed at the Buttonwillow Landfill (Kern County). Some landfill contents might be reused on-site.

- Elevate approximately 1,500 to 1,800 linear feet of the Sierra Northern Railway line along its current alignment through the widened portion of the Sacramento Bypass or alternatively relocate approximately seven miles of the line to west side of the Yolo Bypass.
- Relocate Yolo County Road 124 to the landside toe of the new setback levees and north of extended Sacramento Weir, respectively.
- Excavate benches along the eastern edge of the Tule Canal to provide borrow material for levee construction and establish a woodland corridor along the eastern edge of the Tule Canal south of I-5.
- Strengthen portions of the Reclamation District No. 2068 (RD 2068) levee along the west side of the Yolo Bypass between Cache Slough and Midway Road to resist increases in floodwater conveyed to the lower portion of the bypass through the widened Sacramento Weir and Bypass.
- Construct a new floodwall to protect portions of the City of Rio Vista south of State Route 4 against increases in floodwater conveyed to the lower portion of the Yolo Bypass through the widened Sacramento Weir and Bypass.

C. Levee Modernization

- Provide access to and/or visibility of up to 20 feet along the landside toe of the American River North and South Levees of the American River, the Sacramento River East Levee, and Arcade Creek North and South Levees in order to bring these levee systems into compliance with applicable State and Federal standards and allow responsible levee-maintenance personnel to conduct flood patrols and respond to signs of stress during large flood events. Based on a screening-level review of the existing conditions, it is estimated that approximately 11 miles of these levee systems do not currently meet the applicable standards. As noted in Draft SEIR Section 2.2.5, the rights necessary to secure the requisite access or visibility must be secured over the next 40 years. SAFCA is working with the City and County of Sacramento and the American River Flood Control District on a plan to accomplish this objective.

III. ENVIRONMENTAL REVIEW PROCESS

The SEIR analyzes changes to the local funding mechanisms program that was analyzed in SAFCA's 2007 Final Environmental Impact Report on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area (State Clearinghouse No. 2006072098) ("2007 EIR"), which was certified in February 2007. The 2007 EIR was a program-level EIR, pursuant to CEQA Guidelines section 15168, which analyzed funding mechanisms for improvements to the flood control

system protecting low-lying lands in the Sacramento area situated at the confluence of the American and Sacramento Rivers.

Since the certification of the 2007 EIR, additional data on the condition of existing flood control facilities in the Sacramento area have been developed, more stringent Federal and State levee engineering criteria have been adopted, and opportunities for improving the flood bypass system west of Sacramento have been identified. Consequently, the scope and cost of SAFCA's flood system improvements program have increased. The program changes analyzed in the SEIR consist of changes to the local funding mechanisms as necessary to support this updated program.

The SEIR analyzes changes to the flood control projects that could be financed by the new and updated local funding mechanisms, as summarized in Part II, above, and fully described in Chapter 3 of the Draft SEIR. A subsequent program EIR is appropriate because the proposed changes to SAFCA's program that could be implemented using the new and updated funding mechanisms may result in new or substantially more severe significant environmental effects. (CEQA Guidelines § 15162.) And as in the 2007 EIR, these effects are described and evaluated at a program-level in the SEIR.

On September 17, 2015, SAFCA issued a Notice of Preparation ("NOP") for a program-level subsequent EIR. The NOP was filed with the State Clearinghouse and circulated to governmental agencies and the public for review and comment. A scoping meeting was held on October 6, 2015, to solicit input on the scope and content of the SEIR from interested agencies, individuals, and organizations. The Draft SEIR was published on February 1, 2016, for a 45-day public comment period that ended on March 16, 2016. During that time, the Draft SEIR was reviewed by various governmental agencies, interested individuals, and organizations, SAFCA held a public hearing during the public comment period on February 18, 2016. Five comment letters were received during the public comment period, and one member of the public spoke during the public hearing.

Assembly Bill ("AB") 52, which took effect on July 1, 2015, amended CEQA and added new sections relating to Native American consultation and certain types of cultural resources. AB 52 requires the CEQA lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project before the determination of whether a negative declaration, mitigated negative declaration, or EIR is required, if the Tribe requests the lead agency, in writing, to be informed by the lead agency through formal notification of the proposed projects in the area and the Tribe thereafter requests consultation. In addition, AB 52 includes time limits for certain responses regarding consultation. AB 52 also adds "tribal cultural resources" to the specific cultural resources protected under CEQA. (Pub. Resources Code § 21074.) Public Resources Code section 21084.3 has been added to CEQA, which states that "public agencies shall, when feasible, avoid damaging effects to any tribal cultural resources." The Governor's Office of Planning and Research ("OPR") has until July 1, 2016, to develop guidelines. By that date, the Native American Heritage Commission ("NAHC") will inform tribes which agencies are in their traditional area. In the absence of the adopted guidelines, OPR suggests addressing whether a project would

cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. AB 52 took effect after SAFCA issued the NOP for the program changes. Nonetheless, on November 10, 2015, SAFCA initiated AB 52 consultation by sending letters to interested Native American groups, based on a list provided by the NAHC. The United Auburn Indian Community (“UAIC”) indicated an interest in the project. SAFCA provided UAIC with information on the project, and UAIC provided setting information and input on suggested mitigation measures for cultural resources through conversations and correspondence with SAFCA’s representative.

The Final SEIR document, published in April 2016, includes comments on the Draft SEIR, responses to those comments, and revisions to the Draft SEIR. Lead agencies are required to provide responses to any commenting agency’s comments on a Draft EIR at least 10 days before the certification of the Final SEIR. (CEQA Guidelines § 15088[b].) The Final SEIR document and the Mitigation Monitoring and Reporting program (“MMRP”) were released and sent to agencies that commented on the Draft SEIR on April 11, 2016. As a courtesy, SAFCA also provided electronic notice of the availability of the Final SEIR document, including responses to comments, to all commenters on April 11, 2016.

After this review period, the SEIR was presented to the SAFCA Board for review. The analysis and conclusions contained in the SEIR reflect the independent judgment of SAFCA. The Board considered the comments on the Draft SEIR and the responses to comments, as well as the whole of the administrative record, and determined the SEIR should be certified as adequate under CEQA.

IV. FINDINGS

These findings summarize the environmental determinations of the SEIR about the significant effects on the environment (“impacts”) of the program changes before and after mitigation, and do not attempt to repeat the full analysis of each environmental impact contained in the SEIR. Instead, these findings provide a summary description of and basis for each impact conclusion identified in the SEIR; describe the applicable mitigation measures identified in the SEIR; and state SAFCA’s findings and rationale about the significance of each impact following the adoption of mitigation measures. A full explanation of these environmental findings and conclusions can be found in the SEIR, and these findings hereby incorporate by reference the discussion and analysis in the SEIR supporting the SEIR’s determinations regarding mitigation measures and the program’s impacts.

In adopting the mitigation measures below, SAFCA intends to adopt each of the mitigation measures identified in the SEIR. Accordingly, in the event a mitigation measure identified in the SEIR has been inadvertently omitted from these findings, such mitigation measure is hereby adopted and incorporated into the program and the findings below, by reference. In addition, in the event the language of a mitigation measure set forth below fails to accurately reflect the mitigation measure in the SEIR due to a clerical error, the language of the mitigation measure as set forth in the SEIR shall control unless

the language of the mitigation measure has been specifically and expressly modified by these findings. Finally, acronyms used in the mitigation measures that are not defined in these findings are defined on pages i and ii of the MMRP and are incorporate herein by reference.

Sections V through X, below, provide brief descriptions of the impacts that the SEIR identifies as significant and unavoidable, less than significant with adopted mitigation, and less than significant. These descriptions also reproduce the full text of the mitigation measures identified in the SEIR for each significant impact.

V. SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS AND DISPOSITION OF RELATED MITIGATION MEASURES

The SEIR identifies the significant and unavoidable adverse impacts associated with the program changes described below, and it identifies related mitigation measures. It is hereby determined that these significant and unavoidable adverse impacts are acceptable for the reasons specified in Section XI, below.

A. Impact AG-1. Conversion of Agricultural Land, including Important Farmland, to Nonagricultural Uses.

There are no agricultural land uses where construction of rock bank protection and launchable rock trenches along the Sacramento River East Levee and construction of the new floodwall in the City of Rio Vista would occur. Existing agricultural land uses would not change substantially in the areas with new setback levees in the expanded Yolo and Sacramento Bypasses. However, incorporation of currently protected farmland into the Yolo and Sacramento Bypass Systems could diminish the agricultural productivity of the affected land. In addition, establishment of a woodland corridor along the eastern edge of the Tule Canal south of I-5 would preclude continued use of several hundred acres of farmland for agricultural production. Therefore, implementation of the program changes could result in the conversion of agricultural land, including important farmland, to nonagricultural uses. This impact would be potentially significant.

Mitigation Measure AG-1, which is hereby adopted and incorporated into the program, would reduce this impact through acquisition of conservation easements or similar mechanisms, but not to a less-than-significant level, because no new agricultural land would be created. Therefore, this impact would remain significant and unavoidable.

Mitigation Measure AG-1: Implement Measures to Minimize Impacts to Agricultural Productivity and Compensate for Unavoidable Conversions of Agricultural Land to Nonagricultural Use.

The agency(ies) implementing program components shall implement measures to reduce impacts associated with conversion of agricultural land to nonagricultural use in accordance with local policies and ordinances. These measures may include, but are not limited to:

- *Purchase of mitigation lands and/or creation of conservation easements at the ratio required by the host county (i.e., 2:1 for nonprime or 3:1 for prime farmland in Yolo County), in locations satisfactory to the host county; or*
- *Payment of in-lieu fees at a rate established by the host county, if mitigation lands or conservation easements are not purchased; or*
- *Development of programs and projects that directly mitigate impacts to diminished agricultural capacity and reduced economies of scale; or*
- *Contribution to an Agricultural Sustainability Fund.*

B. Impact CR-2. Possible Damage to or Destruction of Identified or Unidentified Archaeological Resources.

Construction of or improvements to levees or other flood control structures, relocation of railroad alignments, and other actions that include ground-disturbing activities have the potential to damage or destroy prehistoric (Native American) archaeological sites. Disturbance of archaeological resources could compromise the physical integrity, information potential, and Native American value of archaeological deposits. This impact would be potentially significant.

Mitigation Measures CR-2, CR-3, and CR-4, which are hereby adopted and incorporated into the program, would reduce this impact, but not to a less-than-significant level, because the extent of damage to or destruction of presently-unidentified resources could remain significant despite all feasible monitoring, inventory, avoidance, and treatment measures. Therefore, this impact would remain significant and unavoidable.

Mitigation Measure CR-2: Implement Procedures for Inventory and Evaluation of Archaeological Resources, Implement Feasible Avoidance or Treatment Measures.

The agency implementing an individual program component shall inventory and evaluate prehistoric and historic archaeological resources in the program area. At a minimum, the inventory shall include records searches at the applicable Information Center of the California Historical Resources Information System; and a pedestrian archaeological survey of undeveloped and unpaved areas; and subsurface archaeological investigations if needed to identify buried archaeological deposits. If the resource is Native American in origin, additional Native American consultation, other ethnographic research, and a search of the NAHC Sacred Lands Database shall be conducted. If the cultural resource is of an ethnographic group other than Native American, historic societies, ethnographic societies, and historic archival research shall be conducted. Additional non-invasive methods may also be warranted and should be determined in consultation with all consulting parties. Resource recording procedures shall be implemented consistent with DPR 523 forms requirements; and reporting requirements.

The cultural resources inventory shall be conducted under the direct supervision of cultural resources specialists meeting the Secretary of the Interior's Professional Qualification Standards for the applicable field. All identified cultural resources shall be recorded on DPR 523 forms, and the location of each archaeological resource shall be recorded using a Global Positioning System device.

Following completion of the cultural resources inventory, an inventory report shall be prepared by qualified cultural resources specialists that describes the cultural setting of the program area; the methods used in the investigation; all identified cultural resources, including archaeological sites, tribal cultural resources, traditional cultural properties (intangible resources of significance to Native American tribe, other ethnographic group, or a local community), and cultural landscapes; and recommendations for further investigations, avoidance or other management actions. Each cultural resource identified in the component program area shall be evaluated for eligibility for listing on the CRHR and NRHP. Tribal cultural resources shall be evaluated in consultation with culturally affiliated tribes and the views of consulting tribes shall be included in the report. The cultural resources inventory report shall meet the documentation standards as described in 36 CFR 800.11 and shall be prepared by individuals meeting the Secretary of the Interior's Professional Qualifications Standards (48 Federal Register 44738–44739).

If ground-disturbance would be required in the vicinity of a known Native American archaeological resource, a qualified professional archaeologist in consultation with culturally affiliated Native Americans shall establish the boundaries of the resource before the commencement of any ground-disturbance. If feasible, the project activities shall be designed to prevent disturbance of the resource. If, in the judgment of the archaeologist or tribal representative, project activities could disturb the resource, the archaeologist in consultation with tribal representatives and other qualified professionals shall prepare and implement a research design and treatment plan for archaeological resources and, before any construction-related ground-disturbance begins in the vicinity of the resource, shall carry out a testing program, as appropriate, based on the plan to determine whether the resource may meet the definition of a unique archaeological resource or an historical resource. If the construction activity is part of a Federal undertaking, all actions shall be conducted in compliance with Section 106 of the NHPA as well as State laws.

If the resource is determined to be ineligible for listing on the CRHR and the NRHP and is determined not to meet the definition of a unique archaeological resource, and is not an historical resource, no further mitigation shall be required. If the resource is found to potentially meet the definition of a unique archaeological resource or an historical resource and is of Native American origin, the archaeologist and consulting Native American tribes shall recommend additional actions determined to be necessary for the protection and documentation of the resource, as appropriate.

Avoidance and preservation-in-place is the preferred manner of mitigating impacts to cultural resources and may be accomplished by several means, including planning construction to avoid archaeological sites; incorporation of sites within parks,

greenspace, or other open space; covering archaeological sites; deeding a site into a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources of Native American origin will be reviewed by the lead CEQA agency, culturally affiliated Native American tribes, and the appropriate agencies in light of factors such as costs, logistics, technological feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives.

Recommendations for avoidance of cultural resources that are not of Native American origin will be reviewed by the lead CEQA agency and other appropriate agencies. Avoidance and design alternatives may include realignment within the program area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources, or modification or realignment to avoid highly significant features within a cultural resource. For resources that are of Native American origin, culturally affiliated Native American tribes shall be invited to review and comment on these analyses and shall have the opportunity to meet with the lead CEQA agency and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

The agency implementing the construction activity shall ensure that required protection actions are implemented before construction begins at the site. If artifacts are recovered from significant resources that are of Native American origin, their disposition shall be determined in consultation with Native Americans and consulting State and Federal agencies. If artifacts are recovered from significant resources that are not of Native American origin, their disposition shall be determined in consultation with consulting State and Federal agencies. The results of the identification, evaluation, and/or data recovery program shall be presented in a professional report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the appropriate repositories.

Mitigation Measure CR-3: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas During Construction.

If the results of the inventory of cultural resources, including the results of Native American consultation, in a program component project area indicates that portions of or all of a program area are sensitive for the presence of buried or otherwise obscured or unidentified cultural resources of any kind (Native and non-Native American), or tribal cultural resources (including Native American burials), a Native American and archaeological monitoring plan shall be developed and implemented in consultation with culturally affiliated tribes. The monitoring plan shall specify under what conditions monitoring will be conducted, the methods of monitoring, the conditions under which construction work may be stopped or slowed, the conditions under which construction work may be resumed, the roles and authority of monitors, communication protocols, and reporting requirements. Archaeological monitoring shall be conducted by or under the

supervision of an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology. Native American monitoring shall be conducted by a Monitor or Representative of a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the project.

Mitigation Measure CR-4: Stop Work If Archaeological Materials are Discovered during Construction, Assess Significance of the Materials, and Implement Appropriate Avoidance or Treatment Measures, if Warranted.

If archaeological materials are inadvertently discovered during ground-disturbing activities, the agency implementing the program component shall ensure that work is stopped within 100 feet of the find, and a qualified archaeologist shall be retained to assess the significance of the find and develop appropriate treatment measures in cooperation with consulting parties, including culturally affiliated Native American Tribes if the find is a Native American archaeological site. Treatment measures typically include developing avoidance strategies or mitigating impacts through data recovery programs, such as excavation or detailed documentation, alternative mitigation, and, for sites of Native American origin, mitigation informed through tribal consultation. The appropriate treatment depends on the situation of the discovery and the views of consulting parties. Some Tribes consider data recovery programs to cause substantial adverse changes to unique historical, archaeological and tribal cultural resources; therefore, data recovery is not always the best option for mitigation.

The agencies implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to reduce the potential for previously undiscovered cultural resources to be encountered and damaged during construction activities:

- *Before the commencement of construction, a qualified professional archaeologist and a tribal monitor or representative shall give a presentation to all construction personnel regarding the likelihood and type of Native American and non-Native American resources that might be found during construction operations associated with the individual flood control projects, and measures that shall be taken in the event that potential archaeological or historical resources are found during construction. The presentation shall include providing all construction personnel with standard operating procedures and points of contact in the event of a discovery of cultural material during construction. Consulting culturally affiliated Native American Tribes shall be provided with project schedule information and points of contact in the event of a discovery of cultural material.*
- *If unrecorded cultural resources (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) are encountered during the site survey or during construction activity, all ground-disturbing activities shall be restricted within a 100-foot radius of the find or a distance determined by a qualified professional archaeologist in consultation with a tribal representative to be appropriate based on the potential for disturbance of additional cultural resource materials. A qualified*

archaeologist, in consultation with a monitor or representative from a culturally affiliated Native American Tribe, shall identify the materials, determine their potential to meet the definition of a unique archaeological resource or a historical resource, and formulate appropriate measures for their treatment, which shall be implemented by the agency implementing the project. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, no action (i.e., resources determined not to be significant), avoidance of the resource through changes in construction methods or project design, implementation of protection and management measures, alternative mitigation (such as funding a cultural resources program or off-site cultural resources facility), and/or implementation of a program of testing and data recovery, in accordance with all applicable Federal and State requirements.

For unique archaeological resources and archaeological historical resources, the preferred mitigation is preservation-in-place of as much of the resource as possible, where feasible, through project modification or protective measures. In some cases, archaeological data recovery can mitigate impacts that cannot be avoided.

C. Impact CR-3. Possible Damage to or Destruction of a Tribal Cultural Resource.

Tribal Cultural Resources include sites, features, places, cultural landscapes, traditional cultural properties (of Native American origin), sacred places, and objects with cultural value to a California Native American tribe. It is likely that tribal cultural resources, including sanctified cemeteries, shrines, sacred sites, and traditional cultural properties, are present within the program area. Construction of funded facilities could affect Tribal Cultural Resources. Disturbance of tribal cultural resources could compromise the physical integrity, setting, and Native American value of these resources. This impact would be potentially significant.

Mitigation Measures CR-3 and CR-5, which are hereby adopted and incorporated into the program, would reduce this impact, but not to a less-than-significant level, because the extent of damage to or destruction of tribal cultural resources could remain significant despite all feasible monitoring, inventory, avoidance, and treatment measures. Therefore, this impact would remain significant and unavoidable.

Mitigation Measure CR-3: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas During Construction.

If the results of the inventory of cultural resources, including the results of Native American consultation, in a program component project area indicates that portions of or all of a program area are sensitive for the presence of buried or otherwise obscured or unidentified cultural resources of any kind (Native and non-Native American), or tribal cultural resources (including Native American burials), a Native American and archaeological monitoring plan shall be developed and implemented in consultation with culturally affiliated tribes. The monitoring plan shall specify under what conditions

monitoring will be conducted, the methods of monitoring, the conditions under which construction work may be stopped or slowed, the conditions under which construction work may be resumed, the roles and authority of monitors, communication protocols, and reporting requirements. Archaeological monitoring shall be conducted by or under the supervision of an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology. Native American monitoring shall be conducted by a Monitor or Representative of a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the project.

Mitigation Measure CR-5: Implement Procedures for Inventory and Evaluation of Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.

California Native American Tribes that are traditionally and culturally affiliated with the geographic area in which a program component is located may have expertise concerning their tribal cultural resources (California PRC Section 21080.3.1) and shall be consulted concerning the proposed project, the kind of environmental review required, tribal cultural resources that may be impacted, and measures to avoid or minimize impacts. In accordance with California PRC Section 21084.3 public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. If the implementing agency determines that the project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize significant adverse impacts:

- 1. Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.*
- 2. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:*
 - a) Protecting the cultural character and integrity of the resource.*
 - b) Protecting the traditional use of the resource.*
 - c) Protecting the confidentiality of the resource.*
- 3. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.*
- 4. Protecting the resource.*

As a part of the consultation, the parties may propose mitigation measures (as broadly defined in CEQA Guidelines Section 15370), including, but not limited to, those

recommended in Section 21084.3 (listed above), capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource. If the California Native American tribe requests consultation regarding alternatives to the project, recommended mitigation measures, or significant effects, the consultation shall include those topics. The consultation may include discussion concerning the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation which may include a) avoiding the impact by not taking a certain action; b) minimizing impacts by limiting the action; c) rectifying the impact by repairing, rehabilitating, or repairing the environment; d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or e) compensating for the impact by replacing or providing substitute resources or environments (CEQA Guidelines Section 15370).

Any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. The confidential information, may, however, be exchanged between public agencies that have lawful jurisdiction over the preparation of the environmental document.

D. Impact CR-4. Possible Disturbance, Damage to, or Destruction of Human Remains.

Prehistoric human remains have been found at several known prehistoric sites and other locations within the geographic area encompassing the program area. Similarly, historic era human burials are known to exist in the program area, both in cemeteries and smaller private plots. Construction of funded facilities could disturb human remains. It is possible that previously unknown buried human remains could be unearthed and damaged or destroyed during excavation activities. This impact would be potentially significant.

Mitigation Measures CR-2, CR-3, and CR-6, which are hereby adopted and incorporated into the program, would reduce this impact, but not to a less-than-significant level, because human remains could be damaged or disturbed despite all feasible monitoring, inventory, and avoidance or treatment measures. Therefore, this impact would remain significant and unavoidable.

Mitigation Measure CR-2: Implement Procedures for Inventory and Evaluation of Archaeological Resources, Implement Feasible Avoidance or Treatment Measures.

The agency implementing an individual program component shall inventory and evaluate prehistoric and historic archaeological resources in the program area. At a minimum, the inventory shall include records searches at the applicable Information Center of the California Historical Resources Information System; and a pedestrian archaeological survey of undeveloped and unpaved areas; and subsurface archaeological investigations if needed to identify buried archaeological deposits. If the resource is Native American in origin, additional Native American consultation, other ethnographic research, and a search of the NAHC Sacred Lands Database shall be conducted. If the cultural resource is of an ethnographic group other than Native American, historic societies, ethnographic societies, and historic archival research shall be conducted. Additional non-invasive methods may also be warranted and should be determined in consultation with all consulting parties. Resource recording procedures shall be implemented consistent with DPR 523 forms requirements; and reporting requirements.

The cultural resources inventory shall be conducted under the direct supervision of cultural resources specialists meeting the Secretary of the Interior's Professional Qualification Standards for the applicable field. All identified cultural resources shall be recorded on DPR 523 forms, and the location of each archaeological resource shall be recorded using a Global Positioning System device.

Following completion of the cultural resources inventory, an inventory report shall be prepared by qualified cultural resources specialists that describes the cultural setting of the program area; the methods used in the investigation; all identified cultural resources, including archaeological sites, tribal cultural resources, traditional cultural properties (intangible resources of significance to Native American tribe, other ethnographic group, or a local community), and cultural landscapes; and recommendations for further investigations, avoidance or other management actions. Each cultural resource identified in the component program area shall be evaluated for eligibility for listing on the CRHR and NRHP. Tribal cultural resources shall be evaluated in consultation with culturally affiliated tribes and the views of consulting tribes shall be included in the report. The cultural resources inventory report shall meet the documentation standards as described in 36 CFR 800.11 and shall be prepared by individuals meeting the Secretary of the Interior's Professional Qualifications Standards (48 Federal Register 44738–44739).

If ground-disturbance would be required in the vicinity of a known Native American archaeological resource, a qualified professional archaeologist in consultation with culturally affiliated Native Americans shall establish the boundaries of the resource before the commencement of any ground-disturbance. If feasible, the project activities shall be designed to prevent disturbance of the resource. If, in the judgment of the archaeologist or tribal representative, project activities could disturb the resource, the archaeologist in consultation with tribal representatives and other qualified professionals shall prepare and implement a research design and treatment plan for

archaeological resources and, before any construction-related ground-disturbance begins in the vicinity of the resource, shall carry out a testing program, as appropriate, based on the plan to determine whether the resource may meet the definition of a unique archaeological resource or an historical resource. If the construction activity is part of a Federal undertaking, all actions shall be conducted in compliance with Section 106 of the NHPA as well as State laws.

If the resource is determined to be ineligible for listing on the CRHR and the NRHP and is determined not to meet the definition of a unique archaeological resource, and is not an historical resource, no further mitigation shall be required. If the resource is found to potentially meet the definition of a unique archaeological resource or an historical resource and is of Native American origin, the archaeologist and consulting Native American tribes shall recommend additional actions determined to be necessary for the protection and documentation of the resource, as appropriate.

Avoidance and preservation-in-place is the preferred manner of mitigating impacts to cultural resources and may be accomplished by several means, including planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering archaeological sites; deeding a site into a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources of Native American origin will be reviewed by the lead CEQA agency, culturally affiliated Native American tribes, and the appropriate agencies in light of factors such as costs, logistics, technological feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives.

Recommendations for avoidance of cultural resources that are not of Native American origin will be reviewed by the lead CEQA agency and other appropriate agencies. Avoidance and design alternatives may include realignment within the program area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources, or modification or realignment to avoid highly significant features within a cultural resource. For resources that are of Native American origin, culturally affiliated Native American tribes shall be invited to review and comment on these analyses and shall have the opportunity to meet with the lead CEQA agency and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

The agency implementing the construction activity shall ensure that required protection actions are implemented before construction begins at the site. If artifacts are recovered from significant resources that are of Native American origin, their disposition shall be determined in consultation with Native Americans and consulting State and Federal agencies. If artifacts are recovered from significant resources that are not of Native American origin, their disposition shall be determined in consultation with consulting State and Federal agencies. The results of the identification, evaluation, and/or data recovery program shall be presented in a professional report that details all

methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the appropriate repositories.

Mitigation Measure CR-3: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas During Construction.

If the results of the inventory of cultural resources, including the results of Native American consultation, in a program component project area indicates that portions of or all of a program area are sensitive for the presence of buried or otherwise obscured or unidentified cultural resources of any kind (Native and non-Native American), or tribal cultural resources (including Native American burials), a Native American and archaeological monitoring plan shall be developed and implemented in consultation with culturally affiliated tribes. The monitoring plan shall specify under what conditions monitoring will be conducted, the methods of monitoring, the conditions under which construction work may be stopped or slowed, the conditions under which construction work may be resumed, the roles and authority of monitors, communication protocols, and reporting requirements. Archaeological monitoring shall be conducted by or under the supervision of an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology. Native American monitoring shall be conducted by a Monitor or Representative of a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the project.

Mitigation Measure CR-6: Implement Procedures for Inadvertent Discovery of Human Remains, and Implement Protection Measures, If Necessary.

In accordance with the California Health and Safety Code, if human remains are discovered on non-Federal land during ground-disturbing activities, the agency implementing the program component shall immediately halt potentially damaging excavation in the area of the burial and notify the Coroner in the county of which the discovery was made and retain the services of a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]).

If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050.5[c]). PRC Section 5097.98 (d) states that human remains of a Native American may be an inhumation or cremation, and be in any state of decomposition or skeletal completeness. Further, any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. After the coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains. The responsibilities of the agency implementing the program component for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

- *Upon the discovery of Native American remains, the agency implementing the program component shall require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that the agency implementing the program component shall employ:*
 1. *Record the site with the NAHC or the appropriate Information Center.*
 2. *Record a document with the county in which the property is located.*
- *The agency implementing the program component or that agency's authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. The agency implementing the program component or that agency's authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the agency. The agency implementing the program component shall implement measures for the protection of the burial remains. Construction work in the vicinity of the burials shall not resume until the mitigation is completed.*

If the human remains are of historic age and are determined to be not of Native American origin, the agency shall follow the provisions of the Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

E. Impact NOI-1. Possible Exposure to Temporary and Short-Term Generation of Short-Term Construction Noise.

Construction activities associated with the proposed improvements could generate noise levels that exceed the local jurisdictions' significance thresholds at nearby sensitive receptors if construction activities were carried out during noise-sensitive hours, causing sleep disturbance and/or annoyance. This impact would be potentially significant.

Mitigation Measure NOI-1, which is hereby adopted and incorporated into the program, would reduce this impact by implementing measures to reduce noise, but not to a less-than-significant level, because the timing and site-specific conditions for the different program components at the time of their implementation are currently unknown.

Consequently, the feasibility of implementing these measures for all individual program components cannot be assured. In addition, the schedule of most of the program components would be governed by weather conditions and the terms of permits for work in sensitive habitats or the habitats of protected species, and it may be infeasible to limit construction to less noise-sensitive hours in some cases. For these reasons, it is not known whether noise impacts can in all cases be reduced to a less-than-significant level. Therefore, this impact would remain significant and unavoidable.

Mitigation Measure NOI-1: Implement Noise-Reduction Measures to Reduce Construction Noise Effects.

The agency(ies) implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid significant noise-related effects during construction.

Project-specific noise analysis shall be performed to determine the potential for construction-generated noise to affect sensitive receptors. Specific noise-reduction measures shall be implemented for each individual project (funded facility) that are consistent with the noise-reduction requirements of the project depending on the applicable local noise ordinance(s), type of construction activity involved, and proximity of sensitive receptors. The following mitigation strategies shall be implemented as applicable:

- *Use electrically powered equipment instead of internal combustion equipment where practicable and feasible.*
- *Establish and enforce construction site and haul road speed limits.*
- *Restrict the use of bells, whistles, alarms, and horns to safety warning purposes.*
- *Equip all construction equipment with noise-reduction devices such as mufflers to minimize construction noise and operate all internal combustion engines with exhaust and intake silencers.*
- *Prior to construction within 1,000 feet of residences, provide written notification to the potentially affected residents, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the appropriate jurisdiction if construction noise levels are overly intrusive or construction occurs outside the permitted hours.*
- *Locate fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes as far as feasible from noise-sensitive receptors.*
- *Where feasible and particularly in locations subject to prolonged construction, use noise-attenuating buffers such as structures, truck trailers, or soil piles between noise generation sources and sensitive receptors.*

F. Impact VIS-1. Possible Damage to Scenic Resources within State- or County-Designated Scenic Highways.

The program area includes several State- and County-designated scenic highways. Views of construction crews and equipment would be intermittent (blocked by intervening topography and vegetation) from most of these scenic highways. Construction of the proposed improvements would be short-term and temporary in nature, and the completed improvements would be similar to the existing flood control structures already present along the Sacramento River and within the viewsheds throughout the program area. Therefore, this impact would be less than significant for most of the program area. However, a portion of Old River Road along the west bank of the Sacramento River, which is a Yolo County-designated scenic highway, would require closure during construction of the lengthened Sacramento Weir. This temporary impact would be significant in the short term during construction activities. Once the Sacramento Weir lengthening is complete, this program element would result in a less-than-significant long-term impact.

No feasible mitigation is available to reduce the significant impact associated with short-term adverse changes to scenic resources necessitated by closure of Old River Road to a less-than-significant level. Therefore, this impact would remain significant and unavoidable in the short-term.

The long-term, permanent impacts related to degradation of scenic resources within a State- or County-designated scenic highway would be less-than-significant because the completed changes will be visually similar to the existing landscape, screened from view, or visually attractive.

G. Impact VIS-2. Changes in Scenic Vistas and Existing Visual Character.

The program area contains high-quality visual character and scenic vistas of rural agricultural land, the Sacramento River, and throughout the Yolo Bypass, from residential development along portions of Garden Highway, the Little Pocket, and Pocket areas, and the Rio Vista waterfront area. Placement of rock revetment and rock stability berms on the waterside of the Sacramento River East Levee would be inconsistent with the existing visual character, and would stand out in the landscape as a visually detracting element for recreationists on the Sacramento River and on the adjacent levee crowns in the short-term. Therefore, this proposed component would result in temporary, short-term significant impacts for the Sacramento River East Levee area. Changes in scenic vistas and existing visual character during construction activities would be temporary and would only occur for short periods of time as construction crews and equipment move along the levees and other proposed work areas. This temporary, short-term impact would be less than significant throughout the program area. Because program levees, staging areas, erosion repair, and borrow sites would be returned to their original pre-project condition and reseeded with native vegetation, the program components would have less-than-significant long term impacts throughout the program area.

No feasible mitigation is available to reduce to a less-than-significant level the short-term significant impact to scenic vistas and visual character due to use of construction equipment to place rock revetment along the Sacramento River East Levee. Therefore, this impact would remain significant and unavoidable in the short-term.

The long-term, permanent impacts related to degradation of scenic vistas and visual character from all other program-related elements would be less-than-significant because the completed changes will be visually similar to the existing landscape, screened from view, or visually attractive.

H. Impact GHG-1. Temporary, Short-Term Generation of Greenhouse Gas Emissions.

Construction-related greenhouse gas (“GHG”) emissions would only last for the duration of construction activities, and would cease following completion of each program component. However, unlike air quality emissions that are evaluated on a localized and regional basis with respect to ambient air quality standards, GHG emissions have long atmospheric lifetimes and have global effects. Therefore, the total amount of GHG emissions from the program changes were considered in the SEIR. The exact schedule and construction parameters for the funded facilities have not yet been determined, so air quality modeling for each program component would be speculative. However, modeling for projects with similar components demonstrates that the program changes could generate annual GHG emissions that exceed applicable thresholds of significance. Therefore, this impact would be potentially significant.

Mitigation Measures AIR-1 and GHG-1, which are hereby adopted and incorporated into the program, would reduce this impact through construction emissions reductions and the purchase of carbon offset credits. However, depending on the timing and potential overlap of construction activities for different program components, it is possible that insufficient carbon offset credits would be available for purchase at the time of construction for all program components. Therefore, Impact GHG-1 would remain significant and unavoidable.

Mitigation Measure AIR-1: Implement Measures and Guidelines of the Applicable Air District(s) to Reduce Construction-Generated Emissions of Air Pollutants.

The agency(ies) implementing program components and their primary contractor(s) for engineering design and construction shall ensure that the following measures are implemented to reduce emissions of ROG, NO_x, PM₁₀, and PM_{2.5} during construction.

All feasible, current mitigation measures and guidelines of the applicable air district(s) shall be included in project plans and construction specifications. Implementation of program components shall adhere to these measures and comply with all applicable rules and regulations of the applicable air district(s). The measures shall include directives for construction vehicle emissions limits, equipment maintenance, and the use of electric equipment in place of internal-combustion equipment where feasible.

At the time of this analysis, all projects occurring within Sacramento County would be required to implement SMAQMD Basic Construction Emission Control Practices as well as comply with SMAQMD Rule 401 (Ringelmann Chart/Opacity), Rule 402 (Nuisance), and Rule 403 (Nuisance) among others. In Yolo and Solano Counties, future project components would be required to comply with YSAQMD's Rule 2.5 (Nuisance) to minimize fugitive dust emissions.

a) Based on the result of future project-level CEQA analysis and air quality modeling, if construction emissions within SMAQMD's jurisdiction are determined to exceed the SMAQMD thresholds of significance with implementation of SMAQMD Basic Construction Emission Control Practices, additional on-site mitigation measures shall be implemented to further reduce construction emissions. These measures include, but are not limited to:

- 1. SMAQMD Enhanced Exhaust Control Practices.*
- 2. SMAQMD Enhanced Fugitive PM Dust Control Practices.*

b) Based on the result of future project-level CEQA analysis and air quality modeling, if construction emissions within SMAQMD's jurisdiction are determined to exceed the SMAQMD thresholds of significance, the project applicant shall pay SMAQMD an off-site mitigation fee to reduce impacts to a less-than-significant level. The specific fee amounts shall be calculated when the construction emissions can be more accurately determined. This calculation would occur when an alternative has been selected, the project has been approved, and improvement plans have been prepared. Calculation of fees associated with subsequent improvement plans/project phases shall be conducted at the time of their preparation. The applicable fee rate shall be determined, and total fee calculated based upon the fee rate in effect at the time the CEQA document is prepared. The following SMAQMD-prescribed steps shall be taken in the case that on-site mitigation is unable to reduce emissions to a less-than-significant level.

- 1. The project applicant(s) shall pay into SMAQMD's off-site construction mitigation fund to further mitigate construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 lb/day. The calculation of daily NO_x emissions shall be based on the cost to reduce 1 ton of NO_x at the time the document is prepared (currently, \$18,030 per ton). The determination of the final mitigation fee shall be conducted in coordination with SMAQMD before any demolition or ground disturbance occurs for any project phase.*
- 2. Calculation of and payment of the fee for all subsequent project phases shall also be included in the Mitigation Monitoring and Reporting Program for the project.*
- 3. The project applicant(s) for all project phases shall reduce NO_x and visible emissions from heavy-duty diesel equipment by implementing the following measures:*

- *A plan shall be developed, in consultation with SMAQMD, demonstrating that the heavy-duty (>50 hp), off-road vehicles to be used in the construction project (including owned, leased, and subcontractor vehicles) will achieve a project wide fleet-average 20 percent NO_x reduction and 45% particulate reduction compared to the most recent ARB fleet average at the time of construction. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, particulate-matter traps, engine retrofit technology, after-treatment products, and/or such other options as become available.*
- *A comprehensive inventory of all off-road construction equipment equal to or greater than 50 hp that will be used for an aggregate of 40 or more hours during any portion of project construction shall be submitted to SMAQMD. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction operations occur. At least 48 hours before heavy-duty off-road equipment is used, the project applicant(s) shall provide SMAQMD with the anticipated construction timeline, including the start date, and the name and phone number of the project manager and on-site foreman.*

Mitigation Measure GHG-1: Purchase Carbon Offset Credits to Offset Emissions.

Based on the result of future project-level CEQA analysis and air quality modeling for the specific funded facilities, if it is determined that implementation of Mitigation Measure AIR-1 would not reduce the funded facility's construction emissions to a level that would be below applicable thresholds of significance, the agency(ies) implementing the program component shall purchase carbon offset credits to offset the proposed program component's emissions. The amount of total emissions to be offset shall be verified with the applicable air district (SMAQMD or YSAQMD) prior to purchasing offsets. Carbon offset credits shall be purchased from programs that have been approved by ARB and/or the applicable air district. Carbon offset credits will be purchased to reduce annual construction emissions to a less-than-significant level based on the applicable threshold of significance, if necessary.

VI. SIGNIFICANT ADVERSE IMPACTS IDENTIFIED IN THE SEIR THAT ARE REDUCED TO A LESS-THAN-SIGNIFICANT LEVEL BY MITIGATION MEASURES INCORPORATED INTO THE PROJECT

The SEIR identifies the significant impacts associated with the program changes described below. These impacts are reduced to a less-than-significant level by mitigation measures identified in the SEIR and incorporated into the program. It is hereby determined that the impacts addressed by these mitigation measures will be mitigated to a less-than-significant level or avoided by incorporation of these mitigation measures into the program. To the extent that these mitigation measures will not mitigate or avoid all significant effects on the environment, it is hereby determined that any remaining

significant and unavoidable adverse impacts are acceptable for the reasons specified in Section XI, below.

A. Impact GEO-2. Potential Temporary, Short-Term Construction-Related Erosion.

Most program area soils are moderately susceptible to water erosion, and several areas are highly susceptible to wind erosion. Ground-disturbing activities, including soil removal, construction, and grading, associated with construction of improvements included in the program changes could disturb and expose soil. This could result in substantial temporary and short-term soil erosion and loss of topsoil at construction sites. Therefore, this impact would be potentially significant.

Mitigation Measure WQ-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because Best Management Practices specifically designed to control construction-related erosion would be implemented.

Mitigation Measure WQ-1: Implement Standard Best Management Practices (BMPs), Prepare and Implement a Storm Water Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions.

The agency(ies) implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid and minimize potential effects of construction activities on water quality.

The agency(ies) implementing program components shall file a notice of intent (NOI) with the Central Valley RWQCB. Final design and construction plans shall require the implementation of standard erosion, siltation, and good housekeeping BMPs. Each contractor for a construction project shall be required to prepare a SWPPP and comply with the conditions of the NPDES general stormwater permit for construction activity. For work conducted under NPDES authorization, the SWPPP shall describe the construction activities to be conducted, BMPs that will be implemented to prevent contaminated stormwater discharges into waterways, and inspection and monitoring activities that will be conducted. Construction and post-construction monitoring shall be conducted to ensure that all erosion-control efforts are performing as designed.

Construction and post-construction monitoring shall be conducted to ensure that all erosion-control efforts are performing as designed. BMPs shall include pollution prevention measures (erosion and sediment control measures and measures to control nonstormwater discharges and hazardous spills), demonstration of compliance with all applicable RWQCB and other applicable water quality standards, local and regional erosion and sediment control standards, identification of responsible parties, detailed construction timelines, and a BMP monitoring and maintenance schedule. BMPs are applied to meet the maximum extent practicable and best conventional technology/best available technology requirements and to address compliance with water quality

standards. A construction and post-construction monitoring program shall be implemented to ensure compliance and effectiveness of BMPs. The SWPPP shall include, at a minimum, the following BMPs:

- *Ground disturbance shall be limited to construction areas, including necessary access routes and staging areas. The number of access routes, size of staging areas, and total area of each site-specific project activity shall be limited to the minimum necessary. When possible, existing access routes and points shall be used. All roads, staging areas, and other facilities shall be placed to avoid and limit disturbance to river and creek banks and habitat as much as possible.*
- *To minimize ground and vegetation disturbance during project construction, the limits of each site-specific project shall be clearly marked, including the boundaries of designated equipment staging areas; ingress and egress corridors; stockpile areas for spoils disposal, soil, and materials; and equipment exclusion zones.*
- *Disturbance or removal of vegetation shall not exceed the minimum necessary to complete project construction and operations.*
- *If vegetation removal is required within project access or staging areas, the disturbed areas shall be replanted or reseeded with native species and monitored and maintained to ensure the revegetation effort is successful. If erosion control fabrics are used in revegetated areas, they shall be slit in appropriate locations as necessary to allow for plant root growth.*
- *The amount of rock riprap and other materials used for bank protection shall be limited to the minimum needed for erosion protection and establishment of planting benches.*
- *All pesticides/herbicides used to control nonnative vegetation shall be used in accordance with label directions. Methods and materials used for herbicide application shall be in accordance with DWR's most current guidelines on herbicide use and with laws and regulations administered by the California Department of Pesticide Regulation.*
- *Construction materials such as portable equipment, vehicles, and supplies, including chemicals, shall be stored at designated construction staging areas.*
- *Erosion control measures that minimize soil or sediment from entering waterways and wetlands shall be installed, monitored for effectiveness, and maintained throughout construction activities.*
- *If use of erosion control fabrics is necessary, tightly woven fiber netting (mesh size less than 0.25-inch) or similar material shall be used to minimize potential for small animals to become entangled. Coconut coir matting is an acceptable erosion control material, but no plastic mono-filament matting shall be used. The edge of the material*

shall be buried in the ground to prevent animals from crawling underneath the material.

- *No material shall be placed in a manner or location where it can be eroded by normal or expected high flows. Jute netting or another non-monofilament erosion control fabric shall be used to cover soil that is placed over or mixed into riprap or other revetment materials.*
- *Precautions to minimize turbidity/siltation shall be implemented during construction. This may require placing barriers (e.g., silt curtains) to prevent silt and/or other deleterious materials from entering downstream reaches.*
- *Performance of sediment and turbidity control barriers shall be inspected at least once each day during construction to ensure they are functioning properly. Should a control barrier not function effectively, it shall be immediately repaired or replaced. Additional controls shall be installed as necessary.*
- *Sediment shall be removed from sediment controls once the sediment has reached one-third of the exposed height of the control. Sediment collected in these devices shall be disposed of away from the collection site at designated upland disposal sites.*
- *Water containing mud or silt from construction activities shall be treated by filtration, or retention in a settling pond, adequate to prevent muddy water from entering live waterways.*
- *All disturbed soils shall undergo appropriate erosion control treatment (e.g., sterile straw mulching, seeding, planting) prior to the end of the construction season, or prior to October 15, whichever comes first.*

B. Impact WQ-1. Possible Water Quality Effects from Stormwater Runoff, Erosion, and Spills Associated with Construction.

Ground-disturbing activities associated with construction of the funded facilities included in the program changes could result in soil erosion and sedimentation in local drainages, the Tule Canal, and the Sacramento River. Construction activities could also discharge waste petroleum products or other construction-related substances into these water bodies in runoff. Because these materials could adversely affect channel water quality, this impact would be potentially significant.

Mitigation Measures WQ-1 and WQ-2, which are hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because a Storm Water Pollution Prevention Plan (“SWPPP”) and site-specific BMPs specifically designed to reduce erosion, siltation, and pollutant transport would be implemented; and because a spill prevention and control plan (“SPCP”) with measures specifically designed to prevent transport of hazardous materials to waterways and implement cleanup activities in the event of accidental spills would be implemented.

Mitigation Measure WQ-1: Implement Standard Best Management Practices (BMPs), Prepare and Implement a Storm Water Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions.

The agency(ies) implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid and minimize potential effects of construction activities on water quality.

The agency(ies) implementing program components shall file a notice of intent (NOI) with the Central Valley RWQCB. Final design and construction plans shall require the implementation of standard erosion, siltation, and good housekeeping BMPs. Each contractor for a construction project shall be required to prepare a SWPPP and comply with the conditions of the NPDES general stormwater permit for construction activity. For work conducted under NPDES authorization, the SWPPP shall describe the construction activities to be conducted, BMPs that will be implemented to prevent contaminated stormwater discharges into waterways, and inspection and monitoring activities that will be conducted. Construction and post-construction monitoring shall be conducted to ensure that all erosion-control efforts are performing as designed.

Construction and post-construction monitoring shall be conducted to ensure that all erosion-control efforts are performing as designed. BMPs shall include pollution prevention measures (erosion and sediment control measures and measures to control nonstormwater discharges and hazardous spills), demonstration of compliance with all applicable RWQCB and other applicable water quality standards, local and regional erosion and sediment control standards, identification of responsible parties, detailed construction timelines, and a BMP monitoring and maintenance schedule. BMPs are applied to meet the maximum extent practicable and best conventional technology/best available technology requirements and to address compliance with water quality standards. A construction and post-construction monitoring program shall be implemented to ensure compliance and effectiveness of BMPs. The SWPPP shall include, at a minimum, the following BMPs:

- *Ground disturbance shall be limited to construction areas, including necessary access routes and staging areas. The number of access routes, size of staging areas, and total area of each site-specific project activity shall be limited to the minimum necessary. When possible, existing access routes and points shall be used. All roads, staging areas, and other facilities shall be placed to avoid and limit disturbance to river and creek banks and habitat as much as possible.*
- *To minimize ground and vegetation disturbance during project construction, the limits of each site-specific project shall be clearly marked, including the boundaries of designated equipment staging areas; ingress and egress corridors; stockpile areas for spoils disposal, soil, and materials; and equipment exclusion zones.*
- *Disturbance or removal of vegetation shall not exceed the minimum necessary to complete project construction and operations.*

- *If vegetation removal is required within project access or staging areas, the disturbed areas shall be replanted or reseeded with native species and monitored and maintained to ensure the revegetation effort is successful. If erosion control fabrics are used in revegetated areas, they shall be slit in appropriate locations as necessary to allow for plant root growth.*
- *The amount of rock riprap and other materials used for bank protection shall be limited to the minimum needed for erosion protection and establishment of planting benches.*
- *All pesticides/herbicides used to control nonnative vegetation shall be used in accordance with label directions. Methods and materials used for herbicide application shall be in accordance with DWR's most current guidelines on herbicide use and with laws and regulations administered by the California Department of Pesticide Regulation.*
- *Construction materials such as portable equipment, vehicles, and supplies, including chemicals, shall be stored at designated construction staging areas.*
- *Erosion control measures that minimize soil or sediment from entering waterways and wetlands shall be installed, monitored for effectiveness, and maintained throughout construction activities.*
- *If use of erosion control fabrics is necessary, tightly woven fiber netting (mesh size less than 0.25-inch) or similar material shall be used to minimize potential for small animals to become entangled. Coconut coir matting is an acceptable erosion control material, but no plastic mono-filament matting shall be used. The edge of the material shall be buried in the ground to prevent animals from crawling underneath the material.*
- *No material shall be placed in a manner or location where it can be eroded by normal or expected high flows. Jute netting or another non-monofilament erosion control fabric shall be used to cover soil that is placed over or mixed into riprap or other revetment materials.*
- *Precautions to minimize turbidity/siltation shall be implemented during construction. This may require placing barriers (e.g., silt curtains) to prevent silt and/or other deleterious materials from entering downstream reaches.*
- *Performance of sediment and turbidity control barriers shall be inspected at least once each day during construction to ensure they are functioning properly. Should a control barrier not function effectively, it shall be immediately repaired or replaced. Additional controls shall be installed as necessary.*
- *Sediment shall be removed from sediment controls once the sediment has reached one-third of the exposed height of the control. Sediment collected in these devices shall be disposed of away from the collection site at designated upland disposal sites.*

- *Water containing mud or silt from construction activities shall be treated by filtration, or retention in a settling pond, adequate to prevent muddy water from entering live waterways.*
- *All disturbed soils shall undergo appropriate erosion control treatment (e.g., sterile straw mulching, seeding, planting) prior to the end of the construction season, or prior to October 15, whichever comes first.*

Mitigation Measure WQ-2: Prepare and Implement a Spill Prevention and Control Plan.

The agency(ies) implementing the program components and their primary construction contractors shall prepare a written spill prevention and control plan (SPCP). The SPCP and all material necessary for its implementation shall be accessible on-site prior to initiation of project construction and throughout the construction period. The SPCP shall include a plan for the emergency cleanup of any spills of fuel or other material. Employees shall be provided the necessary information from the SPCP to prevent or reduce the discharge of pollutants from construction activities to waters and to use the appropriate measures should a spill occur. In the event of a spill, work shall stop immediately and CDFW, U.S. Fish and Wildlife Service, RWQCB, National Marine Fisheries Service, and USACE shall be notified within 24 hours. The SPCP shall contain, at a minimum, the following required measures to protect water quality:

- *All debris, sediment, rubbish, vegetation, or other material removed from the construction areas shall be disposed of at an approved disposal site.*
- *All litter, debris, unused materials, equipment, and supplies that cannot reasonably be secured shall be removed daily from the project work area and deposited at an appropriate disposal or storage site.*
- *All work pads and construction debris shall be removed from the work area immediately upon project completion.*
- *Every reasonable precaution shall be exercised to protect streams and other waters from pollution with fuels, oils, and other harmful materials. Safer alternative products (such as biodegradable hydraulic fluids) shall be used where feasible.*
- *Petroleum products, chemicals, fresh cement, and construction by-products containing, or water contaminated by, any such materials shall not be allowed to enter flowing waters and shall be collected and transported to an authorized upland disposal area.*
- *Gas, oil, other petroleum products, or any other substances that could be hazardous to aquatic life and resulting from project-related activities, shall be prevented from contaminating the soil and/or entering waters of the state and/or waters of the United States.*

- *Construction vehicles and equipment shall be properly maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Vehicles and equipment shall be checked daily for leaks. If leaks are found, the equipment shall be removed from the site and shall not be used until the leaks are repaired.*
- *Equipment shall be refueled and serviced at designated refueling and staging sites located on the crown or landside of the levee and at least 50 feet from active stream channels or other water bodies. All refueling, maintenance, and staging of equipment and vehicles shall be conducted in a location where a spill shall not drain directly toward aquatic habitat. Appropriate containment materials shall be installed to collect any discharge, and adequate materials for spill cleanup shall be maintained on-site throughout the construction period.*
- *All heavy equipment, vehicles, and supplies shall be stored at the designated staging areas at the end of each work period.*
- *Storage areas for construction material that contains hazardous or potentially toxic materials shall have an impermeable membrane between the ground and the hazardous material and shall be bermed to prevent the discharge of pollutants to groundwater and runoff water.*
- *All materials placed in streams, rivers, or other waters shall be nontoxic and shall not contain coatings or treatments or consist of substances deleterious to aquatic organisms that may leach into the surrounding environment in amounts harmful to aquatic organisms.*

C. Impact WQ-2. Possible Effects on Groundwater or Surface Water Quality Resulting from Contact with the Water Table during Construction.

Installation of floodwalls and dewatering of the construction area and borrow sites (e.g., removing groundwater that may fill trenches dug for floodwall construction or other program components) could result in the release of contaminants to surface or groundwater. This could have an adverse effect on groundwater or surface water quality. Therefore, this impact would be potentially significant.

Mitigation Measure WQ-3, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because implementation of dewatering provisions would decrease the potential for release of these contaminants and provide for cleanup should these releases occur.

Mitigation Measure WQ-3: Implement Provisions for Dewatering.

Before discharging any dewatered effluent to surface water, the agency(ies) implementing program components and their primary construction contractors shall obtain a Low Threat Discharge and Dewatering NPDES permit, or an Individual Permit from the Central Valley RWQCB if the dewatering is not covered under the RWQCB's

NPDES Construction General Permit. The dewatering permit includes extensive water quality monitoring in order to ensure that the discharges adhere to the strict effluent and receiving water quality criteria outlined in the permit. As part of the permit, the permittee shall design and implement measures as necessary to meet the discharge limits identified in the relevant permit. For example, if dewatering is needed during the construction of piers for the floodwall, the dewatering permit would require treatment or proper disposal of the water prior to discharge if it is contaminated or contains a high concentration of sediment. These measures shall 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 would be subject to approval by the Central Valley RWQCB. The agencies implementing program components shall verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. The agencies implementing program components or their authorized agent shall perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. The agencies implementing program components shall notify their contractors immediately if there is a non-compliance issue and shall require compliance.

D. Impact BIO-F1. Modifications to Aquatic Shoreline and Floodplain Habitat Used by Special-Status Fish.

Implementation of program changes would alter Sacramento River shoreline and floodplain habitat, potentially resulting in permanent loss of some habitat for special-status fish. Habitat enhancement and creation would also occur, but the extent of adverse and beneficial effects cannot be quantified at this time. Therefore, the potential exists for substantial adverse effects to special-status fish habitat, and this impact would be potentially significant.

Mitigation Measure BIO-F1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because impact avoidance and minimization measures would be identified and implemented in consultation with CDFW, NMFS, and/or USFWS; compensation would be provided, as necessary, for unavoidable impacts on federally and/or state-listed fish species; and authorization for take of listed fish would be obtained as necessary.

Mitigation Measure BIO-F1: Comply with Section 1602, the Federal Endangered Species Act, and the California Endangered Species Act as Needed, and Mitigate on a No-Net-Loss Basis.

The agency(ies) implementing program components shall implement the following measures to avoid, minimize, and, if necessary, compensate for modifications to aquatic shoreline and floodplain habitat for special-status fish.

CDFW shall be consulted regarding potential disturbance to fish habitat, including SRA habitat, as part of the process for obtaining a streambed alteration agreement, pursuant to Section 1602 of the California Fish and Game Code, for program activities that could affect a channel (e.g., irrigation/drainage canal, creek, river), streambank, or waterside of a levee. Affected habitats shall be replaced and/or rehabilitated on a “no-net-loss” basis in accordance with CDFW regulations and as specified in the streambed alteration agreement, if applicable. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to CDFW. Minimization and compensation measures adopted through the permitting process shall be implemented.

The USFWS and NMFS shall be consulted regarding compliance with the Federal ESA for potential effects on species under their respective jurisdictions, and CDFW shall be consulted regarding compliance with CESA for potential effects on State-listed species. Appropriate measures shall be developed in consultation with the agencies and implemented to minimize and potentially compensate unavoidable effects on special-status fish species. Authorization for take of listed fish species under the Federal ESA and/or CESA shall be obtained if it is determined that the future proposed funded facility(ies) under the proposed program could result in take of the listed species. All measures developed through informal consultation with USFWS, NMFS, and CDFW shall be implemented, as well as any additional measures adopted through a formal permitting process, if applicable.

If applicable, an appropriate and feasible mitigation plan to compensate for habitat modifications shall be developed and provided to NMFS and, as necessary, USFWS and CDFW for approval. Compensation may include preserving, enhancing, and/or creating fish habitat at an on- or off-site location. Appropriate mitigation ratios will be determined in coordination with the resource agencies but would ensure “no-net-loss” of habitat. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, purchasing credits at an agency-approved mitigation bank may be identified as appropriate mitigation.

E. Impact BIO-F2. Potential Disturbance, Injury, and Mortality of Special-Status Fishes during Construction.

Constructing bank protection and launchable rock trenches could result in disturbance, displacement, injury, or death of special-status fishes in the Sacramento River during in-water work periods. Direct impacts may include mortality or injury of individuals present during construction, due to movement of heavy equipment, construction noise, and bank material excavation. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-F2, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because impact avoidance and minimization measures would be identified and implemented in

consultation with CDFW, NMFS, and/or USFWS; compensation would be provided, as necessary, for unavoidable impacts on Federally and/or State-listed fish species; and authorization for take of listed fish would be obtained as necessary.

Mitigation Measure BIO-F2: Develop and Implement Measures to Avoid and Minimize Potential for Direct Impacts.

The agency(ies) implementing program components shall implement the following measures to avoid and minimize disturbance, injury, and mortality of special-status fish.

Implement Mitigation BIO-F1 for Modifications to Aquatic Shoreline and Floodplain Habitat Used by Special-Status Fish.

Consultation with USFWS, NMFS, and CDFW shall include development of measures to avoid and minimize direct effects on individuals of listed fish species. Such measures are likely to include, but will not be limited to, conducting in-water construction during in-water work windows designed to avoid impacts to critical life stages (typically from June through October) and installing screens on any construction-related water pump intakes located on waterways with special-status fish, in accordance with current agency screening specifications.

F. Impact BIO-F3. Possible Water Quality Degradation during and Following In-Water Construction Activities.

Construction activities could result in increases in sediments, turbidity, and contaminants that could adversely affect fish habitats immediately adjacent to and downstream of program activities. These activities would temporarily affect water quality in the Sacramento River during in-water construction, which may affect behavior, habitat, food and feeding, growth, and survival for special-status and non-special-status fishes. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-F3, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because a SWPPP and site-specific BMPs specifically designed to reduce erosion, siltation, and pollutant transport would be implemented; and because a spill prevention and control plan with measures specifically designed to prevent transport of hazardous materials to waterways and implement cleanup activities in the event of accidental spills would be implemented.

Mitigation Measure BIO-F3: Implement Standard Best Management Practices (BMPs), Prepare and Implement a Storm Water Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions.

The agency(ies) implementing program components shall implement Mitigation Measure WQ-1, described in Section 4.5, "Water Quality," to avoid and minimize water quality degradation.

G. Impact BIO-1. Disturbance and Loss of Sensitive Habitats, including Riparian Habitat, Protected Trees, Jurisdictional Waters of the United States, and Waters of the State.

Sensitive habitats within the program area include riparian, wetland, and other open-water habitats. Trees protected by County and City policies and ordinances, including native oaks, are also considered sensitive. Implementation of program changes would increase/enhance sensitive habitats and trees, but it could also cause adverse effects. The extent of such effects cannot be quantified at this time; however, the potential exists for substantial adverse effects to sensitive habitats. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because sensitive habitats would be avoided to the extent feasible and practicable, a mitigation plan would be developed for unavoidable impacts, and compliance with applicable regulatory permitting processes would be obtained.

Mitigation Measure BIO-1: Identify Sensitive Habitat Areas and Implement Measures to Avoid and Minimize Impacts and Compensate Unavoidable Impacts on a No-Net-Loss Basis.

To avoid, minimize, and, if necessary, compensate for the direct fill of waters of the United States and waters of the State and loss of riparian habitat and protected trees, the agency(ies) implementing program components shall implement the measures summarized below.

Areas of sensitive habitat shall be identified and, to the extent feasible and practicable, program activities shall be designed to avoid direct effects on these areas. Before any ground-disturbing activities begin, a qualified biologist shall map potential waters of the United States and shall identify all riparian habitat that could be affected. The mapping may be performed as part of a formal delineation of waters of the United States for CWA Section 404 permitting, as described below. For program activities within the City of Sacramento and/or Sacramento County, a survey of trees protected by applicable policies and ordinances shall also be conducted by a qualified biologist. The primary engineering and construction contractors shall ensure, through coordination with the biologist, that the footprints of construction zones, borrow areas, staging areas, and access routes are designed to avoid disturbance of waters of the United States, riparian habitat, and trees protected by applicable municipal and county policies and ordinances to the extent feasible and practicable.

If sensitive habitats cannot be avoided during project construction, an appropriate and feasible mitigation plan to compensate for loss of these habitats shall be developed and provided to the appropriate regulatory agencies for approval. The plan shall detail appropriate compensation measures determined through consultation with the respective regulatory agencies, methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the

initial mitigation fails. The plan shall be developed in consultation with and approved by the appropriate regulatory agencies before construction activities begin in areas containing sensitive habitats.

If it is determined that implementation of a funded facility would result in direct impacts to sensitive habitats, despite implementation of avoidance and minimization measures, compliance with the following applicable regulatory permitting processes shall be obtained. All measures developed through consultation with the respective regulatory agencies shall be implemented to mitigate adverse effects.

- **Section 404:** *A qualified biologist shall complete a delineation of wetlands and other waters of the United States that would be affected. The findings shall be documented in a detailed report and submitted to the USACE for verification as part of the formal Section 404 wetland delineation process. For all jurisdictional areas that cannot be avoided, authorization shall be secured for fill of wetlands and alteration of waters of the United States from the USACE through the Section 404 permitting process. The acreage of jurisdictional wetland affected shall be replaced on a “no-net-loss” basis in accordance with USACE regulations. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by feasible methods agreeable to the USACE and consistent with the purpose and intent of applicable county and municipal policies and codes.*
- **Section 401:** *Water quality certification pursuant to Section 401 of the CWA shall be obtained from the Central Valley RWQCB and affected habitats shall be replaced and/or rehabilitated. A report of waste discharge shall be filed with the Central Valley RWQCB and all waste discharge requirements prescribed by the Central Valley RWQCB, pursuant to the Porter-Cologne Act, shall be complied with before starting construction in any areas containing waters of the State that are not also waters of United States.*
- **Section 1602:** *A streambed alteration agreement shall be obtained from CDFW and affected habitats shall be replaced and/or rehabilitated. The acreage of riparian habitat that would be removed shall be replaced or rehabilitated on a “no-net-loss” basis in accordance with CDFW regulations and as specified in the streambed alteration agreement, if applicable. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to CDFW and consistent with the purpose and intent of applicable county and municipal policies and codes.*

H. Impact BIO-2. Possible Loss of Special-Status Plants and Loss and Degradation of Special-Status Plant Habitat.

Twenty special-status plant species have potential to occur in aquatic habitats in the program area. Implementation of program changes could result in disturbance and temporary and permanent loss and/or degradation of habitats that are occupied by special-status plant populations. Increases in floodwater conveyed to the Yolo Bypass as a result of the lengthening of the Sacramento Weir are not anticipated to be substantial enough to

alter vernal pools and other seasonal wetlands, so species primarily restricted to those habitats are unlikely to be affected. Species that occur in less specialized aquatic habitats could be directly affected by program activities that disturb habitat or cause erosion, sedimentation, introduction of invasive species or noxious weeds, or other indirect adverse effects that render habitat unsuitable, however; habitat loss could result in permanent loss of special-status plant populations or portions of populations. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-2, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because suitable habitat for special-status plants would be avoided to the extent feasible and practicable, focused surveys for special-status plants would be conducted in areas of suitable habitat that cannot be avoided, and a mitigation plan would be developed and implemented for unavoidable impacts on special-status plants.

Mitigation Measure BIO-2: Identify Occupied Habitat and Implement Measures to Avoid and Minimize Potential Impacts and Compensate Loss of Special-status Plants, as Needed.

To avoid, minimize, and, if necessary, compensate for direct loss of special-status plants, the agency(ies) implementing program components shall implement the measures described below.

Suitable habitat for special-status plants shall be identified and, to the extent feasible and practicable, program elements shall be designed to avoid direct effects on these areas. Before any ground-disturbing program activities begin, a qualified botanist shall identify potential habitat for special-status plants in areas that could be affected. The primary engineering and construction contractors shall ensure, through coordination with the botanist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid disturbance of potential habitat to the extent feasible and practicable.

If suitable habitat for special-status plants cannot be avoided, focused surveys shall be conducted. Before any ground-disturbing project activities begin, a qualified botanist shall conduct surveys for special-status plants in appropriate habitat within the impact area, in accordance with CDFW guidelines and at the appropriate time of year when the target species would be clearly identifiable. If no special-status plants are found during focused surveys, no further action shall be required.

If habitat occupied by special-status plants cannot be avoided during project construction, an appropriate and feasible mitigation plan shall be developed and provided to CDFW for approval. The plan shall detail appropriate measures determined through consultation with CDFW, which may include salvaging and transplanting individual plants, collecting the seeds of affected plants, and collecting and translocating seed- and rhizome-containing mud. If necessary, compensation may include preserving in perpetuity other known populations of these species in the project vicinity at ratios of or greater than 1-to-1. The plan shall be developed in consultation with and approved by

CDFW before construction activities begin in areas containing special-status plant species.

I. Impact BIO-3. Possible Effects on Valley Elderberry Longhorn Beetle.

Implementation of program changes could result in adverse effects on, and potential loss of, blue elderberry shrubs occupied by valley elderberry longhorn beetles, a Federally threatened species. Blue elderberry shrubs are widely distributed along the Sacramento River East Levee and are likely to occur in other portions of the program area. Program activities could require removal, trimming, or disturbance of nearby elderberry shrubs, but habitat enhancement components of program activities could increase habitat for valley elderberry longhorn beetle by incorporating elderberry shrub planting. Because the activities that could be funded through the program are in the early planning stages, the extent of adverse and beneficial impacts cannot be quantified at this time. However, adverse impacts on elderberry shrubs could result in loss of valley elderberry beetle. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-3, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because areas that support elderberry shrubs would be avoided to the extent feasible and practicable, focused surveys of elderberry shrubs would be conducted in areas that cannot be avoided, impact avoidance and minimization measures would be identified and implemented in consultation with USFWS, a mitigation plan would be developed and implemented if elderberry shrub removal is required, and authorization for take of valley elderberry longhorn beetle would be obtained as necessary.

Mitigation Measure BIO-3: Identify Suitable Habitat and Implement Measures to Avoid and Minimize Potential Impacts and Compensate Unavoidable Impacts to Habitat, as Needed.

To avoid, minimize, and, if necessary, compensate for potential adverse effects on valley elderberry longhorn beetle, the agency(ies) implementing program components shall implement the measures described below.

Areas that support elderberry shrubs shall be identified and, to the extent feasible and practicable, program activities shall be designed to avoid direct effects on these areas. Before beginning any ground-disturbing program activities, a qualified biologist shall identify areas that support elderberry shrubs and that could be affected by program activities. The primary engineering and construction contractors shall ensure, through coordination with the biologist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid disturbance of potential habitat to the extent feasible and practicable.

If impacts to areas supporting elderberry shrubs cannot be avoided, focused surveys shall be conducted. Before any program activities begin, a qualified biologist shall conduct surveys for elderberry shrubs within 100 feet of the impact area, in accordance with USFWS guidelines. All elderberry shrubs with potential to be affected

by project activities shall be mapped and the number of stems 1 inch in diameter or greater on each shrub that may require removal shall be counted and examined for beetle exit holes.

USFWS shall be consulted to identify appropriate measures, including appropriate measures from standard USFWS guidelines, if any elderberry shrubs with stems 1 inch in diameter or greater could be adversely affected. Minimization measures may include implementing buffers around shrubs that would not be removed, conducting worker awareness training, and periodic biological monitoring. If direct impacts on elderberry shrubs cannot be avoided, an appropriate and feasible mitigation plan shall be developed and provided to USFWS for approval. At a minimum, the plan shall describe requirements for transplanting shrubs; specify the number of replacement elderberry shrubs and associated native plants to be established (at a ratio ranging from 1:1 to 1:6, depending on stem size and presence of beetle exit holes) and associated success criteria; specify remedial measures to be undertaken if survival success criteria are not met; and describe short- and long-term maintenance and management to ensure that the appropriate habitat conditions are provided.

Authorization for take of valley elderberry longhorn beetle under ESA shall be obtained if it is determined that program activities is likely to result in take, despite implementation of avoidance and minimization measures. All measures developed through informal consultation with USFWS shall be implemented, as well as any additional measures adopted through a formal permitting process, if applicable.

J. Impact BIO-5. Potential Disturbance or Loss of Giant Garter Snakes and Their Habitat.

Areas within the Yolo and Sacramento Bypasses provide important aquatic habitat for the Elkhorn Basin giant garter snake population, and there are many known occurrences of the snake in this area. Implementation of program changes is likely to result in direct and indirect adverse effects to suitable aquatic habitat for the giant garter snake and disturbance of suitable upland habitat. Program activities also have potential to result in direct take of individuals. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-5, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because areas of suitable giant garter snake habitat would be avoided to the extent feasible and practicable, impact avoidance and minimization measures would be identified and implemented in consultation with USFWS, a mitigation plan would be developed and implemented for unavoidable impacts on giant garter snakes, and authorization for take of giant garter snakes would be obtained as necessary.

Mitigation Measure BIO-5: Identify Suitable Habitat and Implement Measures to Avoid and Minimize Potential Impacts and Compensate Unavoidable Impacts, as Needed.

To avoid, minimize, and, if necessary, compensate for potential adverse effects on giant garter snake, the agency(ies) implementing program components shall implement the following measures:

Giant garter snake habitat shall be identified and, to the extent feasible and practicable, program activities shall be designed to avoid direct effects on these areas. Before beginning any ground-disturbing program activities, a qualified biologist shall identify potential giant garter snake habitat in areas that could be affected. The primary engineering and construction contractors shall ensure, through coordination with the biologist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid disturbance of potential giant garter snake habitat to the extent feasible and practicable.

If giant garter snake habitat cannot be avoided, measures shall be implemented to minimize and potentially compensate unavoidable effects. Before any ground-disturbing program activities begin in giant garter snake habitat, CDFW and USFWS shall be consulted to identify appropriate measures to minimize potential for adverse effects on giant garter snake. Minimization measures are likely to include, but would not be limited to, temporary fencing of habitat that can be avoided, conducting worker awareness training, timing of dewatering and ground disturbance to correspond with the snake's active season, preconstruction surveys, and periodic biological monitoring.

If applicable, an appropriate and feasible mitigation plan to compensate for potential disturbance, displacement, injury, or death individuals shall be developed and provided to USFWS and, as necessary, CDFW for approval. Compensation for direct impacts may include preserving, enhancing, and/or creating giant garter snake habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with USFWS and CDFW; ratios typically required depend on the duration of the impact and may range from 1 to 3 acres of replacement habitat for every 1 acre of habitat affected. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, purchasing credits at a USFWS-approved mitigation bank may be identified as appropriate mitigation.

Authorization for take of giant garter snake under ESA, and possibly CESA, shall be obtained if it is determined that implementation of program activities is likely to result in take, despite implementation of avoidance and minimization measures. All measures developed through informal consultation with USFWS and CDFW shall be implemented, as well as any additional measures adopted through a formal permitting process, if applicable.

K. Impact BIO-6. Potential Disturbance or Loss of Northwestern Pond Turtles and Their Habitat.

Areas within the Sacramento and Yolo Bypasses and the proposed setback areas provide suitable aquatic habitat for northwestern pond turtle. Implementation of program changes could result in direct and indirect adverse effects to suitable habitat for northwestern pond turtle and/or local populations of this species if they are present in the affected habitats. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-6, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because areas of suitable pond turtle habitat would be avoided to the extent feasible and practicable and impact avoidance and minimization measures would be identified, in consultation with CDFW, and implemented for habitat that cannot be avoided.

Mitigation Measure BIO-6: Identify Habitat and Implement Measures to Avoid and Minimize Potential Impacts.

To avoid and minimize potential adverse effects on northwestern pond turtle during project construction, the agency(ies) implementing program components shall implement the measures described below.

Suitable habitat for northwestern pond turtle shall be identified and, to the extent feasible and practicable, program elements shall be designed to avoid direct effects on these areas. Before any ground-disturbing program activities begin, a qualified biologist shall identify potential aquatic and nesting habitat in areas that could be affected. The primary engineering and construction contractors shall ensure, through coordination with the biologist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid direct or indirect effects on suitable habitat for northwestern pond turtle to the extent feasible and practicable.

If effects to pond turtle habitat cannot be avoided, measures shall be implemented to minimize unavoidable effects. Before beginning any project activities in such habitat, appropriate measures to minimize adverse effects on pond turtles shall be identified and provided to CDFW for comment. Such measures are likely to include, but would not be limited to, conducting surveys after dewatering of suitable aquatic habitat and moving stranded turtles to appropriate areas (turtles shall only be handled by a qualified biologist authorized by CDFW), conducting preconstruction surveys of uplands adjacent to suitable aquatic habitat, minimizing disturbance of potential nesting habitat during the nesting season, installing fencing to exclude turtles from nesting in areas where ground disturbance would occur, conducting worker awareness training, and periodic biological monitoring.

L. Impact BIO-7. Possible Disturbance of Nesting Swainson's Hawks and Potential Loss of Active Nests and Nest Trees.

The program area is within a densely populated and critical component of the Central Valley Swainson's hawk population, and pairs are known to nest in all portions

of the area. Implementation of program changes could result in loss of active Swainson's hawk nests. Loss of nesting habitat and disturbance of suitable foraging habitat could also occur. Although program components could result in an increase in the amount of suitable nesting habitat, adverse effects on Swainson's hawk nesting habitat and active nests could result in a reduction in the number of this threatened species. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-7, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because nesting habitat would be avoided to the extent feasible and practicable, focused surveys for active Swainson's hawk nests would be conducted, impact avoidance and minimization measures would be identified and implemented in consultation with CDFW for any active nests, and take authorization would be obtained and compensatory mitigation provided as necessary.

Mitigation Measure BIO-7: Identify Habitat and Nest Locations, Minimize Potential Impacts, Monitor Active Nests during Construction, and Compensate Unavoidable Impacts, as Needed.

To avoid and minimize potential adverse effects on nesting Swainson's hawks during project construction and, if necessary, compensate for unavoidable effects, the agency(ies) implementing program components shall implement the measures described below.

Swainson's hawk nesting habitat shall be identified and, to the extent feasible and practicable, program elements shall be designed to avoid direct effects on these areas. Before beginning any ground-disturbing program activities, a qualified biologist shall identify known Swainson's hawk nest locations and areas of potential nesting habitat that could be affected. The primary engineering and construction contractors shall ensure, through coordination with the biologist, that the footprint of project features and construction zones, staging areas, and access routes are designed to avoid disturbance of potential habitat to the extent feasible and practicable.

Surveys shall be conducted if implementation of program activities could result in disturbance of active Swainson's hawk nests. If vegetation removal or other disturbance related to program activities is required during the nesting season, focused surveys for active Swainson's hawk nests shall be conducted by a qualified biologist before initiating such activities. The appropriate area to be surveyed and timing of the survey may vary depending on the activity.

Before beginning program activities that could result in disturbance of nesting pairs or loss of nesting habitat, CDFW shall be consulted to identify appropriate measures to minimize and potentially compensate adverse effects on Swainson's hawk. Minimization measures are likely to include, but would not be limited to, avoiding activities during the nesting season, and/or focusing nesting season activities to less-sensitive periods in the nesting cycle, implementing protective buffers around and monitoring active nests, conducting worker awareness training, and periodic biological

monitoring. Compensation may include preservation, enhancement, and/or creation of Swainson's hawk habitat within the program area and/or at other appropriate locations.

Authorization for take of Swainson's hawk under CESA shall be obtained if it is determined that program activities are likely to result in take, despite implementation of avoidance and minimization measures. All measures developed through informal consultation with CDFW shall be implemented, as well as any additional measures adopted through a formal permitting process, if applicable.

M. Impact BIO-8. Possible Disturbance of Other Special-Status Nesting Birds and Possible Loss of Active Nests and Occupied Burrowing Owl Burrows.

Most of the special-status bird species with potential to occur in the program area are unlikely to be adversely affected by any of the program activities. However, implementation of program changes could result in disturbance of suitable nesting habitat for special-status bird species, loss of occupied burrowing owl burrows, and loss of active nests of other special-status birds. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-8, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because nesting habitat and burrowing owl habitat would be avoided to the extent feasible and practicable, focused surveys for active nests and occupied burrows would be conducted, impact avoidance and minimization measures would be identified and implemented in consultation with CDFW for any active nests and occupied burrows, and compensatory mitigation for burrowing owl impacts would be provided as necessary.

Mitigation Measure BIO-8: Identify Habitat and Nest Locations, Minimize Potential Impacts, Monitor Active Nests during Construction, and Compensate Unavoidable Impacts, as Needed.

To avoid and minimize potential adverse effects on burrowing owls and nesting special-status birds, the agency(ies) implementing program components shall implement the measures described below.

To the extent feasible and practicable, program activities shall be designed to minimize removal of burrowing owl habitat and nesting habitat for other special-status birds. Before any program activities begin, a qualified biologist shall identify potential special-status bird habitat in areas that could be affected. The primary engineering and construction contractors shall ensure, through coordination with the biologist, that the footprint of program features and construction zones, staging areas, and access routes are designed to avoid direct or indirect effects on burrowing owl habitat and nesting habitat for other special-status species to the extent feasible and practicable. Vegetation removal and other program activities shall be timed to avoid the nesting season for special-status bird species that may be present.

Surveys shall be conducted if implementation of program activities could result in disturbance of occupied burrowing owl habitat or loss of active nests of other special-status bird species. If vegetation removal or other disturbance related to program

activities is required during the nesting season, focused surveys for active nests of special-status birds shall be conducted by a qualified biologist before initiating such activities. The appropriate area to be surveyed and timing of the survey may vary depending on the activity and species that could be affected. Surveys for occupied burrowing owl habitat shall be conducted before any program activities are initiated at any time of year. If no active nests or occupied burrowing owl habitat are found during focused surveys, no further action shall be required.

Before beginning program activities that could result in disturbance of occupied burrowing owl habitat or nesting pairs of other special-status birds, CDFW shall be consulted to identify appropriate measures to minimize and potentially compensate for adverse effects. Minimization measures are likely to include, but not be limited to, focusing construction activities that must be conducted during the nesting season to less-sensitive periods in the nesting cycle, implementing buffers around occupied burrowing owl habitat and active nests of other special-status birds to the extent practical and feasible to limit visual and noise disturbance, relocating burrowing owls that are within the impact area, conducting worker awareness training, and biological monitoring. Compensation for impacts on burrowing owls may include preservation, enhancement, and/or creation of suitable habitat onsite and/or other appropriate locations. All measures deemed appropriate and feasible during this consultation with CDFW shall be implemented.

N. Impact BIO-9. Possible Disturbance or Loss of Roosting Special-Status Bats.

Riparian forest and oak woodland habitats along the Sacramento River East Levee have potential to provide suitable roosting habitat for special-status bats. Implementation of program changes could result in disturbance of roosting bats, including maternity roosts. Direct loss or abandonment of important roost sites could result in a substantial adverse effect on local populations of special-status bats. Therefore, this impact would be potentially significant.

Mitigation Measure BIO-9, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because suitable roosting habitat would be avoided to the extent feasible and practicable, focused surveys for maternity roosts would be conducted in areas of suitable habitat that cannot be avoided, and impact avoidance and minimization measures would be identified, in consultation with CDFW, and implemented for active maternity roosts.

Mitigation Measure BIO-9: Identify Roosting Habitat and Implement Measures to Avoid and Minimize Disturbance and Loss of Roosting Habitat.

To avoid and minimize potential disturbance or loss of roosting special-status bats, the agency(ies) implementing program components shall implement the following measures.

To the extent feasible and practicable, program elements shall be designed to minimize disturbance of potential roosting habitat along the Sacramento River East Levee. Before any ground-disturbing program activities begin, a qualified biologist shall identify potential roosting habitat in areas that could be affected by construction bank protection and launchable trenches along the east side of the Sacramento River. The primary engineering and construction contractors shall ensure, through coordination with the biologist that the footprint of project features and construction zones, staging areas, and access routes are designed to prevent or minimize direct or indirect effects on bat roosting habitat to the extent feasible and practicable.

Surveys shall be conducted if implementation of program activities along the Sacramento River East Levee could result in disturbance of maternity roosting habitat. If vegetation removal or other disturbance is required during the pupping season, focused surveys for maternity roost sites shall be conducted by a qualified biologist before initiating such activities. If a special-status bat maternity roost is found, a qualified biologist shall identify appropriate measures to minimize adverse effects, and provide the proposed measures to CDFW for comment. Such measures are likely to include, but not be limited to, focusing construction activities that must be conducted during the pupping season to less-sensitive periods in the pupping cycle, implementing protective buffers around active maternity roosts, conducting worker awareness training, and periodic biological monitoring.

O. Impact CR-1. Possible Damage to or Destruction of Historical Resources.

Numerous known historic period buildings, structures, historical archaeological deposits, and linear features such as levees, canals, and railroads are present in the program area. Construction and land-altering actions may cause the removal or alteration of those physical characteristics of an eligible property that conveys its historical significance. Construction of new structures in the immediate viewshed of historic buildings could also occur. Both direct and indirect effects on historic buildings or structures and direct effects on historical archaeological resources have the potential to compromise the character-defining features of those resources. Therefore, this impact would be potentially significant.

Mitigation Measure CR-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level by requiring inventory, and avoidance or treatment strategies for identified resources.

Mitigation Measure CR-1: Implement Procedures for Inventory and Evaluation of Historical Resources and for Eligible Resources, Implement Feasible Avoidance or Treatment Measures.

The agency implementing an individual program component shall inventory and evaluate historic-period resources in the project area, including elements of the built environment. At a minimum, the inventory shall include records searches at the applicable Information Center of the California Historical Resources Information System; a field reconnaissance of the program area conducted by a historian or

architectural historian who meets the Secretary of the Interior's Professional Qualification Standards in History. Resource recording procedures shall be implemented consistent with California Department of Parks and Recreation (DPR) 523 forms requirements; and reporting requirements. All identified historic-period resources shall be recorded on DPR 523 forms.

Each historic-period resource identified in the program area shall be evaluated for eligibility for listing on the CRHR and the NRHP by a qualified historian or architectural historian. The results of the identification, evaluation, and/or documentation of historical resources shall be presented in a professional report that details all methods and findings, evaluates significance of the resources (CRHR and NRHP eligibility), analyzes and interprets the results, and distributes this information to the appropriate repositories.

For each historic-period resource which is found to be eligible for listing on the CRHR or NRHP, a determination of project effects on that resource will be made consistent with the "Significance Criteria" presented above in this section. Avoidance through project redesign is the preferred mitigation measure for resources that appear to be eligible for listing in the NRHP or CRHR, but if avoidance is not feasible, other feasible mitigation shall be identified. Such treatment measures may include detailed documentation of the resource; visual and/or auditory screening of indirect effects on historic landscapes, buildings, and public interpretation of the resource.

P. Impact PR-1. Potential to Directly or Indirectly Destroy a Unique Paleontological Resource or Site.

Portions of the program area are underlain by Older alluvium, as well as the Mehrten and Montezuma Formations, which are paleontologically sensitive. There is a potential for uncovering additional similar fossil remains during construction-related excavation within the program area. Therefore, earthmoving activities within these formations could damage unknown subsurface unique paleontological resources. This impact would be potentially significant.

Mitigation Measure PR-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because construction workers would be alerted to the possibility of encountering paleontological resources and, in the event that resources were discovered, fossil specimens would be recovered and recorded and would undergo appropriate curation.

Mitigation Measure PR-1: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.

To minimize the potential for destruction of or damage to potentially unique, scientifically important paleontological resources during earthmoving activities, the agencies implementing program components shall do the following:

- *Before the start of construction activities in the program area, construction personnel involved with earthmoving activities (including the site superintendent) shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist.*
- *If paleontological resources are discovered during earthmoving activities, the construction crew shall notify the agencies implementing program components and shall immediately cease work in the vicinity of the find. The agencies implementing program components shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with SVP Guidelines (1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the agencies implementing program components to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.*

Q. Impact TR-1. Temporary and Short-Term Increases in Traffic on Local and Regional Roadways during Construction.

During the construction period for individual program components, haul truck trips and construction worker commute trips would increase traffic on regional roadways and highways and in the vicinity of funded facility program sites and, in the Sacramento River East Levee area, on residential streets. Construction activity, construction traffic, and the presence of construction equipment could increase traffic congestion on some roadways and create hazardous traffic conditions. In addition, some highway and lane closures would be necessary for Yolo Bypass improvements, potentially leading to traffic delays. Therefore, this impact would be significant.

Mitigation Measure TR-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level by requiring traffic management plans and coordination with local agencies to minimize delays and effects on transportation access.

Mitigation Measure TR-1: Prepare and Implement a Traffic Management and Safety Assurance Plan, and Coordinate with Local Jurisdictions and the California Department of Transportation (Caltrans) as Needed.

The environmental review processes for individual program improvements shall determine whether a potential impact would be associated with construction-related traffic. If a potentially significant impact could occur, the agency(ies) implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid and

minimize potential traffic congestion impacts and traffic hazards caused by construction activities.

a) The construction contractor shall prepare and implement a traffic management and safety assurance plan for roadways and intersections in project-related construction zones. The plan shall include provisions specifying the steps to be taken to maintain public safety during all phases of construction and shall be coordinated with the jurisdictions in which traffic effects may be significant. The plan shall include the following elements:

- Conduct worker training regarding high-collision intersections and areas along haul routes of special sensitivity (residential areas, narrow roadways, routes near education centers).*
- Use public notices before and during construction to inform the public of anticipated haul routes and the potential presence of slow-moving vehicles in construction zones, where needed to reduce potential traffic hazards, and encourage the use of alternative routes by the general public.*
- Post advanced warning of construction activities for any affected roadways that would be closed or major roadways where lane closures would occur in the local newspaper(s), distribute information to potentially affected residents, and/or coordinate with the local jurisdictions to post such warnings in highly visible locations near the affected roadways.*
- Temporarily relocate bicycle routes to improve safety if possible, and inform the public of such changes.*
- Where construction zones are adjacent to public roadways, to the extent feasible, limit the construction work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the zone.*
- Place and maintain barriers and install traffic control devices necessary for safety, as specified in Caltrans' Traffic Controls for Construction and Maintenance Work Zones and in accordance with the guidance provided by the affected local jurisdictions.*
- Provide flagger control at construction zones to manage traffic control and flows as necessary.*
- Limit the accumulation of project-generated mud or dirt on roadways adjacent to construction areas to the extent practicable and feasible.*

b) If construction of proposed improvements would result in the addition of traffic (especially slow-moving traffic) on a State highway, the implementing agency shall coordinate with Caltrans to develop an appropriate traffic management plan that includes a description of the proposed traffic patterns in and out of the construction

site(s) and locations for truck routes. The plan shall be submitted to Caltrans for review before the initiation of construction-related activity that could adversely affect traffic on State roadways.

R. Impact TR-2. Possible Effects of Construction Activity on Emergency Access.

Temporary and short-term road closures and the presence of large numbers of slow-moving haul trucks on some roadways during construction periods could cause traffic congestion and delays and hinder emergency access. Therefore, this impact would be potentially significant.

Mitigation Measure TR-2, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because agencies would alert emergency services providers of activities prior to beginning construction, and would maintain access or identify detours as necessary.

Mitigation Measure TR-2: Provide Pre-Notification of Construction to Emergency Service Providers, and Maintain Emergency Access or Coordinate Detours with Providers.

The agency(ies) implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to reduce the potential for adverse effects of construction activity on emergency vehicle access.

- a) *The implementing agency(ies) shall provide pre-notification of construction activity to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on local roadways.*
- b) *To the extent feasible, access for emergency vehicles shall be maintained through construction zones at all times. If through-passage cannot be ensured for emergency service vehicles, appropriate detours shall be coordinated with the emergency service providers in advance of road closures.*

S. Impact AIR-1. Generation of Temporary and Short-Term Emissions of ROG, NO_x, and PM₁₀ during Construction.

Based on modeling and evaluation of other SAFCA programs that are similar to program components, temporary and short-term construction-related emissions of ROG, NO_x, PM₁₀, and PM_{2.5} from program construction activities may exceed applicable significance thresholds. Because of the nonattainment status of the program area for ozone and PM₁₀, such emissions could be considered significant because they contribute to concentrations that exceed applicable air quality standards. Therefore, this impact would be considered potentially significant.

Mitigation Measure AIR-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level through on-site mitigation or payment of an off-site mitigation fee to an established program.

Mitigation Measure AIR-1: Implement Measures and Guidelines of the Applicable Air District(s) to Reduce Construction-Generated Emissions of Air Pollutants.

The agency(ies) implementing program components and their primary contractor(s) for engineering design and construction shall ensure that the following measures are implemented to reduce emissions of ROG, NO_x, PM₁₀, and PM_{2.5} during construction.

All feasible, current mitigation measures and guidelines of the applicable air district(s) shall be included in project plans and construction specifications. Implementation of program components shall adhere to these measures and comply with all applicable rules and regulations of the applicable air district(s). The measures shall include directives for construction vehicle emissions limits, equipment maintenance, and the use of electric equipment in place of internal-combustion equipment where feasible. At the time of this analysis, all projects occurring within Sacramento County would be required to implement SMAQMD Basic Construction Emission Control Practices as well as comply with SMAQMD Rule 401 (Ringelmann Chart/Opacity), Rule 402 (Nuisance), and Rule 403 (Nuisance) among others. In Yolo and Solano Counties, future project components would be required to comply with YSAQMD's Rule 2.5 (Nuisance) to minimize fugitive dust emissions.

a) *Based on the result of future project-level CEQA analysis and air quality modeling, if construction emissions within SMAQMD's jurisdiction are determined to exceed the SMAQMD thresholds of significance with implementation of SMAQMD Basic Construction Emission Control Practices, additional on-site mitigation measures shall be implemented to further reduce construction emissions. These measures include, but are not limited to:*

1. *SMAQMD Enhanced Exhaust Control Practices.*
2. *SMAQMD Enhanced Fugitive PM Dust Control Practices.*

b) *Based on the result of future project-level CEQA analysis and air quality modeling, if construction emissions within SMAQMD's jurisdiction are determined to exceed the SMAQMD thresholds of significance, the project applicant shall pay SMAQMD an off-site mitigation fee to reduce impacts to a less-than-significant level. The specific fee amounts shall be calculated when the construction emissions can be more accurately determined. This calculation would occur when an alternative has been selected, the project has been approved, and improvement plans have been prepared. Calculation of fees associated with subsequent improvement plans/project phases shall be conducted at the time of their preparation. The applicable fee rate shall be determined, and total fee calculated based upon the fee rate in effect at the time the CEQA document is prepared. The following SMAQMD-prescribed steps shall be*

taken in the case that on-site mitigation is unable to reduce emissions to a less-than-significant level.

1. *The project applicant(s) shall pay into SMAQMD's off-site construction mitigation fund to further mitigate construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 lb/day. The calculation of daily NO_x emissions shall be based on the cost to reduce 1 ton of NO_x at the time the document is prepared (currently, \$18,030 per ton). The determination of the final mitigation fee shall be conducted in coordination with SMAQMD before any demolition or ground disturbance occurs for any project phase.*
2. *Calculation of and payment of the fee for all subsequent project phases shall also be included in the Mitigation Monitoring and Reporting Program for the project.*
3. *The project applicant(s) for all project phases shall reduce NO_x and visible emissions from heavy-duty diesel equipment by implementing the following measures:*
 - *A plan shall be developed, in consultation with SMAQMD, demonstrating that the heavy-duty (>50 hp), off-road vehicles to be used in the construction project (including owned, leased, and subcontractor vehicles) will achieve a project wide fleet-average 20 percent NO_x reduction and 45% particulate reduction compared to the most recent ARB fleet average at the time of construction. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, particulate-matter traps, engine retrofit technology, after-treatment products, and/or such other options as become available.*
 - *A comprehensive inventory of all off-road construction equipment equal to or greater than 50 hp that will be used for an aggregate of 40 or more hours during any portion of project construction shall be submitted to SMAQMD. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction operations occur. At least 48 hours before heavy-duty off-road equipment is used, the project applicant(s) shall provide SMAQMD with the anticipated construction timeline, including the start date, and the name and phone number of the project manager and on-site foreman.*

T. Impact AIR-3. Exposure of Sensitive Receptors to Toxic Air Emissions.

Particulate exhaust emissions from diesel-fueled engines are classified as toxic air emissions ("TACs"). Construction of funded facilities would result in the generation of diesel PM emissions from the use of off-road diesel equipment required for site grading and excavation, earthmoving, paving, and other construction activities. Most construction activities associated with program changes would be temporary, short-term, and more than 500 feet from sensitive receptors. However, some program components could

expose sensitive receptors to substantial levels of TACs. Therefore, this impact would be potentially significant.

Mitigation Measure AIR-2, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level through requirements for future project-level analysis and Health Risk Assessments if warranted by project-specific emissions data.

Mitigation Measure AIR-2: Conduct a Health Risk Assessment (HRA) If a Potential Health Risk Exists, and Develop and Implement Mitigation in Coordination with the Applicable Air District(s).

The agency(ies) implementing program components shall ensure that the following measures are implemented to reduce the potential for exposure of sensitive receptors to TACs.

Future project-level CEQA analysis shall include analysis to determine whether a potential impact exists associated with construction-related emissions of TAC. This analysis shall be conducted in accordance with the standards of the air district which has jurisdiction over the program component. If a potential health risk exists, an HRA shall be conducted to determine the risk exposure level at nearby receptors. The HRA should incorporate the applicable on-site emission reduction measures in Mitigation Measure AIR-1. Where sensitive receptors may be exposed to unacceptable levels of TACs, additional site-specific mitigation measures, developed in coordination with the appropriate air district(s), shall be implemented.

Measures may include requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling for extended periods. Applicable measures shall be included in project plans and construction specifications.

U. Impact NOI-2. Possible Exposure of Sensitive Receptors to Temporary and Short-Term Generation of Excessive Groundborne Vibration or Groundborne Noise.

Construction activities associated with program changes could have the potential to result in generation of temporary and short-term excessive groundborne vibration or groundborne noise levels at 25 feet from the source equipment. It is possible that structural or architectural damage, and/or annoyance or sleep disruption, could occur as a result of the associated groundborne vibration levels. Therefore, this impact would be potentially significant.

Mitigation Measure NOI-2, which is hereby adopted and incorporated into the project, would reduce this impact to a less-than-significant level because it would reduce temporary and short-term construction source vibration levels.

Mitigation Measure NOI-2: Implement Measures to Avoid Construction-Related Vibration Effects.

The agency(ies) implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid significant vibration-related effects during construction.

The following groundborne vibration-reduction measures shall be implemented for each individual project (funded facility) consistent with the project-specific conditions, including proximity of sensitive receptors and structures and type of construction activity involved. The following mitigation strategies shall be implemented as applicable:

- *Stationary vibration-production equipment shall be placed as far as practicable from residential structures.*
- *Project construction specifications shall require the contractor to limit vibrations to less than 0.2-inch per second within 75 feet at any building.*
- *Vibration monitoring equipment shall be placed at the property line adjacent to large equipment and, with owner approval, at the back of the residential structures adjacent to the large equipment.*
- *A voluntary pre- and post-construction survey shall be conducted to assess potential architectural damage from levee construction vibration at each residence within 75 feet of construction. The survey shall include visual inspection of the structures that could be affected, documentation of structures by means of photographs, video, and a level survey of the ground floor of structures. This documentation shall be reviewed with the individual owners prior to any construction activities. Affected property owners shall be notified at least 48 hours prior to the visual inspections. Post-construction monitoring of structures shall be performed to identify (and repair, if necessary) all damage, if any, from construction vibrations. Any damage shall be documented with photographs and video. This documentation shall be reviewed with the individual property owners.*

V. Impact REC-1. Temporary and Short-term Changes in Recreational Opportunities during Project Construction Activities.

The Sacramento River Parkway runs along the levee where individual program components are proposed. Developed portions of the Parkway accommodate pedestrians and bicyclists and provide access to the Sacramento River. Individual program components could be adjacent to or in close proximity to parks and recreational facilities. Construction of program components, such as implementing rock bank protection and launchable rock trenches along the Sacramento River, bypass widening, and constructing of new setback levees and the new floodwall in Rio Vista, could result in temporary and

short-term changes in recreational opportunities during project construction activities. Therefore, this impact could be significant.

Mitigation Measures REC-1 and REC-2, which are hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because Mitigation Measure REC-1 would require creation of a bicycle detour plan, public information regarding detours and alternative access routes to bicycle facilities, and repair of construction-related damage, and Mitigation Measure REC-2 would require creation of recreation plans during the construction period and public information regarding alternative access routes to public recreational facilities.

Mitigation Measure REC-1: Prepare and Implement a Bicycle Detour Plan for all Bike Trails and On-Street Bicycle Routes, Provide Construction Period Information on Bicycle Facility Closures, and Coordinate with the City of Sacramento Department of Parks and Recreation and/or the City of Rio Vista Public Works Department to Allow Repair of Damage to Bicycle Facilities.

The agencies implementing program components and their primary contractors for engineering design and construction shall implement the following measures to reduce temporary, short-term construction impacts on bicycle facilities in the program area:

- *Prepare a bicycle detour plan for all bike trails, including those located on the Sacramento River Parkway and the City of Rio Vista Waterfront Promenade and on-street bicycle routes in consultation with the City of Sacramento Department of Parks and Recreation and/or the City of Rio Vista Public Works Department at least 10 days before the start of construction activities, as applicable. The detour plan shall include posted signs at major entry points for bicycle trails clearly indicating closure routes, roadway markings to designate temporary bike lanes, information signs to notify motorists to share the road with bicyclists, and a contact number to call for questions or concerns.*
- *Maintain and implement the detour plan throughout the construction period and during all construction seasons.*
- *Provide public information through the media and on relevant agency and/or park agency Web site(s) regarding detours and alternative access routes to bicycle facilities affected by construction of individual program components.*
- *Coordinate with the City of Sacramento Department of Parks and Recreation to make available information to the public regarding closure of bicycle facilities and detours at least 10 days before the start of construction activities*
- *Continue to provide public information regarding closure of bicycle facilities and detours throughout the construction period.*

- *Upon completion of levee improvements, coordinate with the City of Sacramento Department of Parks and Recreation for the city to restore access and repair any construction-related damage to bicycle facilities to pre-project conditions.*

Mitigation Measure REC-2: Prepare and Implement a Recreation Plan for all Recreation Facilities, Provide Construction Period Information on Recreation Facility Closures, and Repair Damage to Recreational Facilities.

The agency(ies) implementing program components and their primary contractors for engineering design and construction shall implement the following measures to reduce temporary, short-term construction impacts on recreation facilities in the program area:

- *Prepare a construction-period recreation plan for all affected recreation facilities in consultation with the City of Sacramento Department of Parks and Recreation and/or the City of Rio Vista Public Works Department. The recreation plan shall include posted signs at major entry points for parks and recreation facilities, boat launch ramps at Miller Park and Garcia Bend Park in the City of Sacramento and the Main Street Public Dock and Boat Launch in the City of Rio Vista clearly indicating closures and estimated duration of closures, information signs to notify the public of alternate parks and recreation sites and boat launch ramps, and a contact number to call for questions or concerns. The agencies implementing program components and their primary contractors for engineering design and construction shall maintain and implement the recreation plan throughout the construction period and during all construction seasons.*
- *Coordinate with the City of Sacramento Department of Parks and Recreation and/or City of Rio Vista Public Works Department at least 30 days before the start of construction activities to allow for the City of Sacramento and/or City of Rio Vista to relocate activities that occur in affected parks and provide alternate access points to recreation facilities along Sacramento River.*
- *Provide public information through the media and on the agency(ies) Web site and/or the agency(ies)' implementing program components Web site(s) regarding parks and recreation facilities and boat launch ramps affected by project construction at least 30 days before the start of construction activities.*
- *Coordinate with the City of Sacramento Department of Parks and Recreation, City of Rio Vista Public Works Department, and/or California Department of Fish and Wildlife after completion of individual program components for the agencies to restore access and repair any construction-related damage to parks and recreation facilities to pre-project conditions.*
- *Notify and coordinate with the California State Parks at least 30 days before the start of construction activities to allow for possible rerouting or rescheduling of the Excursion Train. Upon completion of individual program components, coordinate*

with the California State Parks to repair any construction-related damage to pre-project conditions.

- *Notify and coordinate with Sierra Northern Railway at least 30 days before the start of construction activities to allow for possible rerouting or rescheduling of the Sacramento River Train. Upon completion of individual program components, coordinate with Sierra Northern Railway to repair any construction-related damage to pre-project conditions.*

W. Impact UTL-1. Potential Disruption of Irrigation Water Supply during Construction.

Construction of individual program components would require relocation of irrigation infrastructure that results in the potential disruption of irrigation water supply. Substantial temporary interruptions of irrigation water supply could occur if irrigation infrastructure is damaged or otherwise rendered inoperable at a time when it is needed. Given the potential extent and intensity of construction activities, it is possible that these activities could impede the repair of damaged infrastructure or cause a delay in the provision of irrigation supply. Therefore, this impact would be potentially significant.

Mitigation Measure UTL-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because the agencies implementing program components and their primary contractors for engineering design and construction would coordinate with water supply providers and consumers to minimize interruptions, would conduct work during the nonirrigation season whenever feasible, and would ensure that essential water supply necessary during the irrigation season is provided by an alternative supply if an interruption is unavoidable.

Mitigation Measure UTL-1: Coordinate with Irrigation Water Supply Users Before and During All Irrigation Infrastructure Modifications and Implement Measures to Minimize Interruptions of Supply.

The agencies implementing program components and their primary contractors for engineering design and construction shall ensure that the following measures are implemented before construction begins to minimize the potential for irrigation water supply interruptions during construction:

- *Coordinate the timing of all modifications to irrigation supply infrastructure with the affected infrastructure owners and water supply users.*
- *Include detailed scheduling of the phases of modifications/replacement of existing irrigation infrastructure components in project design and in construction plans and specifications.*
- *Plan and complete modifications of irrigation infrastructure for the nonirrigation season to the extent feasible.*

- *Make provisions for alternative water supply, if necessary, when modification/replacement of irrigation infrastructure must be conducted during a period when it would otherwise be in normal use by an irrigator.*
- *As may be appropriate based on existing land and water rights, ensure either that (1) 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 (i.e., a decrease in level of service in comparison with the existing level of service); or (2) 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 are compensated for losses associated with the reduction in level of service.*

X. Impact UTL-2. Potential Disruption of Utility Service during Construction.

Construction of individual program components could encroach upon multiple types of utility infrastructure and facilities. Although steps would be taken to minimize potential impacts to utilities, construction activities could inadvertently damage identified and unidentified utility equipment and facilities. In addition, required relocation of existing utilities could result in interruptions in service. Furthermore, the extent and intensity of construction activities could affect service providers' abilities to quickly repair damage and/or restore interrupted service. Therefore, this impact would be potentially significant.

Mitigation Measure UTL-2, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because agencies implementing program components and their primary contractors for engineering design and construction would coordinate with utility service providers and consumers to minimize utility interruptions and inadvertent damage to unknown buried utilities to the maximum extent feasible, and a response plan to address service interruptions would be prepared and implemented.

Mitigation Measure UTL-2: Verify Utility Locations, Coordinate with Affected Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage.

The agencies implementing program components and their primary contractors for engineering design and construction shall require the following measures are implemented before construction begins to avoid and minimize potential damage to utilities, infrastructure, and service disruptions during construction:

- *Coordinate with applicable utility and service providers to implement orderly relocation of utilities that need to be removed or relocated.*
- *Provide notification of any potential interruptions in service to the appropriate agencies and affected landowners.*

- *Verify through field surveys and the use of the Underground Service Alert services the locations of buried utilities in the program area, including natural gas, petroleum, and sewer pipelines. Any buried utility lines shall be clearly marked in the area of construction (e.g., in the field) and on the construction specifications in advance of any earthmoving activities.*
- *Prepare and implement an emergency response plan that addresses potential accidental damage to a utility line. The emergency response plan shall identify chain-of-command rules for notification of authorities and appropriate actions and responsibilities regarding the safety of the public and workers. A component of the emergency response plan will include worker education training in response to such situations.*
- *Stage utility relocations during construction to minimize interruptions in service.*

Y. Impact HAZ-3. Possible Exposure of People and the Environment to Existing Hazardous Materials, Including Cortese-Listed Sites.

Program-related activities would occur within known hazardous material contamination sites including the Old Bryte Landfill. The proposed floodwall in Rio Vista would be constructed within or immediately adjacent to existing groundwater remediation and/or monitoring wells from at least two Cortese-listed sites. In addition, other unknown hazards such as above or underground storage tanks associated with agricultural activities in the Yolo Bypass could be encountered during construction activities. Therefore, this impact would be potentially significant.

Mitigation Measures HAZ-1, HAZ-2, and HAZ-3, which are hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because the Old Bryte Landfill would be remediated prior to start of construction activities associated with the Sacramento Bypass Levee, and site-specific Phase I Environmental Sites Assessments (“ESAs”) or database searches would be performed to determine whether program components would be placed in locations of other known hazardous materials. If so, the agencies implementing program components would coordinate with affected landowners and the owners/agencies responsible for operation of groundwater remediation/monitoring wells to either relocate such wells or modify the project-specific design to avoid adverse environmental impacts.

Mitigation Measure HAZ-1: Characterize Existing Wastes and Remediate the Former Old Bryte Landfill.

The agency(ies) implementing program components shall implement the following measures:

- *Complete the necessary steps to characterize the existing wastes at the Old Bryte Landfill and submit necessary reports and remedial action plans for approval to DTSC and any other required agency (e.g., Central Valley RWQCB, Yolo County Department of Environmental Health).*

- *Perform all necessary activities to remediate the Old Bryte Landfill as required by DTSC and any other regulatory agency. Remediation may include, but is not limited to, removal of soil, landfill debris, and burn ash; and removal of contaminants from groundwater. Remediation shall be performed to a level sufficient for DTSC (and other regulatory agencies such as Central Valley RWQCB as necessary) to make a determination that allowing floodwaters to flow over the site through the widened Sacramento Bypass would not result in environmental contamination. Hazardous materials shall be remediated to a level that is fully protective of human health (including drinking water and agricultural water supply), as well as the health of other mammals and aquatic life, to levels required by DTSC. All required reports documenting that remediation has been completed shall be submitted to DTSC and other regulatory agencies as necessary.*
- *Construction of the new Sacramento Bypass setback levee (adjacent to the landfill) shall not begin until the Old Bryte Landfill has been remediated and a landfill closure order has been issued by DTSC.*

Mitigation Measure HAZ-2: Perform a Site-Specific HazMat Database Search and/or Phase I ESA, and Coordinate with Responsible Parties for Relocation of Storage Tanks and Groundwater Monitoring and Treatment Wells.

The agency(ies) implementing program components shall implement the following measures:

- *Prior to the start of construction activities at any program component location, a site-specific search of relevant hazardous materials databases, including local government listings of permitted aboveground and underground storage tanks and SWRCB listings of groundwater treatment and monitoring wells shall be performed. This search may be performed as part of a site-specific Phase I ESA.*
- *Coordinate with affected landowners to relocate storage tanks and groundwater treatment and/or monitoring wells if such facilities are located within the footprint of the program component, or the alignment of the proposed funded facility shall be adjusted to avoid adverse impacts to these existing facilities. Any further investigations or remedial activities recommended in the ESAs shall be completed prior to the start of construction activities on sites containing known storage tanks and groundwater wells.*

Mitigation Measure HAZ-3: Prepare a Worker Health and Safety Plan, and Implement Appropriate Measures to Minimize Potential Exposure to Hazardous Materials.

The agency(ies) implementing program components shall implement the following measures:

- *If, during site preparation and construction activities, evidence of hazardous materials contamination is observed or suspected through either obvious or implied*

measures (i.e., stained or odorous soil or groundwater), construction activities shall immediately cease in the area of the find. A qualified hazardous materials specialist shall assess the site and collect and analyze soil and/or groundwater samples, if needed. If contaminants are identified in the samples, the agency(ies) implementing the program component shall employ measures, or coordinate with the landowner or other responsible party to employ measures, in accordance with Federal and State regulations before construction activities can resume at the site.

- *A worker health and safety plan shall be prepared before the start of construction activities that identifies, at a minimum, the potential types of 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 shall describe actions to be taken should hazardous materials be encountered during construction, including protocols for handling hazardous materials and preventing their spread, and emergency notification procedures to local and/or State regulatory agencies.*

Z. Impact HAZ-5. Possible Creation of Wildland Fire Hazards.

The funded facilities would be implemented in locations with natural settings where physical and weather conditions may combine to lead to a high risk of fire hazard, and vegetation is present in most areas where program work would occur. Construction activities could result in igniting and spreading wildland fires due to accidental discharge of sparks in vegetated areas. Therefore, this impact would be potentially significant.

Mitigation Measure HAZ-4, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because a fire prevention plan would be prepared and implemented.

Mitigation Measure HAZ-4: Prepare and Implement a Fire Prevention Plan.

The agency(ies) implementing program components shall prepare and implement a fire prevention plan in coordination with the appropriate emergency service and/or fire suppression agencies of the applicable local or State jurisdictions before the start of any construction activities. The plan shall describe fire prevention and response methods, including fire precaution, requirements for spark arrestors on equipment, and suppression measures that are consistent with the policies and standards of the affected jurisdictions. When heavy equipment is used for construction during the dry season, a water truck shall be maintained on the construction site. Materials and equipment required for implementation of the plan shall be available on the construction site. Training shall be provided to all construction personnel regarding fire safety, and all personnel shall be made familiar with the contents of the plan before the start of construction activities.

AA. Impact MIN-2. Possible Loss of Availability of Regionally or Locally Important Mineral Resources—Natural Gas.

Natural gas well fields and individual gas wells are located throughout the program area. The exact locations of all funded facilities have not been finalized, and facilities could be constructed within natural gas field boundaries where existing natural gas wells are located. Therefore, implementation of program changes could result in loss of access to existing natural gas wells, and this impact would be potentially significant.

Mitigation Measure MIN-1, which is hereby adopted and incorporated into the program, would reduce this impact to a less-than-significant level because funding would be provided to close, destroy, and relocate existing natural gas wells (if necessary), and construction of funded facilities would not preclude any mining operator from drilling new wells to obtain natural gas in the future.

Mitigation Measure MIN-1: Finalize Specific Locations of Program Components, Determine Exact Locations of Existing Wells in Relationship to Program Components, and Fund any Necessary Closure, Destruction, or Relocation of Natural Gas Wells.

After the exact locations of each of the program components have been finalized, but before the start of construction activities, the agencies implementing program components shall consult the California DOGRR to determine whether any natural gas wells are present at the locations where proposed funded facilities would be constructed. If no wells are present, then no further mitigation is required. If wells are present, the agencies implementing program components shall consult with the owners of such wells to make arrangements for continued well access. If it is necessary to close, relocate, or destroy any active or inactive wells in order to implement proposed funded facilities, the agencies implementing program components shall pay for the cost of such activities.

VII. LESS-THAN-SIGNIFICANT IMPACTS

The SEIR identifies the less-than-significant impacts described below. Mitigation to further reduce less-than-significant impacts is not required by CEQA.

A. Impact AG-2. Conflict with a Williamson Act Contract.

Construction of the funded facilities would not preclude the continuation of agricultural activities on lands under Williamson Act contracts, and no conflicts with an existing Williamson Act contract would occur. Therefore, there would be no impact.

B. Impact AG-3. Consistency with Adopted Policies, Land Use Designations, and Zoning Codes.

Implementation of program changes would be consistent with adopted land use policies, land use designations, and zoning. This impact would be less than significant.

C. Impact AG-4. Physically Divide an Established Community.

Construction of the funded facilities would occur outside or along the boundaries of existing communities. Therefore, no impacts related to the physical division of communities would result from implementation of program changes.

D. Impact GEO-1. Potential Damage to Program Facilities from Seismic and Geologic Hazards.

Construction of program facilities could result in exposure to seismic hazards such as liquefaction, and to geologic hazards such as settlement and expansion from construction in unstable soils. However, it is assumed that the design and construction of all levee modifications and the elevated Northern Sierra Railroad tracks and County Road 123 would meet or exceed applicable design standards for stability, seismic ground shaking, liquefaction, subsidence, and seepage. Therefore, this impact would be less than significant.

E. Impact HH-1. Hydraulic Effects of the Proposed Program.

The program changes would include lengthening the Sacramento Weir and enlarging the Sacramento Bypass, constructing setback levees along the east side of the Yolo Bypass between I-5 and the enlarged Sacramento Bypass, strengthening the RD 2068 Levee on the west side of the Yolo Bypass, and constructing a new floodwall to protect portions of the City of Rio Vista. Simulations of the effects of the program on water surface elevations, including the water surface elevations associated with 100- and 200-year conditions, show that the program would not cause a significant increase in flood risk. Therefore, this impact would be less than significant.

F. Impact WQ-3. Long-Term Operational Effects on Groundwater Levels Resulting from Installation of Flood Protection Components.

The program changes do not include the installation of cutoff walls. Installation of flood protection components is not expected to result in conditions that would substantially impair groundwater flow or cause a substantial drop in groundwater levels that could decrease the yield of nearby wells. Therefore, this impact would be less than significant.

G. Impact BIO-4. Possible Effects on Special-Status Vernal Pool Invertebrates.

Implementation of program changes would not result in direct adverse effects to suitable habitat for special-status vernal pool invertebrates. Potential indirect impacts would not affect suitable habitat or result in loss of invertebrate populations. Therefore, this impact would be less than significant.

H. Impact BIO-10. Effects on Wildlife Corridors.

Implementation of program changes would result in disturbance of habitats that serve as wildlife corridors, but only a portion of the habitat would be affected and corridors suitable for wildlife movement would persist. Therefore, this impact would be less than significant.

I. Impact AIR-2. Long-Term Changes in Emissions of ROG, NO_x, and PM₁₀.

Long-term (i.e., operational) criteria air pollutant emissions associated with implementation of program components would not result in or substantially contribute to an existing or projected air quality violation. Therefore, this impact would be less than significant.

J. Impact UTL-3. Temporary Increase in Solid Waste Generation.

Operation of the funded facilities would involve only periodic inspection and maintenance activities and would not result in short- or long-term solid waste generation. Construction of individual program components would temporarily increase solid waste generation in the program area. Only those landfills determined to have the ability to accommodate the construction disposal needs of the individual program components would be used for solid waste disposal. Therefore, this impact would be less than significant.

K. Impact HAZ-1. Accidental Spills of Hazardous Materials Used during Construction.

Construction of the funded facilities would involve the storage, use, and transport of hazardous materials such as fuels, oils, and lubricants during construction. Program components would adhere to federal, state, and local hazardous materials regulations have been specifically designed to reduce the risk of accidental spills to the maximum extent practicable. Therefore, this impact would be less than significant.

L. Impact HAZ-2. Handling of Hazardous Materials within 1/4-Mile of a School during Construction.

Construction of the funded facilities would involve the use of small quantities of hazardous materials such as fuels, oils, and lubricants for construction equipment. However, acutely hazardous materials would not be used, and the small quantities of materials used during construction would not represent a hazard to pupils or employees at schools in the vicinity of funded facilities. Therefore, this impact would be less than significant.

M. Impact HAZ-4. Creation of Safety Hazards, Including Birdstrike, in the Vicinity of a Public or Private Airport.

Increasing the size of the Sacramento and Yolo Bypasses is not anticipated to result in creation of wetlands or other habitats likely to attract increased numbers of

waterfowl and other species that could lead to an increased wildlife strike hazard at the California Highway Patrol Academy Airport. Therefore, this impact would be less than significant. There would be no impact from the other funded facilities because they do not involve activities that would affect airport safety.

N. Impact HAZ-6. Create a Public Health Hazard from Increased Exposure to Mosquito-Borne Diseases by Substantially Increasing the Amount of Mosquito Habitat.

Widening the Sacramento Weir would double the size of the Sacramento Bypass, thereby increasing the potential for additional mosquito breeding habitat. However, water is retained in the bypass only during the winter months when mosquito activity is very low, and best management practices would be implemented to reduce mosquito populations. Therefore, this program change would have a less-than-significant impact. There would be no impact from implementing the other program changes, which would have no effect on mosquito habitat.

O. Impact MIN-1. Loss of Availability of Regionally or Locally Important Known Mineral Resources—Construction Aggregate.

None of the proposed program components are located within a regionally or locally designated important mineral resource extraction zone (i.e., an area classified by CGS as MRZ-2). In addition, the use of mineral resources for levee setbacks and road base would be an appropriate use of any aggregate mineral resources that may be present. Therefore, this impact would be less than significant.

P. Impact GHG-2. Conflict with an Applicable Greenhouse Gas Emissions Reduction Plan.

The intent of the program changes is to upgrade and improve existing flood protection infrastructure in Sacramento, Yolo, and Solano Counties, which would protect and prevent against potential adverse climate change impacts. This is consistent with the goals of the updated AB 32 Scoping Plan and 2009 California Statewide Adaptation Strategy to avoid detrimental impacts of climate change. Therefore, this impact would be less than significant.

VIII. GROWTH-INDUCING IMPACTS

CEQA requires that an EIR, including an SEIR, evaluate the growth-inducing impacts of a proposed project. (Pub. Resources Code § 21100[b][5].) Growth-inducing impacts are the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. (CEQA Guidelines § 15126.2(d).) Growth-inducement itself is not an environmental effect, but it may lead to environmental effects.

The program as a whole, including the program changes, would reduce flood risk in the Sacramento metropolitan area through the implementation of various levee improvements and widening of the Sacramento and Yolo Bypasses. Because the program

would not involve housing construction, it would not directly induce growth. Program-related construction activities would generate temporary and short-term employment, but these construction jobs are anticipated to be filled from the existing local employment pool, and would not indirectly result in a population increase or induce growth by creating permanent new jobs. Consequently, the program would not induce growth leading to changes in land use patterns, population densities, or related impacts on environmental resources.

In December 2004, the Sacramento Area County of Governments (“SACOG”) adopted the “Preferred Blueprint Scenario” to guide land use and transportation choices over the next 50 years as the region’s population grows. The program would accommodate planned regional growth in a manner that would be consistent with emerging smart growth principles. This growth will proceed with or without implementation of the program. In the absence of the program, individual developments would likely provide their own flood protection. Thus, the program would accommodate planned regional growth, but is not growth-inducing itself.

IX. CUMULATIVE IMPACTS

An EIR is required to discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable. (CEQA Guidelines § 15130[a][1].) CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which compound or increase other environmental impacts.” (CEQA Guidelines § 15355.) “Cumulatively considerable” means that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. (Pub. Resources Code § 21083[b][2]; CEQA Guidelines § 15065[a][3].)

The SEIR analyzes the program’s contributions to cumulative impacts based on a summary of projections contained in relevant planning documents. Summaries of relevant planning documents are provided in Draft SEIR Section 5.2.2. The analysis of the cumulative impacts of the program in Chapter 5 of the Draft SEIR is summarized below. The findings in this section are based on the SEIR, the discussion and analysis in which is hereby incorporated in full by this reference.

A. Agriculture, Forestry, and Land Use

The program, particularly expansion of the Yolo and Sacramento Bypasses, would convert farmland, including Important Farmland, to non-agricultural uses. However, the amount of land occupied by existing levees that could be returned to agricultural use would be similar to the amount of existing agricultural land that would be converted. Although conversion of farmland is a cumulatively significant impact in the region and state, the program’s contribution to this impact would not be considerable. Land use compatibility impacts are inherently local, and there would be no significant cumulative impact related to consistency with adopted policies, land use designations, and zoning codes. Therefore, this cumulative impact would be less than significant.

B. Fisheries and Aquatic Resources

Program components have potential to temporarily degrade fish habitat during construction activity through the direct release of soil and construction materials into water bodies or the indirect release of contaminants into water bodies through runoff. The implementation of best management practices and adherence to the conditions of a stormwater pollution prevention plan would ensure that the requirements of the Clean Water Act and Porter-Cologne Water Quality Control Act are met, and would minimize the potential for such effects. Other projects would have a similar potential to release materials into water courses that support fish. These other projects would be required to implement similar measures to prevent impacts. Given the temporary nature of any impacts and the protections afforded by regulatory programs under the Clean Water Act and Porter-Cologne Water Quality Control Act, any degradation of surface waters by construction activities of the program and other projects would be minimized. Consequently, the effects of program construction on fish habitat are not expected to constitute a cumulatively considerable contribution to an impact on fish habitat or aquatic species.

The program changes would include implementing waterside levee improvements (e.g., implementing erosion protection treatments) that could result in the temporary loss of overhead cover and instream woody material. These components of shaded riverine aquatic habitat are important to listed salmonids and other fish species. Losses of overhead cover and instream woody material over time are considered to be an important contributing factor in the habitat decline of native fish species. Implementation of Mitigation Measure BIO-F1 would ensure restoration, rehabilitation, and/or replacement of any affected channel habitat. Implementation of Mitigation Measure BIO-F1 would ensure that effects of the program on aquatic habitat would not be cumulatively considerable.

Therefore, the program's contributions to cumulative impacts on fisheries and aquatic habitat would be less than significant.

C. Terrestrial Biological Resources

Implementation of program changes has potential to contribute to loss or degradation of sensitive habitats (including riparian habitat) and loss of protected trees, and to adversely affect special-status species (special-status plants, Swainson's hawks, burrowing owls, other nesting raptors, giant garter snakes, valley elderberry longhorn beetle host plants, and others). Most potential effects of the program related to wildlife would be associated with construction disturbances of wildlife and their habitats, but permanent loss of habitat could also result from some of the individual program components. These effects could contribute to species declines and losses of habitat that have led to the need to protect these species under the federal Endangered Species Act ("ESA") and the California Endangered Species Act ("CESA"). Similar potential for adverse effects on special-status species and their habitats would be associated with the substantial urban growth expected in the Sacramento area, particularly in the Natomas area, which would continue to reduce suitable habitat and nest sites.

Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-5, BIO-6, BIO-7, BIO-8, and BIO-9 would ensure that the effects of the program are reduced or avoided in accordance with the requirements of the ESA and CESA and other regulatory programs that protect habitats, such as Section 1602 of the California Fish and Game Code. Because the implementing agency(ies) would implement avoidance and compensation measures in accordance with the requirements of the ESA, CESA, and Section 1602 and would include additional habitat protection and enhancement components in the program, the contributions to impacts on terrestrial species would not be cumulatively considerable. Therefore, this cumulative impact would be less than significant.

D. Cultural Resources

Prehistoric human habitation sites are common in riverbank and floodplain areas, and burial sites are often encountered in the course of ground-disturbing activities. It is likely that known or unknown archaeological resources could be disturbed and cultural resources damaged or destroyed during construction activities for the program components. Significant and unavoidable loss of a unique archaeological resource as defined in California Public Resources Code section 21083.2 or of Tribal Cultural Resources could occur where excavations encounter resources that cannot be removed or recovered (e.g., under levees). Historic resources also could be damaged or require removal from areas near flood control facilities under levee integrity program activities. If these resources would meet the definition of historical resources as defined in California Public Resources Code Section 21084.1, their modification or destruction would be considered significant. Although mitigation would be implemented to reduce effects on potentially significant cultural resources, significant impacts, particularly on archaeological resources, may still occur. Losses of archaeological resources would add to a historical trend in the loss of these resources as artifacts of cultural significance and as objects of research importance. For these reasons, the proposed program has the potential to make a cumulatively considerable impact on cultural resources. Therefore, the contribution of the program to cumulative impacts on cultural resources would be significant and unavoidable.

E. Transportation and Circulation

Effects of construction activities on emergency access would be site specific, intermittent, and temporary, and are not expected to be cumulatively considerable. Construction activities related to program components would temporarily increase traffic levels on local and regional roadways, sometimes substantially. Mitigation would be implemented to reduce effects to the extent feasible, but the program changes may still result in substantial temporary increases in traffic in relation to the existing traffic load and capacity of the street system. The program's significant temporary effects on traffic circulation could compound the impacts of increased regional short-term (construction-related) and long-term traffic increases associated with new development. However, because of the short-term, intermittent nature of traffic impacts that would be associated with the program components, these impacts would not be cumulatively considerable. Therefore, this cumulative impact would be less than significant.

F. Air Quality

The regional context for air quality emissions is the Sacramento Valley Air Basin (“SVAB”). Past development in the SVAB, combined with meteorological conditions, has resulted in significant cumulative impacts on air quality. The SVAB is in non-attainment status for ozone and small particulate matter (less than 10 microns in diameter, or PM₁₀).

The program changes would result in significant and unavoidable construction-related air quality impacts associated with generation of NO_x (ozone precursors) and PM₁₀, even with implementation of mitigation measures identified in Draft SEIR Section 4.11, “Air Quality.” Other medium-sized and large projects would similarly contribute substantially to air quality impacts. Given the nonattainment status of the SVAB for ozone and PM₁₀, cumulative construction-related air quality impacts are expected to be significant and unavoidable. The program changes would make a cumulatively considerable contribution to this significant and unavoidable cumulative air quality impact.

While there is a potential for exposure of sensitive receptors, particularly residents living near construction areas, to intermittent and temporary toxic air emissions, implementation of Mitigation Measure AIR-2 would ensure that exposure is reduced to a less-than-significant level. The contribution of the program changes to toxic air emission impacts would not be cumulatively considerable. Therefore, this cumulative impact would be less than significant.

G. Hazards and Hazardous Materials

The widening of the Sacramento and Yolo Bypasses in the Elkhorn Basin would increase the area inundated by flood control infrastructure, thereby providing more wildlife habitat near the Sacramento International Airport during winter months. However, since most of the inundated area is currently occupied by rice fields that are already attractive habitat for hazardous wildlife, the increase in hazardous wildlife population and associated birdstrike would not make a considerable contribution to the existing birdstrike risk. Therefore, this cumulative impact would be less than significant.

Although the funded facilities are located in areas of low or moderate wildfire risk, construction activities will have a potentially significant impact related to wildfire because vegetation will be present and construction equipment can emit sparks that ignite fires. However, risk that the program changes will cause or worsen a local or regional wildfire is low. The program contribution to regional impacts related to wildfire would not be cumulatively considerable. Therefore, this cumulative impact would be less than significant.

Implementation of Mitigation Measures HAZ-1, HAZ-2, and HAZ-3 would minimize the potential for exposure of people or the environment to hazardous materials due to construction activity. If hazardous materials are encountered, effects would be

localized and would not be expected to be additive with the effects of other actions. Therefore, no cumulative impact would occur.

H. Greenhouse Gas Emissions

Climate change, as related to GHG emissions, is an inherently cumulative condition because it is global. Although significance thresholds can be and have been developed by air districts and state and federal regulatory agencies, these thresholds and their related goals are designed to effect change at a global level through local actions. Therefore, the analysis presented in Draft SEIR Section 4.18, “Greenhouse Gas Emissions,” considers the contributions of the program changes to cumulative impacts. As stated in Section 4.18, implementation of Mitigation Measures AIR-1 and GHG-1, and the program’s consistency with statewide climate change adaptation strategies, would reduce the program’s impact. However, because of uncertainties regarding the timing and potential overlap of construction of the various program components, sufficient carbon offset credits may not be available at the time of construction. Therefore, SAFCA has conservatively assumed that the program changes would have a significant and unavoidable cumulative impact related to GHG emissions.

I. Visual Resources

The program would include construction activities and installation of waterside erosion control that would have temporary and short-term negative effects on visual character and scenic resources within scenic highways. Because the long-term visual and scenic character of program component sites would be similar to the existing condition, there would be a less-than-significant long-term impact. Because the program’s long-term visual impact would be minimal, the program would not contribute to significant cumulative visual impacts. Therefore, this cumulative impact would be less than significant.

X. ALTERNATIVES

CEQA requires that an EIR include analysis of a reasonable range of feasible alternatives to a proposed project that would attain most of the basic project objectives but would avoid or substantially lessen any of the project’s significant effects. (CEQA Guidelines § 15126.6[a].) The discussion of alternatives is required to include a “No-Project” Alternative and identify an environmentally superior alternative. If the No-Project Alternative is the environmentally superior alternative, an environmentally superior alternative must be identified from among the other alternatives. (CEQA Guidelines § 15126.6.)

The program changes would involve changes to the approved local funding mechanisms program. Specifically, the program changes would create a new assessment district (CCAD 2) to replace the existing assessment district (CCAD) and would update the DIF, all for the purpose of providing the local contribution to funding a program of flood control improvements for the Sacramento Area. As set forth in these findings,

implementation of the program changes would result in significant environmental impacts. Accordingly, SAFCA must consider a reasonable range of feasible alternatives.

Alternatives to the local funding mechanisms program as a whole were analyzed in the 2007 EIR, and included the No Project, No New Public Funding and Private Levees in Natomas, Natomas 100-Year Protection, Reduced Natomas Levee Perimeter, Increased Yolo Bypass Conveyance Capacity, Auburn Dam, and Setback Levee; the No-Project, No New Public Funding and Private Levees in Natomas, Natomas 100-Year Protection, and Reduced Natomas Levee Perimeter Alternatives, which were fully evaluated in the EIR, while the other potential Alternatives were considered but rejected as infeasible. Alternatives to the program changes might include different funding mechanisms than those proposed, but use of different mechanisms would not affect the environmental impacts that would result. Thus, the SEIR analyzes only the No-Project Alternative. The No-Project Alternative is the environmentally superior alternative because it would result in the elimination of a potentially significant environmental effect (reduced to a less-than-significant level with mitigation) related to the loss of availability of natural gas resources.

No-Project Alternative

Description

The No-Project Alternative would include implementation of only those improvements that could be funded by SAFCA's existing mechanisms without any changes. SAFCA would not establish the proposed CCAD 2 or update the DIF and, as a result, would not be able to provide the local cost-share that is needed to implement Federally recommended improvements to the flood control system protecting the Sacramento area. There would be sufficient funding from SAFCA's existing capital assessment district and DIF program to provide SAFCA's share of the cost of modifying Folsom Dam; constructing a new bridge across the American River downstream of the dam; implementing a new water control manual for Folsom Dam; completing Federally authorized levee improvements along the Lower American River; and completing the non-Federal phase of the Natomas Levee Improvement Program. Without the proposed changes to SAFCA's funding mechanisms, however, SAFCA would not have the financial capacity to support the Federal phase of the Natomas Levee Improvement Program, the levee improvements recommended by USACE in the North Sacramento area and along the American and Sacramento Rivers, or the improvements recommended by USACE to the Sacramento Weir and Bypass.

Without these Federally supported improvements, identified deficiencies in the levee system protecting the Sacramento area would not be addressed. This would leave the Natomas Basin and portions of North Sacramento, the downtown area and the Pocket area with less than a 100-year level of flood protection. New development in these areas would not be possible and existing property owners would be required to maintain high-cost flood insurance.

Impact Analysis

Implementation of the No-Project Alternative would result in the elimination of a potentially significant environmental effect (reduced to a less-than-significant level with mitigation) related to the loss of availability of natural gas resources because no funded facilities would be developed in the Yolo Bypass or the City of Rio Vista.

In addition, because of the overall reduction in levels of construction and the reduction in the level of program activities and footprint areas (including removal of the widening of the Yolo and Sacramento Bypasses and the Sacramento Weir) the following significant and potentially significant effects would be reduced, although the significance conclusions would not differ from those of the program:

- Potential Temporary, Short-Term Construction-Related Erosion
- Possible Temporary and Short-Term Water Quality Effects from Stormwater Runoff, Erosion, and Spills Associated with Construction
- Possible Temporary and Short-Term Effects on Groundwater or Surface Water Quality Resulting from Contact with the Water Table during Construction
- Possible Modifications to Aquatic Shoreline and Floodplain Habitat Used by Special-Status Fish
- Potential Disturbance, Injury, and Mortality of Special-Status Fishes during Construction
- Possible Water Quality Degradation during and Following In-Water Construction Activities
- Disturbance and Loss of Sensitive Habitats, including Riparian Habitat, Protected Trees, Jurisdictional Waters of the United States, and Waters of the State
- Possible Loss of Special-status Plants and Loss and Degradation of Special-status Plant Habitat
- Possible Effects on Valley Elderberry Longhorn Beetle
- Potential Disturbance or Loss of Giant Garter Snakes and Their Habitat
- Potential Disturbance or Loss of Northwestern Pond Turtles and Their Habitat
- Possible Disturbance of Nesting Swainson's Hawks and Potential Loss of Active Nests and Nest Trees
- Possible Disturbance of Other Special-Status Nesting Birds and Possible Loss of Active Nests and Occupied Burrowing Owl Burrows
- Possible Disturbance or Loss of Roosting Special-status Bats
- Possible Damage to or Destruction of Historical Resources
- Possible Damage to or Destruction of Identified or Unidentified Archaeological Resources
- Possible Damage to or Destruction of a Tribal Cultural Resource
- Possible Disturbance, Damage to, or Destruction of Human Remains
- Potential to Directly or Indirectly Destroy a Unique Paleontological Resource or Site
- Temporary and Short-Term Increases in Traffic on Local and Regional Roadways during Construction
- Possible Effects of Construction Activity on Emergency Access

- Generation of Temporary and Short-Term Emissions of ROG, NOX, and PM10 during Construction
- Exposure of Sensitive Receptors to Toxic Air Emissions
- Possible Exposure to Temporary and Short-Term Generation of Short-Term Construction Noise
- Possible Exposure of Sensitive Receptors to Temporary and Short-Term Generation of Excessive Groundborne Vibration or Noise
- Possible Temporary and Short-term Changes in Recreational Opportunities during Project Construction Activities
- Possible Damage to Scenic Resources within State- or County-Designated Scenic Highways
- Changes in Scenic Vistas and Existing Visual Character
- Potential Disruption of Irrigation Water Supply during Construction
- Potential Disruption of Utility Service during Construction
- Possible Exposure of People and the Environment to Existing Hazardous Materials, Including Cortese-Listed Sites
- Possible Creation of Wildland Fire Hazards
- Temporary, Short-Term Generation of Greenhouse Gas Emissions

Feasibility/Ability to Meet Project Objectives

The concept of “feasibility” encompasses the question of whether a particular alternative promotes existing policies, as well as the underlying goals and objectives of a project. The No-Project Alternative would only partially meet objectives 1 and 2 because it would only address 100-year and 200-year protection at the American River Levees. Proposed improvements to the North Sacramento Streams, Sacramento River, American River (erosion protection), Yolo and Sacramento Bypasses, and Rio Vista floodwall would not occur.

For the reasons stated above, SAFCA rejects the No-Project Alternative as infeasible within the meaning of CEQA because would not attain most of the basic project objectives.

XI. STATEMENT OF OVERRIDING CONSIDERATIONS

The Board has balanced the benefits of the updated local funding mechanisms against the program’s unavoidable environmental risks in determining whether to approve the program, and has determined that the benefits of the program outweigh the unavoidable adverse environmental effects. The reasons set forth below are based on the Final SEIR, the 2007 EIR, and other information in the record.

A. Because of unique topographical and meteorological features, the Sacramento River basin, including its major tributaries, the Feather and American Rivers, is capable of producing significantly higher peak flood discharge per square mile of drainage area than any other major river basin in the United States.

B. The 1986 flood, the largest flood ever recorded for the Sacramento and American Rivers, triggered a major reevaluation of Sacramento's flood control system by the United States Army Corps of Engineers, which identified deficiencies in the flood control system protecting Sacramento. Although a substantial flood protection effort has been undertaken since 1986, large portions of the Sacramento metropolitan area remain at high risk (having less than 100-year flood protection) or at moderate risk (having greater than 100-year but less than 200-year flood protection) of flooding.

C. There is an immediate need to protect the people and property at risk in the program area. Billions of dollars in damageable property and more than 300,000 residents are located within the flood zones protected by the levee system targeted by the program. Flooding could also release toxic and hazardous materials, contaminate groundwater, and damage the metropolitan power and transportation grids. The disruption in transportation that could result from a major flood would likely affect several major interstate and State highways. A temporary shutdown or slowdown of many Federal, State, regional, and local government functions would also result. In addition, displacement of residents, businesses, agriculture, and recreational areas could occur. Resulting damage could also hinder community growth, stability, and cohesion.

D. The program will help maximize public safety along the lower American and Sacramento Rivers and their tributaries in the Sacramento region. Specifically, the program will improve the levee system protecting Sacramento and make related landscape modifications and drainage and infrastructure improvements.

E. The program would significantly reduce the risk of an uncontrolled flood in the program area that would result in a catastrophic loss of property and a prolonged interruption of commercial activity.

F. By contributing to protection of existing housing stock from destruction due to flood damage, the program will contribute to the maintenance of affordable housing in the region.

G. Several of the significant and unavoidable impacts identified in the SEIR (including construction-related noise, scenic impacts, and generation of GHGs) are temporary in duration and will be limited to the construction period.

XII. INCORPORATION BY REFERENCE

The SEIR is hereby incorporated into these findings in its entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of the mitigation measures, the basis for determining the significance of impacts, the comparative analysis of alternatives, and the reasons for approving updated local funding mechanisms in spite of the potential for associated significant and unavoidable adverse impacts.

XIII. RECIRCULATION NOT REQUIRED

No significant new information was added to the Draft SEIR as a result of the public comment process. The Final Subsequent Environmental Impact Report responds to comments, and clarifies, amplifies, and makes insignificant modifications to the Draft SEIR. It does not identify any new significant effects on the environment or a substantial increase in the severity of an environmental impact requiring major revisions to the Draft SEIR. Therefore, recirculation of the SEIR is not required.

XIV. RECORD OF PROCEEDINGS

Various documents and other materials constitute the record of proceedings upon which the Board bases the findings contained herein. The record of proceedings is located in the offices of the Clerk of the Sacramento Area Flood Control Agency, 1007 Seventh Street, 7th Floor, Sacramento, California 95814.

XV. SUMMARY

A. Based on the foregoing findings and the information contained in the record, the Board has made one or more of the following findings with respect to each of the significant environmental effects of the proposed program:

1. Changes or alterations have been required in, or incorporated into, the program that avoid or substantially lessen the significant environmental effects identified in the SEIR.
2. To the extent that such changes or alterations are within the responsibility and jurisdiction of another public agency, and not SAFCA, those changes or alterations have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternative identified in the SEIR.

B. Based on the foregoing findings and the information contained in the record, it is determined that:

1. All significant effects on the environment due to the approval of the Updated Local Funding Mechanisms for Sacramento Area Flood Control Improvements have been eliminated or substantially lessened where feasible.
2. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section XI, above.

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