

Mitigation Monitoring and Reporting Program for the  
Natomas Levee Improvement Program  
Phase 4a Landside Improvements Project



State Clearinghouse No. 2009032097

Prepared for:



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Natomas Levee Improvement Program  
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## ACRONYMS AND ABBREVIATIONS

APN	Assessor's Parcel Number
ARB	California Air Resources Board
BMPs	best management practices
Cal/OSHA	California Occupational Safety and Health Administration
CESA	California Endangered Species Act
CVFPB	Central Valley Flood Protection Board
DFG	California Department of Fish and Game
DOC	California Department of Conservation
DPF	diesel particulate filters
ESA	Federal Endangered Species Act
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FRAQMD	Feather River Air Quality Management District
GHG	greenhouse gas
HEPA	high-efficiency particulate air
hp	horsepower
HPTP	Historic Property Treatment Plan
LTMP	Long-Term Management Plan
MLD	most likely descendent
MMP	Mitigation and Monitoring Plan
NBHCP	Natomas Basin Habitat Conservation Plan
NLIP	Natomas Levee Improvement Program
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NO <sub>x</sub>	oxides of nitrogen
NOS	Particulate Not Otherwise Specified
NPDES	National Pollutant Discharge Elimination System
OHWM	ordinary high water mark
PCBs	polychlorinated biphenyls
Phase 4a Project	Phase 4a Landside Improvements Project
PM <sub>10</sub>	respirable particulate matter less than 10 microns in diameter
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SAFCA	Sacramento Area Flood Control Agency
SCAS	Sacramento County Airport System
SHPO	State Historic Preservation Officer
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	California Surface Mining and Reclamation Act
SRA	shaded riverine aquatic
SWPPP	Stormwater Pollution Prevention Plan
TNBC	The Natomas Basin Conservancy
USACE	U.S. Army Corps of Engineers
UST	underground storage tanks
USFWS	U.S. Fish and Wildlife Service
WHMP	Wildlife Hazard Management Plan

# MITIGATION MONITORING AND REPORTING PROGRAM

The Sacramento Area Flood Control Agency (SAFCA) prepared an environmental impact report (EIR) to provide the public and responsible and trustee agencies with information about the potential environmental effects associated with the construction and operation of Natomas Levee Improvement Program (NLIP) Phase 4a Landside Improvements Project (Phase 4a Project).

The EIR concludes that implementation of the Phase 4a Project would generate significant adverse environmental impacts to the physical environment. For most potential impacts, the EIR prescribes mitigation feasible of reducing these impacts to less-than-significant levels.

Section 21081.6 of the California Public Resources Code requires a public agency to adopt a reporting or monitoring program for changes to the project that it has adopted and incorporated into the project, at the time of approval, in order to mitigate, minimize, or avoid significant effects on the physical environment. These conditions are also referred to as mitigation measures.

This Mitigation Monitoring and Reporting Program is to be used by SAFCA to ensure that adopted mitigation measures identified in the Phase 4a EIR, which constitutes both the Phase 4a DEIS/DEIR and FEIR are implemented and that implementation is documented. The Mitigation Monitoring and Reporting Program is presented in tabular format.

The table columns contain the following information:

**Mitigation Number:** Lists the mitigation measures by number, as designated in the Phase 4a DEIS/DEIR, by issue area.

**Mitigation Measure:** Provides the text of the mitigation measures (by issue area), as provided in the Phase 4a DEIS/DEIR, and as revised in the FEIR, each of which has been adopted and incorporated into the project.

**Timing/Schedule:** Lists the time frame in which the mitigation is expected to take place.

**Implementation Responsibility:** Identifies the entity responsible for complying with the requirements and conditions of the mitigation measure.

**Completion of Implementation:** SAFCA is responsible for reporting on implementation of the mitigation measures. The “Action” column is to be used by SAFCA to describe the action(s) taken to complete implementation. The “Date Completed” column is to be used by SAFCA to indicate when implementation of the mitigation measure has been completed. SAFCA, at its discretion, may delegate implementation responsibility or portions thereof to qualified consultants or contractors. However, SAFCA still maintains overall responsibility for implementation of mitigation adopted or incorporated into the project.

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
<b>Agricultural Resources</b>					
<b>4.2-a</b>	<b>Minimize Important Farmland Conversion to the Extent Practicable and Feasible</b>				
	(a) Borrow sites shall be configured to minimize the fragmentation of lands that are to remain in agricultural use. Contiguous parcels of agricultural land of sufficient size to support their efficient use for continued agricultural production shall be retained to the extent practicable and feasible.	During project design and before construction	SAFCA and its consultant(s) for engineering and design		
	(b) To the extent practicable and feasible, when expanding the footprint of a flood damage reduction facility (e.g., levee or berm) onto agricultural land, the most productive topsoil from the construction footprint shall be salvaged and redistributed to less-productive agricultural lands in the vicinity of the construction area that could benefit from the introduction of good-quality soil. By agreement between the implementing agencies or landowners of affected properties and the recipient(s) of the topsoil, the recipient(s) shall be required to use the topsoil for agricultural purposes. SAFCA shall implement all terms and conditions of agreements.	Before and during construction	SAFCA and its primary construction contractor(s)		
	(c) During project construction, use of utilities that are needed for agricultural purposes (including wells, pipelines, and power lines) and of agricultural drainage systems shall be minimized so that agricultural uses are not substantially disrupted.	During construction	SAFCA and its primary construction contractor(s)		
	(d) Disturbance of agricultural land and agricultural operations during construction shall be minimized by locating construction staging areas on sites that are fallow, that are already developed or disturbed, or that are to be discontinued for use as agricultural land, and by using existing roads to access construction areas to the extent possible.	During construction	SAFCA and its primary construction contractor(s)		

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	(e) To the extent feasible, lands acquired for flood damage reduction purposes shall also be used as mitigation land for Natomas Basin Habitat Conservation Plan (NBHCP) programs so that agricultural land conversion is minimized.	During project design and before construction	SAFCA		
<b>4.2-b</b>	<p><b>Minimize Impacts on Agricultural Preserve Land and Williamson Act-Contracted Land; Comply with Government Code Sections 51290-51293; and Coordinate with Landowners and Agricultural Operators</b></p> <p>(a) SAFCA shall comply with California Government Code Sections 51290-51295 with regard to acquisition of Williamson Act contracted lands as follows:</p> <ul style="list-style-type: none"> <li>▶ The policy of the state, consistent with the purpose of the Williamson Act to preserve and protect agricultural land, is to avoid, whenever practicable, locating public improvements and any public utilities improvements in agricultural preserves. If it is necessary to locate within a preserve, it shall be on land that is not under contract (Government Code Section 51290[a][b]). More specifically, the basic requirements are:                             <ul style="list-style-type: none"> <li>• Whenever it appears that land within a preserve or under contract may be required for a public improvement, the public agency or person shall notify the California Department of Conservation (DOC) and the city or county responsible for administering the preserve (Government Code Section 51291[b]).</li> <li>• Within 30 days of being notified, DOC and the city or county shall forward comments, which shall be considered by the public agency or person (Section 51291[b]).</li> </ul> </li> <li>▶ The contract shall be terminated when land is acquired by eminent domain or in lieu of eminent domain (Government Code Section 51295).</li> </ul>	Before and during construction	SAFCA		

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	<ul style="list-style-type: none"> <li>▶ DOC and the city or county shall be notified before project completion of any proposed substantial changes to the public improvement (Government Code Section 51291[d]).</li> <li>▶ DOC shall be notified within 10 working days upon completion of the acquisition (Section 51291[c]).</li> <li>▶ If, after acquisition, the acquiring public agency determines that the property will not be used for the proposed public improvement, before returning the land to private ownership, DOC and the city or county administering the involved preserve shall be notified. The land shall be reenrolled in a new contract or encumbered by an enforceable restriction at least as restrictive as that provided by the Williamson Act (Government Code Section 51295).</li> </ul>				
	(b) SAFCA shall coordinate with landowners and agricultural operators to sustain existing agricultural operations, at the landowners' discretion, within the project area until the individual agricultural parcels are needed for project construction.	Before construction	SAFCA		
	(c) Properties that were under Williamson Act contract prior to conversion for borrow use and that are owned by SAFCA or are acquired by SAFCA shall be reenrolled under Williamson Act contract upon reclamation to agricultural use if those properties can be covered by the Williamson Act.	Upon completion of borrow use	SAFCA		
<b>Land Use, Socioeconomics, and Population and Housing</b>					
<b>4.3-b</b>	<b>Implement Mitigation Measure 4.7-k, "Ensure that Project Encroachment Does Not Jeopardize Successful Implementation of the NBHCP and Implement Mitigation Measures 4.7-a, 4.7-c, and 4.7-e through 4.7-h"</b>  Implement Mitigation Measure 4.7-k	See Mitigation Measure 4.7-k	See Mitigation Measure 4.7-k		

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4.3-c	<p><b>Notify Residents and Businesses of Project Construction and Road Closure Schedules; Comply with the Garden Highway Settlement Agreement; and Implement Mitigation Measure 4.10-a, “Prepare and Implement a Traffic Safety and Control Plan for Construction-Related Truck Trips,” and Mitigation Measure 4.10-c, “Notify Emergency Service Providers about Project Construction and Maintain Emergency Access or Coordinate Detours with Providers”</b></p> <p>Implement Mitigation Measures 4.10-a and 4.10-c</p>	See Mitigation Measures 4.10-a and 4.10-c	See Mitigation Measures 4.10-a and 4.10-c		
	<p>a) SAFCA shall provide residents and business owners located adjacent to the construction areas with information regarding construction activities including contact information and complaint procedures, and with a construction timeline and shall post its construction schedule on the SAFCA Web site. Information shall include road closures and detour information. The schedule shall be updated on a regular basis.</p>	Before and during construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		



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	<p>b) SAFCA shall apply the following measures to power line relocations: To the extent that the main electrical power transmission lines and poles serving the Garden Highway must be relocated or replaced to accommodate the project, the relocation or replacement shall occur east of the new adjacent levee and in a manner that appropriately accommodates private landside improvements and properties. Existing main electrical power transmission lines and poles on the waterside of the existing Garden Highway levee that do not need to be relocated or replaced to accommodate the project may be left in place. No new main electrical power transmission lines and poles shall be installed on the waterside of the Garden Highway levee. Consistent with sound engineering practices that prioritize the following, individual services shall: (1) use existing configurations and facilities, and (2) any new poles shall be placed on the landside of Garden Highway, subject to the approval of U.S. Army Corps of Engineers (USACE), the Central Valley Flood Protection Board (CVFPB), and any other regulatory public agencies and utility companies. If the affected property owner and SAFCA cannot agree on a location of an individual service line pole from among locations that are otherwise acceptable to USACE, CVFPB, other regulatory agencies, and the utility provider, SAFCA shall pay the cost of a referee, who is a qualified registered civil engineer and agreeable to both the affected property owner and SAFCA, to decide the dispute over the location of the individual service line pole.</p>	Before and during construction	SAFCA, CVFPB, applicable utility districts, and SAFCA's primary contractor(s) for engineering design and construction		

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	c) SAFCA shall apply the following measure to encroachments: Once SAFCA determines that the Sacramento River east levee is certifiable for the Federal Emergency Management Agency's (FEMA's) flood protection purposes, SAFCA shall make its best efforts to get written agreement from USACE, CVFPB, and RD 1000 that no additional encroachments on the waterside of the Garden Highway levee need to be removed.	Consult with FEMA, USACE, CVFPB, and/or RD 1000 before construction	SAFCA		
	d) SAFCA shall implement the following measures before and during construction: (i) SAFCA shall give property owners within the project area an informational package advising the property owners that preproject inspections of their properties are important and that SAFCA will conduct a free preconstruction inspection of the property, but only if requested by the affected property owner. The scope of the inspection and documentation shall be determined by SAFCA in consultation with the property owner. For property owners who request prior inspections/documentation, the inspection/documentation must be scheduled prior to the start of construction within the specified reach of the Sacramento River east levee where project construction will commence.  (ii) If requested by a property owner within the project area, SAFCA shall test the owner's domestic well water before and after project construction for the presence of bentonite, concrete, and cement.	Before and during construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

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	<p>(iii) SAFCA shall cooperate with a construction monitoring committee established by local residents and businesses to resolve reasonable complaints regarding SAFCA or its contractors' construction activities for the projects improvements in accordance with this provision. A complaint procedure and hierarchy shall be developed by the committee and SAFCA's Ombudsperson in time to be included in the informational packet referenced in subsection (i), above. In addition, the information packet shall include SAFCA's instructions to its contractors regarding appropriate use of the Garden Highway. SAFCA agrees to resolve all complaints pertaining to dangerous activities immediately and to resolve all other reasonable complaints in an expeditious manner.</p> <p>(iv) SAFCA shall prohibit the use of earth-moving equipment or haul trucks on the Garden Highway in conjunction with project construction.</p> <p>(v) SAFCA shall provide local residents and businesses with a timeline for the phased completion of the project that indicates the role of the various agencies involved in implementing or permitting the project. SAFCA shall post its construction schedule for the project on the SAFCA Web site. The schedule shall be updated on a monthly basis. In addition, SAFCA shall post a "60-day notice" of Planned Construction on the SAFCA Web site. "Planned Construction" shall not include construction in the event of an emergency or construction necessary to remedy a condition discovered after completion of the project. However, SAFCA shall provide whatever notice is possible under the circumstances to affected, adjacent landowners prior to any emergency or remedial work.</p>				

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	e) SAFCA shall apply the following measures to drainage line location and relocation: No roadside swales shall be included in the design of the new adjacent levee downstream of Powerline Road. Consistent with sound engineering practices, and subject to the approval of USACE, CVFPB, and the Regional Water Quality Control Board (RWQCB), any new drainage outfall lines required by the project shall be buried pipes, located along property lines, and drain to the river. If a property owner does not want a new drain line located along the property line, he or she may request that the drain line be placed elsewhere on his or her property. If the property owner and SAFCA cannot agree on a location for a new drain line from among locations that are otherwise acceptable to USACE, CVFPB, and Central Valley RWQCB, SAFCA shall pay the cost of a referee, who is a qualified registered civil engineer and agreeable to both parties, to decide the dispute over the location of the drain line.	Consult with USACE, CVFPB, Central Valley RWQCB, and property owners before construction activities	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		
	f) Where a property owner occupies a residence on property to be acquired for the project, SAFCA shall allow up to 12 months, rather than the statutory allowance of 3 months, for the owner to relocate off the property. The 12-month period shall be counted from the first written offer.	Before construction activities	SAFCA		
	g) SAFCA shall provide notice as feasible for emergency construction or remedial construction.	Before and during construction activities	SAFCA		
<b>Geology, Soils, and Mineral Resources</b>					
4.4-a(1)	<b>Implement Mitigation Measure 4.6-a, “Implement Standard Best Management Practices, Prepare and Implement a Stormwater Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions”</b>				

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	Implement Mitigation Measure 4.6-a	See Mitigation Measure 4.6-a	See Mitigation Measure 4.6-a		
<b>4.4-a(2)</b>	<p><b>Secure and Implement the Conditions of the California Surface Mining and Reclamation Act Permit or Exemption</b></p> <p>In the event that any borrow site activity is determined to be subject to the California Surface Mining and Reclamation Act (SMARA), SAFCA shall secure and implement the conditions contained in the SMARA permit or exemption as administered and issued by the local agency (applicable county).</p>	Secure SMARA permit or exemption before construction (if needed); implement SMARA conditions through construction	SAFCA		
<b>4.4-b</b>	<p><b>Conduct Soil Core Sampling in Areas of the Phase 4a Project Footprint Designated as MRZ-3</b></p> <p>SAFCA shall retain a qualified geologist to analyze soil core samples extracted from proposed borrow sites, to depth of at least 3 feet, in areas that are designated as MRZ-3. In the event that a clean layer of economically viable aggregate is discovered, the county, DOC, and other appropriate agencies shall be notified. In addition, the horizontal extent of available aggregate shall be delineated by a qualified geologist.</p>	Before construction	SAFCA and the retained qualified geologist		
<b>Hydrology and Hydraulics</b>					
<b>4.5-b</b>	<b>Coordinate with Landowners and Drainage Infrastructure Operators, Prepare Final Drainage Studies as Needed, and Implement Proper Project Design</b>				

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	<p>During project design, SAFCA’s project engineers shall coordinate with owners and operators of local drainage systems and landowners served by the systems. This coordination shall enable the project engineers to evaluate the preproject and postproject drainage needs and the design features to consider in project design any project-related substantial drainage disruption or alteration in runoff that would increase the potential for local flooding.</p> <p>If substantial alteration of runoff patterns or disruption of a local drainage system could result from a project feature, a final drainage study shall be prepared and implemented as part of project design. The study shall consider the design flows of any existing facilities that would be crossed by project features and shall develop appropriate plans for relocation or other modification of these facilities and construction of new facilities, as needed, to ensure that the altered systems provide drainage services during and after construction that are equivalent to the drainage services that were provided prior to construction. If no drainage facilities (e.g., ditches, canals) would be affected, but project features would have a substantial adverse impact on runoff amounts and/or patterns, then new drainage systems shall be included in the design of project improvements to ensure that the project would not result in new or increased local flooding. Any necessary features to remediate project-induced drainage problems shall be constructed before the project is completed or as part of the project, depending on site-specific conditions. Any additional coordination with landowners and drainage infrastructure operators related to future selection of borrow sites in the Fisherman’s Lake Area shall be completed by SAFCA before commencement of any earth-moving activities.</p>	<p>Coordinate with owners and operators of local drainage systems and landowners served by the systems during project design. Prepare drainage study during project design. Construct and necessary features to remediate project-induced drainage issues as part of the project development, depending upon site-specific conditions</p>	<p>SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction</p>		

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<b>Water Quality</b>					
<b>4.6-a</b>	<p><b>Implement Standard Best Management Practices, Prepare and Implement a Stormwater Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions</b></p> <p>SAFCA shall file a Notice of Intent (NOI) to discharge stormwater associated with construction activity with the Central Valley RWQCB. Final design and construction specifications shall require the implementation of standard erosion, siltation, and good housekeeping Best Management Practices (BMPs). Construction contractors shall be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) and comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) general stormwater permit for construction activity. The SWPPP shall describe the construction activities to be conducted, BMPs that will be implemented to prevent discharges of contaminated stormwater into waterways, and inspection and monitoring activities that shall be conducted.</p> <p>The SWPPP shall include the following:</p> <ul style="list-style-type: none"> <li>▶ pollution prevention measures (erosion and sediment control measures and measures to control nonstormwater discharges and hazardous spills),</li> <li>▶ demonstration of compliance with all applicable Central Valley RWQCB standards and other applicable water quality standards,</li> <li>▶ demonstration of compliance with regional and local standards for erosion and sediment control,</li> <li>▶ identification of responsible parties,</li> <li>▶ detailed construction timelines, and</li> </ul>	<p>Prepare NOI and SWPPP before the start of project construction.</p> <p>Implement SWPPP and SMPs during construction.</p> <p>Monitor effectiveness of measure during and at completion of construction</p>	<p>SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction</p>		

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	<ul style="list-style-type: none"> <li>▶ a BMP monitoring and maintenance schedule.</li> </ul> BMPs shall include the following: <ul style="list-style-type: none"> <li>▶ conduct all work according to site-specific construction plans that identify areas for clearing, grading, and revegetation so that ground disturbance is minimized;</li> <li>▶ install silt fences near riparian areas or streams to control erosion and trap sediment, and reseed cleared areas with native vegetation;</li> <li>▶ stabilize disturbed soils of the new or raised levees, existing levee removal areas, and borrow sites before the onset of the winter rainfall season; and</li> <li>▶ stabilize and protect stockpiles from exposure to rain and potential erosion.</li> </ul> The SWPPP also shall specify appropriate hazardous materials handling, storage, and spill response practices to reduce the possibility of adverse impacts from use or accidental spills or releases of contaminants. Specific measures applicable to the project include, but are not limited to, the following: <ul style="list-style-type: none"> <li>▶ develop and implement strict on-site handling rules to keep potentially contaminating construction and maintenance materials out of drainages and other waterways;</li> <li>▶ conduct all refueling and servicing of equipment with absorbent material or drip pans underneath to contain spilled fuel, and collect any fluid drained from machinery during servicing in leak-proof containers and deliver to an appropriate disposal or recycling facility;</li> </ul>				



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	<ul style="list-style-type: none"> <li>▶ maintain controlled construction staging and fueling areas at least 100 feet away from channels or wetlands to minimize accidental spills and runoff of contaminants in stormwater;</li> <li>▶ prevent substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses;</li> <li>▶ maintain spill cleanup equipment in proper working condition. Clean up all spills immediately according to the spill prevention and response plan;</li> <li>▶ develop a slurry spill contingency plan to respond to a potential for bentonite slurry spill and prevent slurry from entering the Sacramento River or NCC; and</li> <li>▶ immediately notify the California Department of Fish and Game (DFG) and the Central Valley RWQCB of any spills and cleanup procedures.</li> </ul> <p>BMPs shall be applied to meet the “maximum extent practicable” and “best conventional technology/best available technology” requirements and to address compliance with water quality standards. A monitoring program shall be implemented during and after construction to ensure that the project is in compliance with all applicable standards and that the BMPs are effective.</p>				
<b>4.6-b</b>	<b>Implement Standard Best Management Practices and Comply with NPDES Permit</b>				

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	SAFCA and its contractor(s) for construction shall implement a suite of stormwater quality BMPs designed to remove contaminants from water discharging through the Garden Highway outlets. These BMPs shall be based on the strategies for effectively integrating stormwater quality management into project design described in <i>Stormwater Quality Design Manual for Sacramento and South Placer Regions</i> (May 2007). Treatment control measures such as vegetated swales and vegetated filter strips shall be used, depending upon the design requirements of the levee. BMPs shall meet “maximum extent practicable” and “best conventional technology/best available technology” requirements, and comply with NPDES permit conditions.	Implement BMPs during construction. Monitor effectiveness of measures during and at completion of construction	SAFCA and its primary contractor(s) for construction		
4.6-c	<p><b>Conduct Groundwater Quality Tests, Notify the Central Valley RWQCB, and Comply with the RWQCB’s Waste Discharge Authorization and NPDES Permit.</b></p> SAFCA, in coordination with RD 1000, shall ensure that groundwater in the vicinity of potential relief well locations is tested during project design and before well construction, to ensure that discharge of extracted groundwater does not exceed maximum contaminant levels specified in Title 22. SAFCA shall provide the Central Valley RWQCB with the results of these water quality tests and a conceptual plan for how the relief wells will be used (e.g., extracting and discharging groundwater), and shall comply with any waste discharge requirements and the NPDES permit issued by the Central Valley RWQCB.	Before and during project construction	SAFCA and its primary contractor(s) for construction		

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<b>Biological Resources</b>					
4.7-a	<p><b>Minimize Effects on Woodland Habitat; Implement all Woodland Habitat Improvements and Management Agreements; Compensate for Loss of Habitat; and Comply with Section 7 of the Federal Endangered Species Act, Section 1602 of the California Fish and Game Code, and Section 2081 of the California Endangered Species Act Permit Conditions</b></p> <ul style="list-style-type: none"> <li>Native woodland areas shall be identified and the primary engineering and construction contractors shall ensure, through coordination with a qualified biologist retained by SAFCA, that construction is implemented in a manner that minimizes disturbance of such areas to the extent feasible. Temporary fencing shall be used during construction to prevent disturbance of native trees that are located adjacent to construction areas but can be avoided.</li> </ul>	Before and during project construction	SAFCA and its primary construction contractor(s) in coordination with a qualified biologist		
	<ul style="list-style-type: none"> <li>SAFCA shall coordinate with U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), DFG, and the Sacramento County Airport System (SCAS) (if on Airport property) to ensure that all woodland habitat improvements of the NLIP are created and managed. SAFCA shall prepare a project-specific Mitigation and Monitoring Plan (MMP) and append the programmatic Long-Term Management Plan (LTMP) to ensure the creation and long-term management of these components before construction commences. SAFCA shall enter into agreements with the appropriate local entity responsible for long-term management of these created woodland habitats and shall coordinate with USFWS, NMFS, and DFG to ensure that performance standards and long-term management goals that are required by the regulatory agencies with jurisdiction over these resources will be specifically detailed and outlined in the MMP and LTMP. All performance standards and long-term</li> </ul>	Before, during, and after construction. Implement MMP and LTMP as specified	SAFCA and its design consultant(s)		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>management goals will be in full compliance with the Endangered Species Act (ESA) and California Endangered Species Act (CESA). SAFCA shall implement all terms and conditions of the agreements.</p> <hr/> <ul style="list-style-type: none"> <li>▶ Sacramento River waterside riparian woodland areas that provide shaded riverine aquatic (SRA) habitat functions shall be identified and the primary engineering and construction contractors shall ensure, through coordination with a qualified biologist retained by SAFCA, that construction is implemented in a manner that minimizes disturbance of such areas to the extent feasible. Temporary fencing shall be used during construction to prevent disturbance of trees and shrubs that are located adjacent to construction areas but can be avoided.</li> </ul>				
		During project design and construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>▶ Sacramento River waterside riparian forest and scrub (canopy acreage) shall be restored using ratios established by NMFS. Mitigation shall be 1:1 for in-kind mitigation and 3:1 for mitigation above the levee bench hinge (a surrogate for the ordinary high water mark (OHWM) for impacts below the levee bench hinge (OHWM). Mitigation shall be conducted using native plant species, including an assemblage of grasses, sedges, shrubs, and trees. At maturity, the riparian vegetation community would provide SRA functions. SAFCA shall develop a detailed woodland planting design and management protocols in coordination with USFWS, NMFS, and DFG. A monitoring plan with performance criteria shall be developed to determine the progress of the woodland habitats towards providing adequate mitigation.</p>	<p>Prepare plan before project construction. Monitor effectiveness with measures identified and in accordance with monitoring plan. Enter into agreements with responsible entities for long-term management of created SRA habitats before end of construction period</p>	<p>SAFCA and its consultant(s) for engineering and design</p>		
	<p>▶ The criteria for measuring performance shall be used to determine if the habitat improvement is trending toward sustainability (reduced human intervention) and to assess the need for adaptive management (e.g., changes in design or maintenance revisions). These criteria must be met for the habitat improvement to be declared successful, both during a particular monitoring year and at the end of the establishment period. These performance criteria, shall be developed in consultation with USFWS, NMFS, and DFG, and shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• percent survival of planted trees (from 65–85%),</li> <li>• percent survival of transplanted trees (from 60–85%), and</li> <li>• percent relative canopy cover (from 5–35%).</li> </ul>	<p>Consult with USFWS, NMFS, and DFG before the start of habitat improvements. Monitor effectiveness with measures identified and in accordance with monitoring plan</p>	<p>SAFCA</p>		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>SAFCA shall also enter into agreements with entities responsible for long-term management of created SRA habitats to ensure that performance standards and long-term management goals are met. SAFCA shall provide assurances for habitat creation and management goals that are required by regulatory agencies with jurisdiction over these resources will be specifically detailed and outlined in the LTMP and MMP. Such agreements shall be coordinated with USFWS, NMFS, and DFG. SAFCA shall implement all terms and conditions of the agreements.</li> </ul>	Enter into agreements with responsible entities for long-term management of created SRA habitats before the end of construction period	SAFCA		
	<ul style="list-style-type: none"> <li>A Section 1602 Streambed Alteration Agreement from DFG shall be obtained before any trees within a stream zone under DFG jurisdiction are removed. SAFCA shall comply with all terms and conditions of the streambed alteration agreement including measures to protect fish habitat or to restore, replace, or rehabilitate any SRA habitat on a no-net-loss basis.</li> </ul>	Consult with DFG and comply with Section 1602, as needed, before any waterside ground disturbance	SAFCA and its primary construction contractor(s)		
	<ul style="list-style-type: none"> <li>USACE shall initiate Section 7 consultation with NMFS under Section 7 of the Federal ESA and SAFCA shall consult or coordinate with DFG under CESA regarding potential impacts of the loss of SRA habitat on Federally listed fish species and state-listed fish species, respectively. SAFCA shall implement any additional measures developed through the ESA Section 7 and CESA consultation processes, including Section 2081 permit conditions, to ensure no net loss of SRA habitat functions.</li> </ul>	Obtain authorization for take of Federally listed fish species and state-listed fish species under the Federal ESA and CESA, respectively before construction	SAFCA		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
4.7-b	<p><b>Implement Mitigation Measure 4.7-a, “Minimize Effects on Woodland Habitat; Implement all Woodland Habitat Improvements and Management Agreements; Compensate for Loss of Habitat; and Comply with Section 7 of the Federal Endangered Species Act, Section 1602 of the California Fish and Game Code, and Section 2081 of the California Endangered Species Act Permit Conditions,” and Mitigation Measure 4.7-e, “Minimize the Potential for Direct Loss of Giant Garter Snake Individuals, Implement All Upland and Aquatic Habitat Improvements and Management Agreements to Ensure Adequate Compensation for Loss of Habitat, and Obtain Incidental Take Authorization”</b></p> <p>Implement Mitigation Measures 4.7-a and 4.7-e.</p>	See Mitigation Measures 4.7-a and 4.7-e	See Mitigation Measures 4.7-a and 4.7-e		
4.7-c	<p><b>Minimize Effects on Jurisdictional Waters of the United States; Complete Detailed Design of Habitat Creation Components and Secure Management Agreements to Ensure Compensation of Waters Filled; and Comply with Section 404, Section 401, Section 10, and Section 1602 Permit Processes</b></p> <ul style="list-style-type: none"> <li>Waters of the United States, including wetlands, shall be identified and the primary engineering and construction contractors shall ensure, through coordination with a qualified biologist(s), that construction is implemented in a manner that minimizes disturbance of canals, ditches, and seasonal wetlands. Temporary fencing shall be used during construction to prevent disturbance of waters of the United States that are located adjacent to construction areas but can be avoided.</li> </ul>	During project design and construction	SAFCA, its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>To mitigate for permanent impacts to sensitive aquatic resources, at least 1 acre of aquatic habitat (irrigation/drainage canal) or 1 acre of seasonal wetland shall be created for every acre that is lost to ensure no net loss of sensitive aquatic habitat. The mitigation ratio that is ultimately required will be determined by USACE through the Section 404 permitting process. Features planned in the Phase 4a Project (under both action alternatives), would provide aquatic habitat that has been designed to offset the effects described above. These features include the creation of aquatic habitat resulting from construction of the relocated Riverside Canal and creation of managed marsh in the vicinity of Fisherman’s Lake, much of which would meet the criteria for Waters of the United States, including wetlands.</li> </ul>	During construction	SAFCA in coordination with USACE		
	<ul style="list-style-type: none"> <li>Develop and implement a Mitigation and Monitoring Plan and Long-Term Management Plan in coordination with and subject to approval of USACE, USFWS, and DFG. The MMP and LTMP shall provide complete detailed designs of habitat creation components, performance standards and management protocols. SAFCA shall also enter into agreements with entities responsible for long-term management of created canals and marsh habitats to ensure that performance standards and long-term management goals that are required by the regulatory agencies with jurisdiction over these resources will be met and specifically detailed and outlined in the LTMP and MMP. All performance standards and long-term management goals will be in full compliance with ESA and CESA.  SAFCA shall secure all such agreements and implement all conditions of the agreements.</li> </ul>	Develop MMP and LTMP in coordination with USACE, USFWS, and DFG before start of construction	SAFCA		



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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>Obtain the following applicable permits prior to the start of construction activities that would affect the resources covered by these permits: an individual permit pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act from USACE, Section 401 certification from the Central Valley RWQCB, and a Section 1602 Streambed Alteration Agreement from DFG. All requirements of these permitting processes shall be implemented by SAFCA.</li> </ul>	Obtain appropriate permits before start of construction	SAFCA		
4.7-e	<p><b>Minimize the Potential for Direct Loss of Giant Garter Snake Individuals, Implement All Upland and Aquatic Habitat Improvements and Management Agreements to Ensure Adequate Compensation for Loss of Habitat, and Obtain Incidental Take Authorization</b></p> <ul style="list-style-type: none"> <li>The engineering and design consultants and primary construction contractors shall ensure, through coordination with a qualified biologist retained by SAFCA, that construction is implemented in a manner that minimizes disturbance of giant garter snake habitat (e.g., temporary fencing shall be used during construction to protect all aquatic and adjacent upland habitat that is located adjacent to construction areas that can be avoided).</li> </ul>	Establish protective measures during project design and before any project construction-related ground disturbance	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>Additional measures consistent with the goals and objectives of the NBHCP shall be implemented to minimize the potential for direct injury or mortality of individual giant garter snakes during project construction. Such measures shall be finalized in consultation with USFWS and DFG, and are likely to include conducting worker awareness training, timing initial ground disturbance to correspond with the snake's active season (as feasible in combination with project needs and minimizing disturbance of nesting Swainson's hawks), dewatering aquatic habitat before fill, conducting preconstruction surveys, erecting fencing around habitat features that can be avoided to ensure that these remain undisturbed by construction vehicles and personnel, conducting biological monitoring during construction, and removing any temporary fill or construction debris and restoring temporarily disturbed areas to their pre-project conditions according to the USFWS's <i>Guidelines for the Restoration and/or Replacement of Giant Garter Snake Habitat</i> (USFWS 1997).</li> </ul>	Implement measures before and during construction	SAFCA		

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>SAFCA shall coordinate with USFWS, DFG, and SCAS (if on Airport property) to ensure that the NLIP’s aquatic and upland habitat improvements are created and managed. SAFCA shall prepare a project-specific MMP and programmatic LTMP to ensure the creation and long-term management of these components before construction commences. SAFCA shall enter into agreements with the appropriate local entity responsible for long-term management of these created giant garter snake habitats and shall coordinate with USFWS and DFG to ensure that performance standards and long-term management goals required by the regulatory agencies with jurisdiction over these resources will be specifically detailed and outlined in the LTMP and MMP. All performance standards and long-term management goals will be in full compliance with ESA and CESA. SAFCA shall implement all terms and conditions of the management agreements.</li> </ul>	Develop MMP and submit to USFWS and DFG for approval before start of construction	SAFCA		
	<ul style="list-style-type: none"> <li>Where borrow sites would result in impacts to giant garter snake habitat over more than one construction season, the work shall progress in cells that will be incrementally developed as habitat or returned to agricultural use as the borrow activities are completed such that no area would be used in consecutive years or such that replacement habitat is available prior to loss of existing habitat.</li> </ul>	During project construction	SAFCA		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ Authorization for take of giant garter snake under the ESA and CESA shall be obtained. All measures subsequently adopted through the permitting process shall be implemented.</li> </ul>	Obtain authorization for take of giant garter snake under the Federal ESA and CESA, if required before the start of construction	SAFCA		
<b>4.7-f</b>	<b>Minimize Potential Impacts on Swainson’s Hawk and Other Special-Status Birds Foraging and Nesting Habitat, Monitor Active Nests during Construction, Implement All Upland and Agricultural Habitat Improvements and Management Agreements to Compensate for Loss of Quantity and Quality of Foraging Habitat, Obtain Incidental Take Authorization, and Implement Mitigation Measure 4.7-a, “Minimize Effects on Woodland Habitat, Implement all Woodland Habitat Improvements and Management Agreements, Compensate for Loss of Habitat, and Comply with Section 7 of the Federal Endangered Species Act, Section 1602 of the California Fish and Game Code, and Section 2081 of the California Endangered Species Act Permit Conditions”</b>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ The primary engineering and design consultants and primary construction contractors shall ensure, through coordination with a qualified biologist retained by SAFCA, that construction is implemented in a manner that minimizes disturbance of potential nesting habitat for special-status birds through the following activities:</li> </ul>	During project design. Conduct preconstruction surveys in accordance with standardized protocols and NBHCP requirements	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		
	<ul style="list-style-type: none"> <li>▶ The biologist shall conduct preconstruction surveys to identify active special-status bird nests near construction areas.                             <ul style="list-style-type: none"> <li>• Surveys for nesting birds shall be conducted before project activities are initiated during the nesting season (March 1–September 15). Surveys shall be conducted in accordance with standardized protocols and NBHCP requirements.</li> <li>• Removal of potential nesting habitat shall be conducted during the non-nesting season, to the extent feasible and practicable, to minimize the potential for loss of active nests.</li> </ul> </li> </ul>				

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>If an active nest is found, the biologist shall determine an appropriate buffer that minimizes potential for disturbance of the nest, in coordination with DFG. No project activities shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active or the birds are not dependent on it. Monitoring shall be conducted during construction and by a qualified biologist to ensure that project activity does not result in detectable adverse effects on the nesting pair or their young. The size of the buffer may vary, depending on the nest location, nest stage, construction activity, and monitoring results. If implementation of the buffer becomes infeasible or construction activities result in an unanticipated nest disturbance, DFG shall be consulted to determine the appropriate course of action.</li> </ul>	If an active nest is found, establish buffer that minimizes the potential for disturbance of the nest before construction. If a nest must be disturbed or becomes accidentally disturbed, consult with DFG	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		
	<ul style="list-style-type: none"> <li>The primary engineering and construction contractors shall ensure, through coordination with a qualified biologist retained by SAFCA, that staging areas and access routes are designed to minimize disturbance of known Swainson's hawk nesting territories through the following activities:</li> </ul>	During project design	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		
	<ul style="list-style-type: none"> <li>The biologist shall conduct preconstruction surveys to identify active nests within 0.50 mile of construction areas, in accordance with DFG guidelines. Surveys shall be conducted in accordance with NBHCP requirements and <i>Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley</i> (Swainson's Hawk Technical Advisory Committee 2000).</li> </ul>	Conduct preconstruction surveys in accordance with DFG guidelines	SAFCA		

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>If an active nest is found, an appropriate buffer that minimizes the potential for nest disturbance shall be determined by the biologist, in coordination with DFG. No project activities shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active or the birds are not dependent on it. Monitoring shall be conducted during construction and by a qualified biologist to determine whether project activity results in detectable adverse effects on the nesting pair or their young. The size of the buffer may vary, depending on the nest location, nest stage, construction activity, and monitoring results. If implementation of the buffer becomes infeasible or construction activities result in an unanticipated nest disturbance, DFG shall be consulted to determine the appropriate course of action.</li> </ul>	If an active nest is found, establish buffer that minimizes the potential for disturbance of the nest before construction	SAFCA		
	<ul style="list-style-type: none"> <li>SAFCA shall coordinate with USFWS, DFG, and SCAS (if on Airport property) to ensure that the NLIP's woodland, upland, and agricultural habitat improvements are created and managed. SAFCA shall prepare a project-specific MMP and programmatic LTMP to ensure the creation and long-term management of these components before construction commences. SAFCA shall enter into agreements with the appropriate local entity responsible for long-term management of these created Swainson's hawk habitats and shall coordinate with USFWS and DFG to ensure that performance standards and long-term management goals that are required by the regulatory agencies with jurisdiction over these resources will be specifically detailed and outline in the LTMP and MMP. All performance standards and long-term management goals will be in full compliance with ESA and CESA. SAFCA shall implement all terms and conditions of the management agreements.</li> </ul>	Coordinate with USFWS, DFG, and SCAS, as appropriate, for development of a MMP and LTMP. Implement management plan as specified	SAFCA		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ The criteria for measuring performance shall be used to determine if the habitat improvement is trending toward sustainability (reduced human intervention) and to assess the need for adaptive management (e.g., changes in design or maintenance revisions). These criteria must be met for the habitat improvement to be declared successful, both during a particular monitoring year and at the end of the establishment period. Performance criteria for managed grasslands shall be developed in consultation with USFWS, NMFS, and DFG, and shall include, but not be limited to:                             <ul style="list-style-type: none"> <li>• percent cover of invasive species (&lt;1%),</li> <li>• percent cover of nonnative herbaceous plants (&lt;10–25%), and</li> <li>• percent absolute cover of native species (&gt;50–80%).</li> </ul> </li> </ul>	Consult with USFWS, NMFS, and DFG before the start of habitat improvements. Monitor effectiveness with measures identified and in accordance with monitoring plan	SAFCA		
	<ul style="list-style-type: none"> <li>▶ Authorization for take of Swainson’s hawk under CESA shall be obtained. All measures subsequently adopted through the permitting process shall be implemented.</li> </ul>	Obtain authorization for take of Swainson’s hawk under CESA, if required before the start of construction	SAFCA		
	<ul style="list-style-type: none"> <li>▶ Implement Mitigation Measure 4.7-a</li> </ul>	See Mitigation Measure 4.7-a	See Mitigation Measure 4.7-a		



Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
4.7-g	<p><b>Conduct Focused Surveys for Elderberry Shrubs as Needed, Implement all Woodland Habitat Improvements and all Management Agreements, Ensure Adequate Compensation for Loss of Shrubs, and Obtain Incidental Take Authorization</b></p> <ul style="list-style-type: none"> <li>A qualified biologist retained by SAFCA shall conduct focused surveys of elderberry shrubs within 100 feet of the project footprint, in accordance with USFWS guidelines. All elderberry shrubs with potential to be affected by project activities shall be mapped, the number of stems greater than 1 inch in diameter on each shrub that requires removal shall be counted, and these stems shall be searched for beetle exit holes.</li> </ul>	Conduct surveys before any ground-disturbing activities	SAFCA		
	<ul style="list-style-type: none"> <li>The engineering and design consultants and primary construction contractors shall ensure, through coordination with the biologist, that construction is implemented in a manner that minimizes disturbance of areas that support elderberry shrubs (e.g., temporary fencing shall be used during construction to protect all elderberry shrubs that are located adjacent to construction areas but can be avoided). Shrubs that require removal shall be transplanted to the woodland creation areas, if feasible, when the plants are dormant (November through the first 2 weeks of February) to increase the success of transplanting. If none of the areas of suitable habitat to be created as part of the project would be available before the impact would occur, alternative transplantation locations (e.g., other SAFCA mitigation areas or The Natomas Basin Conservancy [TNBC] preserves) shall be identified and shall be approved by USFWS.</li> </ul>	Establish protective measures during project design and before any project construction-related ground disturbance	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

**Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program  
Phase 4a Landside Improvements Project (Phase 4a Project)**

Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>The number of replacement elderberry plantings shall be determined based on USFWS guidelines, which require replacement ratios ranging from 1:1 to 8:1 for lost stems at least 1 inch in diameter, depending on the size of the affected stems and presence or absence of beetle exit holes. Associated native species shall be planted at ratios ranging from 1:1 to 2:1 for each elderberry planting.</li> </ul>	Coordinate with USFWS to determine replacement ratios before project construction	SAFCA		
	<ul style="list-style-type: none"> <li>SAFCA shall coordinate with USFWS, DFG, and SCAS (if on Airport property) to ensure that the NLIP's woodland habitat improvements are created and managed. SAFCA shall prepare a project-specific MMP and programmatic LTMP to ensure the creation and long-term management of these components before construction commences. SAFCA shall enter into agreements with the appropriate local entity responsible for long-term management of these created woodland habitats and shall coordinate with USFWS and DFG to ensure that performance standards and long-term management goals that are required by regulatory agencies with jurisdiction over these resources will be specifically detailed and outlined in the LTMP and MMP. All performance standards and long-term management goals will be in full compliance with the ESA and CESA. SAFCA shall implement all terms and conditions of the management agreements USACE shall initiate consultation activities with USFWS under Section 7 of the ESA, and authorization for take of valley elderberry longhorn beetle under the ESA shall be obtained if it is determined, in consultation with USFWS, that shrub removal is likely to result in such take. All measures subsequently developed through the Section 7 consultation process shall be implemented by SAFCA.</li> </ul>	Develop a project-specific MMP and programmatic LTMP before start of construction. Implement all terms and conditions of the management agreements	SAFCA		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
4.7-h	<p><b>Conduct Focused Surveys for Northwestern Pond Turtles, Relocate Turtles, Minimize Potential Impacts on Burrowing Owls, and Relocate Owls as Needed</b></p> <ul style="list-style-type: none"> <li>▶ A qualified biologist retained by SAFCA shall conduct surveys for northwestern pond turtle in aquatic habitats to be dewatered and/or filled during project construction. Surveys shall be conducted immediately after dewatering and before fill of aquatic habitat suitable for pond turtles. If pond turtles are found, the biologist shall capture them and move them to nearby areas of suitable habitat that would not be disturbed by project.</li> </ul>	Conduct focused surveys immediately after any dewatering and before any fill of aquatic habitat. If pond turtles are found, implement capture and relocation plan	SAFCA		
	<ul style="list-style-type: none"> <li>▶ The engineering and design consultants and primary construction contractors shall ensure, through coordination with a qualified biologist retained by SAFCA, that construction is implemented in a manner that minimizes disturbance of potential nesting habitat for burrowing owls (e.g., removal of potential nesting habitat shall be conducted during the non-nesting season, to the extent feasible and practicable, to minimize the potential for loss of active nests).</li> </ul>	During project construction	SAFCA, its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>The biologist shall conduct preconstruction surveys to identify occupied burrowing owl burrows in the vicinity of construction areas. Surveys for burrowing owl shall be conducted before project activities are initiated at any time of year. Surveys shall be conducted in accordance with standardized protocols, including DFG's <i>Staff Report on Burrowing Owl Mitigation</i> (DFG 1995), and NBHCP requirements. If an occupied nest burrow is found, an appropriate buffer that minimizes potential for disturbance of the nest shall be determined by the biologist, in coordination with DFG. No project activities shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active or the birds are not dependent on it. Monitoring shall be conducted by a qualified biologist to ensure that project activity does not result in detectable adverse effects on the nesting pair or their young. The size of the buffer may vary, depending on the nest location, nest stage, construction activity, and monitoring results. If implementation of the buffer becomes infeasible or construction activities result in an unanticipated nest disturbance, DFG shall be consulted to determine the appropriate course of action.</li> </ul>	Conduct focused surveys before construction	SAFCA		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>If an occupied burrowing owl burrow that does not support an active nest is found, SAFCA shall develop and implement a relocation plan, in coordination with and subject to approval of DFG and USFWS and consistent with requirements of the NBHCP, DFG's <i>Staff Report on Burrowing Owl Mitigation</i> (DFG 1995), and the <i>Airport Wildlife Hazard Management Plan</i> (WHMP). Relocation is anticipated to occur through passive exclusion of owls from the project site (using one-way doors at the burrow entrances). The owls would then be able to reoccupy the area after construction is complete. Because the project would generally result in temporary disturbance of burrowing owl habitat and conversion from one suitable habitat type to another, no mitigation for temporary burrow or habitat loss would be required.</li> </ul>	If burrowing owls are found, implement a relocation plan	SAFCA, its engineering and design consultant(s) and primary contractor(s) for construction		
4.7-i	<p><b>Implement Mitigation Measure 4.6-a, "Implement Standard Best Management Practices, Prepare and Implement a Stormwater Pollution Prevention Plan, Prepare and Implement a Spill Containment Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions," Implement a Feasible Construction Work Window that Minimizes Impacts to Special-Status Fish Species for Any In-Water Activities, and Implement Operational Controls and a Fish Rescue Plan that Minimizes Impacts to Fish Associated with Cofferdam Construction and Dewatering</b></p> <p>Implement Mitigation Measure 4.6-a</p>	See Mitigation Measure 4.6-a	See Mitigation Measure 4.6-a		
4.7-k	<p><b>Ensure that Project Encroachment Does Not Jeopardize Successful Implementation of the NBHCP and Implement Mitigation Measures 4.7-a, 4.7-c, and 4.7-e through 4.7-h</b></p>				

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	<ul style="list-style-type: none"> <li>Implement Mitigation Measures 4.7-a, 4.7-c, and 4.7-e though 4.7-h.</li> </ul>	See Mitigation Measures 4.7-a, 4.7-c, and 4.7-e through 4.7-h	See Mitigation Measures 4.7-a, 4.7-c, and 4.7-e through 4.7-h		
	<ul style="list-style-type: none"> <li>Based on the current value-per-acre, SAFCA shall contribute funds to TNBC to offset direct impacts to TNBC reserves on an acre-per-acre basis, drawing upon TNBC's existing land surplus.</li> </ul>	Coordinate funds with TNBC before disturbance of TNBC land	SAFCA		
<b>Cultural Resources</b>					
<b>4.8-a</b>	<p><b>Incorporate Mitigation Measures to Documents Regarding Any Elements Contributing to RD 1000 and Rural Landscape District and Distribute the Information to the Appropriate Repositories</b></p> <p>The management of the cultural resources that constitute the contributing elements of RD 1000 is governed by the PA (Appendix E1 of the DEIS/DEIR). Because the elements of the RD 1000 historic landscape district have already been recorded, a new inventory of these resources is not required under Stipulation IV(A) of the PA. After an APE has been determined per Stipulation III(C), a qualified architectural historian shall determine if contributing elements of the district are present in the APE. If contributing elements are present, the architectural historian shall update records for these resources and evaluate those elements to determine if they retain integrity. Because much of the Natomas Basin has been developed, it is possible that changes to the setting have diminished the integrity and thus eligibility of contributing elements in the APE. If the elements in the APE retain eligibility, the architectural historian shall make a finding of effect.</p>	Before and after construction	SAFCA		

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	<p>If there is an adverse effect to a contributing element (under Section 106) or a significant impact on the resource’s integrity as an historical resource (under CEQA), the architectural historian shall review existing HAER documentation and determine whether any augmentation of this documentation is needed. The original documentation for the American River Watershed Project (completed in 1997) contemplated changes to the setting of the district and thus provided comprehensive documentation to record the district before urbanization (Peak &amp; Associates 1997). This original documentation was intended to adequately recorded and preserve records of the elements that may be affected. However, if this documentation is not sufficient for adversely affected and contributing elements, SAFCA shall prepare an Historic Property Treatment Plan (HPTP) stipulating additional HAER documentation, or other similar treatment as required under Stipulation V(A). After consultation with USACE and the State Historic Preservation Officer (SHPO), SAFCA shall implement the required documentation or treatment prior to construction. Any additional documentation that is needed shall be prepared and distributed to appropriate public repositories.</p>				
<b>4.8-b</b>	<p><b>Avoid Ground Disturbance Near Eligible and Listed Resources to the Extent Feasible, Prepare a Finding of Effect, and Resolve Any Adverse Effects through Preparation of an HPTP</b></p> <ul style="list-style-type: none"> <li>▶ Complete an evaluation of identified resources, and determine the effect of each phase of work on all eligible or listed resources in accordance with Stipulation IV(A) of the PA.</li> </ul>	During project construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

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	<ul style="list-style-type: none"> <li>▶ Consult with USACE, the SHPO, the MLD and other consulting parties such as Native American individuals and organizations, to develop appropriate treatment or mitigation in an HPTP, per Stipulation V(A) of the PA if the project would result in adverse effects on eligible resources.</li> <li>▶ Document the site and avoid further effects by protecting the resource through capping per management under an HPTP or other avoidance measures where feasible. Where physical impacts cannot be avoided and such physical impacts could damage the data these sites contain, including mortuary components, further mitigation may be required. Such mitigation may consist of data recovery excavations to retrieve those values and mortuary assemblages that contain significance for archaeology after consultation with and the agreement of the Native American most likely descendent (MLD), where possible.</li> <li>▶ Monitor potentially destructive construction in the vicinity of documented resources, as required under the Construction Monitoring and Inadvertent Discovery Plan.</li> </ul>				
<b>4.8-c</b>	<p><b>Train Construction Workers before Construction, Monitor Construction Activities, Stop Potentially Damaging Activities, Evaluate Any Discoveries, and Resolve Adverse Effects on Eligible Resources, if Encountered.</b></p> <ul style="list-style-type: none"> <li>▶ SAFCA shall complete surveys to identify cultural resources in the Phase 4a Project footprint, as identified in the Phase 2 EIR (SAFCA 2007:3.8-31) at the program level.</li> </ul>	Before the start of ground-disturbing construction activities	SAFCA		



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	<ul style="list-style-type: none"> <li>Mitigation Measure 3.4-d from the SEIR prepared for the Phase 2 Project is copied below and shall be implemented, as appropriate within the footprint of the Proposed Action (SAFCA 2009: 3.4-10).</li> </ul>				
	<p><b>Mitigation Measure 3.4-d: Conduct Additional Backhoe and Canine Forensic Investigations As Appropriate</b></p> <p>To increase the data set for identifying buried sites under the existing levee, SAFCA shall recommend that the following additional mitigation measures be adopted by USACE during Section 106 consultation:</p> <ul style="list-style-type: none"> <li>Additional inventory may be conducted at appropriate intervals along the Sacramento River east levee, using a backhoe excavator, to increase the sample of information at depths below 6 feet that cannot be reached with conventional shovel test methods. Such methods may be used only when necessary to address potential project-related effects to cultural resources because other methods are ineffective or project circumstances dictate that such resources must be identified in advance of construction. USACE and SAFCA shall consult with the MLD regarding the use of such methods. USACE and SAFCA recognize the Tribe's preference for less invasive methods of investigation such as the use of canine forensics.</li> </ul>	Before the start of ground-disturbing construction activities	SAFCA		
	<ul style="list-style-type: none"> <li>Where this process or additional inventory efforts reveal other resources, SAFCA recommends the use of canine forensic investigations as a way of identifying interred human remains with minimal disturbance, and for further refinement of an understanding of the constituents of identified resources</li> </ul>	During ground-disturbing construction activities	SAFCA		

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	<ul style="list-style-type: none"> <li>▶ Before construction begins, a qualified professional archaeologist retained by SAFCA shall give a presentation and training session to all construction personnel so that they can assist with identification of undiscovered cultural resource materials and avoid them where possible. Such training shall note the importance of these materials to Native American groups that attach cultural significance to resources in the project area. A qualified archaeologist shall monitor ground-disturbing construction activities along the Sacramento River east levee. In areas of known sacred value, such as archaeological sites containing Native American burials, a Native American monitor will be present to observe potentially destructive construction activities and to ensure proper treatment of human remains in accordance with State law. If a previously unidentified archaeological resource is uncovered during construction, construction activities shall be halted in the vicinity of the find and the construction contractor, SAFCA, USACE, the MLD, and the NAHC (if appropriate), and other appropriate parties shall be notified regarding the discovery. Where construction would consist of cutoff walls excavated in a bentonite and/or cement slurry, SAFCA and USACE anticipate that it will not be possible to identify the precise location of any materials found in spoils or at soil mixing stations, thus construction cannot stop during excavation of cutoff walls if resources are discovered in spoils.</li> </ul>	Before and during construction	SAFCA		

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	<ul style="list-style-type: none"> <li>▶ SAFCA shall then consult with USACE and the SHPO to determine the eligibility of the resource. If SAFCA and USACE, in consultation with the SHPO, concur that the resource is eligible and the project may result in adverse effects on the resource, SAFCA shall prepare and implement an HPTP as required under the PA, Stipulation V(A). The HPTP shall be prepared in consultation with USACE, the SHPO, and other appropriate consulting parties such as Native American individuals or organizations.</li> <li>▶ Work may only resume when either all necessary treatment has been performed under the HPTP, or construction in the vicinity will not result in adverse effects, and that work does not encroach within 30 meters of the known boundaries of the resource, or the boundaries designated by the SHPO, per the PA, Stipulation V(B)(2). All treatment stipulated in the HPTP shall be performed by SAFCA, in consultation with USACE.</li> </ul>				
<b>4.8-d</b>	<b>Stop Work Within An Appropriate Radius Around the Find, Notify the Applicable County Coroner and Most Likely Descendant, and Treat Remains in Accordance with State Law and Measures Stipulated in an HPTP Developed in Consultation between USACE, SAFCA, and the SHPO</b>				

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
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	<p>If human remains are uncovered during ground-disturbing activities, under either the Proposed Action or the RSLIP Alternative, SAFCA shall cease all ground-disturbing activities within the vicinity of the find, if known. If the discovery occurs in spoils removed from construction of cutoff walls, the remains shall be treated in accordance with state law. Because cutoff walls are constructed at great depth within a slurry of soil and bentonite and/or cement, SAFCA and USACE anticipate that it will not be possible to pinpoint the location of human remains that may be disinterred during construction of these features and it will not be feasible or useful to stop construction. Discovered remains removed from cutoff wall spoils will be treated as required by state law, as follows. SAFCA's archaeological monitors and/or the contractor shall notify the relevant county coroner and a SAFCA-retained archaeologist skilled in osteological analysis to determine the nature of the remains. 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 (Health and Safety Code Section 7050[c]). The NAHC will designate an MLD who may decide how to reinter the remains with appropriate dignity in an appropriate location.</p> <p>Prehistoric remains are usually found in the context of an archaeological site. The treatment of any associated site shall be in consultation with the MLD, as required under the PA and Mitigation Measure 4.8-c. It is unlikely, but also possible, that ground-disturbing work may disinter human remains associated with an historic burial, not subject to the jurisdiction of the NAHC. Such a resource shall be treated as an archaeological discovery as required by Mitigation Measure 4.8-c.</p>	During ground-disturbing construction activities	SAFCA and its primary construction contractor(s)		

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
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<b>Paleontological Resources</b>					
<b>4.9-a</b>	<p><b>Conduct Construction Personnel Training and, if Paleontological Resources Are Found, Stop Work Near the Find and Implement Mitigation in Coordination with a Professional Paleontologist</b></p> <p>Before the start of construction and/or borrow activities in the Riverbank Formation or the Modesto Formation, construction personnel involved with earthmoving activities shall be informed by SAFCA of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and the proper notification procedures should fossils be encountered. This worker training may be either (1) prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources, or (2) prepared and presented separately by a qualified paleontologist.</p>	Before ground-disturbing construction activities in the Riverbank or Modesto Formations	SAFCA and its primary construction contractor(s)		
	<p>If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately stop work in the vicinity of the find. SAFCA shall retain a qualified paleontologist to evaluate the resource and prepare a mitigation plan in accordance with SVP guidelines (1995). The mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations made by the paleontologist, in consultation with SAFCA, shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.</p>	During ground-disturbing construction activities	SAFCA and its primary construction contractor(s)		

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<b>Transportation and Circulation</b>					
<b>4.10-a</b>	<b>Prepare and Implement a Traffic Safety and Control Plan for Construction-Related Truck Trips</b>				
	<p>Before the start of construction in each construction season, SAFCA and its primary contractors for engineering and construction shall develop a coordinated construction traffic safety and control plan to minimize the simultaneous use of roadways by different construction contractors for material hauling and equipment delivery to the extent feasible and to avoid and minimize potential traffic hazards on local roadways during construction. Upon selection of borrow sites within the Elkhorn Borrow Area, the traffic safety and control plan shall reflect affected roadways. Items (a) through (e) of this mitigation measure, as listed below, shall be integrated as terms of the construction contracts.</p> <p>(a) The plan shall outline phasing of activities and the use of multiple routes to and from off-site locations to minimize the daily amount of traffic on individual roadways. SAFCA shall ensure that the construction contractors enforce the plans throughout the construction periods.</p>	<p>Prepare a coordinated construction traffic control plan before the start of construction in each construction season.</p> <p>Enforce the plans during the construction periods</p>	SAFCA and its primary construction contractor(s)		

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
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	<p>(b) The construction contractors shall develop a traffic safety and control plan for the local roadways that would be affected by construction traffic. Before the initiation of construction-related activity involving high volumes of traffic, the plan shall be submitted for review by Caltrans and the agencies of the local jurisdictions (Sutter County, Sacramento County, and/or City of Sacramento) having responsibility for roadway safety at and between project sites. The plan shall call for the following elements:</p> <ul style="list-style-type: none"> <li>▶ posting warnings about the potential presence of slow-moving vehicles;</li> <li>▶ using traffic control personnel when appropriate; and</li> <li>▶ placing and maintaining barriers and installing traffic control devices necessary for safety, as specified in Caltrans’s <i>Manual of Traffic Controls for Construction and Maintenance Works Zones</i> and in accordance with city/county requirements (Caltrans 1996).</li> </ul> <p>The contractor shall train construction personnel in appropriate safety measures as described in the plan and shall implement the plan. The plan shall include the prescribed locations for staging equipment and parking trucks and vehicles. Provisions shall be made for overnight parking of haul trucks to avoid causing traffic or circulation congestion.</p>	Develop and submit traffic safety and control plan before the initiation of construction-related activity that could adversely affect traffic on local roadways	SAFCA and its primary construction contractor(s)		

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	(c) Consistent with Mitigation Measure 4.11-a “Implement Applicable District-Recommended Control Measures to Minimize Temporary Emissions of reactive organic gases (ROG), oxides of nitrogen (NO <sub>x</sub> ), and respirable particulate matter less than 10 microns in diameter (PM <sub>10</sub> ) during Construction,” the track-out of bulk material onto public paved roadways as a result of operations, or erosion, shall be minimized by the use of track-out and erosion control, minimization, and preventive measures. Tracked-out materials shall be removed within 1 hour from adjacent streets anytime such material track-out extends for a cumulative distance of greater than 50 feet onto any paved public road during active operations. All visible roadway dust tracked out upon public paved roadways as a result of active operations shall be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. Wet sweeping or a high-efficiency particulate air (HEPA) filter equipped vacuum device shall be used for roadway dust removal.	During construction	SAFCA and its primary construction contractor(s)		
	(d) Construction of project features along the Sacramento River east levee shall be accommodated through the creation of temporary haul roads along the landside of the adjacent levee and berm footprint. Garden Highway shall not be used for earthen materials hauling activities.	During construction	SAFCA and its primary construction contractor(s)		
	(e) A Transportation Management Plan shall be prepared and submitted to Caltrans District 3 to cover any points of access from the state highway system for haul trucks and other construction equipment.	Before construction	SAFCA		
	(f) Before the start of the construction season, SAFCA shall coordinate with Sacramento and Sutter Counties and the City of Sacramento to address maintenance and repair of affected roadways resulting from increased truck traffic.	Before construction	SAFCA		



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	(g) Before project construction begins, SAFCA shall provide notification of project construction to all appropriate emergency service providers in Sutter County, Sacramento County, and/or the City of Sacramento and shall coordinate with providers throughout the construction period to ensure that emergency access through construction areas is maintained.	Before construction	SAFCA		
	(h) Before the start of construction, SAFCA and its primary contractors shall coordinate with Sutter County, Sacramento County, and/or the City of Sacramento regarding any closures of any public roadways.	Before construction	SAFCA		
<b>4.10-b</b>	<b>Implement Mitigation Measure 4.10-a, “Prepare and Implement a Traffic Safety and Control Plan for Construction-Related Truck Trips”</b> Implement Mitigation Measure 4.10-a	See Mitigation Measure 4.10-a	See Mitigation Measure 4.10-a		
<b>4.10-c</b>	<b>Notify Emergency Service Providers about Project Construction and Maintain Emergency Access or Coordinate Detours with Providers</b> SAFCA and its primary contractors for engineering design and construction shall implement Mitigation Measure 4.10-a, above.	See Mitigation Measure 4.10-a	See Mitigation Measure 4.10-a		
<b>4.10-d</b>	<b>Prepare and Implement a Bicycle Detour Plan for Project Area Roadways, Including Garden Highway</b>				

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	<ul style="list-style-type: none"> <li>Before the start of construction, SAFCA or its primary contractor shall prepare a bicycle detour plan for roadways that would be affected by project construction activities, including Garden Highway, in consultation with the County Alternative Modes Coordinator and/or City of Sacramento Bicycle and Pedestrian Coordinator as applicable. The detour plan shall include posted signs clearly indicating closure points, truck haul routes, detour routes, and informational signs to notify motorists and bicyclists to share the roads. Signs shall be posted outside of the immediate project area in order to notify bicyclists of closure points and detours. The detour plan shall be in place before the start of construction and shall be maintained and implemented throughout the construction period.</li> </ul>	Before the start of project construction	SAFCA and its primary construction contractor(s)		
<b>Air Quality</b>					
<b>4.11-a</b>	<p><b>Implement Applicable District-Recommended Control Measures to Minimize Temporary Emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub> during Construction Construction in Sutter County (Feather River Air Quality Management District [FRAQMD])</b></p> <p>For portions of the project occurring in Sutter County, FRAQMD's <i>Indirect Source Review Guidelines</i> and online CEQA guidance provide mitigation measures for reducing short-term air quality impacts. As recommended by FRAQMD, SAFCA shall ensure that the following mitigation measures are implemented during all project construction activities to the extent practicable. In addition, construction of the proposed levee improvements are required to comply with all applicable</p> <p>FRAQMD rules and regulations, in particular Rule 3.0 (Visible Emissions), Rule 3.16 (Fugitive Dust Emissions), and Rule 3.15 (Architectural Coatings).</p>	<p>Submit fugitive dust control plan before the start of ground-disturbing construction activities</p> <p>Implement measures during construction</p>	<p>SAFCA</p> <p>SAFCA and its primary construction contractor(s)</p>		

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	<p>1. SAFCA shall implement a Fugitive Dust Control Plan that includes the following measures:</p> <ul style="list-style-type: none"> <li>▶ All earthmoving operations should be suspended when winds exceed 20 miles per hour or when winds carry dust beyond the property line despite implementation of all feasible dust control measures.</li> <li>▶ Construction sites shall be watered as directed by the Sutter County Department of Public Works or FRAQMD and as necessary to prevent fugitive dust violations.</li> <li>▶ An operational water truck shall be on-site at all times. Apply water to control dust as needed to prevent visible emissions violations and off-site dust impacts.</li> <li>▶ On-site dirt piles or other stockpiled particulate matter shall be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce wind blown dust emissions. Incorporate the use of approved nontoxic soil stabilizers to all inactive construction areas according to manufacturers' specifications.</li> <li>▶ All transfer processes involving a free fall of soil or other particulate matter shall be operated in such a manner as to minimize the free-fall distance and fugitive dust emissions.</li> <li>▶ Apply approved chemical soil stabilizers to all inactive construction areas (previously graded areas that remain inactive for 96 hours), including unpaved roads and employee/equipment parking areas, according to the manufacturers' specifications.</li> </ul>				

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	<ul style="list-style-type: none"> <li>▶ To prevent track-out, wheel washers shall be installed where project vehicles and/or equipment exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed before each trip. Alternatively, a gravel bed or rumble strip may be installed as appropriate at vehicle/equipment site exit points to effectively remove soil buildup on tires and tracks to prevent/diminish track-out.</li> <li>▶ Paved streets shall be swept frequently (at least once per day by water sweeper with reclaimed water recommended; wet broom) if soil material has been carried onto adjacent paved, public thoroughfares from the project site.</li> <li>▶ Provide temporary traffic control as needed during all phases of construction to improve traffic flow, as deemed appropriate by the Sutter County Department of Public Works and/or Caltrans and to reduce vehicle dust emissions. An effective measure is to enforce vehicle traffic speeds at or below 15 miles per hour on unpaved roads.</li> <li>▶ Reduce traffic speeds on all unpaved surfaces to 15 miles per hour, where feasible, and reduce unnecessary vehicle traffic by restricting access. Provide appropriate training, on-site enforcement, and signage. Where restricting vehicle speeds on unpaved surfaces to 15 miles per hour would make timely completion of the project infeasible, SAFCA shall cooperate with FRAQMD to implement alternative dust control measures that would be at least as effective in reducing fugitive dust emissions. Such measures may include increased frequency in applying water to the unpaved roads in the vicinity of sensitive receptors and reducing speeds in the vicinity of sensitive receptors.</li> <li>▶ Reestablish ground cover on the construction site as soon as possible, through seeding and watering.</li> </ul>				

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	<ul style="list-style-type: none"> <li>▶ Open burning is yet another source of fugitive gas and particulate emissions, and it shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, etc.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials off-site for disposal by open burning.</li> <li>2. Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions Limitations (40% opacity or Ringelmann 2.0). Operators of vehicles and equipment found to exceed opacity limits shall take action to repair the equipment within 72 hours or remove the equipment from service. Failure to comply may result in a notice of violation.</li> <li>3. SAFCA shall be responsible for ensuring that all construction equipment is properly tuned and maintained before and during on-site operation.</li> <li>4. Minimize idling time to 10 minutes, to conserve fuel and minimize emissions.</li> <li>5. Use existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel-powered generators.</li> </ul>				

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	6. Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (ARB) Portable Equipment Registration with the state or a local district permit. The owner/operator shall be responsible for arranging appropriate consultations with ARB or FRAQMD to determine registration and permitting requirements before equipment is operated at the site.  7. SAFCA shall assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, and emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower [hp] and greater) that will be used an aggregate of 40 or more hours for the construction project and apply the following mitigation measure: <ul style="list-style-type: none"> <li>▶ Reduce NO<sub>x</sub> emissions from off-road diesel-powered equipment: SAFCA shall provide a plan for approval by FRAQMD demonstrating that the heavy-duty (equal to or greater than 50 hp) off-road equipment to be used in the construction project, including owned, leased and subcontractor vehicles, shall achieve a project wide fleet-average 20% NO<sub>x</sub> reduction and 45% particulate reduction<sup>1</sup> compared to the most recent ARB fleet average at time of construction.</li> </ul>	Before the start of ground-breaking construction activities	SAFCA and its primary construction contractor(s)		

<sup>1</sup> Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology (Carl Moyer Guidelines), and after-treatment products; voluntary off-site mitigation projects; providing funds for air district off-site mitigation projects; and/or other options as they become available. FRAQMD should be contacted to discuss alternative measures.

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
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	<p>Implementing the FRAQMD-recommended measures is expected to achieve at least a 75% reduction in fugitive dust emissions, 5% reduction in ROG emissions from construction equipment, 20% reduction in NO<sub>x</sub> emissions from construction equipment, and 45% reduction in PM<sub>10</sub> emissions from construction equipment (SMAQMD 2004). The resulting maximum average daily construction-generated emissions in Sutter County, with mitigation incorporated, are conservatively calculated to be as high as 102 lb/day of ROG, 527 lb/day of NO<sub>x</sub>, and 1,260 lb/day of PM<sub>10</sub> for the Proposed Action, and 68 lb/day of ROG, 341 lb/day of NO<sub>x</sub>, and 822 lb/day of PM<sub>10</sub> for the RSLIP Alternative.</p> <p>SAFCA shall implement the following measure to further mitigate NO<sub>x</sub> emissions through off-site reductions:</p> <p>8. SAFCA shall enter into a voluntary emissions reduction agreement with the FRAQMD to mitigate the portion of construction-generated emissions of NO<sub>x</sub> that exceeds EPA's applicable threshold for general conformity purposes. The calculation of the fee shall be determined in coordination with the FRAQMD and paid prior to the occurrence of any construction-related activities within areas under the jurisdiction of the FRAQMD.</p>				
	<b>Construction in Sacramento County (Sacramento Metropolitan Air Quality Management District [SMAQMD])</b>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>For portions of the project occurring in Sacramento County, SMAQMD's Guide to Air Quality Assessment in Sacramento County (SMAQMD 2004) provides mitigation measures for reducing short-term air quality impacts. As recommended by SMAQMD, SAFCA shall ensure that the following mitigation measures are implemented during all project construction activities to the extent practicable and feasible.</p> <ul style="list-style-type: none"> <li>▶ SAFCA shall prepare a construction emissions dust control plan(s) in accordance with SMAQMD recommendations that reduces fugitive dust emissions by at least 85% (or shall provide calculations based on SMAQMD-approved methodologies showing that emissions would be reduced to less than 100 tons per year assuming a conservative reduction of 75% with typical mitigation). All grading operations shall be suspended when fugitive dust levels exceed levels specified by SMAQMD rules. SAFCA and its primary construction contractors shall ensure that dust is not causing a nuisance beyond the property line of the construction site.</li> <li>▶ If overlapping construction phases in Sacramento County create unmitigated PM<sub>10</sub> emissions in excess of 400 TPY SAFCA shall use advanced dust suppressant materials (such as EnviroTac II) on all unpaved roadways and stockpiled materials to ensure 95% or greater control of fugitive dust and a reduction of PM<sub>10</sub> emissions below 100 TPY.</li> </ul> <p>Overlapping Phases where this would apply includes all work on the Sacramento River east level for the Phase 3 and 4a Projects.</p>	<p>Submit fugitive dust control plan before the commencement of ground-disturbing construction activities</p> <p>Implement measures during construction.</p>	<p>SAFCA and its primary construction contractor(s)</p> <p>SAFCA and its primary construction contractor(s)</p>		



Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ SAFCA shall develop a plan, in consultation with SMAQMD, demonstrating that the heavy-duty (&gt;50 hp), off-road vehicles to be used in the construction project (including owned, leased, and subcontractor vehicles) shall achieve a project-wide fleet-average 20% NO<sub>x</sub> reduction and 45% particulate reduction compared to the most recent ARB fleet average at the time of construction.<sup>2</sup> 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, SAFCA shall provide SMAQMD with the anticipated construction timeline, including the start date, and the name and phone number of the contractor's project manager and on-site foreman.</li> </ul>				

<sup>2</sup> 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.

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>Emissions from off-road, diesel-powered equipment used on the project site shall not exceed 40% opacity for more than 3 minutes in any 1 hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be repaired immediately, and SMAQMD shall be notified of noncompliant equipment within 48 hours of identification. A visual survey of all in-operation equipment shall be made at least weekly. A monthly summary of visual survey results shall be submitted to SMAQMD throughout the construction period, except that the monthly summary shall not be required for any 30-day period in which no construction operations occur. The monthly summary shall include the quantity and type of vehicles surveyed, as well as the dates of each survey. SMAQMD and/or other officials may conduct periodic site inspections to determine compliance.</li> </ul>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>▶ SAFCA shall pay SMAQMD an off-site mitigation fee for implementation of any proposed alternatives for the purpose of reducing impacts to a less-than-significant level. Based on the construction information presented in Chapter 2.0, “Alternatives” and the emissions calculations shown in Appendix F of the DEIS/DEIR, if the Proposed Action is implemented, the specific fee amount to offset NO<sub>x</sub> emissions for elements of the 2010 construction phase that would occur in Sacramento County would be \$737,248 (see Appendix F for fee calculations) plus a 5% administrative fee of \$36,862. Thus, the total mitigation fee for project-related work conducted in Sacramento County during the 2010 construction season is currently estimated to be \$774,110 for the Proposed Action. Calculation of fees associated with subsequent improvement plans/project phases shall be conducted at the time of project approval. The applicable fee rate shall be determined and the total fee shall be calculated based on the fee rate in effect at the time that subsequent environmental documents are prepared. The fee for subsequent construction projects shall be remitted to SMAQMD before groundbreaking.</p> <p>SAFCA shall pay into SMAQMD’s off-site construction mitigation fund to further mitigate construction-generated emissions of NO<sub>x</sub> that exceed SMAQMD’s daily emission threshold of 85 lb/day. The calculation of daily NO<sub>x</sub> emissions is based on the cost to reduce 1 ton of NO<sub>x</sub> at the time when the document is prepared (currently \$16,000 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. Calculation of and payment of the fee for all subsequent project phases shall also be included in the CEQA MMRP for the project.</p>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>Implementing the SMAQMD-recommended measures is expected to achieve at least a 75–85% reduction in fugitive dust emissions, 5% reduction in ROG emissions from construction equipment, 20% reduction in NO<sub>x</sub> emissions from construction equipment, and 45% reduction in PM<sub>10</sub> emissions from construction equipment (SMAQMD 2004). The resulting maximum average daily construction-generated emissions with mitigation incorporated are shown in Table 4.11-1 of the DEIS/DEIR.</li> </ul>				
	<p><b>All Project Construction</b></p> <p>SAFCA shall implement the following additional measures to reduce construction emissions of PM<sub>10</sub> comprising fugitive dust and mobile-exhaust and ozone precursors throughout the project area:</p> <ul style="list-style-type: none"> <li>Open burning of removed vegetation shall be prohibited. Vegetation material shall be chipped on-site or delivered to waste-to-energy facilities to the extent feasible.</li> <li>An operational water truck shall be on-site at all times. Water shall be applied to control dust as needed to prevent dust impacts off-site. Unpaved areas subject to vehicle traffic, including employee parking areas and equipment staging areas, shall be stabilized by being kept wet, treated with a chemical dust suppressant or soil binders, or covered.</li> </ul>	<p>Submit construction emission/dust control plan to SMAQMD and FRAQMD for approval before groundbreaking. Implement measures during construction</p>	<p>SAFCA and its primary construction contractor(s)</p>		

<b>Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)</b>					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ The track-out of bulk material onto public paved roadways as a result of operations, or erosion, shall be minimized by the use of track-out and erosion control, minimization, and preventive measures, and removed within 1 hour from adjacent streets such material anytime track-out extends for a cumulative distance of greater than 50 feet onto any paved public road during active operations. All visible roadway dust tracked out upon public paved roadways as a result of active operations shall be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. Wet sweeping or a HEPA filter equipped vacuum device shall be used for roadway dust removal.</li> <li>▶ Low-sulfur fuel shall be used for stationary construction equipment.</li> <li>▶ Existing power sources or clean fuel generators shall be used rather than temporary power generators to the extent feasible.</li> <li>▶ Low-emission on-site stationary equipment shall be used.</li> <li>▶ Vehicle speeds on unpaved roadways shall be limited to 15 miles per hour.</li> <li>▶ Idling time for all heavy-duty equipment shall be limited to 5 minutes.</li> </ul>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ Install ARB-certified Level 3 diesel particulate filters (DPF) on a minimum of 15% of the total number of off-road (non-street legal) diesel-powered construction equipment pieces with an engine size equal to or greater than 50 hp throughout the duration of the project. For fleets with 6 or fewer total applicable equipment pieces, a DPF shall be installed on a minimum of one engine. All DPFs shall be kept in working order and maintained in operable condition according to manufacturer's specifications. At the time of writing, a list of ARB-certified Level 3 DPF can be found at <a href="http://www.arb.ca.gov/diesel/verdev/level3/level3.htm">http://www.arb.ca.gov/diesel/verdev/level3/level3.htm</a>.</li> <li>▶ Install Level 3 ARB-certified DPF that are functional and kept in working order to meet manufacturer's specifications throughout the duration of the project on at least 15% of the total pieces of off-road (non-street legal) construction equipment on the project site over 50 hp (a minimum of one diesel particulate filter for fleets with 6 or less total pieces).</li> </ul> <p>SMAQMD has also recently released since publication of the DEIS/DEIR, draft BMPs for consideration as practical alternatives to reduce construction-generated greenhouse gas (GHG) emissions. SAFCA shall implement a range of measures to reduce GHG emissions, which may include the following:</p> <ul style="list-style-type: none"> <li>▶ improve fuel efficiency from construction equipment by reducing unnecessary idling (modify work practices, install auxiliary power for driver comfort); performing equipment maintenance (inspections, detect failures early, corrections); training equipment operators in proper use of equipment; using the proper size of equipment for the job; and using equipment with new technologies (repowered engines, electric drive trains);</li> <li>▶ use alternative fuels for generators at construction sites such as propane or solar, or use electrical power;</li> </ul>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ encourage and provide carpools, shuttle vans, transit passes, and/or secure bicycle parking for construction worker commutes;</li> <li>▶ reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones;</li> <li>▶ recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight);</li> <li>▶ use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for roadway, parking lot, and sidewalk and curb materials); and</li> <li>▶ develop a plan to efficiently use water for adequate dust control.</li> </ul>				
<b>Noise</b>					
<b>4.12-a</b>	<p><b>Implement Noise-Reducing Construction Practices, Prepare and Implement a Noise Control Plan, and Monitor and Record Construction Noise Near Sensitive Receptors</b> <b>All Project Construction</b></p> <ul style="list-style-type: none"> <li>▶ Equipment shall be used as far away as practical from noise-sensitive uses.</li> <li>▶ All construction equipment shall be equipped with noise-reduction devices such as mufflers to minimize construction noise and all internal combustion engines shall be equipped with exhaust and intake silencers in accordance with manufacturers' specifications.</li> </ul>	Implement measures during construction	SAFCA and its primary construction contractor(s)		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ Equipment that is quieter than standard equipment shall be used, including electrically powered equipment instead of internal combustion equipment where use of such equipment is a readily available substitute that accomplishes project tasks in the same manner as internal combustion equipment.</li> <li>▶ Construction site and haul road speed limits shall be established and enforced.</li> <li>▶ The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only.</li> <li>▶ Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators).</li> <li>▶ Fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes shall be located at the most distant point feasible from noise-sensitive receptors.</li> <li>▶ When noise sensitive uses are within close proximity and subject to prolonged construction noise, noise-attenuating buffers such as structures, truck trailers, or soil piles shall be located between noise generation sources and sensitive receptors.</li> <li>▶ Before construction activity begins within 500 feet of one or more residences or businesses, written notification shall be provided to the potentially affected residents or business owners, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents or business owners to register complaints with the appropriate jurisdiction if construction noise levels are overly intrusive. The distance of 500 feet is based on the 60-dBA contour of the loudest anticipated construction activity.</li> </ul>				



Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ If noise-generating activities are conducted within 100 feet of noise-sensitive receptors (the 70-dBA noise contour of construction noise), the primary contractor shall continuously measure and record noise levels generated as a result of the proposed work activities. Sound monitoring equipment shall be calibrated before taking measurements and shall have a resolution within 2 dBA. Monitoring shall take place at each activity operation adjacent to sensitive receptors. The recorded noise monitoring results shall be furnished weekly to SAFCA.</li> <li>▶ The primary contractor shall prepare and implement a detailed noise control plan based on the proposed construction methods. This plan shall identify specific measures to ensure compliance with the noise control measures specified above. The noise control plan shall be submitted to and approved by SAFCA before any noise-generating construction activity begins.</li> </ul> <p><b>24/7 Project Construction</b></p> <ul style="list-style-type: none"> <li>▶ When construction of cutoff walls takes place during nighttime hours (between 10:00 p.m. and 6:00 a.m.), SAFCA shall honor requests from affected residents to provide reasonable reimbursement of local hotel or short-term rental stays for the period of time that cutoff wall construction takes place within 500 feet of the residents requesting reimbursement.</li> </ul>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ When construction of groundwater wells (including up to two weeks of continuous pump testing for each well) or modifications to Pumping Plant Nos. 3 and 5 takes place during nighttime hours (between 10:00 p.m. and 6:00 a.m.) and the resulting noise levels exceed the applicable County noise standard (i.e., 45 dBA <math>L_{eq}</math> and 65 dBA <math>L_{max}</math> for Sutter County and 45 dBA <math>L_{50}</math> and 65 dBA <math>L_{max}</math> for Sacramento County), SAFCA shall honor requests from affected residents to provide reasonable reimbursement of local hotel or short-term rental stays for the period of time that construction of groundwater wells or modifications to Pumping Plant Nos. 3 and 5 takes place within 500 feet of the residents requesting reimbursement.</li> </ul>				
4.12-c	<p><b>Implement Noise-Reduction Measures to Reduce the Impacts of Haul Truck Traffic Noise</b></p> <ul style="list-style-type: none"> <li>▶ All heavy trucks shall be equipped with noise-control (e.g., muffler) devices in accordance with manufacturers' specifications.</li> <li>▶ All haul trucks shall be inspected before use and a minimum of once per year to ensure proper maintenance and presence of noise-control devices (e.g., lubrication, nonleaking mufflers, and shrouding).</li> <li>▶ Before haul truck trips are initiated during a construction season on roads within 160 feet of residences (the 60-dBA noise contour of haul truck traffic), written notification shall be provided to the potentially affected residents identifying the hours and frequency of haul truck trips. Notification materials shall also identify a mechanism for residents to register complaints with the appropriate jurisdiction if haul truck noise levels are overly intrusive or occur outside the exempt daytime hours for the applicable jurisdiction.</li> </ul>	During project construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
4.13-b	<p><b>Implement Mitigation Measure 4.15-f, “Coordinate Work in the Critical Zone with Airport Operations and Restrict Night Lighting within and near the Runway Approaches,” and Direct Lighting Away from Adjacent Properties</b></p> <p>Implement Mitigation Measure 4.15-f</p>	See Mitigation Measure 4.15-f	See Mitigation Measure 4.15-f		
<b>Utilities and Service Systems</b>					
4.14-a	<p><b>Coordinate with Irrigation Water Supply Users Before and During All Irrigation Infrastructure Modifications and Minimize Interruptions of Supply</b></p> <p>SAFCA and its primary contractors for engineering design and construction shall ensure that the measures listed below are implemented to minimize the potential for irrigation water supply interruptions during construction activities.</p> <ul style="list-style-type: none"> <li>▶ Coordinate the timing of all modifications to irrigation supply infrastructure with the affected infrastructure owners and water supply users, either directly or through NCMWC.</li> <li>▶ Include detailed scheduling of the phases of modifications/replacement of existing irrigation infrastructure components in project design and in construction plans and specifications.</li> <li>▶ Plan and complete modifications of irrigation infrastructure for the nonirrigation season to the extent feasible.</li> <li>▶ Provide 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.</li> </ul>	During project design and construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ 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 in kind for losses associated with the reduction in level of service.</li> </ul>				
<b>4.14-b</b>	<b>Verify Utility Locations, Coordinate with Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage and Implement Mitigation Measure 4.15-c, “Review Design Specifications and Prepare and Implement an Impact Avoidance and Contingency Plan in Consultation with Wickland Pipelines, LLC”</b>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>Before construction begins, SAFCA and its primary contractors shall coordinate with USACE, the CVFPB, and applicable utility providers to implement orderly relocation of utilities that need to be removed or relocated. Power pole relocations shall be coordinated with SMUD and SACDOT to avoid conflicts with the SACDOT-proposed bike/pedestrian path. Existing main electrical power transmission lines and poles on the waterside of the existing Garden Highway levee that do not need to be relocated or replaced to accommodate the project may be left in place. No new main electrical power transmission lines and poles shall be installed on the waterside of Garden Highway. Consistent with sound engineering practices that prioritize the following, individual service lines shall: (1) use existing configurations and facilities, and (2) any new poles shall be placed on the landside of Garden Highway, subject to the approval of USACE, the CVFPB, and any other regulatory public agencies and utility companies. SAFCA shall implement Mitigation Measure 4.15-c, "Review Design Specifications and Prepare and Implement an Impact Avoidance and Contingency Plan in Consultation with Wickland Pipelines, LLC."</p> <ul style="list-style-type: none"> <li>▶ SAFCA and its primary construction contractors shall provide the following: Notification of any potential interruptions in service shall be provided to the appropriate agencies and affected landowners.</li> <li>▶ Before the start of construction, utility locations shall be verified through field surveys and the use of the Underground Service Alert services. Any buried utility lines shall be clearly marked in the area of construction on the construction specifications in advance of any earthmoving activities.</li> </ul>	Before the start of construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ Before the start of construction, a response plan shall be prepared to address potential accidental damage to a utility line. The plan shall identify chain of command rules for notification of authorities and appropriate actions and responsibilities to ensure the safety of the public and workers. Worker education training in response to such situations shall be conducted by the contractor. The response plan shall be implemented by SAFCA and its contractors during construction activities.</li> <li>▶ Utility relocations shall be staged to minimize interruptions in service.</li> </ul>				
<b>Hazards and Hazardous Materials</b>					
4.15-b(1)	<p><b>Implement Mitigation Measure 4.11-a, “Implement Applicable District-Recommended Control Measures to Minimize Temporary Emissions of ROG, NO<sub>x</sub>, and PM<sub>10</sub> during Construction,” and Mitigation Measure 4.6-a, “Implement Standard Best Management Practices, Prepare and Implement a Stormwater Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions”; and Complete Phase I and/or II ESAs and Implement Recommended Measures</b></p> <p>Implement Mitigation Measures 4.11-a and 4.6-a</p>	See Mitigation Measures 4.11-a and 4.6-a	See Mitigation Measures 4.11-a and 4.6-a		

<b>Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)</b>					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>Before the start of any construction activities, SAFCA shall ensure that Phase I ESAs are completed for all sites subject to ground disturbance, and that any additional site evaluations that be recommended in the Phase I ESAs are conducted. For the following sites where Phase I ESAs have been completed, the following additional evaluations (as recommended in the applicable Phase I ESAs) shall be completed prior to start of construction or earthmoving activities:</p> <p><b><i>Assessor's Parcel Number (APN) 201-0330-019</i></b></p> <ul style="list-style-type: none"> <li>▶ Conduct a limited Phase II ESA to evaluate for pesticide residues, and the possible presence of petroleum and/or other hazardous materials associated with on-site ASTs and drums.</li> </ul> <p><b><i>APNs 225-0010-038, 225-0010-041, and 225-0010-043</i></b></p> <ul style="list-style-type: none"> <li>▶ Conduct a limited Phase II ESA to evaluate for pesticide residues, and the possible presence of petroleum and/or other hazardous materials associated AST tanks and an on-site vehicle.</li> <li>▶ Conduct a geophysical survey to assess the presence of a possible underground storage tank (UST) and if present, collect soil and/or groundwater samples to evaluate if contamination exists.</li> </ul> <p><b><i>APNs 225-0090-014, 225-0110-050, 225-0101-007, 225-0101-057, 225-0101-058, 225-0101-061, 225-0110-018, and 225-0110-051</i></b></p> <ul style="list-style-type: none"> <li>▶ Conduct a limited Phase II ESA to evaluate for pesticide residues.</li> </ul>	Before the start of construction	SAFCA and property owners		

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p><b>APN 225-0090-040 (Novak Property)</b></p> <ul style="list-style-type: none"> <li>▶ As recommended in the Phase I ESA (Kleinfelder 2009a), a limited Phase II ESA was completed to evaluate for pesticide residues. The possible presence of petroleum and/or other hazardous materials associated with on-site ASTs, car batteries, burn areas, and drums shall be evaluated before the start of earth-moving activities.</li> </ul> <p><b>APN 225-0090-069</b></p> <ul style="list-style-type: none"> <li>▶ Conduct a limited Phase II ESA to evaluate for pesticide residues.</li> <li>▶ Conduct a geophysical survey to assess the presence of a possible UST and if present, collect soil and/or groundwater samples to evaluate if contamination exists.</li> <li>▶ APNs 225-0101-003, 225-0101-004, 225-0101-005, 225-0101-006</li> <li>▶ Conduct a limited Phase II ESA to evaluate for pesticide residues.</li> <li>▶ Conduct a geophysical survey to assess the presence of a possible UST and if present, collect soil and/or groundwater samples to evaluate if contamination exists.</li> </ul> <p><b>APN 225-0210-026</b></p> <ul style="list-style-type: none"> <li>▶ Conduct a limited Phase II ESA to evaluate for pesticide residues and residual chemical concentrations related to petroleum product surface staining.</li> </ul>				



Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p><b><i>APNs 225-0110-019, 225-0110-020, and 225-0110-037 (Huffstutler Trust/Johnson Property)</i></b></p> <ul style="list-style-type: none"> <li>▶ Conduct additional Phase II ESA work to further evaluate for potentially hazardous materials discussed in the Phase I ESA, including potential hydrocarbon contamination, miscellaneous refuse, unlabeled containers, and compounds found in aboveground and underground structures.</li> <li>▶ Retain an Industrial Hygienist to prepare a Construction Worker Health and Safety Plan. The Construction Worker Health and Safety Plan shall include, but shall not be limited to: personal protective equipment for workers, a delineation of the horizontal and vertical extent of elevated arsenic levels, a list of required monitoring equipment to be onsite during contaminated soil excavation (e.g., air quality meter), and proper procedures in the event that stained soil is encountered.</li> <li>▶ Retain a qualified professional to conduct an Ecological Risk Assessment. The Ecological Risk Assessment shall include, but shall not be limited to: potential chemicals of concern, biological characterization of the site, identification of potential exposure pathways, ecological receptors, and recommendations for and implementation of remediation, if necessary.</li> </ul> <p><b><i>APNs 201-0250-015, 201-0270-002, and 201-0270-037 (South Sutter, LLC Borrow Site)</i></b></p> <ul style="list-style-type: none"> <li>▶ Conduct a Phase II ESA to evaluate for potentially hazardous materials discussed in the Phase I ESA, including potential miscellaneous refuse, unlabeled containers, and ASTs may have impacted the soil.</li> <li>▶ Remove, as appropriate, items on site, such as the AST, car batteries, unlabeled storage tanks, debris, and water wells in accordance with regional, local, state, and Federal regulations.</li> </ul>				

Mitigation Monitoring and Reporting Program for the Natomas Levee Improvement Program Phase 4a Landside Improvements Project (Phase 4a Project)					
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				Action	Date Completed
4.15-b(2)	<p><b>Complete Investigations Related to the Extent to Which Soil and/or Groundwater May Have Been Contaminated in Areas Not Covered by the Phase I and/or II ESAs and Implement Required Measures (e.g., Site Management and/or Other Contingency Plans)</b></p> <p>For parcels that will be used for Phase 4a Project borrow activities or where earthmoving activities would occur, SAFCA shall ensure that the contractor complete the following prior to start of construction and earthmoving activities:</p> <ul style="list-style-type: none"> <li>▶ Prepare a site management plan, subject to SAFCA review and approval that contains protocols and procedures for excavation, use, disposal, and handling of soil containing pesticide residues or contaminants, and for identifying possible contamination during construction. The plan shall include measures for the safe transport, use, and disposal of pesticide residue impacted soil and building debris removed from the site. Soil reuse may include: containing portions of the affected topsoil within the core of seepage berms, with an overlay of clean soil to prevent surface runoff caused by rainfall erosion on the topsoil materials; rip, mix, and/or amend affected topsoil that is re-spread onto borrow sites, levee, and/or berm surfaces, to provide a plant growth medium and reduce the concentration of pesticide residues in the soil; establish native perennial grasses and other perennial vegetation cover (e.g., hay, alfalfa) on these planted surfaces to reduce sediment runoff that may be caused by rainfall erosion or surface irrigation; and improve the drainage of agricultural lands used as borrow/mitigation sites to reduce ponded water and minimize the discharge of sediments into nearby drainages. In the event that impacted groundwater is encountered during site</li> </ul>	Before construction	SAFCA and property owners		

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>excavation activities, the contractor shall report the chemical concentrations to the appropriate regulatory agencies, dewater the excavated area, and treat the groundwater to remove the chemicals before discharge. The contractor shall be required to comply with applicable Federal, state, regional, and local laws. The plan shall outline measures for specific handling and reporting procedures for hazardous materials and disposal of hazardous materials removed from the site at an appropriate off-site disposal facility. The plan shall include, but shall not be limited to: delineations of the horizontal and vertical extent and concentration of soil contamination; a list of required monitoring equipment to be onsite during soil excavation (e.g., an air quality meter shall be used at the fence line during dust-producing activities); sampling and analysis protocol for additional soil investigations; a list of necessary agencies to be contacted if chemical concentrations in water, air, and/or soil exceed set threshold limits; and a list of necessary permits, reports, or other compliance mechanisms.</p> <ul style="list-style-type: none"> <li>▶ Retain an industrial hygienist to prepare a construction worker health and safety plan. The construction worker health and safety plan shall include, but not be limited to: personal protective equipment for workers, a delineation of the horizontal and vertical extent of elevated arsenic levels, a list of required monitoring equipment to be on-site during contaminated soil excavation (e.g., air quality meter), and proper procedures in the event that stained soil is encountered.</li> </ul>				

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				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ Retain a qualified professional to conduct an ecological risk assessment on sites found to contain levels of contaminant exceeding pertinent ecological risk levels. The ecological risk assessment shall include, but not be limited to: potential chemicals of concern, biological characterization of the site, identification of potential exposure pathways, ecological receptors, and recommendations for and implementation of remediation, where feasible and practicable.</li> <li>▶ Retain an air quality specialist to monitor the concentration of particulates of concern in the air at the project fenceline, adjacent to residential property to ensure compliance with Federal, state, regional, and local regulations, to the extent feasible and practicable. Airborne particulate monitoring should be performed in the on-site worker's breathing zone using the Particulate Not Otherwise Specified (NOS) concentrations standard of 5 mg/m<sup>3</sup> as well as at the project boundaries using the Fenceline Particulate NOS goal of 0.3 mg/m<sup>3</sup>.</li> <li>▶ Retain a licensed contractor to remove USTs, ASTs, and stained soils in accordance with applicable Federal, state, regional, and local regulations.</li> <li>▶ Retain a licensed contractor to remove and dispose of asbestos cement pipe found within the project area in accordance with applicable Federal, state, regional, and local regulations.</li> <li>▶ Retain a licensed contractor to remove septic systems, water wells, and other underground structures, as needed, in accordance with applicable Federal, state, regional, and local regulations.</li> </ul>				

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<ul style="list-style-type: none"> <li>▶ Retain an asbestos specialist who is certified by the California Occupational Safety and Health Administration (Cal/OSHA) The asbestos specialist shall investigate whether asbestos-containing materials or lead-based paints are present before demolition of on-site buildings and utilities. If materials containing asbestos or lead are found, they shall be removed by an accredited contractor in accordance with EPA and Cal/OSHA standards. In addition, activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. The materials containing asbestos and lead shall be disposed of properly at an appropriate off-site disposal facility.</li> <li>▶ Obtain an assessment conducted by the Sacramento Municipal Utility District and/or Pacific Gas &amp; Electric Company pertaining to the contents of the existing pole-mounted transformers that would be relocated as part of the Phase 4a Project. The assessment shall determine whether existing on-site electrical transformers contain polychlorinated biphenyls (PCBs) and whether there are records of spills from such equipment. If equipment containing PCBs is identified, the maintenance and/or disposal of the transformer shall be subject to the regulations of the Toxic Substances Control Act under the authority of the Sutter County Environmental Health Division and Sacramento County Environmental Management Department.</li> <li>▶ Identify oil and gas well locations. Prepare and implement a California Department of Oil, Gas, and Geothermal Resources well review program, if necessary.</li> </ul>				

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	<ul style="list-style-type: none"> <li>▶ Notify the appropriate Federal, state, regional, and local agencies, as required, if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) is encountered during construction activities. Areas with chemical concentrations exceeding regulatory levels shall be cleaned up in accordance with recommendations made by the Sutter County Environmental Health Division, Sacramento Environmental Management Department, Central Valley RWQCB, DTSC or other appropriate Federal, state, regional, or local regulatory agencies as generally described above.</li> </ul>				
	<ul style="list-style-type: none"> <li>▶ Implement Mitigation Measure 4.14-b, “Verify Utility Locations, Coordinate with Utility Providers, Prepare and Implement a Response Plan, and Conduct Worker Training with Respect to Accidental Utility Damage.”</li> </ul>	See Mitigation Measure 4.11-b	See Mitigation Measure 4.11-b		
<b>4.15-c</b>	<p><b>Review Design Specifications and Prepare and Implement an Impact Avoidance and contingency Plan in Consultation with Wickland Pipelines, LLC</b></p> <p>Prior to issuance of construction contract bid requests for the Phase 4a Project, SAFCA and its engineering and design consultants shall ensure that Wickland Pipelines, LLC has approved design specifications and impact avoidance and safety measures for construction activities within 50 feet of the jet fuel pipeline (CCR Title 8, Section 1541). Construction specifications to be approved with Wickland Pipelines, LLC include, but are not limited to, the type of construction and equipment (e.g., bulldozers, graders, excavators) and the location and depth of earth-moving activities near the pipeline (i.e., 50 feet). All excavation and construction in the vicinity (i.e., 50 feet) of the jet fuel pipeline shall be undertaken in strict conformity with the most recent version of the Best Practice of the Common Ground Alliance available.</p>	Before issuance of construction contract bid requests	SAFCA and its engineering and design consultant(s)		

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Mitigation Number (from Phase 4a DEIS/DEIR)	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation	
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	<p>Prior to the start of earthmoving activities, an impact avoidance and contingency plan shall be prepared and implemented by SAFCA in consultation with Wickland Pipelines, LLC. The plan shall include, but shall not be limited to:</p> <ul style="list-style-type: none"> <li>▶ a contingency plan for actions to take in the event of damage to the pipeline or release of jet fuel, which shall include chain of command and notification procedures, worker safety, pipeline security, wildlife care, response procedures, necessary permits for response actions, and waste handling and disposal;</li> <li>▶ a worker health and safety plan and worker training that shall consider personal protective equipment, operations safety within 50 feet of the pipeline, and a contact list for reporting and obtaining medical service; and</li> <li>▶ a method to provide the Airport with jet fuel in the event that the pipeline incurs substantial damage.</li> </ul> <p>Agreements made between SAFCA, SAFCA’s contractor, and Wickland Pipelines, LLC shall be in compliance with applicable Federal and state regulations (e.g., Hazardous Liquid Pipeline Safety Act, Pipeline Safety Improvement Act of 2002, Cal OSHA regulations).</p>				
<b>4.15-d</b>	<p><b>Notify State and Local Emergency Management Agencies about Project Construction and Coordinate Any SR 99/70 Detours with these Agencies to Ensure That Any Need for Emergency Use Is Not Significantly Impaired</b></p> <p>SAFCA shall implement Mitigation Measures 4.10-a and 4.10-c, set forth in Section 4.10, “Traffic and Circulation,” to avoid impairment of the use of SR 99/70 as an emergency evacuation route.</p>	See Mitigation Measures 4.10-a and 4.10-c	See Mitigation Measures 4.10-a and 4.10-c		

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4.15-e	<p><b>Notify the Natomas Unified School District and Applicable Schools with Jurisdiction within One-Quarter Mile of Project Construction Activities</b></p> <p>SAFCA shall provide written notification of the project to each of the affected schools and the Natomas and Twin Rivers Unified School Districts within 30 days prior to certification of this EIS/EIR and shall consult with the Natomas and Twin Rivers Unified School Districts regarding the potential impacts on schoolchildren from hazards associated with project implementation.</p>	30 days before certification of the EIR	SAFCA	Sent notification letter	April 21, 2009
4.15-f	<p><b>Coordinate Work in the Critical Zone with Airport Operations and Restrict Night Lighting Within and Near the Runway Approaches</b></p> <ul style="list-style-type: none"> <li>▶ No borrow activities shall be conducted within the Airport Critical Zone during nighttime hours.</li> <li>▶ All project-related nighttime lighting that is in, or is aligned with, the Airport runway approach zones (Sacramento River east levee Reaches 10–11A) shall be directed downward to avoid potential interference with nighttime aircraft operations.</li> <li>▶ SAFCA shall ensure that the SCAS is informed in advance of the timing and nature of all construction activities within the Airport Critical Zone, and shall coordinate with SCAS during final project design to ensure that all appropriate safety precautions within the Airport Critical Zone are incorporated into the construction plans. Additionally, requirements provided by the Federal Aviation Administration (FAA), not incorporated into this document, shall be followed.</li> </ul>	During project construction	SAFCA		



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	<ul style="list-style-type: none"> <li>▶ SAFCA shall submit the FAA form 7460-1, Notice of Proposed Construction or Alteration, which notifies the FAA of construction or alteration that might affect navigable airspace. This form must be submitted to the FAA at least 30 days before the earlier of the following dates: (1) the date the proposed construction or alteration is proposed to begin, or (2) the date an application for a construction permit is to be filed.</li> </ul>	Submit FAA form 7460-1 at least 30 days before the earlier of the following dates: (1) the date the proposed construction or alteration is proposed, or (2) the date an application for a construction permit is to be filed	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		
<b>4.15-h</b>	<b>Prepare and Implement a Fire Management Plan to Minimize Potential for Wildland Fires</b>				

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				Action	Date Completed
	SAFCA and its primary contractors for engineering design and construction shall prepare and implement a fire management plan in coordination with the appropriate emergency service and/or fire-suppression agencies of the applicable local jurisdictions before beginning project construction. The plan shall describe fire prevention and response methods, including fire precaution, presuppression, and suppression measures that are consistent with the policies and standards of the affected jurisdictions. All materials and equipment required for implementation of the plan shall be maintained on-site. All construction personnel shall be made familiar with the contents of the plan before construction activities begin.	Prepare fire management plan before project construction. Conduct construction personnel training before construction activities. Implement measures during construction	SAFCA and its engineering and design consultant(s) and primary contractor(s) for construction		
<b>Environmental Justice</b>					
<b>4.16-a</b>	<p><b>Increase the Direct Benefits of the Project for the Ancestors of the Native American Tribes</b></p> <p>As part of the Phase 4a Project, SAFCA proposes to acquire various properties in the Natomas Basin as compensation for the project’s potential impacts, as required under Federal and state laws. As part of the process for restoring these lands, SAFCA shall implement the following measures to address environmental justice and increase the direct benefits to the ancestors of the Native American tribes that would bear disproportionate adverse effects:</p> <ul style="list-style-type: none"> <li>▶ consult with appropriate Native American representatives to identify plant species of value for traditional cultural uses;</li> <li>▶ consult with Native American representatives to identify traditional cultural activities that could occur on these lands, consistent with habitat conservation and safety objectives;</li> </ul>	During project design and construction	SAFCA		

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	<ul style="list-style-type: none"> <li>▶ to the extent feasible, include identified plant species in the planting palettes developed for habitat conservation;</li> <li>▶ to the extent feasible, establish easements or other protective measures on these properties that include access for appropriate Native American representatives for plant gathering and other traditional cultural activities; and</li> <li>▶ where feasible, also provide access to appropriate Native American representatives to the river front on acquired parcels that have access to the Sacramento River, provided that access does not permit the construction of physical structures on the levee, beaches, or in the river without prior approval from the appropriate regulatory agency.</li> </ul>				

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