

Final
Supplement to the Environmental Impact Report on the
Natomas Levee Improvement Program
Landside Improvements Project—Phase 2 Project



State Clearinghouse # 2007062016

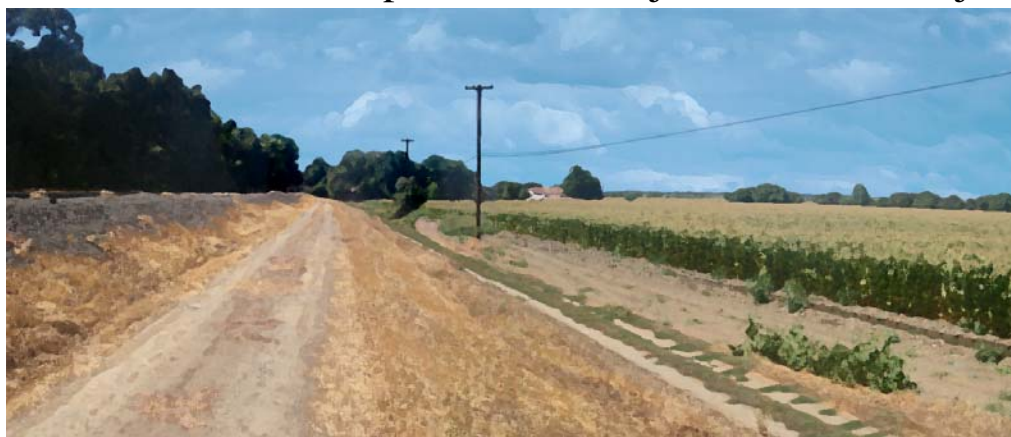
Prepared for:



January 2009

EDAW | AECOM

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Natomas Levee Improvement Program
Landside Improvements Project—Phase 2 Project



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Prepared for:

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January 2009

EDAW | AECOM

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ACRONYMS AND ABBREVIATIONS

2007 Landside EIR	Draft Environmental Impact Report on the Natomas Levee Improvement Program, Landside Improvements Project
24/7	24-hours-per-day, 7-days-per-week
APLIC	Avian Power Line Interaction Committee
APP	Avian Protection Plan
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CSLC	California State Lands Commission
dBA	A-weighted decibel scale
dbh	diameter at breast height
EIR	Environmental Impact Report
ESA	Federal Endangered Species Act
GGS	Giant Garter Snake
H:V	horizontal-to-vertical
Landside EIR	Environmental Impact Report on the Natomas Levee Improvement Program, Landside Improvements Project
Local Funding EIR	Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area
LTMP	Long-Term Management Plan
MMP	Mitigation and Monitoring Plan
MMRP	Mitigation Monitoring and Reporting Program
msl	mean sea level
NBHCP	Natomas Basin Habitat Conservation Plan
NCC	Natomas Cross Canal
NCMWC	Natomas-Central Mutual Water Company
NEMDC	Natomas East Main Drainage Canal
NLIP	Natomas Levee Improvement Program
NOP	notice of preparation
PG&E	Pacific Gas & Electric Company
PGCC	Pleasant Grove Creek Canal
Phase 2 Project SEIR	Supplement to the Natomas Levee Improvement Program Landside Improvements Project Environmental Impact Report for the Phase 2 Project
RWQCB	Regional Water Quality Control Board
SAFCA	Sacramento Area Flood Control Agency
SCAS	Sacramento County Airport System
TNBC	The Natomas Basin Conservancy

1 INTRODUCTION

The Sacramento Area Flood Control Agency (SAFCA) is proposing to implement the Natomas Levee Improvement Program (NLIP) to upgrade the Natomas Basin levee system to provide 100-year flood protection for developed areas in the major floodplains of the Sacramento metropolitan area as quickly as possible, with urban-standard (“200-year”) flood protection to be developed over time. The environmental impacts of landside levee improvements under the NLIP, as well as related canal relocation/construction and environmental mitigation, were addressed by the *Environmental Impact Report on the Natomas Levee Improvement Program, Landside Improvements Project* (Landside EIR). Phase 2 Project improvements were disclosed and analyzed at a project level of detail, and subsequent construction phases were addressed at a program level of detail. The SAFCA Board certified the Landside EIR in November 2007.

Since the certification, SAFCA has made minor modifications to the design of the Phase 2 Project. The *Supplement to the Natomas Levee Improvement Program Landside Improvements Project Environmental Impact Report* (EIR) for the Phase 2 Project (the “Phase 2 Project SEIR”) was prepared to disclose, analyze, and provide mitigation measures for all potentially significant environmental effects associated with modifications to the Phase 2 Project.

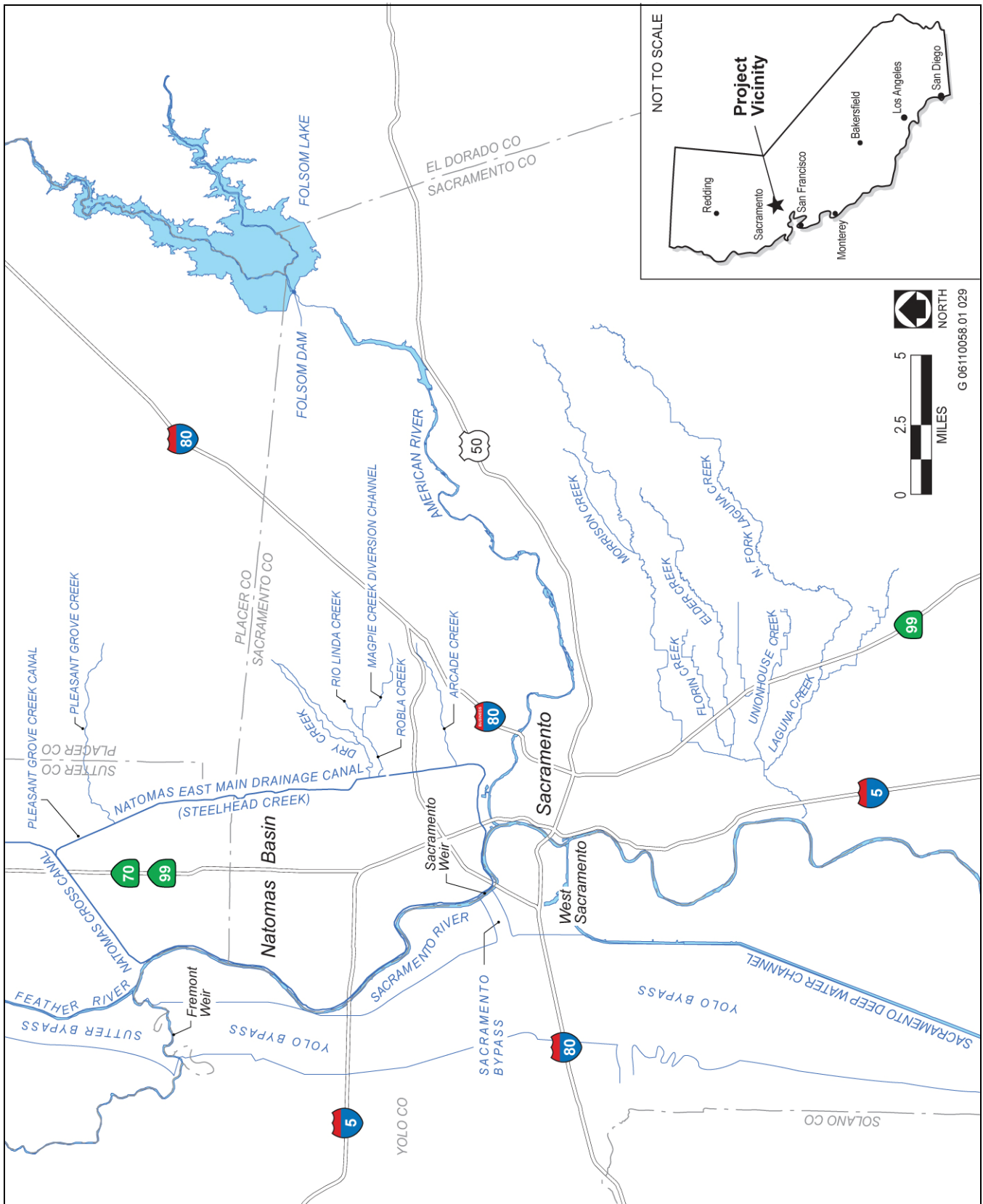
During the comment period on the Draft SEIR, SAFCA received four written comment letters/e-mails. This Final SEIR has been prepared to respond to comments received on the Draft SEIR, which are reproduced in this volume; and to present corrections, revisions, and other clarifications made to the Draft SEIR as a result of considering these comments and SAFCA’s ongoing planning efforts. SAFCA has prepared this Final SEIR in accordance with the requirements of the California Environmental Quality Act (CEQA). SAFCA is the lead agency for complying with CEQA. This analysis addresses the potential environmental impacts associated with modifications to the Phase 2 Project, and is the final CEQA environmental review document to be presented to the SAFCA Board of Directors (Board) before the Board considers approving Phase 2 Project implementation.

The Final SEIR consists of the Draft SEIR and this document, which includes comments on the Draft SEIR, responses to those comments, and revisions to the Draft SEIR. Both the Draft SEIR and this volume should be used as the informational basis for addressing the environmental consequences of implementing the proposed modifications to the Phase 2 Project. The Phase 2 Project SEIR, in combination with the 2007 Landside EIR, will be used by the SAFCA Board in considering whether to approve the Phase 2 Project as revised by the SEIR. Pursuant to Public Resources Code Section 21081, findings will be made by the Board for each significant effect disclosed in the SEIR as well as any revisions to significant effects or mitigation measures previously identified in the Landside EIR.

A Mitigation Monitoring and Reporting Program (MMRP) was previously prepared and adopted for the Landside EIR pursuant to Public Resources Code Section 21080.6(a)(1). That MMRP identifies the timing and method of implementation for each mitigation measure adopted by the SAFCA Board, and contains monitoring and reporting requirements. This SEIR modifies some of the mitigation measures contained in the Landside EIR and previously adopted MMRP as a result of the modifications to the project and in response to comments, and identifies additional mitigation measures that would be implemented as part of a revised MMRP that would be adopted by the SAFCA Board.

1.1 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

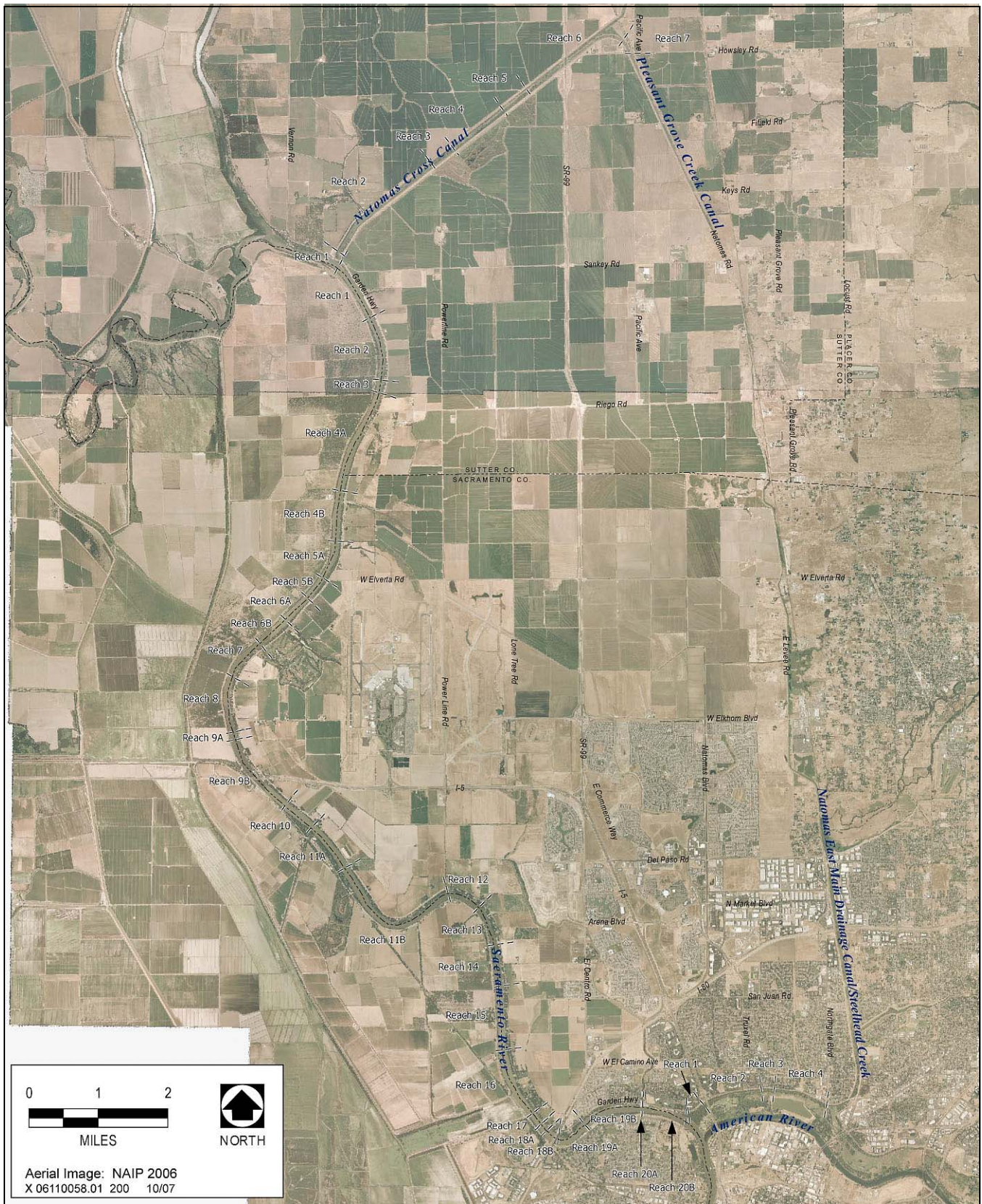
The NLIP involves improving the levee system that provides flood protection for the 53,000-acre Natomas Basin in northern Sacramento and southern Sutter Counties, California, including a portion of the city of Sacramento (Exhibit 1-1). The Natomas Basin is generally bounded by leveed reaches of the Natomas Cross Canal (NCC) on the north, the Sacramento River on the west, the American River on the south, and the Pleasant Grove Creek Canal (PGCC) and Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek on the east (Exhibit 1-2).



Source: CaSil, adapted by EDAW for SAFCA 2007

Project Location

Exhibit 1-1



Source: Aerial Image SACOG 2006, adapted by EDAW 2008

Natomas Basin Levee System

Exhibit 1-2

1.1.1 SUMMARY DESCRIPTION OF THE PHASE 2 PROJECT ANALYZED IN THE 2007 LANDSIDE EIR

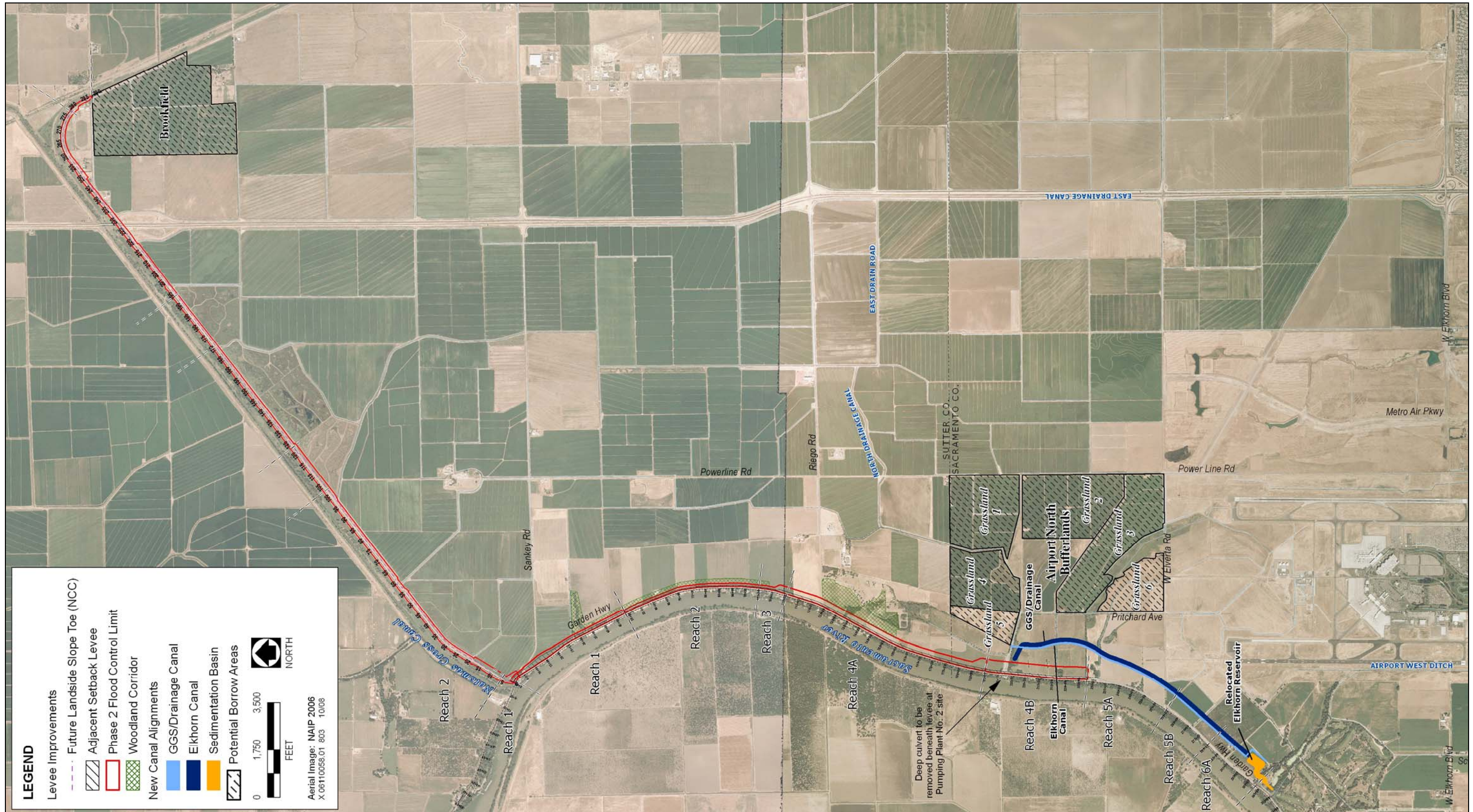
The general elements of the Phase 2 Project proposed and analyzed in the 2007 Landside EIR and updated based on current plans are shown in Exhibit 1-3 and summarized as follows (a detailed project description is provided in the 2007 Landside EIR):

- ▶ **Levee raising and seepage remediation: NCC south levee**—Raise and realign the NCC south levee to provide additional levee height and more stable waterside and landside slopes and to reduce the need for removal of waterside vegetation. Construct a seepage cutoff wall through the levee crown in Reaches 3 through 7.
- ▶ **Levee raising and seepage remediation: Sacramento River east levee**—Construct an adjacent setback levee from the NCC to the downstream end of Sacramento River east levee Reach 4B, raised where needed to provide adequate levee height, with a combination of cutoff walls, seepage berms, and relief wells for seepage remediation where required.
- ▶ **Improvements to major irrigation and drainage infrastructure**—These improvements are described below.
 - Relocate a portion of the existing highline Elkhorn Main Irrigation Canal north of the Natomas Central Mutual Water Company’s Elkhorn Reservoir. (“Highline” canals are water conveyances with bottoms roughly equal to the surrounding ground elevation.)
 - Construct a new canal designed to provide drainage and associated giant garter snake habitat (the “GGs/Drainage Canal”) between the North Drainage Canal and the Elkhorn Reservoir to improve associated giant garter snake habitat. (These features are intended to offset project impacts on giant garter snake canal and ditch habitat.)
 - Remove a deep culvert at the location of Reclamation District 1000 Pumping Plant No. 2 on the Sacramento River east levee.
- ▶ **Right-of-way acquisition**—Acquire right-of-way through fee title or easement interest within the footprint of the project features and at the borrow sites to prevent encroachments into the flood control system.

The levee raise along the Sacramento River involves construction of an “adjacent setback levee,” consisting of a new levee crown and embankment adjoining the land side of the existing levee. The adjacent setback levee would be constructed to provide the required levee height and would include seepage remediation where required. The seepage remediation would use a combination of seepage berms, cutoff walls, and relief wells. SAFCA would acquire additional rights-of-way to construct the improvements and to prevent encroachment into the flood control system. These improvements would include recontouring the levee slopes where necessary to provide at least a 3:1 horizontal-to-vertical (3H:1V) waterside slope and a 3H:1V (preferred) or 2H:1V (maximum) landside slope. Soil material for Phase 2 Project construction would be excavated and hauled to construction sites from the borrow sites located within two miles of construction sites.

1.1.2 MODIFICATIONS TO THE PHASE 2 PROJECT SINCE CERTIFICATION OF 2007 LANDSIDE EIR

Since certification of the 2007 Landside EIR in November 2007, SAFCA has continued to finalize the design and refine the features of the proposed Phase 2 Project, resulting in modifications to the project description, as follows:



Source: HDR 2008, Wood Rodgers 2007, Mead & Hunt 2008

Overview of the Proposed Phase 2 Project Features

Exhibit 1-3

- ▶ **“24/7” Construction of Cutoff Walls.** To complete construction of cutoff walls before the flood season while providing sufficient drying and curing time to ensure high-quality cutoff walls, SAFCA would likely conduct cutoff wall construction on a 24-hours-per-day, 7-days-per-week (“24/7”) basis.
- ▶ **Replacement of Seepage Berms with Cutoff Walls in Some Locations in Sacramento River East Levee.** In Reaches 2 and 3 of the Sacramento River east levee, seepage berms would be replaced by approximately 6,200 feet of cutoff walls up to 65 feet deep from existing landside toe elevation. In Reach 1, approximately 4,500 feet of cutoff wall up to 20 feet deep and 300 feet of cutoff wall up to 65 feet deep would be constructed. In Reach 4A, cutoff walls up to 60 feet deep would be constructed in addition to these seepage berms.
- ▶ **Enlargement of Seepage Berm in Reach 4B of the Sacramento River East Levee.** In Reach 4B of the Sacramento River east levee, the seepage berm footprint would be extended farther (500 feet as opposed to 300 feet) from the setback levee for approximately 1,200 feet to accommodate a known cultural resources site. No relief wells would be installed, as was assumed in the 2007 Landside EIR. Any necessary monitoring wells would be located outside of the extended berm footprint. The enlarged berm would provide a protective cap over much of an area known to contain sensitive cultural resources.
- ▶ **Change in Airport North Bufferlands Baseline—Active Rice to Idle.** The existing conditions at the Airport north bufferlands borrow sites changed from “active rice cultivation,” which existed on June 4, 2007, the time of publication of the notice of preparation (NOP) for the 2007 Landside EIR, to “idle” because the agricultural leases for these lands expired on December 31, 2007. The Sacramento County Airport System has indicated that it will not be bringing these lands back into rice production. The NOP issued for the SEIR (October 2, 2008) acknowledges that these current, existing physical conditions constitute the baseline for this SEIR, whereas the baseline for these lands are no longer in active rice cultivation, but are idle. These lands are no longer considered giant garter snake habitat, and SAFCA has revised its reclamation plan to convert all of the sites used for borrow sites to managed grassland. Previously, the site now called Grassland 4 was to be converted into a managed marsh after excavation of borrow material. The conversion of all of the Airport north bufferlands borrow sites to managed grasslands would reduce potential impacts to aviation safety.
- ▶ **Design Details for Garden Highway Drainage Outfalls.** The surface drainage outlets across Garden Highway were discussed in the 2007 Landside EIR. However, SAFCA has since developed additional design and construction details. Between the Sacramento River adjacent setback levee and the Garden Highway pavement in Reaches 1 through 4B, new storm drainage collection facilities would be constructed to convey surface water beneath Garden Highway and toward the Sacramento River. A surface collection system (grassed drainage swale) would convey runoff water to drop inlets, and new pipe laterals would convey the water beneath Garden Highway to new outfalls in the berm along the east bank of the Sacramento River. In most locations, the outfalls would be placed above the ordinary high-water mark (2-year) water surface elevation. The location of the cross culverts would be selected to minimize impacts on existing residential properties and vegetation. These discharge pipes would require minor landscape improvements to control erosion and ensure that applicable water quality standards are met. Excavation of a trench across Garden Highway would be required, and those segments where excavation occurs would have to be reconstructed. Single-lane traffic controls and through-traffic detours would be required during this phase of construction. This work would be conducted in two headings (work sites) simultaneously.
- ▶ **Additional Preservation of High-Quality Foraging Habitat.** To mitigate the permanent loss of (high quality) foraging habitat within the foraging range of potentially impacted Swainson’s hawk nest locations, SAFCA would create or preserve in perpetuity approximately 90 acres of high-quality foraging habitat. This would be primarily achieved by the acquisition and reclamation of land used for borrow material, including a combination of the South Sutter (Thornton), Bianchi and Novak borrow sites, and approximately 14 acres of land acquired in Reach 2 of the Sacramento River east levee.

1.2 MAJOR CONCLUSIONS OF THE DRAFT SEIR ENVIRONMENTAL ANALYSIS

1.2.1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

As described in the Draft SEIR, the proposed modifications to the Phase 2 Project could result in significant environmental effects on several resources. The majority of the impacts would be less than significant after implementation of the identified mitigation measures. Table 1-1 summarizes the environmental impacts of the proposed project modifications, the level of significance before mitigation, recommended mitigation measures, and the level of significance of each impact after mitigation. This table was reproduced from the Draft SEIR, and has been updated to reflect changes to mitigation measures made as a result of comments received on the Draft SEIR. Table 1-1 indicates which mitigation measures from the 2007 Landside EIR have been revised; mitigation measures that have been revised in Chapter 3 of the Final EIR are *bold italicized*, and mitigation measures that were revised in the Draft SEIR are *italicized*.

1.2.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

As described in the Draft SEIR, the proposed modifications to the Phase 2 Project would result in the following significant and unavoidable impacts:

- ▶ Potential construction impacts on cultural resource CA-SAC-485H
- ▶ Damage to or destruction of other identified prehistoric cultural resources
- ▶ Damage to or destruction of previously undiscovered cultural resources
- ▶ Damage to or destruction of previously undiscovered interred human remains
- ▶ Generation of temporary, short-term construction noise

Where feasible mitigation exists, it has been included to reduce these impacts; however, the mitigation would not be sufficient to reduce the impacts to a less-than-significant level. Therefore, these impacts would remain significant and unavoidable.

1.3 PURPOSE OF THE FINAL SEIR

CEQA requires a lead agency that has prepared a Draft EIR, including a draft SEIR, to consult with and obtain comments from public agencies that have legal jurisdiction concerning the proposed project, and to provide the general public with an opportunity to comment on the Draft EIR. The final EIR is the mechanism for responding to comments and providing this information to the decisionmakers. This Final SEIR has been prepared to respond to comments received on the Draft SEIR, which are reproduced in this volume; and to present corrections, revisions, and other clarifications made to the Draft SEIR as a result of considering these comments and SAFCA's ongoing planning efforts.

1.4 REQUIREMENTS FOR CERTIFICATION AND FUTURE STEPS IN PROJECT APPROVAL

The SEIR is intended to be used by the SAFCA Board of Directors when considering approval of project modifications, and by responsible and trustee agencies that have regulatory authority over portions of the project features, land management jurisdiction, or other permit approval responsibility.

On October 2, 2008, SAFCA issued an NOP of an SEIR, and filed the NOP and notice of availability with the State Clearinghouse and distributed the NOP to a broad mailing list. The 30-day public comment period on the NOP ended on November 3, 2008. A scoping meeting was held at Teal Bend Golf Club on October 22, 2008, from 4:00–7:00 p.m. to solicit input on the scope of the SEIR from agencies and the public.

On November 18, 2008, SAFCA released the Draft SEIR for public review and comment for a 45-day period ending January 2, 2009. The Draft SEIR was submitted to the State Clearinghouse for distribution to reviewing agencies. A notice of availability was filed with the county clerks of Sacramento and Sutter Counties; published in the *Sacramento Bee*; and distributed to a broad mailing list.

A public hearing to receive comments on the Draft SEIR was held at the Sacramento City Council Chambers on December 11, 2008 during the regular meeting of the SAFCA Board of Directors.

As a result of these notification efforts, written and verbal comments were received from federal, state, and local agencies; organizations; and individuals on the content of the Draft SEIR. Chapter 2 of this Final SEIR identifies these commenting parties, their respective comments, and responses to these comments. None of the comments received or the responses provided constitute “significant new information” by CEQA standards (State CEQA Guidelines Section 15088.5).

Following completion of the Final SEIR, the SAFCA Board of Directors will hold a public meeting to consider certification of the Final SEIR and to decide whether or not to approve the proposed project modifications. A notice of determination will then be filed with the State Clearinghouse. If the Board of Directors approves the proposed project modifications, it will prepare and adopt written findings of fact for each significant environmental impact identified in the SEIR; a statement of overriding considerations; and a mitigation monitoring and reporting program. The Board will also adopt a revised version of the Mitigation Monitoring and Reporting Program (MMRP) that was adopted when the 2007 Landside EIR was certified. The revised MMRP will combine the previously certified and adopted mitigation measures, which have not been modified, with new or revised mitigation measures contained in the SEIR.

1.5 ORGANIZATION AND FORMAT OF THE FINAL SEIR

This document is organized as follows:

Chapter 1, “Introduction,” presents a summary of the Phase 2 project analyzed in the 2007 Landside EIR and a summary of the proposed modifications to the Phase 2 Project, summarizes the major conclusions of the SEIR, describes the purpose of the Final SEIR, provides an overview of the environmental review process, and describes the content of the Final SEIR.

Chapter 2, “Responses to Comments on the Draft SEIR,” presents responses to environmental issues raised in the comments submitted.

Chapter 3, “Revisions to the Draft SEIR,” presents revisions to the Draft SEIR text made in response to comments, or to amplify, clarify, or make insignificant modifications or corrections. Changes in the text are signified by ~~strikeout~~ where text is removed and by underline where text is added.

Chapter 4, “References,” includes the references to documents used to support the comment responses.

Chapter 5, “List of Preparers,” lists the individuals who assisted in the preparation of this document.

Table 1-1 Summary of Impacts and Mitigation Measures			
Issue Area Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance after Mitigation
Hydrology and Water Quality			
Impact 3.2-a. Possible Effects on Water Quality from Stormwater Runoff from Garden Highway Drainage Outlets to the Sacramento River	Significant	<i>Mitigation Measure 3.2-a: Implement Standard Best Management Practices and Comply with NPDES Permit Conditions</i>	Less than significant
Impact 3.2-b. Possible Effects on Groundwater	Less than significant	No mitigation is required	Less than significant
Impact 3.2-c. Cumulative Effects on Groundwater	Less than significant	No mitigation is required	Less than significant
Terrestrial Biological Resources			
Impact 3.3-a. Loss of Sensitive Habitats	Significant	Mitigation Measure 3.3-a: The following mitigation measure from the 2007 Landside EIR has been revised, as shown in Chapter 3 of the Final EIR: <i>Mitigation Measure 3.7-a: Minimize Effects on Sensitive Habitats, Develop a Habitat Management Plan to Ensure Compensation for Unavoidable Adverse Effects, and Comply with Section 404, Section 401, and Section 1602 Permit Processes</i>	Less than significant
Impact 3.3-b. Disturbance and Loss of Giant Garter Snake Habitat	Significant	Mitigation Measure 3.3-b: The following mitigation measure from the 2007 Landside EIR has been revised, as shown in Chapter 3 of the Final EIR: <i>Mitigation Measure 3.7-d: Minimize the Potential for Direct Loss of Giant Garter Snake Individuals, Develop a Management Plan in Consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (DFG), and Obtain Incidental Take Authorization</i>	Less than significant
Impact 3.3-c. Loss of Swainson’s Hawk Habitat and Potential Disturbance of Nests	Significant	Mitigation Measure 3.3-c: The following mitigation measure from the 2007 Landside EIR has been revised, as shown in Chapter 3 of the Final EIR: <i>Mitigation Measure 3.7-f: Minimize Potential Impacts on Swainson’s Hawk, Monitor Active Nests during Construction, Develop a Management Plan in Consultation with DFG, and Obtain Incidental Take Authorization</i>	Less than significant
<p>Note: Mitigation measures that have been revised in Chapter 3 of the Final SEIR are <i>bold italicized</i> Mitigation measures that were added or revised in the Draft SEIR are <i>italicized</i>.</p>			

Table 1-1 Summary of Impacts and Mitigation Measures			
Issue Area Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance after Mitigation
Cultural Resources			
Impact 3.4-a. Changes to Elements of Reclamation District (RD) 1000	Significant	Mitigation Measure 3.4-a: The following mitigation measure from the 2007 Landside EIR was revised in the Draft SEIR: <i>3.8-a: Incorporate Mitigation Measures to Documents Regarding Any Elements Contributing to RD 1000 and Distribute the Information to the Appropriate Repositories</i>	Less than significant
Impact 3.4-b. Potential Construction Impacts on CA-SAC-485H	Significant	<i>Mitigation Measure 3.4-b: Avoid Ground Disturbance near Known Prehistoric Archaeological Site CA-SAC-485/H to the Extent Feasible and Prepare and Implement a Historic Properties Treatment Plan</i>	Significant and unavoidable
Impact 3.4-c. Damage to or Destruction of Other Identified Prehistoric Cultural Resources	Potentially Significant	<i>Mitigation Measure 3.4-c: Evaluate NLIP-7 and NLIP-22. If the Resources are Eligible, Avoid Disturbance to the Extent Feasible, and Prepare and Implement a Historic Properties Treatment Plan</i>	Significant and unavoidable
Impact 3.4-d. Damage to or Destruction of Previously Undiscovered Cultural Resources	Potentially Significant	<i>Mitigation Measure 3.4-d: Conduct Additional Backhoe and Canine Forensic Investigations As Appropriate</i>	Significant and unavoidable
Impact 3.4-e. Damage to or Destruction of Previously Undiscovered Interred Human Remains	Significant	Mitigation Measure 3.4-e: The following mitigation measure from the 2007 Landside EIR would be applied: Mitigation Measure 3.8-e: Halt Work Within 50 Feet of the Find, Notify the County Coroner and Most Likely Descendant, and Implement Appropriate Treatment of Remains	Significant and unavoidable
Noise			
Impact 3.5-a. Generation of Temporary, Short-Term Construction Noise	Significant	Mitigation Measure 3.5-a: The following mitigation measure from the 2007 Landside EIR has been revised, as shown in Chapter 3 of the Final EIR: <i>Mitigation Measure 3.12-a: Implement Noise-Reducing Construction Practices, Prepare a Noise Control Plan, and Monitor and Record Construction Noise Near Sensitive Receptors</i>	Significant and unavoidable
<p>Note: Mitigation measures that have been revised in Chapter 3 of the Final SEIR are <i>bold italicized</i> Mitigation measures that were added or revised in the Draft SEIR are <i>italicized</i>.</p>			

2 RESPONSES TO COMMENTS ON THE DRAFT SEIR

This chapter contains the comment letters received on the Draft SEIR and SAFCA’s responses to environmental issues raised in those comments. Each letter, as well as each individual comment within the letter, has been given a number for cross-referencing. Responses are sequenced to reflect the order of comments within each letter.

As noted previously, a public hearing on the Draft SEIR was conducted on December 11, 2008.

Table 2-1 lists all parties who submitted comments on the Draft SEIR during the 45-day public review period.

Table 2-1 List of Commenters				
Commenter	Date of Comment	Comment / Letter Designation	Page Number	
Federal and State Agencies				
California State Lands Commission Gail Newton, Chief, Division of Environmental Planning and Management	December 11, 2008	1	2	
Organizations				
Friends of the Swainson’s Hawk James P. Pachl, Attorney at Law	January 4, 2009	2	5	
Individuals				
Roy Dahlberg	January 4, 2009	3	17	
Siddiqui Family Partnership	December 31, 2008	4	19	
Public Hearing				
Roland Candee	December 11, 2008	5	23	

CALIFORNIA STATE LANDS COMMISSION

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Contact FAX: (916) 574-1885

December 11, 2008

File Ref: SCH# 2007062016

Sacramento Area Flood Control Agency
Attn: John A. Bassett
1007 7th Street, 7th Floor
Sacramento, Ca 95814

**Subject: Natomas Levee Improvement Program Landside Improvements Project
Draft Supplemental EIR**

Dear Mr. Bassett:

The California State Lands Commission (CSLC) staff has reviewed the Draft Supplemental EIR (SEIR) for the Natomas Levee Improvement Program Landside Improvement Project – Phase 2. For this project, the CSLC is potentially both a trustee agency and a responsible agency under the California Environmental Quality Act (CEQA).

The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation and open space. The boundaries of these State-owned lands generally are based upon the last naturally occurring location of the ordinary high or low water marks prior to artificial influences which may have altered or modified the river or shoreline characteristics. On tidal waterways, the State's sovereign fee ownership extends landward to the ordinary high water mark as it last naturally existed. On navigable non-tidal waterways, the State holds fee ownership of the bed landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, as they last naturally existed. Such boundaries may not be readily apparent from present day site inspections. The State's sovereign interests are under the leasing jurisdiction of the CSLC.

The proposed project may involve the Sacramento River, which is State sovereign land under jurisdiction of the State Lands Commission, or other sovereign lands of the State. To the extent the proposed project involves activity waterward of the high watermark, approval from the Commission is required.

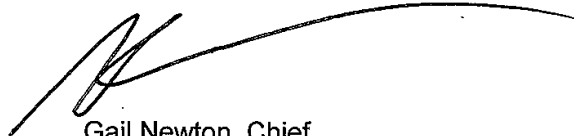
Based on a review of the Draft SEIR, the CSLC has the following comment: Consider including the following measures within your existing mitigation for construction noise. These additional measures may help to reduce the significance of short-term construction noise on sensitive receptors.

- Offer temporary re-location of residents within 100 to 500 feet of nighttime construction areas.
- Install a temporary noise wall that blocks the line of sight between all nighttime construction activities and the closest residences (100 to 500 feet). The noise wall or barrier shall achieve an attenuation of at least 10 dBA.

We appreciate receiving a copy of the Draft SEIR and look forward to review of the Final SEIR.

If you have any jurisdictional questions, please contact Diane Jones, Public Land Specialist, at (916) 574-1843 or by e-mail at jonesd@slc.ca.gov. If you have any questions on the environmental review, please contact Crystal Spurr at (916) 574-0748 or by e-mail at spurrc@slc.ca.gov

Sincerely,



Gail Newton, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
C. Spurr, CSLC
D. Jones, CSLC

**Letter
1
Response**

California State Lands Commission
Marina R. Brand, Assistant Chief
Division of Environmental Planning & Management
December 11, 2008

- 1-1 SAFCA recognizes that to the extent that Natomas Levee Improvement Program (NLIP) construction on the water side of the Sacramento River east levee extends below the high watermark, as defined by the California State Lands Commission (CSLC), authorization from the CLSC would be required.
- 1-2 SAFCA appreciates CSLC's suggestions regarding construction noise impacts, which were thoroughly analyzed in Section 3.5 of the Draft SEIR. In response, Mitigation Measure 3.5a, "Implement Noise-Reducing Construction Practices, Prepare and Implement a Noise Control Plan, and Monitor and Record Construction Noise Near Sensitive Receptors" has been revised to indicate that SAFCA will offer relocation during nighttime construction. (See Chapter 3, "Revisions to the Draft EIR.") With regard to the suggestion that temporary noise walls be constructed, SAFCA rejects this suggestion because of the challenges and cost of constructing a temporary sound wall on the Garden Highway (it is located on top of a levee) and the potential to create other adverse environmental effects.

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January 4, 2009

John Bassett, Director of Engineering
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VIA E-MAIL BassettJ@SacCounty.net

Comments of Friends of the Swainson's Hawk on the Draft SEIR On the Natomas Levee Improvement Program, Landside Improvements Project, Phase 2, November 2008

Dear Mr. Bassett,

The following comments are submitted on behalf of the Friends of the Swainson's Hawk. We **incorporate herein by reference** our comment letter dated October 29, 2007, on the original DEIR for the NLIP, Landside Improvements, and the comment letter of USFWS and DFG dated October 26, 2007, (reproduced in SAFCA NLIP Landside Improvements FEIR pp 3-1 through 3-15, 3-72 through 3-80). We commend SAFCA for its efforts and creative solutions to avoid and mitigate for the impacts of the project on the unique biological resources of the Basin. However, there are critical issues of implementation which have yet to be resolved:

1. Relocated power poles should be designed to avoid electrocution of birds.

We strongly urge that all power poles which are relocated or replaced, and those which are not relocated, be designed or retrofitted to reduce electrocution of birds perching on the poles or power lines. For a least several years, PG and E has installed poles and pole retrofit devices which are able to reduce or avoid instances of electrocution of birds. There is no reason why this could not be done here insofar as most poles alongside the levee will need to be replaced. Please see e-mail letter of Roy Dahlberg regarding this issue, sent to Mr. Bassett on January 4, 2008.

2. Formulation of Mitigation Measures improperly deferred, findings that these measures will mitigate impacts to less than significant are not supported by substantial evidence, and Mitigation Measures are not enforceable.

Mitigation Measures 3.3-a, 3.3-b and 3.3.c defer formulation of mitigation measures to unknown later dates and rely on Federal and State permit conditions which will be developed at a later date, and upon consultations with USFWS and DFG at a later date, all of which is deferral of mitigation that is impermissible under CEQA. Such measures will require the consent and cooperation of the FAA, County Airport, NBC, RD 1000, NCMWC, and other agencies whose consent and cooperation are not assured. Findings that these measures will mitigate impacts to

less than significant, or are the maximum extent of mitigation measures that are feasible, are not supported by substantial evidence. These measures are unenforceable.

For example, MM 3.3-a proposes to create a habitat management plan which does not yet exist and to comply with conditions of Federal Section 401 and 402 permits and State Fish and Game Code Section 1602 permits which have not been finalized or issued. Such measures would require the consent and cooperation of other agencies, whose consent and cooperation are not yet assured. This is improper deferral of formulation of mitigation measures, which is prohibited by CEQA Guideline 15126.4(a)(1)(B). Such measures are not enforceable, and thus in violation of CEQA's requirement that mitigation measures must be enforceable. **We incorporate herein** the previous discussion of this issue in the letter of USFWS and CDFG, dated October 26, 2007, commenting on the DEIR of the NLIP. (NLIP FEIR pp. 3-1 through 3-15).

There is no evidence that (a) compliance with permits issued by wildlife agencies in the future and (2) consultations with the wildlife agencies would mitigate impacts to less than significant. Whether this can be accomplished depends upon each individual site-specific situation and the effectiveness of the mitigation measures and permit conditions specific to each site-specific situation. This cannot be assessed from this SDEIR because the necessary information is not provided, permit conditions have not been formulated, finalized or accepted, and permits containing these as-yet unknown permit conditions have not been approved or issued. There is no assurance that all parties to future consultations with Federal or State agencies will agree to measures recommended by said agencies.

SAFCA and RD 1000 will use rodenticides to prevent rodent borrows in levees. What measures will prevent ingestion of rodenticides by non-target species, including SWH and other raptors which may eat rodents that have recently ingested rodenticides?

What is the expected "take" of SWH and other raptors from accidental ingestion of rodenticides due to eating of rodents that have recently ingested rodenticides? How will this "take" be mitigated?

How will the grassland mitigation lands be managed to maximum SWH foraging value?

What entity will manage the SWH mitigation habitat, GGS mitigation habitat, GGS mitigation canal? Wildlife agencies and biologists have repeatedly expressed concern about aggressive vegetation removal practices of RD 1000 and NCMWC which are detrimental to GGS.

There is no reference to SWH or GGS mitigation lands or the GGS mitigation canal being subject to an enforceable Conservation Easement. This is a subject of concern discussed in the USFWS Biological Opinion, dated October 9, 2008, for the Corps permit for the NLIP, Landside Improvements, incorporated herein by reference. For that reason, these mitigation measures are unenforceable, contra to the requirements of CEQA.

The DEIR p. 3.3-12, states that the loss of high-quality croplands used as SWH foraging habitat will be compensated by creation of a greater area of lower-quality grassland mitigation land. What is calculation which demonstrates that the creation of the 233 acres of grassland in excess of the acreage of SWH foraging habitat lost will fully offset the loss of higher-quality SWH foraging habitat?

Is SAFCA crediting any part of the Airport buffer lands, including borrow pits on Airport bufferland, as “grassland” SWH mitigation habitat? If so, will these areas be fully exempt from the requirement of the Airport and FAA that Airport bufferlands be managed to minimize attractiveness to birds, including raptors?

The DEIR proposes to excavate large borrow pits to a depth of 6 feet for levee material, and then convert them to high-quality SWH foraging habitat, including cultivation of alfalfa (DEIR 3.3-12). Alfalfa requires well-drained permeable soil, and is highly vulnerable to root rot if the soil is saturated with water for even a short period. For that reason, it is not grown in most of the Basin. The Natomas Basin Conservancy has lost alfalfa fields due to saturated soil conditions.

The DEIR p. 3.2-2 states that hydrographs for wells in the western part of the North American Subbasin (Natomas Basin and Middle American Basin) shows groundwater levels between 5 and 20 feet below surface. Five feet below surface is shallower than the anticipated 6 foot depth of the proposed borrow pits. However, the DEIR also asserts that groundwater in the basin averages between 10 and 25 feet below surface. How are these contradictions reconciled? Natomas landowners, particularly in the western portion of the Basin, have repeatedly recounted instances of groundwater being very close to or even at ground surface level when the surface level of the river is high during winter and spring.

Please disclose all data upon which SAFCA is relying in its estimate of groundwater depth during high groundwater conditions (winter and spring).

How does SAFCA propose to keep the borrow pits sufficiently dry to grow alfalfa or other high-quality SWH foraging habitat that needs well-drained soil? Who will be responsible for draining the borrow pits and how will this be funded?

Why does SAFCA believe that the proposed reclaimed borrow pits will support alfalfa crops? How does SAFCA propose to prevent the accumulation of water in the reclaimed borrow pits or water saturation of the soils within the reclaimed borrow pits during winter and spring? The DEIR states that SAFCA will obtain water for the GGS canal and managed wetlands from NCMWC. How is this assured?

It is reported that NCMWC may be facing potential financial difficulty due to (1) the need to install fish screens to comply with Federal law (2) the need to replace existing pump plants, and (3) reduced revenues cause by conversion of rice farming to urban development, and fallowing of former rice fields, without corresponding reduction of NCMWC operating costs (notably fixed costs of maintaining and replacing facilities). NCMWC’s efforts to obtain regulatory permission to sell water to urban water users (which would provide more revenue) are being contested by Sutter County Water Agency, and others.

How will SAFCA provide water for its mitigation wetlands and GGS canal in the event that NCMWC goes out of business or its costs become prohibitive?

3. What, if any, is the effect of the project on the linear water ponds (slough) and adjacent riparian habitat, immediately north of Teal Bend Golf Course and east of the proposed relocated Elkhorn Reservoir?

Immediately north of Teale Bend golf course, and south-east of the proposed relocated Elkhorn Reservoir, are a series of linear ponds (likely a former slough, running southeast from approx 100 feet inland from the levee) surrounded with riparian habitat., immediately north of Teale Bend Golf Course and south-east of the proposed relocated Elkhorn Reservoir. (See Map, Exhibit 32-5, DEIR p. 2-9). I believe that the property is owned by Natomas Mutual Water Company. These ponds are habitat for GGS, turtles, and other aquatic creatures, and the riparian trees surrounding the ponds are habitat for various birds.

How will these ponds and adjacent riparian vegetation (including trees) be affected by the project?

What measures will be undertaken to prevent sedimentation of these ponds from construction run-off, and other project impacts upon the ponds and its adjacent riparian vegetation?

Will these ponds connect to the GGS Canal?

4. The SDEIR Violates CEQA by failing to provide information on financial feasibility of mitigation measures

A number of mitigation measures will require funding to be capable of successful implementation. Due to failure of the SDEIR to disclose any financial information, it cannot be determined if such mitigation measures are financially feasible. Therefore, findings in such instances that mitigation measures would be implemented or that impacts would be reduced to less than significant as a result of implementation of mitigation measures are not supported by substantial evidence. In other cases, Courts have set aside EIR's for failure to provide substantial evidence that proposed mitigation measures are financially feasible.

5. The Funding Plan Improperly Relies On Speculative Revenues To Be Generated By Potential New Development Which May Not Occur, or May Not Occur Within the Time Parameters of the Financing Plan

The DSEIR relies on the financial assumptions of the original EIR for the NLIP, which are now outdated. SAFCA's "Natomas Levee Improvement Program Update, November 17, 2008," reported that the estimated cost of achieving a 100-year level of protection has increased to \$580.1 M, and \$618.1 M to achieve a 200-year level of protection (inclusive of the cost of 100-year certification). It assumes, without further explanation that \$132 M of these costs will be paid by assessments on new development, based on current projections of regional growth.

Recent economic events have demonstrated that the regional growth projections relied upon by SAFCA, SACOG, and other local government are highly unreliable, and that no substantial evidence supports the assumption that assessments on new development will provide \$132 M funding for the NLIP. None of the regional growth projections relied upon by SAFCA, et al, disclosed that there existed an oversupply of housing in 2005, that a substantial portion of the recent home purchase market was funded by imprudent lending practices having a very high propensity to fail, or that much of the region's private sector growth since 2000 was dependent upon continued new home construction and creation of jobs dependent upon real estate sales and construction, including realty, lending and financial, accounting, legal, etc. All construction booms are temporary, and all end, sometimes with a severe crash. The speculative lending and investment practices which fueled a substantial part of the region's recent construction and

development boom will not be available again, and regional growth of the more permanent economic sectors has been slow.

Respectfully Submitted,

James P. Pachl

- 2-1 SAFCA responded to the October 29, 2007 letter from Friends of the Swainson's Hawk, which commented on the *Draft Environmental Impact Report on the Natomas Levee Improvement Program, Landside Improvements Project* (2007 Landside EIR), in the Final 2007 Landside EIR (November 2007, State Clearinghouse No. 2007062016, pages 3-113 to 3-115). Specific responses to each of the comments on the Draft SEIR for the Phase 2 Project are presented in the following text.
- 2-2 The Phase 2 Project includes relocating or replacing Pacific Gas & Electric Company (PG&E) power poles. Power poles may benefit raptors by providing perching and/or nesting structures in areas where few natural perches or nest sites exist. However, these structures can also pose a threat to raptors and other birds through electrocutions or collisions. Mortality is most common with large birds, such as eagles or cranes. Electrocution can occur when a bird simultaneously touches two energized parts or an energized part and a grounded part of the electrical equipment. PG&E has developed and implemented an Avian Protection Plan (APP) to better protect birds and improve safety and reliability for its customers. The APP, which has been in place since 2002, includes outfitting all new poles and replacement poles in bird-sensitive locations with bird-safe equipment. PG&E is also a founding member of the Avian Power Line Interaction Committee (APLIC), a collaboration between utilities and the U.S. Fish and Wildlife Service that began nearly 20 years ago. The APLIC has guidelines and industry standards to avoid bird collisions and electrocutions. While SAFCA has no direct control over the specific design and retrofitting of the relocated and replaced power poles, it can be expected that PG&E will implement its APP and follow the APLIC guidelines and industry standards to reduce electrocution of birds perching on the power poles and power lines.
- 2-3 The required regulatory permits for the project have been or will soon be issued by the resources agencies. The U.S. Fish and Wildlife Service biological opinion/incidental take permit was issued on October 18, 2008, and a California Department of Fish Game 2081(b) incidental take permit is expected to be issued by spring 2009. The agencies issuing these permits evaluate the impacts to sensitive resources. If the agency concludes that the project with the associated mitigation measures may affect, but is not likely to adversely affect these resources, a permit may be issued. The permits typically condition the commencement of project construction on the attainment of or demonstrated commitment to mitigation measures.
- As stated in State CEQA Guidelines, Section 15126.4, Subdivision (a)(1)(B): "Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." Hence mitigation measures commonly are adopted in which the agency commits to achieve a performance standard and the mitigation measure lists options and alternatives for achieving the performance standard, some or all of which may be selected for implementation as part of a future, specific mitigation or management plan.
- See Chapter 3, "Revisions to the Draft EIR," for clarifications and revisions to the following mitigation measures from the 2007 Landside EIR:

- ▶ 3.7-a “Minimize Effects on Sensitive Habitats; Develop and Implement a Habitat Management Plan to Ensure Compensation for Unavoidable Adverse Effects; Comply with Section 404, Section 401, and Section 1602 Permit Processes; and Implement all Permit Conditions;”
- ▶ 3.7-b “Minimize the Potential for Direct Loss of Giant Garter Snake Individuals, Develop and Implement a Management Plan in Consultation with USFWS and DFG, and Obtain Incidental Take Authorization;”
- ▶ 3.7-c “Minimize Potential Impacts on Swainson’s Hawk, Monitor Active Nests during Construction, Develop and Implement a Management Plan in Consultation with DFG, and Obtain Incidental Take Authorization.”

2-4

Lands in the expanded flood control facility (e.g., levee slopes, seepage berms, and operation and maintenance corridors) will be managed by RD 1000 under a long-term operation and maintenance contract with SAFCA. The contract will specify the management practices to be employed, including the practices necessary to maintain and manage the native grasslands established on these areas consistent with the levee operation and maintenance requirements developed by U.S. Army Corps of Engineers (USACE) in connection with the Sacramento River Flood Control Project.

The selective use of anticoagulant baits to control rodents is a common practice throughout the Central Valley levee system at locations where California ground squirrel populations are present. Reclamation District (RD) 1000, not SAFCA, is responsible for inspection, maintenance, flood fighting, and repair of Natomas Basin levees. RD 1000 has, as necessary, used rodenticide to reduce the presence of ground squirrel burrows in levees, and may continue this management practice in the future. SAFCA is coordinating with University of California Davis Wildlife Extension researchers and RD 1000 to explore alternative control measures less hazardous to foraging raptors.

RD 1000 typically uses rodenticide in areas infested with multiple burrow complexes that could create seepage and piping pathways during high water in the river, causing levee erosion and instability. Individual burrows range in size from 5 to 30 feet wide and 2 to 4 feet deep depending on the size of the colony. Most areas chronically infested with burrows along the Sacramento River east levee are at locations near fruit and nut trees, a primary food source for the squirrels.

Rodenticide is not applied to isolated holes; rather, these holes are just filled with soil. Research has found that dinking burrows is ineffective, whereas the modification of habitat can have moderate success. Ground squirrels will not use wet areas or dense woody vegetation, but creating these conditions is not an option on levees. However, eliminating or reducing available food sources is expected to reduce ground squirrel populations and, therefore, the frequency of levee rodent control by RD 1000. Orchard trees and perennial seed crops will be removed from the base of the existing levee for several hundred feet outward to accommodate the new flood control footprint. This footprint includes the new adjacent setback levee (approximately 165 feet wider than the existing levee); seepage berms ranging between 100 and 500 feet wide; a 70-foot-wide operation, maintenance, and utility corridor; one or two canals; and the 100- to 150-foot-wide woodland corridor. The aggregate of these physical barriers will place potential ground squirrel food sources and cover substantially farther from burrows on the levee. This distance is greater than the typical range of ground squirrels, which rarely venture more than a 75-yard radius from the burrow.

In some areas, the fallowing of existing seed and nut crops and the removal of orchard on Airport lands adjacent to the levee has reduced the available food supply for ground squirrels. Although the existing management practices used to control ground squirrels (e.g., use of rodenticide) for levee maintenance by RD 1000 is not expected to change, the project will decrease ground squirrel populations on the levee slopes because of the reduction in available food sources within range of levees. Therefore, the need for and frequency of use of rodenticides by RD 1000 will be less than under existing conditions.

2-5

Native perennial grasslands on levee slopes, seepage berms, and rights-of-way will be managed to enhance their foraging value for Swainson's hawk, within the constraints of the management regime for maintenance and inspection of the flood control system. The primary purpose and management priority of levee slopes and berms will be flood protection. However, some necessary management practices (such as rodent control) could diminish habitat value for Swainson's hawk by reducing prey populations. Grassland management on levee slopes and berms will be implemented in a manner to minimize negative impacts on Swainson's hawk where habitat management is compatible with levee management. As indicated previously, SAFCA is coordinating with UC Davis Wildlife Extension researchers and RD 1000 to explore alternative control measures less hazardous to foraging raptors.

Established grasslands would be mowed at least twice per year to a 6–12-inch stubble height (depending on field conditions and season) to optimize these areas for Swainson's hawk foraging habitat. The grasslands would be mowed in the spring before weed species grow high enough to shade out native species, and in summer or fall before weed seed heads mature and shatter. Mowing regimes for fire prevention near inspection roads may require more frequent mowing events and shorter stubble heights; however, this will depend on field conditions and season. Broad-leaved selective herbicides may be applied as needed in spring. Irrigation of these habitats is not anticipated. During construction, the grasslands would be seeded in late fall to take advantage of early-fall rains, thus minimizing the need for supplemental irrigation.

2-6

A Long-Term Management Plan (LTMP) will be implemented by SAFCA in connection with the NLIP's Mitigation and Monitoring Plan. The LTMP will describe the management practices and land protection mechanisms that will be implemented as each phase of the NLIP is approved and permitted. Land ownership, management responsibilities, and protection obligations will be held by SAFCA, RD 1000, Natomas Central Mutual Water Company (NCMWC), The Natomas Basin Conservancy (TNBC), and the Sacramento County Airport System (SCAS).

The GGS/Drainage Canal shall be managed by RD 1000 under easements granted by SAFCA. The easements will identify TNBC as a third party beneficiary with the rights necessary to monitor and enforce the terms of the easements. RD 1000 will manage these lands under a long-term operations and maintenance contract with SAFCA, which will specify the management practices that are beneficial to maintaining giant garter snake habitat in the canal. TNBC will carry out its monitoring activities under a long-term contract with SAFCA.

TNBC will manage the mitigation woodlands, rice fields, and field crops under a long-term management agreement contract with SAFCA, utilizing similar land management practices as are currently employed by TNBC in connection with the Natomas Basin Habitat Conservation Plan (NBHCP).

RD 1000 will manage lands in the expanded flood control facility (e.g., levee slopes, seepage berms, and operation and maintenance corridors) under a long-term operation and maintenance contract with SAFCA. The contract will specify the management practices to be employed, including the practices necessary to maintain and manage the native grasslands established on

these areas and consistent with the levee operation and maintenance requirements developed by USACE in connection with the Sacramento River Flood Control Project.

The management and monitoring plans, easements, and long-term contracts for the habitat creation components of the proposed project will be reviewed and approved by the appropriate resource agencies before project implementation.

- 2-7 Lands used for the new GGS/Drainage Canal shall be encumbered by Drainage Canal Easements, granted by SAFCA to RD 1000 and by SCAS to SAFCA and RD 1000. These easements will preserve in perpetuity the aquatic and upland habitat values associated with the canal, as well as the drainage and irrigation values. The easements will identify TNBC as a third party beneficiary with the rights necessary to monitor and enforce the terms of the easements.

The lands used as mitigation woodlands, rice fields, and field crops will be acquired by SAFCA in fee title. These lands will be encumbered by conservation easements granted to TNBC to protect the habitat values of these lands in perpetuity.

Lands needed to support the NLIP habitat components along the expanded flood control facility (e.g., levee slopes, seepage berms, and operation and maintenance corridors) will be acquired in fee title by SAFCA and given in fee title or easement to RD 1000 or encumbered by flood control easements granted by SCAS to SAFCA and RD 1000.

The management and monitoring plans, easements, and long-term contracts for the habitat creation components of the proposed project shall be reviewed and approved by the appropriate resource agencies before project implementation.

- 2-8 Biologists have determined that particular types of foraging habitat (particularly alfalfa, hay, and similar field crops) provide higher-value Swainson's hawk foraging habitat than other habitat types. Although the multi-phase NLIP Landside Improvements Project will create many more total acres of foraging habitat than the total acres of converted foraging habitat, much of the converted acreage is higher-value cropland, while most of the created acreage will be moderate-value native grassland. This habitat value difference is partially offset by the fact that many of the converted acres are currently low-value ruderal grassland, and will be enhanced to moderate-value managed native perennial grassland following project implementation. However, to compensate for the difference in foraging habitat value between some types of cropland (particularly alfalfa) and managed native grassland, SAFCA will also preserve cropland. This cropland will be managed to provide foraging habitat for Swainson's hawk, and crop rotations will include alfalfa, hay, or other field crops considered to provide high-value foraging habitat for the Swainson's hawk.

SAFCA investigated cropland parcels within the project vicinity that would be suitable for alfalfa farming, and that would be located within close proximity to potential Swainson's hawk nesting habitat. SAFCA identified cropland that would meet these criteria and may be available for purchase and preservation. SAFCA will create or enhance crop land to be preserved in perpetuity. These croplands will be managed under crop rotations that will include alfalfa, hay, or other field crops considered to provide high-value foraging habitat for the Swainson's hawk. This preserved cropland will provide higher value foraging habitat than existing alfalfa crops because they will be managed specifically to provide foraging habitat, while existing crops are managed for profit. Existing crop rotations depend, in part, upon market conditions, whereas the preserved crops will rotate on a schedule designed to benefit the Swainson's hawk, within the constraints necessary to maintain viable farmland.

- 2-9 Approximately 470 acres of the Airport’s north bufferlands would provide borrow sources for construction of Sacramento River east levee improvements in NLIP project Phases 2 and 3. After the removal of borrow material, the borrow areas, which are currently either fallow agricultural lands or ruderal grassland, would be reclaimed as grassland. The management of these lands is at the discretion of SCAS and would continue to comply with Federal Aviation Administration guidelines concerning the necessary reduction of hazardous wildlife-attractant habitat around Airport runways. These lands would be temporarily unavailable as Swainson’s hawk foraging habitat during construction, but would be returned to similar or equal value foraging habitat at the end of construction. Management of the land is not expected to change as a result of the project, and so there is no permanent reduction in foraging habitat value or area expected at this location. These lands are not a component of SAFCA’s proposed mitigation for Swainson’s hawk foraging habitat.
- 2-10 The primary borrow sites proposed for the Phase 2 Project are: the Airport North Bufferlands, consisting of existing idle agricultural lands (including some former rice fields) or ruderal grassland, which, following borrow related excavation, would be reclaimed as grassland; and the Brookfield borrow site, consisting of existing rice field, which, following borrow-related excavation, would be reclaimed as rice field. The selection of sites for field crop preservation lands, whether or not they are used as borrow sites, will be based on cropland parcels that would be suitable for farming alfalfa, hay, or other similar crops (e.g., well-drained, permeable soils) and that are located within reasonable proximity of potential Swainson’s hawk nesting habitat. Where borrow sites are identified for field crop preservation, the limit of excavation would be, at minimum, 2 feet above the high water table. Further, these sites would be re-contoured to have positive drainage so that the sites can be gravity-drained to collector drains offsite to ensure that the root zones would not be saturated. Finally, the foot of topsoil removed and stockpiled prior to borrow removal would be re-spread over the borrow sites after soil excavation, thereby increasing the depth of soil above the water table.
- 2-11 The two references to groundwater in the third paragraph on page 3.2-2 of the Draft SEIR levels are expressed in different units. The reference to 10 to 25 feet for average groundwater levels in the Natomas Basin is expressed in terms of depth below ground surface. The original source for this reference, “Final Letter Report—Sacramento River Watershed Project (Common Features), CA: Sacramento River East-Side Levee Strengthening Project Cut-Off Wall Evaluation” is provided in Appendix A. The reference to -5 to 20 feet for well hydrographs in the western part of the North American Subbasin (which contains the Natomas Basin) is expressed in terms of elevation relative to mean sea level (msl). The depth below ground surface for water levels at these contour lines would depend upon the elevation of the ground surface in terms of elevation in feet relative to msl. The source for this information is the Sacramento Groundwater Authority, State of the Basin Report-2002, provided in Appendix B. The commenter is correct in the statement that seepage is often found at the ground surface in many areas along the river when river stages are elevated above normal levels in winter and spring.
- 2-12 See responses to Comment 2-10 and Comment 2-11. SAFCA is still evaluating which properties would be suitable for cultivation of alfalfa, hay, or other similar crops, and has not completed collection and compilation of relevant data, which would include groundwater depth in relation to potential excavation of soil borrow material.
- 2-13A See responses to Comment 2-10 and Comment 2-11.
- 2-13B Portions of the GGS/Drainage Canal (primarily the portion south of Elkhorn Reservoir) will become part of the NCMWC system. SAFCA is entering into an agreement with NCMWC to integrate the canal into its system and to provide water for the portions of the GGS/Drainage

Canal north of Elkhorn Reservoir. The managed wetlands components of the NLIP mitigation will be primarily within the Fisherman's Lake area. Most of the lands contemplated for reclamation to marsh habitat are presently and will continue to be served by the NCMWC Riverside Canal system.

2-14 Water supplies for the new GGS/Drainage Canal, rice fields, field crops, and woodlands would be provided by NCMWC under existing landowner/shareholder rights acquired by SAFCA and, where necessary, under long-term water purchase contracts with SAFCA. SAFCA would be required to ensure adequate water supplies to these areas through measures developed in the long-term management plan for these lands. Ensuring that lands continue to use NCMWC-provided water will tend to ensure the company's continued economic viability.

2-15 As part of the Phase 2 Project, the new Elkhorn Reservoir would be constructed at the southern end of the portion of the relocated Elkhorn Irrigation Canal north of the Teal Bend Golf Club and the existing Elkhorn Reservoir. A small portion of the riparian habitat near the northeast corner of the existing reservoir (<1.5 acre) is anticipated to be removed to accommodate the widened footprint of the Sacramento River east levee as part of the NLIP Phase 3 Project improvements.

In the Phase 3 Project, the GGS/Drainage Canal would extend eastward from this point through agricultural fields and along the northern boundary of the riparian habitat bordering the linear ponds (i.e., Jacobs Slough), allowing this riparian woodland to remain intact. At the eastern side of the Teal Bend Golf Club, the GGS/Drainage Canal would turn and extend southward along the east side of Schoolhouse Road, crossing over the eastern portion of Jacobs Slough. A small amount of riparian woodland (0.25 acre) would be removed where the GGS/Drainage Canal would be constructed across the slough. Although it would be deepened to maintain the required water depth through the GGS/Drainage Canal, Jacobs Slough would continue to function as existing habitat. Water will flow in and out of the GGS/Drainage Canal and Jacobs Slough junction.

In the Phase 3 Project, construction of the relocated Elkhorn Canal would avoid disturbance of the linear ponds and most of the surrounding riparian habitat. To minimize right-of-way needs. The canal would be piped across the existing Elkhorn Slough area and the Teal Bend Golf Club.

The implementation of Mitigation Measure 3.6-a (Implement Standard Best Management Practices, Prepare and Implement a Storm Water Pollution Prevention Plan, and Comply with NPDES Permit Conditions) would prevent potential sedimentation of these ponds that might otherwise result from run-off from construction areas. The implementation of Mitigation Measure 3.7-a (Minimize Effects on Sensitive Habitats, Develop a Habitat Management Plan to Ensure Compensation for Unavoidable Adverse Effects, and Comply with Section 404, Section 401, and Section 1602 Permit Processes) requires that all sensitive habitats and protected trees that are located adjacent to construction areas, but can be avoided, such as the riparian habitats around Jacobs Slough, shall be protected by temporary fencing during construction.

2-16 The comment does not identify specific mitigation measures that apply to impacts of the Phase 2 Project where financial feasibility might be a concern. Because the mitigation measures are modifications to the Phase 2 Project, the cost of implementing the mitigation measures would be included in the total cost of the Phase 2 Project. If there were insufficient funding to award contracts for construction of the Phase 2 Project, the proposed project would not be built and the impacts that have been identified as requiring mitigation would not occur. See Comment 2-17 regarding funding of the Phase 2 Project.

The comment does not provide a specific reference to where the Draft SEIR relies on the financial assumptions of the 2007 Landside EIR. The 2007 Landside EIR does not provide information on project costs or funding mechanisms. Both the 2007 Landside EIR and the SEIR tier from the program-level Environmental Impact Report on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area (Local Funding EIR, State Clearinghouse No. 2006072098) (February 2007), which analyzed the significant effects on the environment associated with the program of flood control improvements and related environmental mitigation that will be funded, in part, by SAFCA Consolidated Capital Assessment District and SAFCA Development Impact Fees.

The “Natomas Levee Improvement Program Update, November 17, 2008” (see Appendix C) refers to changes in the estimated total cost to achieve 100- and 200-year levels of flood protection. Funds for the implementation of the Phase 2 Project, which is one of several phases of the landside improvements under the NLIP, are available from Proposition 1E funding that has already been designated for SAFCA flood control improvements, as well as assessments from SAFCA’s Consolidated Capital Assessment District and potential funds from SAFCA’s Development Impact Fee program. Implementation of the Phase 2 component of the NLIP does not depend on potential funds from the Development Impact Fee program.

From: Redravenroy@aol.com [mailto:Redravenroy@aol.com]
Sent: Sunday, January 04, 2009 5:25 PM
To: Bassett, John (MSA)
Cc: Washburn, Timothy (MSA); jpachl@sbcglobal.net; dougcummings@sbcglobal.net
Subject: Comment on SEIR, NLIP, Landside, Phase 2

Mr. Bassett,

I wish to comment on the SEIR for the Natomas Levee Improvement, Landside Improvements, Phase 2.

The SEIR fails to adequately address the issue of power pole caused mortality for raptors and other avian life forms. I have on several occasions talked with contractors surveying the number of dead raptors and other birds underneath power line poles along Garden Highway in Sutter County. On each occasion they told me that there were numerous dead raptors and other birds whose deaths were caused by the poles. In addition I have witnessed several hawks and owls, as well as herons and egrets, which were dead in the poles/lines.

There is a significant body of knowledge as to how to mitigate this problem by properly designing and placing poles and lines. See, e.g., "Winging It, the Newsletter of the American Birding Association", vol. 20, no. 6, December 2008: Raptor Electrocutations on the Mongolia Steppe. This article discusses the lethality of certain pole designs and less lethal alternatives. Virtually all of the power poles along the Garden Highway south of Cross Canal to the intersection of Power Line Rd. are scheduled for removal and replacement during the levee improvement project. It is imperative that replacement poles, both temporary and, far more importantly, permanent, be designed to be as harmless as possible to threatened Swainson's Hawks, other raptors and other birds as is currently technologically possible. This will require coordination with both PG&E in Sutter Co. and SMUD in Sacramento Co. This matter is not adequately planned for or discussed in the SEIR and I request that that be done.

Thank you in advance for your consideration.

Roy Dahlberg
10451 Garden Hwy.
Sacramento, CA 95837
916.747.1944

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**Letter
3
Response**

Roy Dahlberg
January 4, 2009

3-1 See response to Comment 2-2.

Siddiqui Family Partnership	1808 J Street Sacramento, CA 95811 Tel: (916) 441-6708 Fax: (916) 441-5336
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December 31, 2008

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Re: Additional comments regarding levee and bank protection improvements adjacent to River Ranch and Garden Highway Properties (Natomas Levee Improvement Program Landside Improvements)

Dear Elizabeth and John:

I reviewed the responses related to my concern in the final EIS . I was disappointed that it did not adequately address concerns as raised in my letters but I now understand after speaking with John Bassett earlier this month that this EIS does not cover the reach of the Sacramento River that affects our property. John indicated the various studies needed to determine the final design for the area of my concerns are now underway. I understand that SAFCA is sensitive to the concerns of the farmers and the property owners and that upon the receipt of the pending geotechnical data from the borings beneath the existing levee and adjacent to the levee, a more detailed review of the proposed design will be undertaken by SAFCA before proposed recommendations are submitted for levee and bank projection improvements adjacent to our property.

Our family is respectful of the tasks undertaken by SAFCA and the Corps of Engineers and asks that the levee and the bank improvements be designed to apply all available design techniques. The Sacramento River has natural beauty that needs to be fully utilized. Cities across the country embrace the magic of the superior environment and entertainment offered by rivers. All proposed improvements, including bank protection and levee development, either public or private, would need to be consistent with the Garden Highway SPA, the Airport Land use plan, and should consider the following:

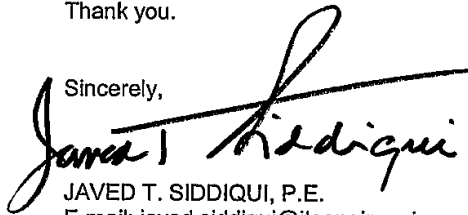
1. Promote a design which preserves river views and the connectivity between the landside and river side existing houses and other improvements. (Avoid isolating landside from river side).
2. Community is investing significant funds to provide 100-year flood protection. Reserve river frontage and areas between the river and Interstate 5 for future development at the highest and best use. Undeveloped land is limited; land protected from 100-year flows has a much higher land value and must be used wisely.
3. The community is investing significant funds in the Sacramento International Airport expansion. That investment should be supported by associated development convenient to the airport. A setback levee would isolate the river and reduce potential supporting development.
4. The presence of native and migratory birds adjacent to the airport currently represents a hazard to airplanes. Development of a setback levee and continued use of the vicinity as agriculture or natural space which could promote an increase in the bird population appears inconsistent with the current and future expansion of the airport.

5. Consider the possibility of using material dredged from the Sacramento River for levee fill material. Historical high sand soils were used to discourage burrowing animals. Use or dredged material would lessen the stripping of agricultural lands and could be placed on agricultural properties for disposal. Dredging the river has the added benefit of potentially lowering the water surface and reducing the required height of levees.
6. The Yolo bypass was created to divert partial river flows and reduce the water surface. Consider re-operation of the Yolo bypass to further lower the water surface and reduce the required height of levees.
7. Designation of the area between the existing levee and Interstate 5 for future development would lead to an increase in revenues for local agencies. Construction of a setback levee would restrict future development and lower future revenues.
8. Encourage designs which utilize the levee and adjacent areas such as the Rivage Hotel and Embassy Suites, currently functioning in City of Sacramento.
9. Don't create habitat for wildlife in areas where flood protection has been purchased. Natural habitat in the Sacramento Valley prior to levees included periodic flooding.
10. The City and County are currently protected by a single levee system rather than the existing levee and a setback levee. The slurry wall system recently employed for other levee sections appears to be a satisfactory solution for the reach in question. The use of a setback levee results in a significant loss of land and future development which does not appear to be warranted.

I would appreciate considering my earlier letters which have not been addressed and the points revised herein. I look forward to hearing from you. If you have any questions or comments, please feel free to contact me.

Thank you.

Sincerely,



JAVED T. SIDDIQUI, P.E.
E-mail: javed.siddiqui@jtsengineering.com
Siddiqui Family Partnership

JTS/fob

- 4-1 This is not a comment on the Phase 2 Draft SEIR but on the potential improvements in Reaches 10 and 11A of the Sacramento River east levee, which are part of the Phase 4A Project component of the NLIP and will be the subject of a future, project-level EIR.
- 4-2 All road connections to the Garden Highway from the landside of the Sacramento River east levee would be maintained as part of the design of the adjacent setback levee [refer to pages 2-26, 2-27, and 2-33 in the 2007 Landside EIR (Draft EIR)]. Waterside construction would involve placement of low-profile outfall structures on the bank, which would not significantly affect views of the river.
- 4-3 Phase 2 Project construction would not take place on river front property, with the exception of bank outfalls for discharge pipes, as discussed on page 1-8 of the Draft SEIR. Project construction impacts in the vicinity of I-5 and the Sacramento River will be addressed in pending environmental documents for the Phase 3 Project and the Phase 4A Project.
- 4-4 See response to Comment 4-2. The reasoning behind the selection of an adjacent setback levee to meet project objectives is discussed in section 2.1.1.2 of the 2007 Landside EIR.
- 4-5 Impact 3.16-d in the 2007 Landside EIR addresses the potential for the Phase 2 Project to increase the frequency of collisions between aircraft and wildlife at the Sacramento International Airport.
- 4-6 SAFCA has considered the use of material dredged from the Sacramento River as a source of soil borrow and rejected it for the following reasons:
- ▶ The amount of material that can be extracted is limited because of the need to avoid undermining the river banks, which would reduce levee integrity;
 - ▶ Because the area of the river that can be excavated without undermining the banks is limited, not enough material can be excavated to significantly lower water surface elevations in the river;
 - ▶ The potential effect of lowering the river water surface elevation is neutralized in the long-term by the filling in of the excavated areas by sediment the river carries from upstream;
 - ▶ The material dredged from the Sacramento River would not necessarily meet the quality requirements for construction of the adjacent setback levee;
 - ▶ Dredging would significantly add to the permitting costs of the project without providing enough borrow material to justify the added cost.
- 4-7 The potential to improve the Yolo Bypass to reduce water surface elevations was addressed in Section 2.2.8 of the 2007 Landside EIR (Final EIR).

- 4-8 See response to Comment 4-3. SAFCA's approach to designing the proposed NLIP flood control facilities is to minimize the footprint to the extent possible while still meeting other design criteria necessary to ensure 100-year and 200-year flood protection for the entire Natomas Basin.
- 4-9 It is not clear how the examples provided in the comment letter relate to the Natomas Basin portion of the Sacramento River east levee, which in all reaches has a standard crown width with no adjacent high ground that could be integrated into the design of the levee upgrade.
- 4-10 A variety of habitat types currently exist on the landside of the Natomas Basin levees, including remnant riparian zones which are no longer exposed to periodic flooding because they are separated from river channels by man-made levees. Besides meeting its statutory obligations to mitigate habitat that would be significantly adversely affected by expansion of flood control facilities, SAFCA has identified as one of its objectives use of flood control projects to enhance habitat values by increasing the extent and connectivity of the lands in the Natomas Basin being managed to provide habitat for giant garter snake, Swainson's hawk, and other special-status species.
- 4-11 The design of the levee improvements for the Reaches 10 and 11A will be addressed in the EIR for the Phase 4A Project.

December 11, 2008 Public Hearing
Roland Candee

Thank you, my name is Roland Candee, I live on the Sacramento River's eastern bank, on the waterside of the garden highway, in Sutter County, less than two miles south of the Natomas cross canal. I do thank you for allowing me to address you today, and I do want to specifically ask that you reconsider your determination to SAFCA, to not acknowledge that the Natomas Levee Improvement Project will physically subject my property to increased flooding and that effectively and conversely condemns my property. It's pretty ominous here, when we had this presentation here back in 2007 of November, and the only vote we got was Mr. Silva, and now he's gone, but us...

The reasons, you know I realize, it's very awkward to come and ask you to reconsider something that you've already crossed on, because you know, it's a challenge to keep moving forward, but I do believe that there are reasons to reconsider. Obviously when I came up before, my main point was, hey if you are raising the levee, it really doesn't take that much to realize that, that shifts the flood risk from one side to the other, if you are raising the levee, but that was not an argument that prevailed with you folks, and what it didn't prevail on, was you folks went back to your November 2007 EIR and said while we have data that says, at your level it's going to be less than a significant change, it's going to be under point one, that it's going to raise the flood level at our place and that's where I made the argument to you, okay, come in and take your engineers and dump one inch of water on their floor and say whether that's significant or not. But then the engineer that you have, Mr Countryman came in and said, no, we are telling you as a board that we're not adding one drop, those were his words, I believe it was Mr. Yee, that was up addressing the crowd and saying, hey if this is not adding one drop of water to the Sacramento River, therefore people in your situation, Mr Candee, that are living on the river are not going to see any additional water in that river and the reasons that I think you should reconsider are because you folks picked the point one level of threshold for significance, and now the latest documentation has, yes, it talks about a five hundred year flood, that's where it is, but also the document it says, in the neighborhood where I live, it's going to be a 0.26 raise in the level, and that means that now, under your own documents, it's raising you know, two and a half times what you folks used as the significance cutoff as the reasons for not saying that we're going to recognize that raising the water inversely condemns your property. The second point, I just could not resist telling you folks was when your engineer comes in and says, that we're not adding one drop, and now in the documents, I can go through and show you the page where you say you are adding 23 places, 23 pipes, putting water into the river, and twenty three pipes strikes me as a significant amount of over engineering for not one drop of water. So, by the very nature of your own report, and by the very nature of your latest design, saying yes we are going to have twenty three drains, putting new water into the river right where you are living, that's in the stretch, one through four. So that's my spiel, thank you for allowing me to address you, I realize it's like listening to a broken record, but I couldn't resist playing it again. Thank you.

- 5-1 The hydraulic effects of the Phase 2 Project levee improvements and impacts on Garden Highway residents were addressed in Impact 3.4-a of the 2007 Landside EIR (pages 3.4-6 and 3.4-7 of the Draft EIR) and in Section 2.2.7 of the Final EIR for the 2007 Landside EIR.
- 5-2 The Garden Highway drainage system for the proposed Phase 2 Project would include approximately 12 waterside storm water drainage outlets in Reaches 1–4A of the Sacramento River. The commenter’s residence is located in Reach 2 of the Sacramento River east levee, in the vicinity of River Mile (RM) 77.3. Based on an average spacing of 1,600 feet between outlets, it is estimated that 6 outlets would be located upstream of RM 77.3. The average maximum discharge flow of each of these outlets is 1.9 cubic feet per second (cfs), which is based on a design condition of a 10-year storm event. Total maximum flow from the 6 outlets upstream of RM 77.3 would be approximately 12 cfs. To estimate how the addition of this flow to the Sacramento River would affect water surface elevations during the 100-year and 200-year events, SAFCA's consulting firm MBK Engineers has modeled these flows at the Verona gage (RM 78.75), which is located approximately 1.5 miles upstream of RM 77.3. The hydraulic model shows the peak flows at the gage in the 100-year and 200-year storm simulations would be 145,000 cfs and 150,000 cfs, respectively. MBK has estimated that 12 cfs in additional flow in the river in Reaches 1–4A during these events, assuming that none of this flow reached the river in the existing condition, would potentially increase the river stage up to two thousandths of a foot, a negligible change in water surface elevations. This hypothetical increase in river stage is offset by the fact that even though the existing runoff pattern would route storm flow initially to the landside of the existing levee, the existing flow is collected in the interior drainage system and is pumped back into the river. In addition, the timing of the flow would be changed such that the 12 cfs would enter the river earlier in the storm before the peak flow and stage arrives from the upstream watershed.

3 REVISIONS TO THE DRAFT SEIR

Changes to the text of the Draft SEIR are shown in this chapter, by Draft SEIR page number, with a line through the text that has been deleted (~~strikeout~~) or underlining where new text has been added.

3.1 REVISIONS TO CHAPTER 2, PROJECT DESCRIPTION

PAGE 2-8

To correct an error in Section 2.2, “Summary Description of the Phase 2 Project Analyzed in the 2007 Landside EIR,” the third sub-bullet point under “Improvements to major irrigation and drainage infrastructure” is revised as follows:

- ▶ Remove a deep culvert at the location of Reclamation District 1000 Pumping Plant No. 2 on the Sacramento River east levee, ~~and reconstruct Pumping Plant No. 2.~~

Construction of Pumping Plant No. 2 is part of the Phase 3 Project, which is to be addressed in a separate environmental document.

PAGE 2-16

To correct an error in Section 2.3, “Modifications to the Phase 2 Project Since Certification of 2007 Landside EIR,” the first bullet point on page 2-16 is revised as follows:

- ▶ **Replacement of Seepage Berms with Cutoff Walls in Some Locations in Sacramento River East Levee.** In Reaches 2 and 3 of the Sacramento River east levee, seepage berms would be replaced by approximately 6,200 feet of cutoff walls up to 65 feet deep from existing landside toe elevation. In Reach 1, approximately 4,500 feet of cutoff wall up to 25 feet deep and 300 feet of cutoff wall up to 65 feet deep would be constructed. In Reach 4A, ~~200 feet of cutoff walls~~ up to 60 feet deep would be constructed in addition to these seepage berms.

3.2 REVISIONS TO CHAPTER 3, ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

PAGES 3.3-4 AND 3.3-5

In response to Comment 2-3, Mitigation Measure 3.7-a “Minimize Effects on Sensitive Habitats; Develop and Implement a Habitat Management Plan to Ensure Compensation for Unavoidable Adverse Effects; Comply with Section 404, Section 401, and Section 1602 Permit Processes; and Implement all Permit Conditions,” from the 2007 Landside EIR, and which is repeated on pages 3.3-4 and 3.3-5 of the Draft SEIR, is revised as follows:

SAFCA and its primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid, minimize, and compensate for potential project effects on sensitive habitats.

Areas of sensitive habitat shall be identified and 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 canals and ditches, seasonal wetlands, and woodland patches. Trees within the Sacramento County portion of the project area that qualify as Native Oaks or Heritage Trees under Sacramento County’s tree preservation ordinance shall be identified. All sensitive habitats and

protected trees that are located adjacent to construction areas, but can be avoided, shall be protected by temporary fencing during construction.

~~SAFCA shall develop and implement~~ shall develop a habitat management plan Mitigation and Monitoring Plan (MMP) to address establishment and management of aquatic (i.e., GGS/Drainage Canal and marsh/seasonal wetland habitat) and woodland habitats that are created as part of the proposed project in order to ensure that the performance standard of no net loss of sensitive habitat is met. The shall identify the measures and performance criteria during the initial mitigation monitoring period (8 years) and shall be submitted to federal and state agencies for review and approval prior to project construction.

GGG/Sensitive Aquatic Habitats

Mitigation for impacts to aquatic habitat include the construction of a new GGS/Drainage canal, relocation of the Elkhorn Irrigation Canal, and preservation of rice fields. The GGS Canal shall create jurisdictional waters of the United States, and include banks that are designed to facilitate shoreline growth of freshwater marsh plants, plantings of native perennial grasses on the upper canal banks for better giant garter snake cover, and creation of giant garter snake hibernacula (rock piles keyed into the bank). This habitat shall be protected in perpetuity through an easement. In addition, to the extent practicable the Phase 2 Project Elkhorn Irrigation Canal shall be relocated in an alignment near the new GGS/Drainage Canal alignment to provide the potential for additional aquatic habitat (its main function would still be irrigation).

A monitoring program with performance criteria shall be developed to determine the progress of the GGS/Drainage canal towards achieving the performance standard of no net loss of aquatic habitat. The criteria for measuring performance shall be used to determine if the habitat is trending toward sustainability (reduced human intervention) and to assess the need for adaptive management (e.g., changes in mitigation design or maintenance revisions). These criteria must be met in order for the mitigation site to be declared successful, both during a particular monitoring year and at the end of the establishment period. These performance criteria, which shall be developed in consultation with DFG and USFWS, shall include, but are not limited to:

- ▶ percent total cover (from 85–90%),
- ▶ percent relative cover by wetland species (from 85–90%),
- ▶ percent relative cover by native species (from 50–85%), and
- ▶ water level controlled to within +/- 6 inches of design water level.

Vegetation assessments of the GGS/Drainage Canal shall be conducted annually for native perennial grasses (during the appropriate peak flowering period). The presence of giant garter snakes shall be monitored and recorded along this canal, consistent with monitoring methods currently conducted for SAFCA and TNBC elsewhere in the Natomas Basin.

All monitoring shall occur for the full monitoring period or until the performance criteria are met, whichever period is longer. Waterline plug plantings (sedges and rushes) may not be mowed once established. All areas seeded with perennial grasses shall be mowed to a height of between 6–12 inches above ground.

The primary function and service of the Elkhorn Canal is to deliver irrigation water to users throughout the Natomas Basin. The water supply within the Elkhorn Canal shall vary depending on the needs of those users. Therefore, the performance standard for the Elkhorn Canal is the delivery of irrigation water.

Woodlands

To mitigate impacts to woodland habitats, woodland corridors and groves shall be established. In addition, existing woodlands, located outside of the flood control and canal improvement footprints, but within project acquisition areas adjacent to the new groves shall be preserved. Generally, the size of the woodland mitigation

areas shall vary somewhat depending on the characteristics of their unique locations. Trees under 10 inches diameter at breast height (dbh) located within the project footprint (mostly valley oaks), that can be feasibly relocated shall be transplanted into woodland mitigation areas. Elderberry shrubs located within the project footprint that can be feasibly relocated shall be transplanted into woodland mitigation areas. The botanical species composition of individual clusters and rows shall mimic vegetation types commonly found along the Sacramento River, including:

- ▶ Valley oak woodland
- ▶ Mixed riparian forest, cottonwood-dominant
- ▶ Shallow scrub (at moist soil sites or depressions)
- ▶ Sycamore and oak savanna (with native perennial grassland)
- ▶ Elderberry shrub/scrub

A monitoring plan with performance criteria shall be developed to determine the progress of the woodland habitats towards providing adequate mitigation. The criteria for measuring performance shall be used to determine if the mitigation is trending toward sustainability (reduced human intervention) and to assess the need for adaptive management (e.g., changes in mitigation design or maintenance revisions). These criteria must be met in order for the mitigation site to be declared successful, both during a particular monitoring year and at the end of the establishment period. These performance criteria, which shall be developed in consultation with DFG and USFWS, shall include, but are not limited to:

- ▶ Percent survival of planted trees (from 65–85%)
- ▶ Percent survival of transplanted trees (from 60–85%)
- ▶ Percent relative canopy cover (from 5–35%)

Field assessments of woodland planting areas shall be conducted once per year. The timing of these assessments shall be adjusted according to annual site-specific conditions, but assessments shall generally occur in late summer. To measure percent survival of trees and shrubs, each plant shall be inspected and the species of each live plant shall be recorded. Qualitative assessments shall be recorded to track the health and vigor of each species for adaptive management of the mitigation sites.

To determine the success of the woodland plantings as a functioning ecosystem, percent canopy shall be estimated each fall by recording the extent of woodland habitat on aerial photographs, or using repeat transects or fixed radius plots at ground level. The timing of these assessments shall be adjusted according to annual site-specific conditions, but assessments shall generally occur in late summer or early fall while trees are still in full foliage. The results of these assessments shall also be used to determine where replanting should occur to maintain suitable Swainson's hawk habitat. All monitoring shall occur for the full monitoring period or until the performance criteria are met, whichever is longer.

A Long-Term Management Plan (LTMP) shall be implemented by SAFCA in connection with the NLIP Landside MMP. The LTMP shall establish the long-term management practices (post establishment period success criteria) and land protection mechanisms that shall be implemented as each phase of the NLIP is approved and permitted. Land ownership and management responsibilities shall be held by SAFCA, RD 1000, NCMWC, TNBC, and the SCAS. The plan shall, at a minimum, establish specific requirements for habitat creation (e.g., acreage of specific habitats to be created and number and species of trees to be planted), success criteria for habitat creation (e.g., tree survival requirements), specify remedial measures to be undertaken if success criteria are not met (e.g., supplementary plantings and additional monitoring), and describe short- and long-term maintenance and management of the features. Long-term protection of the created features, and funding for their management, shall be provided through appropriate mechanisms to be determined by SAFCA, in consultation with the regulatory agencies and other entities cooperating in implementation of the proposed project. The management plan for the habitat creation components of the

~~proposed project shall be reviewed and approved by the appropriate resource agencies before project implementation.~~

Applicable permits, including a Section 404 permit from the USACE, Section 401 certification from the Central Valley Regional Water Quality Control Board (RWQCB), and a Section 1602 streambed alteration agreement from DFG, shall be obtained before any impact on the relevant resources occurs. All ~~measures~~ permit terms and conditions adopted through these permitting processes shall be implemented.

Implementation of the ~~project as proposed~~ Phase 2 Project with proposed modifications and the above mitigation measures would ensure that adverse effects on sensitive habitats are minimized and an overall performance ~~criteria~~ standard of no net loss in acreage, function, and value of sensitive habitats is met. These project modifications and mitigation measures would reduce the impact on sensitive habitats to a **less-than-significant** level.

PAGES 3.3-8 AND 3.3-9

In response to Comment 2-3, Mitigation Measure 3.7-d “Minimize the Potential for Direct Loss of Giant Garter Snake Individuals, Develop and Implement a Management Plan in Consultation with USFWS and DFG, and Obtain Incidental Take Authorization” from the 2007 Landside EIR, and which is repeated on pages 3.3-8 to 3.3-9 of the Draft SEIR, is revised as follows:

SAFCA and its primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid, minimize, and compensate for potential project effects on giant garter snakes.

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 giant garter snake habitat. All aquatic and adjacent upland habitat that is located adjacent to construction areas, but can be avoided, shall be protected by temporary fencing during construction.

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 DFG and USFWS, 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 minimizing disturbance of nesting Swainson’s hawks), dewatering aquatic habitat before fill operations are commenced, conducting preconstruction surveys, and conducting biological monitoring during construction.

SAFCA shall develop and implement an MMP to address management of aquatic (i.e., GGS/Drainage Canal and marsh/seasonal wetland habitat) and adjacent upland habitats that are created and rice fields that are preserved as part of the project in order to ensure that the performance standard of no net loss in function and value of giant garter snake habitat is met. This plan shall be completed and submitted to state and federal agencies for review prior to project construction. ~~The management plan shall, at a minimum, establish specific success criteria for habitat creation, specify remedial measures to be undertaken if success criteria are not met (e.g., adaptive management, physical adjustments to created habitat, additional monitoring), and describe short- and long-term maintenance and management of the features. Long-term protection of the created features and funding for their management shall be provided through appropriate mechanisms to be determined by SAFCA, the regulatory agencies, and other entities cooperating in implementation of the proposed project.~~

The management plan for the giant garter snake habitat creation and preservation components of the project shall be reviewed and approved by USFWS and DFG before project implementation. Authorization for take

of giant garter snake under the ESA and CESA shall be obtained. ~~At~~ Any additional avoidance, minimization, or compensation measures subsequently adopted through the permitting process shall be implemented prior to or during project construction, as appropriate. A Long-Term Management Plan (LTMP) shall be implemented by SAFCA in connection with the NLIP's MMP. The LTMP shall describe the management practices and land protection mechanisms that shall be implemented as each phase of the NLIP is approved and permitted. Land ownership, management responsibilities, and protection obligations shall be held by SAFCA, RD 1000, NCMWC, TNBC, and the SCAS.

Implementation of the ~~project as proposed~~ Phase 2 Project with proposed modifications and the above mitigation measures would ensure that adverse effects from proposed modifications to giant garter snake are minimized and an overall performance criterion of no net loss in function and value of giant garter snake habitat is met. This would reduce the impact on giant garter snake to a **less-than-significant** level.

PAGES 3.3-12 AND 3.3-13

In response to Comment 2-3, Mitigation Measure 3.7-f "Minimize Potential Impacts on Swainson's Hawk, Monitor Active Nests during Construction, Develop and Implement a Management Plan in Consultation with DFG, and Obtain Incidental Take Authorization" from the 2007 Landside EIR, and which is repeated on pages 3.3-8 to 3.3-9 of the Draft SEIR, is revised as follows:

SAFCA and its primary contractors for engineering design and construction shall ensure that the following measures are implemented to avoid, minimize, and compensate for potential project effects on Swainson's hawks.

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. The biologist shall conduct preconstruction surveys to identify active nests within 0.25 mile of construction areas, in accordance with DFG guidelines. Surveys shall be conducted in accordance with NBHCP requirements and *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). If an active nest is found, an appropriate buffer that minimizes the 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 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.

SAFCA shall develop and implement ~~a plan to an~~ an MMP to address management of grassland habitats that are created as part of the proposed project in order to ensure that the performance standard of no net loss of sensitive habitat is met. ~~The management plan shall, at a minimum, establish specific success criteria for habitat creation, specify remedial measures to be undertaken if success criteria are not met (e.g., supplementary plantings and additional monitoring), and describe short- and long-term maintenance and management of the features. Long-term protection of the created features and funding for their management shall be provided through appropriate mechanisms to be determined by SAFCA, DFG, and other entities cooperating in implementation of the proposed project. To mitigate impacts on cropland and grassland suitable for Swainson's hawk foraging habitat, SAFCA shall create managed native perennial grassland habitats on the new levee slopes, seepage berms, access right-of-ways, and canal embankments. This grassland shall provide moderate-quality Swainson's hawk foraging habitat. In addition, grasslands on and adjacent to canal banks shall provide basking and aestivation habitat for giant garter snake.~~

The MMP shall include methods to create the grasslands, including native grass mixes which shall be seeded along new levee slopes and seepage berms, staging areas, and adjacent maintenance and utility rights-of-way. Seed material shall be purchased from a reputable nursery and must be from local genetic stock within 200 miles of the project site unless otherwise approved by a qualified ecologist. The native grass mix shall include the following:

- ▶ Purple needlegrass (*Nassella pulchra*)
- ▶ Creeping wildrye (*Leymus triticoides*)
- ▶ Six weeks grass (*Vulpia microstachys*)
- ▶ Slender wheatgrass (*Elymus trachycaulus*)
- ▶ Meadow barley (*Hordeum brachyantherum*)

An initial baseline assessment of grassland mitigation sites shall be conducted following the initial drill seeding program, and then a monitoring program with performance criteria shall be developed to determine the progress of the grassland habitats towards providing adequate mitigation. The criteria for measuring performance shall be used to determine how well the mitigation is being established and to assess the need for adaptive management (e.g., changes in mitigation design or maintenance revisions). These criteria must be met in order for the mitigation site to be declared successful, both during a particular monitoring year and at the end of the establishment period. These performance criteria, which shall be developed in consultation with USACE, DFG and USFWS, shall include, but are not limited to:

- ▶ Percent cover of invasive species (<1%)
- ▶ Percent cover of non-native herbaceous plants (<10–25%)
- ▶ Percent absolute cover of native species (>50–80%)

The management plan for the grassland habitat creation components of the project shall be ~~reviewed and approved~~provided to the USFWS and DFG for review before project implementation. Authorization for take of Swainson's hawk under CESA shall be obtained. Any additional avoidance, minimization or compensation ~~AA~~ measures subsequently adopted through the permitting process shall be implemented.

Implementation of the ~~project as proposed~~ Phase 2 Project with proposed modifications and the above mitigation measures would ensure that adverse effects on Swainson's hawk are minimized and an overall performance criterion of no net loss in acreage, function, and value of Swainson's hawk foraging habitat is met. This would reduce the impact on Swainson's hawk to a **less-than-significant** level.

PAGE 3.4-2

To correct an error in Section 3.4.3 of the Draft SEIR, the fifth sentence of the second paragraph of that section is revised as follows:

Shovel test pits measured approximately ~~0.5~~ 0.25 meters on a side ~~and~~ were excavated to a depth of 1.0 meters on average.

PAGES 3.4-8 AND 3.4-9

To clarify documentation requirements for NLIP-7 and NLIP-22, the third bullet of Mitigation Measure 3.4-c is revised as follows:

- ▶ If the resources are deemed to be eligible, document the sites and avoid or reduce adverse effects by minimizing disturbance from construction of the berm. Where physical impacts cannot be avoided and such physical impacts could damage the data these sites may contain, further excavation ~~would~~ shall be ~~required~~conducted in order. ~~Such excavation would be required~~ to support of documentation of the

resource as required under Section 110(b) of the NHPA, or, in the alternative, data recovery excavations to retrieve those values and mortuary assemblages that contain significance for archaeology and Native American culture after consultation with and the agreement of the Native American MLD tribe.

PAGES 3.4-10 AND 3.4-11

As a clarification for how any newly discovered prehistoric resources associated with human remains shall be handled, Mitigation Measure 3.4-e from the Draft SEIR is revised as follows:

SAFCA and its primary construction contractors shall ensure that the following measures are implemented to address the potential discovery of human remains during construction.

- ▶ If human remains are uncovered during ground-disturbing activities, all ground-disturbing activities shall cease within a 50-foot radius of the find, and SAFCA or its designated representative shall be notified. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, SAFCA and/or the contractor shall notify the county coroner of the county in which the remains are uncovered (Sutter or Sacramento) and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall designate a Most Likely Descendant (MLD) to dispose of the remains with appropriate dignity.
- ▶ After a determination that the remains are of prehistoric Native American origin, SAFCA shall coordinate with the MLD for reburial of the remains and associated grave goods in an appropriate location. If the MLD fails to make a recommendation or reinter the remains, further treatment shall conform to PRC Section 5097 et seq. and other appropriate authorities.
- ▶ The discovery of prehistoric burials often reveals locations sensitive for the occurrence of additional archaeological material. ~~After the initial discovery and management of human remains, a professional archaeologist working on behalf of SAFCA shall record the site with the NAHC and the appropriate Information Center and, if possible, use project features to protect the site from future disturbance.~~ Newly discovered prehistoric resources associated with human remains shall be evaluated, and if the resource is eligible for the CRHR or the NRHP and the project would result in adverse effects to those eligible resources, Mitigation Measure 3.4-c shall be implemented.

Even though measures would be implemented to avoid human remains or, if found, to dispose of the remains with appropriate dignity, future disturbance to additional archaeological material at the site could still occur after the initial discovery and management of human remains. Therefore, this potential impact would remain **significant and unavoidable** with implementation of mitigation.

PAGES 3.5-3 AND 3.5-4

In response to Comment 1-2 and to address special conditions in Reaches 1 and 4A of the Sacramento River east levee, Mitigation Measure 3.5a, “Implement Noise-Reducing Construction Practices, Prepare and Implement a Noise Control Plan, and Monitor and Record Construction Noise Near Sensitive Receptors,” on pages 3.5-3 and 3.5-4 is revised as follows:

SAFCA and its primary contractors for engineering design and construction shall ensure that the following measures are implemented at each work site in any year of project construction to avoid and minimize

construction noise effects on sensitive receptors. These measures are consistent with SAFCA's standard contract specifications for noise control.

The SAFCA and its primary construction contractors shall employ noise-reducing construction practices and other measures to reduce exposure of sensitive receptors to construction noise. Measures that shall be used to reduce ~~limit~~ noise impacts shall include the following:

- ▶ Equipment shall be used as far away as practical from noise-sensitive uses.
- ▶ 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.
- ▶ 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.
- ▶ Construction site and haul road speed limits shall be established and enforced.
- ▶ The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only.
- ▶ Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators).
- ▶ 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.
- ▶ When noise sensitive uses are within close proximity and subject to prolonged construction noise, where feasible, noise-attenuating buffers such as structures, truck trailers, or soil piles shall be located between noise generation sources and sensitive receptors.
- ▶ Before construction activity begins within 500 feet of one or more residences, written notification shall be provided to the potentially affected residents, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the appropriate jurisdiction if construction noise levels are overly intrusive. The distance of 500 feet is based on the 60-dBA contour of the loudest anticipated construction activity other than pile driving (as listed in Table 3.12-4 of the 2007 Landside EIR).
- ▶ When construction of cutoff walls takes place during nighttime hours (between 10 p.m. and 6 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.
- ▶ 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 sound 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.
- ▶ The primary contractor shall prepare a detailed noise control plan based on the construction methods proposed. This plan shall identify specific measures to ensure compliance with the noise control

~~measures~~ limits specified above. The noise control plan shall be submitted to and approved by SAFCA before any noise-generating construction activity begins.

- ▶ Construction of cutoff walls in Reaches 1 and 4A of the Sacramento River east levee shall be limited to the hours of 6 a.m. to 8 p.m., Monday through Saturday, with only maintenance activities on Sunday.

These measures would reduce interior and exterior noise levels at noise-sensitive receptors located near construction sites. However, standards applicable to local exterior noises would not be reduced to a less-than-significant level at every nearby receptor. Therefore, the impact of temporary, short-term construction noise on sensitive receptors would be **significant and unavoidable**.

4 REFERENCES

Swainson's Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.*

5 LIST OF PREPARERS

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