Final Environmental Impact Report

North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project

State Clearinghouse No. 2014052038

Prepared for:

Prepared by:

July 2016
North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project

Prepared for:
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

Contact:
Pete Ghelfi, P.E.
Director of Engineering
Phone (916) 874-8733
PeteGhelfi@saccounty.net

Prepared by:
GEI Consultants, Inc.
2868 Prospect Park Drive, Suite 400
Rancho Cordova, CA 95670

Contact:
Francine Dunn
Project Manager
Phone (916) 912-4931
fdunn@geiconsultants.com

July 2016
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRONYMS AND OTHER ABBREVIATIONS</td>
<td>iii</td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1-1</td>
</tr>
<tr>
<td>1.1 Overview of this Document</td>
<td>1-1</td>
</tr>
<tr>
<td>1.2 Organization of the Final Environmental Impact Report</td>
<td>1-1</td>
</tr>
<tr>
<td>1.3 Comments that Require Responses</td>
<td>1-1</td>
</tr>
<tr>
<td>1.4 Environmental Review Process</td>
<td>1-2</td>
</tr>
<tr>
<td>2 SUMMARY OF THE PROJECT DESCRIPTION</td>
<td>2-1</td>
</tr>
<tr>
<td>2.1 Project Overview</td>
<td>2-1</td>
</tr>
<tr>
<td>2.2 Project Objectives</td>
<td>2-2</td>
</tr>
<tr>
<td>2.3 Project Characteristics</td>
<td>2-2</td>
</tr>
<tr>
<td>3 COMMENTS AND RESPONSES</td>
<td>3-1</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>3-1</td>
</tr>
<tr>
<td>3.2 List of Commenters on the Draft Environmental Impact Report</td>
<td>3-1</td>
</tr>
<tr>
<td>3.3 Related Comments</td>
<td>3-2</td>
</tr>
<tr>
<td>3.4 Master Responses</td>
<td>3-3</td>
</tr>
<tr>
<td>3.5 Comments and Responses on the Draft Environmental Impact Report</td>
<td>3-5</td>
</tr>
<tr>
<td>3.6 Related Comments and Responses</td>
<td>3-220</td>
</tr>
<tr>
<td>4 CORRECTIONS AND REVISIONS TO THE DRAFT ENVIRONMENTAL IMPACT REPORT</td>
<td>4-1</td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>4-1</td>
</tr>
<tr>
<td>4.2 Corrections and Revisions</td>
<td>4-1</td>
</tr>
<tr>
<td>5 REFERENCES</td>
<td>5-1</td>
</tr>
<tr>
<td>6 REPORT PREPARERS</td>
<td>6-1</td>
</tr>
<tr>
<td>6.1 Sacramento Area Flood Control Agency</td>
<td>6-1</td>
</tr>
<tr>
<td>6.2 GEI Consultants, Inc.</td>
<td>6-1</td>
</tr>
<tr>
<td>6.3 AECOM</td>
<td>6-2</td>
</tr>
<tr>
<td>6.4 Stillwater Sciences</td>
<td>6-2</td>
</tr>
<tr>
<td>6.5 MBK Engineers</td>
<td>6-2</td>
</tr>
<tr>
<td>6.6 URS Corporation (Now AECOM)</td>
<td>6-2</td>
</tr>
</tbody>
</table>

Appendix

A Sacramento River East Levee Improvement Project Alternatives Evaluation - Summary Memorandum

Revised Appendix

C Air Quality and Greenhouse Gas Modeling and Assumptions
## Exhibits

Exhibit 1-1  Relationship Between the Proposed Project and the ARCF GRR ................................................ 1-3

## Revised Exhibits

Exhibit 3-11.  North Sacramento Streams Staging Areas ................................................................................. 4-27
Exhibit 3-16.  Sacramento River East Levee Borrow Areas, Haul Routes, Access Points, and Staging Areas ........................................................................................................................................... 4-29

## Tables

Table 3-1.  Comment Letters Regarding the DEIR ........................................................................................ 3-1
Table 3-2.  Relevant Comment Letters from the American River Common Features General Reevaluation Report DEIS/DEIR........................................................................................................................................... 3-3

## Revised Tables

Table 4.6-9.  Comparison of Acreages of Existing and Impacted Riparian Habitat and Woodland in the Arcade Creek and Sacramento River East Levee Study Areas\(^1\) .............................................................................. 3-39
Table 4.4-4.  North Sacramento Streams Levee Improvements Area Construction Emissions (Unmitigated/Mitigated) ................................................................................................................................. 4-30
Table 4.4-5.  Sacramento River East Levee Improvements Area Construction Emissions (Unmitigated/Mitigated) ........................................................................................................................................... 4-33
Table 4.6-9.  Comparison of Acreages of Existing and Impacted Riparian Habitat and Woodland in the Arcade Creek and Sacramento River East Levee Study Areas\(^1\) .............................................................................. 4-39
Table 4.17-4.  Existing and Plus Project – North Sacramento Streams Levee Improvements Area Vehicular Traffic ........................................................................................................................................... 4-72
# ACRONYMS AND OTHER ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHP</td>
<td>Advisory Council on Historic Preservation</td>
</tr>
<tr>
<td>APE</td>
<td>Area of Potential Effect</td>
</tr>
<tr>
<td>ARB</td>
<td>Air Resources Board</td>
</tr>
<tr>
<td>ARCF GRR</td>
<td>American River Common Features General Reevaluation Report</td>
</tr>
<tr>
<td>BMP</td>
<td>Best Management Practice</td>
</tr>
<tr>
<td>Caltrans</td>
<td>California Department of Transportation</td>
</tr>
<tr>
<td>CCR</td>
<td>California Code of Regulations</td>
</tr>
<tr>
<td>CDFW</td>
<td>California Department of Fish and Wildlife</td>
</tr>
<tr>
<td>CEQA</td>
<td>California Environmental Quality Act</td>
</tr>
<tr>
<td>CESA</td>
<td>California Endangered Species Act</td>
</tr>
<tr>
<td>CLVRP</td>
<td>California Levee Vegetation Research Program</td>
</tr>
<tr>
<td>CMP</td>
<td>Corridor Management Plan</td>
</tr>
<tr>
<td>CNDDDB</td>
<td>California Natural Diversity Database</td>
</tr>
<tr>
<td>CNPS</td>
<td>California Native Plant Society</td>
</tr>
<tr>
<td>CO2/yr</td>
<td>CO2-equivalents per year</td>
</tr>
<tr>
<td>CRHR</td>
<td>California Register of Historic Resources</td>
</tr>
<tr>
<td>CSLC</td>
<td>California State Lands Commission</td>
</tr>
<tr>
<td>CVFPB</td>
<td>Central Valley Flood Protection Board</td>
</tr>
<tr>
<td>CVFPP</td>
<td>Central Valley Flood Protection Plan</td>
</tr>
<tr>
<td>CWA</td>
<td>Clean Water Act</td>
</tr>
<tr>
<td>Decision Key</td>
<td>Vegetation Management Decision Key</td>
</tr>
<tr>
<td>DEIR</td>
<td>Draft Environmental Impact Report</td>
</tr>
<tr>
<td>DEIS</td>
<td>Draft Environmental Impact Statement</td>
</tr>
<tr>
<td>Delta</td>
<td>Sacramento-San Joaquin Delta</td>
</tr>
<tr>
<td>DWR</td>
<td>California Department of Water Resources</td>
</tr>
<tr>
<td>EFH</td>
<td>Essential Fish Habitat</td>
</tr>
<tr>
<td>EIR</td>
<td>Environmental Impact Report</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>FEIR</td>
<td>Final Environmental Impact Report</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
<tr>
<td>FTA</td>
<td>Federal Transit Administration</td>
</tr>
<tr>
<td>HSC</td>
<td>Health and Safety Code</td>
</tr>
<tr>
<td>lb/day</td>
<td>pounds per day</td>
</tr>
<tr>
<td>Levee Accreditation Project</td>
<td>North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project</td>
</tr>
<tr>
<td>LOS</td>
<td>Level of Service</td>
</tr>
<tr>
<td>LURMP</td>
<td>Land Use and Resource Management Plan</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>MMRP</td>
<td>Mitigation Monitoring and Reporting Plan</td>
</tr>
<tr>
<td>NAHC</td>
<td>Native American Heritage Commission</td>
</tr>
<tr>
<td>NCIC</td>
<td>North Central Information Center</td>
</tr>
<tr>
<td>NEMDC</td>
<td>Natomas East Main Drainage Canal</td>
</tr>
<tr>
<td>NEPA</td>
<td>National Environmental Policy Act</td>
</tr>
<tr>
<td>NFIP</td>
<td>National Flood Insurance Program</td>
</tr>
<tr>
<td>NHPA</td>
<td>National Historic Preservation Act</td>
</tr>
<tr>
<td>MNFS</td>
<td>National Marine Fisheries Service</td>
</tr>
<tr>
<td>NOP</td>
<td>Notice of Preparation</td>
</tr>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>nitric oxide</td>
</tr>
<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
</tr>
<tr>
<td>NRHP</td>
<td>National Register of Historic Places</td>
</tr>
<tr>
<td>PCE</td>
<td>Passenger Car Equivalent</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>PM equal to or less than 10 micrometers in diameter</td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
<td>PM equal to or less than 2.5 micrometers in diameter</td>
</tr>
<tr>
<td>PRC</td>
<td>Public Resources Code</td>
</tr>
<tr>
<td>Porter-Cologne Act</td>
<td>Porter-Cologne Water Quality Control Act</td>
</tr>
<tr>
<td>proposed project</td>
<td>North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project</td>
</tr>
<tr>
<td>ROG</td>
<td>reactive organic gases</td>
</tr>
<tr>
<td>RWQCB</td>
<td>Regional Water Quality Control Board</td>
</tr>
<tr>
<td>SAFCA</td>
<td>Sacramento Area Flood Control Agency</td>
</tr>
<tr>
<td>SE</td>
<td>State Endangered</td>
</tr>
<tr>
<td>SMAQMD</td>
<td>Sacramento Metropolitan Air Quality Management District</td>
</tr>
<tr>
<td>SMARA</td>
<td>Surface Mining and Reclamation Act</td>
</tr>
<tr>
<td>ST</td>
<td>State Threatened</td>
</tr>
<tr>
<td>SWPPP</td>
<td>Storm Water Pollution Prevention Plan</td>
</tr>
<tr>
<td>SWRCB</td>
<td>State Water Resources Control Board</td>
</tr>
<tr>
<td>TCP</td>
<td>traditional cultural property</td>
</tr>
<tr>
<td>THPO</td>
<td>Tribal Historic Preservation Officer</td>
</tr>
<tr>
<td>TMDL</td>
<td>total maximum daily load</td>
</tr>
<tr>
<td>UAIC</td>
<td>United Auburn Indian Community</td>
</tr>
<tr>
<td>ULDC</td>
<td>Urban Levee Design Criteria</td>
</tr>
<tr>
<td>UPRR</td>
<td>Union Pacific Railroad</td>
</tr>
<tr>
<td>USACE</td>
<td>U.S. Army Corps of Engineers</td>
</tr>
<tr>
<td>USFWS</td>
<td>U.S. Fish and Wildlife Service</td>
</tr>
<tr>
<td>V/C</td>
<td>Volume-to-Capacity Ratio</td>
</tr>
<tr>
<td>WDR</td>
<td>waste discharge report</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

1.1 OVERVIEW OF THIS DOCUMENT

The Final Environmental Impact Report (FEIR) for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project (proposed project), also referred to as the Levee Accreditation Project, includes comment letters and responses to comments on the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project Draft Environmental Impact Report (DEIR). This document, combined with the DEIR, comprises the FEIR.

1.2 ORGANIZATION OF THE FINAL ENVIRONMENTAL IMPACT REPORT

Section 2, “Summary of the Project Description,” presents a summary of the project description from the DEIR.

Section 3, “Comments and Responses,” contains all identified comments received on the DEIR and presents responses to significant environmental issues raised in the comments, as required by California Code of Regulations (CCR) Section 15132 of the State California Environmental Quality Act Guidelines (State CEQA Guidelines). All comment letters are labeled to correspond with an index table (Table 3-1, page 3-1) in Section 3. Each individual comment is assigned a number (e.g., 1-1) that corresponds with the response that follows the comment. In addition to comments received on the DEIR, this section also includes responses to selected, relevant comments received by the U.S. Army Corps of Engineers (USACE), Sacramento District on their American River Common Features General Reevaluation Report Draft Environmental Impact Statement/Environmental Impact Report (ARCF GRR DEIS/DEIR). The proposed project represents a subset of the work included in the ARCF GRR, and responses to these comments is provided as a courtesy to commenters on the ARCF GRR EIS/EIR.

Section 4, “Corrections and Revisions to the Draft Environmental Impact Report,” presents specific changes that were made to the text of the DEIR in response to comments raised on significant environmental issues, or where clarification, further explanation, or correction was needed. For those comments that have resulted in corrections or revisions to the DEIR, the text of the DEIR is reproduced in Section 4.2, “Corrections and Revisions.” Changes in the text are indicated by strikethrough (strikethrough) where text has been removed and by underline (underline) where text has been added.

Section 5, “References,” identifies the new or supplemental documents and personal communications cited in this document.

Section 6, “Report Preparers,” identifies the preparers of this document.

1.3 COMMENTS THAT REQUIRE RESPONSES

CCR Section 15088(c) of the State CEQA Guidelines specifies that the focus of the responses to comments shall be on the disposition of significant environmental issues. Responses are not required on comments regarding the merits of the proposed project or on issues not related to the proposed project’s environmental impacts.

In one or more letters, general statements concerning the DEIR and its conclusions are provided, but without comments regarding the DEIR’s specific content. CEQA requires responses on comments concerning the environmental impacts of the proposed project on the physical environment. Thus, if the comments do not address
the specific environmental impacts of the proposed project and whether they were properly addressed, responses
may not be possible or warranted. Nevertheless, where feasible and relevant, responses have been provided to
supply as much information as practical about the proposed project to the public, interested agencies, and decision
makers.

### 1.4 ENVIRONMENTAL REVIEW PROCESS

On May 15, 2014, the Sacramento Area Flood Control Agency (SAFCA) issued a Notice of Preparation (NOP)
for this EIR and filed the NOP with the State Clearinghouse. The public comment period on the NOP ended on
June 15, 2014. A scoping meeting was held on May 28, 2014, to solicit input on the scope and content of the EIR
from interested agencies, individuals, and organizations. The DEIR was circulated for a 45-day public review
period on March 18, 2015. SAFCA held five public meetings in Sacramento during the public comment period, at
which it received comments from agencies and the public on the DEIR. The meetings were held at the following
locations in Sacramento, California:

- Wednesday, April 8, 2015, 5 - 7 p.m., Joe Mims Jr. Community Center, 3270 Marysville Boulevard;
- Thursday, April 9, 2015, 5 - 7 p.m., Sacramento Elks Lodge #6, 6446 Riverside Boulevard;
- Wednesday, April 15, 2015, 3:30 - 5:30 p.m., Tsakopoulos Library Galleria, 828 I Street;
- Thursday, April 16, 2015, 3 p.m., Sacramento County Administration Building, 700 H Street, Room #1; and
- Friday, April 17, 2015, 5 - 7:00 p.m., Arden-Dimick Library, 891 Watt Avenue.

These meetings were held jointly with USACE, and included information on both the proposed project, and also
on USACE’s ARCF GRR project. The ARCF GRR covers a range of actions in the Sacramento region, including
not only the proposed project, but also additional actions along the Lower American River, and an expansion of
the Sacramento Weir and Bypass, among other improvements. **Exhibit 1-1** illustrates the relationship between the
proposed project and the ARCF GRR.

The public comment period on the DEIR closed on May 1, 2015.

The FEIR document, along with the Mitigation Monitoring and Reporting program (MMRP) was released on
June 8, 2015 and sent to agencies, organizations, and individuals who commented within the DEIR’s 45-day
review period. The June FEIR was subsequently updated to respond to additional comments received, and a
second FEIR was released on July 8, 2015. At its July 16 meeting, SAFCA’s Board of Directors deferred action
on the EIR and the Levee Accreditation Project. The current FEIR document, released in June 2016 and referred
to as the revised FEIR, incorporates the revisions of the second FEIR, as well as responses to comments received
after July 8, 2015.

Lead agencies are required to provide responses to the commenting agency’s comments on DEIRs at least 10 days
before the certification of the FEIR (CCR Section 15088[b] of the State CEQA Guidelines). SAFCA is extending
this courtesy review to all commenters who commented during the 45-day review period.

After the 10-day agency review period, SAFCA will review the DEIR and this FEIR document, which together
form the complete final EIR. SAFCA will consider comments provided on this document, the whole of the
administrative record, as well as other information pertaining to the FEIR, and will determine whether the EIR
should be certified as adequate under CEQA. If so, SAFCA will adopt a resolution certifying the EIR, pursuant to
CCR Section 15090 of the State CEQA Guidelines.
Exhibit 1-1  Relationship Between the Proposed Project and the ARCF GRR
Once the EIR is certified, SAFCA intends to approve the proposed project, and will adopt Findings of Fact, pursuant to CCR Section 15091 of the State CEQA Guidelines, for each significant effect. For each significant environmental effect identified in the EIR, SAFCA must issue a written finding reaching one or more of three permissible conclusions. According to CCR Section 15091 of the State CEQA Guidelines, the three possible findings are:

► Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the FEIR;

► Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or

► Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR.

In addition, if SAFCA determines to approve the proposed project, SAFCA will adopt a separate MMRP—consistent with CCR Section 15097 of the State CEQA Guidelines—that describes when each of the mitigation measures adopted for the project will be implemented, identifies who is the responsible implementing party, and provides a mechanism for monitoring their implementation.
2  SUMMARY OF THE PROJECT DESCRIPTION

2.1  PROJECT OVERVIEW

The proposed project consists of Levee Accreditation improvements, a creek corridor management plan, and a mitigation and conservation strategy that would be implemented during the next 5–7 years, following receipt of all required environmental permits, authorizations, and permissions. The proposed project consists of the following elements:

► North Sacramento Streams Levee Improvements – Improves approximately 4 miles of levee along the Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek East Levee and Arcade Creek North and South Levees that require substantial work to mitigate seepage, meet embankment and foundation stability requirements, and remove high-hazard encroachments and vegetation.

► Sacramento River East Levee Improvements – Improves approximately 6 miles of the Sacramento River East Levee, including the Little Pocket and Pocket areas that require substantial work to address seepage and meet embankment and foundation stability requirements; mitigate approximately 3,000 feet (approximately 0.6 mile) of erosion at several sites on the Sacramento River East Levee; and remove high-hazard encroachments and vegetation.

► American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal – Removes high-hazard encroachments and vegetation that must be addressed to allow accreditation of segments of the American River North and South Levees and the Beach Lake Levee.

► NEMDC/Steelhead Creek Corridor Management Plan – Reduces channel roughness, increases floodwater conveyance capacity, and provides essential habitat for salmon and steelhead in the Dry Creek, NEMDC/Steelhead Creek and warm-water species in Arcade Creek channels.

► The Levee Accreditation Mitigation and Conservation Strategy – Protects, avoids, minimizes, reduces, and mitigates impacts on sensitive habitats and special-status species that may be temporarily or permanently affected by the Levee Accreditation improvements, once implemented.

SAFCA’s Levee Accreditation Project includes elements that would be permitted and constructed on different timelines to accommodate funding, scheduling, and geographic considerations. Assuming timely receipt of all environmental clearances, approvals, permits, and authorizations, the American River and Beach Lake Levees High-Hazard Encroachment and Vegetation Removal could get underway in 2015; the North Sacramento Streams Levee Improvements could start construction in 2016; the Sacramento River East Levee Improvements could start construction in 2017; and the NEMDC/Steelhead Creek CMP is expected to get underway in 2018. Each proposed project element is anticipated to take 1 to 2 years to complete, while the improvements associated with the NEMDC/Steelhead Creek CMP would be ongoing.
2.2 PROJECT OBJECTIVES

The specific objectives of the proposed project are:

1. **Levee Accreditation.** Over the next 5–7 years, implement the levee and channel improvements necessary to ensure that levees along the Lower American and Sacramento Rivers and their tributaries outside the Natomas Basin can be operated in concert with Folsom Dam to meet National Flood Insurance Program (NFIP) levee accreditation and State urban levee design requirements.

2. **Conservation Strategy.** Implement the necessary levee and channel improvements in a manner that optimally protects the natural environment, especially riparian habitat and stream channels suitable for native plants, wildlife habitat, and public recreation.

2.3 PROJECT CHARACTERISTICS

The proposed project consists of five separate elements in three geographic study areas, as described in further detail below.

2.3.1 PROJECT ELEMENTS

**LEVEE IMPROVEMENTS**

Levee improvements would consist of berms, cutoff walls, relief wells, and erosion repair (i.e., placement of rock revetment). This work is intended to reduce flood risk and bring the flood management system in the project study area into compliance with applicable NFIP and Urban Levee Design Criteria (ULDC) engineering standards.

**ENCRUCHEMENT REMOVAL**

Encroachment removal would entail removal of structures and vegetation that are encroaching on existing levees. This work is intended to meet NFIP standards for levee accreditation and the State’s ULDC, which both require removal or modification of encroachments that pose an unacceptably high risk to the performance and safety of a levee either by undermining its structural integrity or by interfering with necessary inspection, operation, and maintenance activities.

**VEGETATION MANAGEMENT**

The vegetation management element would entail removal of “high-hazard trees” and other vegetation from the levees. The ULDC provides criteria that reflect the underlying risk management objectives of the NFIP. Under these criteria, vegetation on levees must be modified or removed if it presents an unacceptable risk to the structural integrity or impedes operation and maintenance of the levee.

**CONSERVATION STRATEGY**

The Conservation Strategy would entail vegetative plantings (including trees) in various locations. The Conservation Strategy also includes a set of measures that would be implemented as part of the proposed project to protect, avoid, minimize, reduce, and mitigate impacts on sensitive habitats and special-status species caused by the proposed project. These protective measures would be implemented in a manner that optimally protects the...
natural environment, especially riparian and stream habitat suitable for native plants, wildlife habitat, and public recreation.

**CORRIDOR MANAGEMENT PLAN**

The NEMDC/Steelhead Creek Corridor Management Plan (CMP) would include various activities such as removal of invasive vegetation, recontouring of stream channels, removal of beaver dams, fencing to exclude cattle from the active stream zone, and other similar activities intended to reduce channel roughness, increase floodwater conveyance capacity, and provide essential habitat for salmon and steelhead in Dry Creek, NEMDC/Steelhead Creek, and other warm water species in Arcade Creek.

**2.3.2 GEOGRAPHIC AREAS**

The proposed improvements would occur in the following geographic areas:

**NORTH SACRAMENTO STREAMS LEVEE IMPROVEMENTS**

North Sacramento Streams levee improvements consist of approximately 4 miles of levee along the NEMDC/Steelhead Creek East Levee and Arcade Creek North and South Levees that require substantial work to mitigate seepage, meet embankment and foundation stability requirements, and remove high-hazard encroachments and vegetation that threaten levee integrity and to allow accreditation of the levees. Includes various Conservation Strategy activities. Includes implementation of all activities associated with the NEMDC/Steelhead Creek CMP. North Sacramento Streams Levee Improvements are described in detail in Section 3.3.2 of Chapter 3, “Project Description,” beginning on page 3-6 of the DEIR. The CMP activities are described in Section 3.6 of Chapter 3, “Project Description,” beginning on page 3-67 of the DEIR.

**SACRAMENTO RIVER EAST LEVEE IMPROVEMENTS**

Sacramento River East Levee improvements consist of approximately 6 miles of the Sacramento River East Levee, including the Little Pocket and Pocket areas that require substantial work to address seepage and meet embankment and foundation stability requirements; mitigate approximately 3,000 feet (approximately 0.6 mile) of erosion at several sites on the Sacramento River East Levee; and remove high-hazard encroachments and vegetation that threaten levee integrity and to allow accreditation of the levee. The Sacramento River East Levee area includes various Conservation Strategy activities, which are described in detail in Section 3.5 of Chapter 3, “Project Description,” starting on page 3-50 of the DEIR. Sacramento River East Levee Improvement activities are described in detail in Section 3.3.3 of Chapter 3, “Project Description,” beginning on page 3-24 of the DEIR. High-hazard encroachment and vegetation removal activities are described in Section 3.4 of Chapter 3, “Project Description,” beginning on page 3-43 of the DEIR.

**AMERICAN RIVER AND BEACH LAKE LEVEES HIGH-HAZARD LEVEE ENCROACHMENT AND VEGETATION REMOVAL**

High-hazard encroachments and vegetation that threaten levee integrity would be removed to allow accreditation of segments of the American River North and South Leves and the Beach Lake Levee. The American River and Beach Lake Levee areas include various Conservation Strategy activities, which are described in detail in Section 3.5 of Chapter 3, “Project Description,” starting on page 3-50 of the DEIR. High-hazard encroachment...
and vegetation removal activities are described in Section 3.4 of Chapter 3, “Project Description,” beginning on page 3-43 of the DEIR.
3 COMMENTS AND RESPONSES

3.1 INTRODUCTION

This chapter contains the comment letters received on the DEIR for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project, which contains the following proposed elements: North Sacramento Streams Levee Improvements, Sacramento River East Levee Improvements, American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal, and the NEMDC/Steelhead Creek CMP. Together, these elements are sometimes referred to as SAFCA’s Levee Accreditation Project. A list of each commenter on the DEIR, associated agencies, and assigned letter numbers are provided in Section 3.2. A discussion of the master responses that are used in this FEIR is provided in Section 3.3. Section 3.4 presents each comment letter received on the DEIR and the responses thereto. Each comment contained in the comment letter is summarized at the beginning of each comment response in Section 3.5.

3.2 LIST OF COMMENTERS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

Table 3-1 presents the numerical designation for each comment letter received, the author of the comment letter, and the date of the comment letter. Section 3.4 presents each comment letter received on the DEIR and the responses thereto.

<table>
<thead>
<tr>
<th>Comment Letter #</th>
<th>Author</th>
<th>Commenting Entity</th>
<th>Date (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal, State, Regional, and Local Agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>Marcos Guerrero</td>
<td>United Auburn Indian Communities</td>
<td>April 15</td>
</tr>
<tr>
<td>A2</td>
<td>Trevor Cleak</td>
<td>Central Valley Regional Water Quality Control Board</td>
<td>April 17</td>
</tr>
<tr>
<td>A3</td>
<td>Karen Huss</td>
<td>Sacramento Metropolitan Air Quality Management District</td>
<td>April 20</td>
</tr>
<tr>
<td>A4</td>
<td>Kursten Sheridan</td>
<td>California Department of Fish and Wildlife</td>
<td>April 30</td>
</tr>
<tr>
<td>A5</td>
<td>Cy R. Oggins</td>
<td>California State Lands Commission</td>
<td>May 1</td>
</tr>
<tr>
<td>A6</td>
<td>Erik Vink</td>
<td>Delta Protection Commission</td>
<td>May 1</td>
</tr>
<tr>
<td>A7</td>
<td>Cindy Messer</td>
<td>Delta Stewardship Council</td>
<td>May 1</td>
</tr>
<tr>
<td>A8</td>
<td>Rob Ferrera</td>
<td>Sacramento Municipal Utilities District</td>
<td>May 1</td>
</tr>
<tr>
<td>A9</td>
<td>Scott Morgan</td>
<td>Governor’s Office of Planning and Research</td>
<td>May 4</td>
</tr>
<tr>
<td>A10</td>
<td>Cliff Harvey</td>
<td>California State Water Resources Control Board</td>
<td>May 6</td>
</tr>
<tr>
<td>A11</td>
<td>Clifford Harvey</td>
<td>California State Water Resources Control Board</td>
<td>April 28</td>
</tr>
<tr>
<td>A12</td>
<td>Terrie Robinson</td>
<td>Native American Heritage Commission</td>
<td>July 15</td>
</tr>
<tr>
<td>A13</td>
<td>Gene Whitehouse</td>
<td>United Auburn Indian Community</td>
<td>July 16</td>
</tr>
<tr>
<td>Comments Received at Public Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>Sandra Maxwell</td>
<td></td>
<td>April 8</td>
</tr>
<tr>
<td>M2</td>
<td>Beverly Nason, Pamela Bigelow, Shirley Short, Craig Carroll</td>
<td></td>
<td>April 9</td>
</tr>
<tr>
<td>M3</td>
<td>John Lundgren</td>
<td>Sacramento County</td>
<td>April 15</td>
</tr>
<tr>
<td>M4</td>
<td>Pat Hara, Jack Burrows, Judith Scott</td>
<td></td>
<td>April 17</td>
</tr>
<tr>
<td>M5</td>
<td>Mary Schwartz</td>
<td></td>
<td>April 9</td>
</tr>
</tbody>
</table>
Table 3-1. Comment Letters Regarding the DEIR

<table>
<thead>
<tr>
<th>Comment Letter #</th>
<th>Author</th>
<th>Commenting Entity</th>
<th>Date (2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6</td>
<td>Ellen Broms</td>
<td></td>
<td>April 9</td>
</tr>
<tr>
<td>M7</td>
<td>Carolyn Baker</td>
<td></td>
<td>April 9</td>
</tr>
<tr>
<td>M8</td>
<td>Lissa McKee</td>
<td></td>
<td>April 9</td>
</tr>
<tr>
<td>M9</td>
<td>John Taylor</td>
<td></td>
<td>August 21</td>
</tr>
<tr>
<td>P1</td>
<td>Lissa McKee</td>
<td></td>
<td>March 29</td>
</tr>
<tr>
<td>P2</td>
<td>John Bertke</td>
<td></td>
<td>March 30</td>
</tr>
<tr>
<td>P3</td>
<td>Russell C. Sherman</td>
<td></td>
<td>March 31</td>
</tr>
<tr>
<td>P4</td>
<td>John Bertke</td>
<td></td>
<td>March 31</td>
</tr>
<tr>
<td>P5</td>
<td>John Bertke</td>
<td></td>
<td>April 1</td>
</tr>
<tr>
<td>P6</td>
<td>Ellen Broms</td>
<td></td>
<td>April 3</td>
</tr>
<tr>
<td>P7</td>
<td>Deborah Snider</td>
<td></td>
<td>April 9</td>
</tr>
<tr>
<td>P8</td>
<td>James E. Houpt</td>
<td></td>
<td>April 12</td>
</tr>
<tr>
<td>P9</td>
<td>James Geary</td>
<td></td>
<td>April 12</td>
</tr>
<tr>
<td>P10</td>
<td>Pam Bigelow</td>
<td></td>
<td>April 12</td>
</tr>
<tr>
<td>P11</td>
<td>Lissa McKee</td>
<td></td>
<td>April 15</td>
</tr>
<tr>
<td>P12</td>
<td>Ronald W. Beals</td>
<td></td>
<td>April 25</td>
</tr>
<tr>
<td>P13</td>
<td>Lissa McKee</td>
<td></td>
<td>April 26</td>
</tr>
<tr>
<td>P14</td>
<td>Lissa McKee</td>
<td></td>
<td>April 26</td>
</tr>
<tr>
<td>P16</td>
<td>James E. Houpt</td>
<td></td>
<td>April 29</td>
</tr>
<tr>
<td>P17</td>
<td>Denise Dutra</td>
<td></td>
<td>April 29</td>
</tr>
<tr>
<td>P18</td>
<td>Jody Wright</td>
<td></td>
<td>April 30</td>
</tr>
<tr>
<td>P19</td>
<td>Keith McCallin</td>
<td></td>
<td>May 1</td>
</tr>
<tr>
<td>P20</td>
<td>Judith Lamare</td>
<td>Friends of the Swainson’s Hawk</td>
<td>May 1</td>
</tr>
<tr>
<td>P21</td>
<td>Nicholas S. Avdis</td>
<td></td>
<td>May 1</td>
</tr>
<tr>
<td>P22</td>
<td>Kim Tremaine</td>
<td>Tremaine &amp; Associates</td>
<td>July 14</td>
</tr>
<tr>
<td>P23</td>
<td>Suzanne Taylor</td>
<td></td>
<td>July 20</td>
</tr>
</tbody>
</table>

3.3 RELATED COMMENTS

USACE, Sacramento District and the Central Valley Flood Protection Board (CVFPB) released the ARCF GRR DEIS/DEIR for public review and comment on March 13, 2015. The public review period was closed on May 18, 2015. SAFCA held four joint public meetings with USACE and CVFPB on the SAFCA DEIR and the USACE/CVFPB DEIS/DEIR because the projects being analyzed are related (refer to Exhibit 1-1 in Chapter 1, “Introduction”).

USACE and CVFPB received a range of public comments on their ARCF GRR DEIS/DEIR document. Although these comments were not submitted independently to SAFCA, as a courtesy to commenters, SAFCA is providing responses to those comments which appeared to be particularly relevant or focused on the subset of the ARCF GRR work represented by SAFCA’s proposed project.
Table 3-2 presents the designation assigned to each comment letter by USACE, along with the author of the comment letter and the date of the comment letter. These comments are reproduced, and responses provided, in Section 3.7, “Related Comments and Responses.”

<table>
<thead>
<tr>
<th>Comment Letter #</th>
<th>Author</th>
<th>Commenting Entity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Dan Kopp</td>
<td></td>
<td>April 7</td>
</tr>
<tr>
<td>J</td>
<td>Stan Jones</td>
<td></td>
<td>April 10</td>
</tr>
<tr>
<td>K</td>
<td>Janet Fullwood</td>
<td></td>
<td>April 10</td>
</tr>
<tr>
<td>L</td>
<td>James Geary</td>
<td></td>
<td>April 11</td>
</tr>
<tr>
<td>M</td>
<td>Maggie Beddow</td>
<td></td>
<td>April 12</td>
</tr>
<tr>
<td>O</td>
<td>Eric Fredericks</td>
<td>California Department of Transportation, District 3</td>
<td>April 27</td>
</tr>
<tr>
<td>R</td>
<td>Kamal Atwal</td>
<td>Sacramento County Department of Transportation</td>
<td>May 1</td>
</tr>
<tr>
<td>U</td>
<td>Kim Tremaine</td>
<td>Tremaine &amp; Associates</td>
<td>May 4</td>
</tr>
</tbody>
</table>

### 3.4 MASTER RESPONSES

#### 3.4.1 MASTER RESPONSE 1: DISAGREEMENT REGARDING THE CONCLUSIONS OF THE DEIR

Several commenters expressed their disagreement with the analysis methodology and/or impact conclusions in the DEIR related to various topic areas such as air quality and climate change.

CEQA requires that a public agency’s determination or decision under CEQA be supported by substantial evidence (California Public Resources Code (PRC) Section 21168.5). The State CEQA Guidelines similarly require that decisions regarding the significance of environmental effects addressed in an EIR be based on substantial evidence and recognize that other evidence suggesting a different conclusion may exist. “Substantial evidence” means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the proposed project may have a significant effect on the physical environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. (State CEQA Guidelines, CCR Section 15384.) An agency’s decision will not be displaced simply because an opposite conclusion may be equally or more reasonable. (Citizens of Goleta Valley v. Board of Supervisors [1990] 52 Cal. 3d 553, 564.) An EIR is not inadequate simply because experts in a particular environmental subject matter dispute the conclusions reached by the experts whose studies were used in drafting the EIR, even where different conclusions can reasonably be drawn from a single pool of information. (State CEQA Guidelines, CCR Section 15151; “Guide To CEQA” [Remy, Thomas, et al.] 11th ed. pp. 499-500; Greenebaum v. City of Los Angeles [1984] 153 Cal. App. 3d 391, 413.) The DEIR provides a comprehensive evaluation of the proposed project’s environmental impacts in compliance with CEQA and the State CEQA.
Guidelines, and in accordance with professionally accepted methodology for the evaluation of environmental resources. The DEIR and this FEIR present substantial evidence to support the conclusions drawn within these documents regarding the significance of the proposed project’s environmental effects. When commenters disagree about environmental conclusions, the EIR need only summarize the main points of disagreement and explain the lead agency’s reasons for accepting one set of judgments instead of another. CCR Section 15151 of the State CEQA Guidelines states that “Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts.” (See also Greenbaum v. City of Los Angeles [1984] 153 Cal.App.3d 391, 413 and Browning-Ferris Industries v. City Council [1986] 181 Cal.App.3d 852, 862-863.) The lead agency will ultimately determine which conclusion is appropriate, based on the substantial evidence presented in the EIR and other documents in the whole of the record.

The comment letters and responses to them present summaries of the areas of disagreement. In some cases, there is no substantial evidence offered by commenters to support that a different conclusion should be drawn. As such, no further response to disagreements presented in the comment letters is necessary. If evidence is provided by the commenter to support the disagreement with the DEIR’s conclusion, the evidence is summarized and considered in making the EIR’s conclusion and response to the individual comment. SAFCA has reviewed and considered all the substantial evidence in the whole of the record in making its decisions about the proposed project and its environmental effects.

**3.4.2 Master Response 2: Evaluation of Project Impacts to Vegetation**

SAFCA has received several comments requesting more information about the options for reducing the extent of the vegetation that may be considered hazardous to the structural integrity of the levee system and removed as part of the proposed project. The methodology used to identify high-hazard trees and vegetation is set forth in the Vegetation Management Decision Key for Levee Accreditation (Decision Key) which is Appendix B of the DEIR. This methodology results in a reasonably conservative scenario – neither the best case nor the worst case – for removing trees and vegetation that would not otherwise be affected by proposed project construction activities.

As explained in the introduction to the Decision Key, the Federal regulations governing the accreditation of levees under the NFIP (44 Code of Federal Regulations [CFR] Section 65.10) do not address vegetation management as an accreditation requirement. USACE, however, has attempted, through its adoption of Engineering Technical Letter (ETL) 1110–2–571 (April 10, 2009), to establish uniform Federal guidelines for landscape planting and vegetation management on levees, floodwalls, embankment dams, and appurtenant structures. In addition, as part of its preparation of the Central Valley Flood Protection Plan (CVFPP) in 2012, the California Department of Water Resources (DWR) adopted urban levee design criteria that address vegetation on levees. In light of these Federal and State actions, the Decision Key indicates that it would not be prudent to ignore the presence of vegetation on and adjacent to levees in establishing the standard of care that is needed to guide the levee accreditation process. Toward that end, the Decision Key identifies a framework for evaluating existing vegetation and the risk it poses to public safety so as to determine the extent to which such vegetation should be subject to ongoing management including removal.

The Decision Key recognizes that the science informing the risks associated with vegetation on levees is evolving. At the Federal level, Congress has directed USACE carry out a comprehensive review of the guidelines in the above referenced ETL in order to determine whether current Federal policy relating to levee vegetation is
appropriate for all regions of the United States. As provided in Section 3013 of the Water Resources Reform and Development Act of 2014, as part of the review directed by Congress, USACE is called upon to consider the following factors (among others):

► the need to ensure that levee safety investments minimize environmental impacts and provide corresponding public safety benefits;

► the available science and the historical record regarding the link between vegetation on levees and flood risk; and

► the avoidance of actions requiring significant economic costs and environmental impacts.

Concurrent with this review by USACE, DWR is updating the CVFPP, and in the process is considering the results of the levee vegetation research that it has conducted with SAFCA’s assistance since 2007. These results are summarized in the report issued in January 2016 entitled, **Synthesis of Levee Vegetation Research Results (2007-2014)** prepared for the California Levee Vegetation Research Program (CLVRP) (Shields 2016). This is perhaps the most comprehensive assessment of the current state of the science on the risks associated with levee vegetation. The report is likely to have a significant impact on USACE’s review of its levee vegetation guidelines and on DWR’s review of the levee vegetation policies incorporated in the CVFPP Update.

In anticipation of these developments, the Decision Key is explicitly referred to as a “living document” which will continue to be refined. As the proposed project moves toward implementation, this framework will likely be refined to reflect the synthesis of the levee vegetation research and the results of the ongoing Federal and State reviews. Toward this end, SAFCA intends to create a levee vegetation working group made up of interested stakeholders, levee engineers, arborists, and other experts to assimilate the ongoing research results, track the Federal and State review processes, and refine the Decision Key as appropriate to reflect these developments. In order to give the working group time to carry out this work, SAFCA will seek the Federal Emergency Management Agency’s (FEMA’s) support for deferring most hazard tree removal activities pending completion of the Federal and State reviews and the emergence among experts and the regulatory agencies of a more settled vegetation management policy for our area.

**3.5 COMMENTS AND RESPONSES ON THE DRAFT ENVIRONMENTAL IMPACT REPORT**

The written individual comments received on the DEIR and the responses to those comments are provided in this section. Each comment letter is reproduced in its entirety and is followed by the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter.
Suzanne, please file.

Drew, DEIR comment.

Francine Dunn
Principal | CEQA, NEPA, Environmental Compliance
Environmental Planning Business Unit Leader, Greater Northern CA/NV
D +1 916.414.5840
francine.dunn@aecom.com

AECOM
2020 L Street, Suite 400, Sacramento, CA 95811 USA
T +1 916.414.5800 F +1 916.414.5850
wwwaecom.com

From: Marcos Guerrero [mailto:mguerrero@auburnrancheria.com]
Sent: Wednesday, April 15, 2015 12:43 PM
To: Ghelfi, Pete; Jurich, Denise; Danny Rey; Melodi McAdams; TribalpreservationDG
Cc: Dunn, Francine; reinhardt@mlbengineers.com; jdavis@qualco.com; Buck. Peter; Barbara Gualco; Jason Camp
Subject: SAFCA DEIR Comments: Sacramento East Levee Project

Hello All, please see UAICs comments to the SAFCA Sacramento East Levee Project, DEIR.

After an internal review of the project documentation the DEIR for the Project has some significant deficiencies beyond those already noted.

1. DEIR does not appear to contact an Environmentally Preferred Alternative that is required under CEQA Guidelines 15126.6(c)(2) [the tribe would like to be allowed to microsite or get other design features incorporated to reduce the potential for direct cultural impacts].

2. UAIC left out of DEIR analysis as Tribe, government or partner. There is no discussion of the Tribe/tribal values in areas of controversy, construction timing, project and alternatives screening criteria (i.e., a tribal burial mound avoidance alternative), environmental commitments for cultural resources, social effects, environmental justice or identified as a viewer group for visual impacts [the UAIC requests to be allowed to participate in the EIR analysis].

3. On Alternatives, it appears that very little consideration was given to any others [the rationale for rejecting other design features and preservation in place falls short of what the Tribe considers a minimum level of effort] [the Tribe requests a complete and full analysis of such preservation in place and avoidance alternatives as setback levees, and seepages and stability berms].

4. SAFCA materially revises any section of the DEIR then the document should be
recirculated. SAFCA shall evaluate, determine effects, and develop treatment before the project construction activities begin. The tribe does not consider data recovery appropriate which is in fact a negative effect and direct impact to the cultural resources. The DEIR addresses solely scientific archeology, there is zero discussion regarding tribal cultural values, sanctified cemeteries, or cultural landscapes. Include a section on why preservation in place is a feasible alternative. The DEIR does not admit that human remains could be impacted and that state law would be followed.

6. The DEIR also will any new sections on PG&E utility relocation be in the DEIR? Especially of this work includes use of cranes, land leveling, poll removal and relocation, tree replanting and vegetation removal - all activities that could have significant impacts on cultural resources.

7. The cumulative impact section is wholly deficient and also contains improper analysis such as cultural resources are typically not subject to cumulative effects which is unsupported in CEQA. Yet DEIR then admits impacts are cumulatively significant but then offers no mitigation for that impact. Again, there is no mention of tribes or cultural landscapes, the latter is especially relevant when dealing with cumulative effects or effects across several phases or projects over wide geography.

8. Specific borrow and staging sites were not identified in the DEIR.

9. Will there be a section on Wetland delineation?

10. Will the project be avoiding FEMA land use restrictions and are barges included in the project - use of barges could help to reduce impacts on cultural resources?

11. Other interesting points, we would like to discuss are:

- Admits no further federal action assumed, raises question of whether feds could assume the project without reopening the environmental review.
- No analysis of vibration or compression effects on project on cultural resources.
- No analysis of vegetation impacts that relate to native or cultural plants including those that might have been part of the burial mounds or part of the tribal cultural landscape.
- Will there be conservation bank purchased for giant garter snake - why not for cultural landscape?
- Please note that post approval technical studies are not okay.
- No section in climate change discussing whether it makes sense to raise structure instead of hardening levees.
- No text references to NPS Bulletin 38 (TCPs) or ACIIP guidance on cultural landscapes, document takes a very stilted view of what Section 106 means. We understand this may be in the DEIS, yet to be developed, but it would be good to include the important of place, setting, landscape, to the Tribe.
- NAHC not listed as a trustee agency.

Marcos Guerrero, RPA
A1-1  The comment states the DEIR does not appear to include an Environmentally Preferred Alternative that is required under CEQA guidelines 15126.6(e)(2).

As described in Section 7.4, “Environmentally Superior Alternative” on page 7-17 of the DEIR, the Limited Footprint Alternative would be the environmentally superior alternative because it would have fewer potential impacts on environmental resource areas.

A1-2  The comment requests that UAIC be given the opportunity to be allowed to microsite or get other design features incorporated to reduce the potential for direct cultural impacts.

SAFCA is working with professional engineers to incorporate design features and minimize the amount of ground disturbance during project-related construction. As interested parties, United Auburn Indian Community (UAIC) and other tribes in the area will be given an opportunity to comment on the construction design through the ongoing consultation process. USACE will initiate the Section 106 consultation process for the North Sacramento Streams Levee Improvement Area; USACE will initiate the Section 106 process for the Sacramento River East Levee Improvement Area when additional engineering details are available. SAFCA will assist USACE with Section 106 consultation efforts.

A1-3  The comment states the UAIC was left out of DEIR analysis as a tribe, government, or partner and that there was no discussion of tribal values.

As stated on page 8-4 on the DEIR, SAFCA sent contact letters to individuals identified by the Native American Heritage Commission (NAHC), including Marcos Guerrero, Tribal Preservation Committee; Gene Whitehouse, Chairperson; and Jason Camp, Tribal Historic Preservation Officer. These contact letters were mailed on September 2, 2014, and contained information regarding the proposed project and a request for any information or concerns related to the proposed project. Mr. Guerrero responded on September 9, 2014 and requested a meeting regarding the proposed project. On Friday, January 9, 2015, SAFCA held an office meeting for interested Native American representatives, and both Mr. Guerrero and Mr. Camp attended. On January 20, 2015, at the suggestion of Mr. Guerrero, SAFCA requested access to the UAIC’s cultural repository as part of the data-gathering process. Mr. Guerrero responded on January 20, 2015, stating that SAFCA’s consultant would be sent the access and use-agreements; however as of the printing of this response, UAIC has not provided access information. On January 29, 2015, based on the availability of Native American representatives, SAFCA scheduled a tour on March 4, 2015, of the restricted portions of the project area for the interested tribes. Mr. Guerrero attended the first half of the tour. Although he was invited, Mr. Camp did not attend the tour.

During these interactions and through email exchanges, SAFCA has attempted to obtain any information UAIC may be willing to share regarding Native American cultural resources; however UAIC has not provided substantial evidence that could be used under CEQA to analyze potential impacts to cultural resources, nor has UAIC provided access to its cultural repository.
Although UAIC does not have an obligation to disclose information, ownership or character of sacred sites and places, SAFCA continues to demonstrate a good faith effort to identify cultural resources in the project area by encouraging UAIC and other interested tribes to voice their concerns. It is only with the tribes’ assistance that SAFCA can identify and analyze potential impacts to those sacred places that are not on file with NAHC, North Central Information Center (NCIC), the Bancroft Library, the Anthropological Curation Facility at California State University Sacramento, the California State Library, and other publicly accessible repositories.

The comment requests UAIC be allowed to participate in the EIR analysis.

Please see response to A1-3. In addition to meetings, tours, and emails, UAIC was sent a copy of the DEIR for public review and comment.

The comment states that very little consideration was given to any other alternative, and that the rationale for rejecting other design features and preservation in place falls short of what the UAIC considers a minimum level of effort.

SAFCA respectfully disagrees with the commenter. Chapter 7, “Alternatives,” of the DEIR provides a comparative analysis between the proposed project and three alternatives: a No-Project/No-Build Alternative (No Financing, No Improvements), a Federal Project Alternative, and a Limited Footprint Alternative. These alternatives are presented in Section 7.2, “Alternatives Description,” and the relative impacts of these alternatives are described in Section 7.3, “Comparison of the Effects of the Alternatives.” In addition to the three alternatives which were selected for detailed analysis, Section 7.1.3, “Alternatives Development Process,” describes how engineering alternatives were evaluated and selected to meet levee accreditation and State levee requirements. Section 7.1.4, “Alternatives Considered but Rejected from Detailed Analysis,” provides further detail on alternatives to the proposed project which were not carried forward for detailed analysis in the DEIR.

The comment requests a complete and full analysis of alternatives such as preservation in place and avoidance alternatives as setback levees, and seepages and stability berms.

No significant impacts related to any specific archaeological sites were identified in the DEIR. The potential construction footprint is constrained due to the existing river, creek, or canal; and due to urban development present in the immediate vicinity of the Arcade Creek, NEMDC/Steelhead Creek, and Sacramento River East levees. Mitigation Measure CR-2a, Conduct Archaeological Monitoring during Ground Disturbance within 100 feet of Known Archaeological Resources and Prepare and Implement a Monitoring Plan, requires that SAFCA shall retain the services of a professional archaeologist to prepare and implement a monitoring plan. The archaeologist and SAFCA shall seek the input of Native American tribes that are traditionally and culturally affiliated with the geographic area. Mitigation Measure CR-3, Implement Procedures for Inadvertent Discovery of Cultural Resources, requires that SAFCA shall retain the services of a professional archaeologist to perform monitoring during on-site earthwork, with appropriate actions if potential cultural resources are discovered. Because of the physical constraints to the construction footprint and the proposed improvements required to reduce flood risk and bring the flood management system into compliance with applicable
engineering standards established under the NFIP, it may not be feasible to preserve in place or to use setback levees or berms.

A1-8 *The comment states if SAFCA revises any section of the DEIR then the document should be recirculated. SAFCA shall evaluate, determine effects, and develop treatment before the project construction activities begin.*

Recirculation of the DEIR is not required; none of the proposed revisions to the DEIR would constitute “significant new information” as described in CCR Section 15088.5(a) of the State CEQA Guidelines; rather, the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

A1-9 *The comment states UAIC does not consider data recovery appropriate which is in fact a negative effect and direct impact to the cultural resources.*

Data recovery is acceptable mitigation under CEQA. CCR Section 15126.4 of the State CEQA Guidelines requires preparation and adoption of a data recovery plan prior to excavation when data recovery through excavation is the only feasible mitigation. The data recovery plan makes provision for adequately recovering the scientifically consequential information from and about the historical resource.

A1-10 *The comment states the DEIR addresses solely scientific archaeology; there is no discussion regarding tribal cultural values, sanctified cemeteries, or cultural landscapes.*

Please see response to A1-3.

A1-11 *The comment requests that the DEIR include a discussion on why preservation in place is a feasible alternative.*

Please see response to A1-7.

A1-12 *The comment states that the DEIR does not admit that human remains could be impacted and that State law would be followed.*

The DEIR addresses the potential discovery of human remains in Impact CR-4 on pages 4.7-38–4.7-41. This impact discussion states “Prehistoric human remains have been found at several known prehistoric sites in Sacramento County. It is possible that previously unknown buried human remains could be unearthed and damaged or destroyed during excavation activities. Therefore, this impact would be potentially significant.” Mitigation Measure CR-4 (on pages 4.7-38 and 4.7-39 of the DEIR) implements the procedures for Inadvertent Discovery of Human Remains in accordance with the California Health and Safety Code Section (HSC) 7050.5[b]), and, if applicable, HSC Section 7050[c]) and California PRC Section 5097.9 et seq.

A1-13 *The commenter asks whether any new sections on PG&E utility relocation will be in the DEIR. Especially if this work includes use of cranes, land leveling, pole removal and relocation, tree replanting, and vegetation removal - all activities that could have significant impacts on cultural resources.*
The proposed project would avoid existing utilities to the extent feasible (as described on page 3-15 of Chapter 3, “Project Description”). Some utilities would need to be temporarily relocated during construction (see page 3-17) but would be restored following construction. All utility relocation associated with the proposed project would occur within the areas identified for levee improvements and have been analyzed in the DEIR. The mitigation measures outlined in Section 4.7, “Cultural Resources,” of the DEIR would apply to all project activities analyzed within the proposed project footprint that involve ground-disturbance in the event of the inadvertent discovery of unknown cultural resources or human remains.

A1-14–15  The cumulative impact section is wholly deficient and also contains improper analysis such as cultural resources are typically not subjected to cumulative effects. Yet DEIR then admits impacts are cumulatively significant but then offers no mitigation for that impact.

The DEIR includes the cumulative impacts to cultural resources. As stated in Chapter 5, “Cumulative Impacts,” Section 5.5.6, “Cultural Resources,” of the DEIR (pages 5-17 and 5-18), the “projects considered in this cumulative impact analysis have the potential to contribute to the loss or degradation of known and unrecorded archaeological resources, known historical built environment resources, and human remains. Most potential effects of the proposed project and other related projects to cultural resources would be associated with construction disturbances of archaeological sites and human remains. These effects could contribute to the loss of intact cultural resources or human remains that have led to the need to protect these resources.”

Section 5.5.6 of the DEIR concludes “implementation of the avoidance and minimization measures outlined in Mitigation Measures CR-2 through CR-4 in Section 4.7, “Cultural Resources,” would reduce or avoid the effects of the proposed project on archaeological and human remains.”

A1-16  The comment states that there is no mention of tribes or cultural landscapes.

Please see response to A1-3. No tribal representative provided adequate information regarding the geographic definition of the size and scope of the cultural landscape that is required to analyze a cultural landscape for California Register of Historic Resources- (CRHR) or National Register of Historic Places- (NRHP) eligibility.

A1-17  The comment states specific borrow and staging sites were not identified in the DEIR.

Exhibits 3-9, 3-11, and 3-16 in Chapter 3, “Project Description” of the DEIR, illustrate specific borrow sites and staging areas. Impacts associated with the use of borrow materials and staging areas were considered in the DEIR’s environmental analysis. Exhibit 3-11 has been modified to reflect changes to Proposed Staging Area 1 for the North Sacramento Streams Levee Improvement area. The revised Exhibit 3-11 is presented in Chapter 4, “Corrections and Revisions to the Environmental Impact Report.”

A1-18  The comment asks if there will there be a section on wetland delineation.
As stated in Section 4.6.1, “Section 404 of the Federal Clean Water Act (CWA) requires a project proponent to obtain a permit from USACE before engaging in any activity that involves any discharge of dredged or fill material into Waters of the U.S., including wetlands.” A wetland delineation is currently being conducted by SAFCA and will be completed prior to obtaining a permit from USACE.

A1-19

The comment asks if the project will avoid FEMA land use restrictions and if barges included in the project.

It is unclear what “FEMA land use restrictions” are referred to by the commenter. We assume that the commenter intends to ask about FEMA mandatory flood insurance obligations and restrictions on new and replacement construction; the proposed project is intended to avoid decisions by FEMA that could trigger those effects. No barges will be used during construction.

A1-20

Admits no further federal action assumed, raises question of whether feds could assume the project without reopening the environmental review.

It is unclear what text in the DEIR is referred to by the commenter. SAFCA intends to construct the improvements identified in the DEIR project description, and the DEIR is a project-level document, as defined under CEQA. It is intended that no additional CEQA review of the proposed project will be required following certification of the EIR. National Environmental Policy Act (NEPA) review will be conducted to support issuance of Federal permits, authorizations, and permissions required to construct the proposed project.

A1-21

The comment states there is no analysis of vibration or compression effects on project on cultural resources.

Vibration or compression is part of project-generated construction. As with other aspects of project-related construction, vibration or compression may impact possible cultural resources that are buried under the levee; however, because any cultural resource that may be buried under the existing levee is inaccessible, it is impossible to conduct vibration or compression analyses without removing a large segment of the levee, which undermines public safety and is financially infeasible.

A1-22

The comment states there is no analysis of vegetation impacts that relate to native or cultural plants including those that might have been part of the burial mounds or part of the tribal cultural landscape.

SAFCA and its consultant provided tribal representatives with geospatial databases, site records from the NCIC, offered a tour of the parts of the levee that have area-restricted access, and were reminded, when asked that they could visit the publicly accessible portions of the project at any time. SAFCA and its consultant also respectfully requested and encouraged tribal representatives to inform SAFCA of other cultural resources that may have been of concern. No tribal representative provided adequate information regarding the geographic definition of the size and scope of the cultural landscape or native plant area or that is required to analyze such a resource for eligibility on the CRHR or NRHP.
The comment asks if there will be conservation bank purchased for giant garter snake, and if so, why not for a cultural landscape?

At this time there is no conservation bank purchase planned for giant garter snake. As stated in Section 4.6 of the DEIR, “if potentially occupied habitat for giant garter snake cannot be avoided during project construction, an appropriate and feasible mitigation plan to compensate for potential disturbance, displacement, injury, or death individuals shall be developed and provided to USFWS and, as necessary, CDFW for approval. Compensation for direct impacts may include preserving, enhancing, and/or creating giant garter snake habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with USFWS.”

Although no tribal representative provided adequate information regarding the geographic definition of the size and scope of the cultural landscape that is required to analyze a cultural landscape for eligibility on the CRHR or NRHP, SAFCA is in the process of identifying potential mitigation options for cultural resources.

The comment states that post approval technical studies are not okay.

The Fifth Appellate District ruled that for a known and identified cultural resource that is included in the CEQA analysis, eligibility “determination must be made sometime before the final EIR is certified, and it cannot be undone after certification of the EIR. In other words, if the determination regarding historicity is subject to being undone, the EIR cannot be regarded as complete for purposes of CEQA” (Madera Oversight Coalition, Inc. et al., v. County of Madera); however, evaluation of accidentally discovered cultural resources post-certification is allowed under CEQA. Section 15064.5(f) states “as part of the objectives, criteria, and procedures required by PRC Section 21082, a lead agency should make provisions for historical or unique archaeological resources accidentally discovered during construction. These provisions should include an immediate evaluation of the find by a qualified archaeologist.”

The comment states there is not a discussion in the climate change section analyzing raising the levee structure instead of hardening levees.

Raising the levee would not remediate seepage and stability issues to be addressed by the proposed work; these issues are related to the potential for water to seep through or beneath the levee during high water events, and risks would not be reduced solely by increasing the levee height. The potential for levee failure would continue to be a public safety issue.

The comment states there is no reference to NPS Bulletin 38 regarding traditional cultural properties (TCPs) or the Advisory Council on Historic Preservation’s (ACHP) guidance. The comment claims the DEIR has a very stilted view of Section 106.

The term “traditional cultural property” that includes properties affiliated with traditional religious and cultural importance to a distinct cultural group, including, but not limited to, Native Americans. In 1992 The National Historic Preservation Act (NHPA) was amended to include TCP. None of the Native Americans or other interested parties contacted provided substantial evidence that there is a TCP or the CEQA equivalent in the construction footprint, borrow areas,
or staging areas. The State CEQA Guidelines require that decisions regarding the significance of environmental effects addressed in an EIR be based on substantial evidence and recognize that other evidence suggesting a different conclusion may exist. “Substantial evidence” means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, does not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. (State CEQA Guidelines, CCR Section 15384.)

The definition of Section 106 of the NHPA provided in the DEIR is taken from 36 CFR Part 800, Protection of Historic Properties.

A1-27

The comment notes that NAHC not listed as a trustee agency.

NAHC is a trustee agency. 14 CCR Section 15386 defines “trustee agency” as “a State agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.” As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” NAHC has been added to the list of trustee agencies on page 1-4 of Chapter 1, “Introduction,” of the DEIR.
Central Valley Regional Water Quality Control Board

17 April 2015

Pete Ghelfi
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

CERTIFIED MAIL
7014 2870 0000 7535 8171

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, NORTH SAC STREAMS, SAC RIVER EAST LEVEE, LOWER AMERICAN RIVER, & RELATED FLOOD IMPROVEMENTS PROJECT, SCH# 2014052038, SACRAMENTO AND YOLO COUNTIES

Pursuant to the State Clearinghouse’s 18 March 2018 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the Request for Review for the Draft Environment Impact Report for the North Sac Streams, Sac River East Levee, Lower American River, & Related Flood Improvements Project, located in Sacramento and Yolo Counties.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit
Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.
Phase I and II Municipal Separate Storm Sewer System (MS4) Permits

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

1 Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.
Clean Water Act Section 401 Permit – Water Quality Certification
If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements
If USACOE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Regulatory Compliance for Commercially Irrigated Agriculture
If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. Obtain Coverage Under a Coalition Group. Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board’s website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/app_approval/index.shtml; or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently $1,084 + $5.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring...
North Sac Streams, Sac River East Levee, Lower American River, & Related Flood Improvements Project
Sacramento and Yolo Counties

- 4 - 17 April 2015

...To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrlLands@waterboards.ca.gov.

**Low or Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for Dewatering and Other Low Threat Discharges to Surface Waters (Low Threat General Order) or the General Order for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more Information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:

For more Information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

If you have questions regarding these comments, please contact me at (916) 464-4684 or tcleeak@waterboards.ca.gov.

Trevor Cleak
Environmental Scientist

cc: State Clearinghouse unit, Governor’s Office of Planning and Research, Sacramento
The comment provides information related to the potential need to obtain a construction storm water general permit, Phase I and II MS4 permits, industrial storm water general permit, CWA Section 404 and 401 permits, waste discharge requirement permit, coverage under the Irrigated Lands Regulatory Program, and a low or limited threat National Pollutant Discharge Elimination System (NPDES) permit.

SAFCA acknowledges that one or more of the permits listed by the commenter may be required, and notes that it will obtain said permits if necessary prior to construction of the proposed project.
April 20, 2015

SMAQMD

Mr. Pete Ghelfi, P.E.
Director of Engineering
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

North Sacramento Streams, Sacramento River East Levee, Lower American River and Related Flood Improvements Project Draft Environmental Impact Report (SMAQMD # SAC201401496)

Dear Mr. Ghelfi:

Thank you for informing the Sacramento Metropolitan Air Quality Management District (SMAQMD) of the availability of the draft environmental impact report (DEIR) for the North Sacramento Streams, Sacramento River East Levee, and Lower American River Flood Improvements Project. Staff comments on the DEIR follow.

1. Mitigation measure AIR-1c requires the use of Tier 3 construction equipment for at least 15 percent of the equipment used on the North Sacramento Streams and Sacramento River East Levee portions of the project to reduce NOx emissions (page 4.4-22).

   When a project exceeds the 85 lbs./day NOx threshold, the SMAQMD recommends its Enhanced Exhaust Control Practices (attached) to obtain a 20% reduction of NOx emissions from the off-road fleet working on the project. The Enhanced Exhaust Control Practices are a known standard in the region so many contractors are familiar with implementation; provide flexibility for contractors in selecting equipment for the job; include initial and ongoing reporting of the fleet to ensure continued compliance; and are easier to enforce than the proposed mitigation.

2. SMAQMD recommends implementation of mitigation measure AIR-1a for the American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal and Natomas East Main Drainage Canal/Steelhead Creek Corridor Management Plan portions of the project be the responsibility of the construction contractor(s) in addition to SAFCA (page 4.4-26 and 27).
Mr. Ghelfi  
April 20, 2015  
Page 2

You may contact me at 916-874-4881 or khus@airquality.org if you have questions regarding the SMAQMD’s comments.

Sincerely,

Karen Huss  
Associate Air Quality Planner/Analyst  
ATTACHMENT  
cc: Larry Robinson, SMAQMD  
George Lu, AECOM
ATTACHMENT

Enhanced Exhaust Control Practices

The project representative shall submit to the lead agency and District a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used as an aggregate of 40 or more hours during any portion of the construction project.

- The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
- The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
- This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.
- The District's Equipment List Form can be used to submit this information.
- The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

The project representative shall provide a plan for approval by the lead agency and District demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.

- This plan shall be submitted in conjunction with the equipment inventory.
- Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.

- Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately.
- Non-compliant equipment will be documented and a summary provided to the lead agency and District monthly.
- A visual survey of all in-operation equipment shall be made at least weekly.
- A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supercede other District, state or federal rules or regulations.
The comment recommends that Sacramento Metropolitan Air Quality Management District (SMAQMD) Enhanced Exhaust Control Practices be implemented as mitigation, in lieu of DEIR Mitigation Measure AIR-1c.

As suggested by the commenter and shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” the text on DEIR page 4.4-22 under Mitigation Measure AIR-1c is hereby modified as follows:

**Mitigation Measure AIR-1c: Use Tier 3 Construction Equipment for At Least 15 Percent of SMAQMD Enhanced Exhaust Control Practices for Construction Equipment.**

As shown above in Table 4.4-4, maximum daily construction-related NO\textsubscript{X} emissions would exceed SMAQMD’s construction threshold of significance. A majority of the construction-related NO\textsubscript{X} emissions are generated from off-road construction equipment. Therefore, Mitigation Measure AIR-1c requires that at least 15 percent of the construction equipment used for the proposed project shall be Tier 3 engines or achieve Tier 3 engine emission standards. Table 4.4-4 presents the proposed project’s mitigated construction emissions with inclusion of Mitigation Measure AIR-1c off-road construction equipment use SMAQMD’s Enhanced Exhaust Control Practices.

- The construction contractor shall submit to SAFCA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.

- The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The SMAQMD Equipment List Form can be used to submit this information. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

- The construction contractor shall provide a plan for approval by SAFCA and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO\textsubscript{X} reduction and 45 percent particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions...
may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

- SMAQMD’s Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction. The construction contractor shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than 3 minutes in any 1 hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to SAFCA and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly. A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

A3-2 The comment suggests that the DEIR should be changed to include the construction contractor as a party responsible for implementation of Mitigation Measure AIR-1a in addition to SAFCA, for the American River and Beach Lake Levee portions of the project.

As suggested by the commenter, the text on DEIR page 4.4-26 under Mitigation Measure AIR-1a is hereby modified as follows: “Responsibility: Sacramento Area Flood Control Agency and Construction Contractors.”
DEIR comment letter.

Sent from my iPhone

Begin forwarded message:

From: SAFC Levee Accreditation Program <PeteGhelfi@saccounty.net>
Date: April 30, 2015 at 7:29:34 PM CDT
To: "Francine.Dunn@aec.com" <Francine.Dunn@aec.com>, "jdavis@gualco.com" <jdavis@gualco.com>, "aliateyveb@gmail.com" <aliateyveb@gmail.com>

From: Sheridan, Kursten@Wildlife
Sent: Thursday, April 30, 2015 5:29:22 PM (UTC-08:00) Pacific Time (US & Canada)
To: SAFC Levee Accreditation Program
Cc: Wildlife R2 CEQA: Baer, Isabel@Wildlife
Subject: Comments on the Draft Environmental Impact Statement/Environmental Impact Report for the North Sacramento Streams, Sacramento River East Levee & Related Flood Improvements Project, SCH # 2014052038

Dear Mr. Ghelfi:
The California Department of Fish and Wildlife (Department) has reviewed the North Sacramento Streams, Sacramento River East Levee & Related Flood Improvements Project (Project) Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Pursuant to Section 15082(b) of the California Environmental Quality Act (CEQA) Guidelines, the Department offers the following comments on the EIS/EIR in our roles both as a trustee agency and as a responsible agency. As trustee for the State’s fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species. The Department may also be a responsible agency for a project affecting biological resources where we will exercise our discretion after the lead agency to approve or carry out a proposed project or some facet thereof.
The Project is focused on levees outside of the Natomas Basin along the American River, the east side of Natomas East Main Drainage Canal.
Steelhead Creek, Arcade Creek, Dry Creek North Levee, Robla Creek South Levee, the Lower Sacramento River from the mouth of the American River to the community of Freeport, and the Beach Lake Levees. The Project consists of five separate elements in three geographic study areas as described in further detail below.

Project Elements
Levee improvements would consist of berms, cutoff walls, relief wells, and erosion repair (i.e., placement of rock revetments. This work is intended to reduce flood risk and bring the flood management system in the project study area in to compliance with applicable National “Flood Insurance Program (NFIP) and Urban Levee Design Criteria (ULDC) engineering standards.

Encroachment removal would entail removal of structures and vegetation that are encroaching on existing levees. This work is intended to meet NFIP standards for levee accreditation and State’s ULDC, which both require removal or modification of encroachments that pose and unacceptably high risk to the performance and safety of a levee either by undermining its structural integrity or by interfering with necessary inspection, operation, and maintenance activities. The vegetation management element would entail removal of “high-hazard trees” and other vegetation from the levees. The ULDC provides criteria that reflect the underlying risk management objectives of the NFIP. Under these criteria, vegetation on levees must be modified removed if it presents an unacceptable risk to the structural integrity or impedes operation and maintenance of the levee.

The Conservation Strategy would entail vegetative plantings (including trees) in various locations. The Conservation Strategy also includes a set of measures that would be implemented as part of the proposed project to avoid, minimize, reduce, and mitigation impacts on sensitive habitats and special-status species caused by the proposed project. These protective measures would be implemented in a manner that optimally protects the natural environment, especially riparian and stream habitat suitable for native plants, wildlife habitat, and public recreation.

The NEMDC/Steelhead Creek Corridor Management Plan (CMP) would include various activities such as removal of invasive vegetation, recontouring of stream channels, removal of beaver dams, fencing to exclude cattle from the active stream zone, and other similar activities intended to reduce channel roughness, increase floodwater conveyance capacity, and provide essential habitat for salmon and steelhead in Dry Creek, NEMDC/Steelhead Creek, and other warm water species in Arcade Creek.

The proposed project elements described above are being analyzed together in this EIS/EIR, these elements each contribute separately and independently to achieving the project purpose. Each element is separable and would be permitted and constructed on a different timeline to accommodate funding, scheduling, and geographic considerations. The schedule anticipates four or five permit packages over the next 4 years covering: North Sacramento Streams Levee Improvements, Sacramento River East Levee Improvements, American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal, and NEMDC/Steelhead Creek CMP.

The Department is primarily concerned with the preferred Alternative’s impacts to special status species, including Swainson’s hawk (Buteo swainsoni), giant garter snake (Thamnophis gigas), bats, Sacramento River winter-run Chinook salmon (Oncorhynchus tsawytscha), the potential loss of high quality riparian habitat and, as well as the cumulative impacts in conjunction with similar
projects within the area.
The comments provided herein are based on the information provided in the EIS/EIR, the Department’s knowledge of sensitive and declining vegetative communities and wildlife species in the area, and are limited to the likely impacts to biological resources from the Project.
California Fish and Game Code Section 1602
On page 4.6-4 “Stream” is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. However this definition from Title 14 Section 1.72 does not apply to Fish and Game Code 1602 jurisdiction. The Department recommends that this reference to the stream definition from Title 14 be removed from this document.
California Endangered Species Act
The EIS/EIR identifies several species protected under California Endangered Species Act (CESA) that could be impacted by the project. A CESA permit should be obtained if the proposed project has the potential to result in take of state-listed plants or wildlife over the life of the proposed project, including long-term management and operations. Issuance of a CESA permit is subject to CEQA; therefore the environmental document must clearly identify potential direct, indirect, temporary and permanent impacts; avoidance, minimizations and mitigation measures; and a mitigation, monitoring and reporting program. If the proposed project may have the potential to “take” a CESA listed species, early consultation is encouraged, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA permit. Issuance of a CESA permit may take up to 180 days from receipt of an application from the applicant.
The EIS/EIR misidentifies the status of the follow species protected under CESA. The Department recommends the EIS/EIR be revised to update the following information:
- California tiger salamander (Ambystoma californiense) is federally and state-listed as Threatened

Rare Plants
The EIS/EIR states “The California Native Plant Protection Act (California Fish and Game Code Section 19000 et seq.) allows landowners to take listed plant species from, among other places, a canal, lateral ditch building site, or road, or other right-of-way, provided that the owner first notifies CDFW and gives the agency at least 10 days to come and presumably replant the plants before they are plowed under or otherwise destroyed. The project sites are “building sites” within the meaning of the applicable statute (California Fish and Game Code Section 1913). “It is not clear how the project sites were determined to fit under the term “building sites.”
The Department recommends the following text change: The California Native Plant Protection Act (California Fish and Game Code Section 19000 et seq.) allows landowners to take listed plant species from, among other places, a canal, lateral ditch, building site, or road, or other right-of-way, provided that the owner first notifies CDFW and gives the agency at least 10 days to come and presumably replant the plants before they are plowed under or otherwise destroyed. The project sites are “building sites” within the meaning of the applicable statute (California Fish and Game Code Section 1913) The Department also recommends that the EIS/EIR clarifies how the project site
where determined to be "building sites." Take of state-listed rare plants that may occur as a result of the project may be permitted through an incidental take permit or other authorization issued by the Department pursuant to California Code of Regulations, Title 14, section 786.9 subdivision (b).

Giant Garter Snake
Mitigation measure BIO-4-GGS-3 states that unless authorized by U.S. Fish and Wildlife Service (USFWS), construction and other ground-disturbing activities within 200 feet of suitable aquatic habitat for the giant garter snake shall not commence before May 1, with initial ground disturbance expected to correspond with the snake’s active season. Giant garter snakes spend a substantial amount of time in burrows even during the “active” season as refuge from predators, to shed, and to give birth. Ground disturbing activities in suitable habitat during any time of year have the potential to injure harm or kill giant garter snakes. The Department recommends that the text be changed to reflect this potential impact. The EIS/EIR states that for impacts to giant garter snake “purchasing credits at a USFWS-approved mitigation bank may be identified as appropriate mitigation.”

Swainson’s Hawk
Mitigation measure BIO-7h: Minimize Adverse Impact of Swainson’s Hawk Foraging Habitat Loss and Compensate for Substantial Loss states that mitigation will be coordinated with the Department (typically ranging from 0.5 to 1 acre of replacement habitat for every 1 acre of habitat lost). Ratios necessary to compensate for Swainson’s hawk foraging habitat will likely be higher than those stated as 1:1 or less does not even replace what was lost. The Department recommends removing reference to these replacement ratios.

Bats
Mitigation measure BAT-1 requires a preconstruction survey for active maternity roosts for trees with suitable roost cavities or dense cover designated for removal and these surveys shall be conducted from dusk until dark. The Department recommends that a daytime survey of suitable trees and structures for evidence and habitat assessment is conducted and followed up with nighttime emergence surveys to detect presence.

Aquatic Species
The EIS/EIR includes references in Table 4.5.1. Special-Status Fishes With the Potential to Occur in the Project Study Area, Sacramento River winter-run Chinook salmon that reference juvenile salmonid migration timing. The EIS/EIR states “Anadromous, expected to occur in the Lower Sacramento River as adults, migrating upstream in December–July (peak in March) (Moyle 2002), and as juveniles migrating downstream soon after fry emerge, typically beginning in August and peaking in September and October (Vogel and Marine 1991). The Sacramento River channel is the main migration route for winter-run juveniles, and smolts (i.e., juveniles that are physiologically ready to enter seawater) may migrate through the Sacramento River East Levee Improvement area to the ocean in November–May (Yoshiyama et al. 1998).” These references highlight the variable nature of juvenile outmigration. Department surveys (published and unpublished occurring near Knights Landing (closest nearby study with this stock) in the Sacramento River suggest juvenile winter-run emigrate in the lower Sacramento River October through April. Furthermore, emigration may be
influenced by dry conditions. The Department recommends developing a
contingency strategy during drought conditions.
The EIS/EIR states that "Central Valley steelhead would not typically occur in
Arcade Creek, as this stream regularly lacks water quality conditions for
spawning" (page 4.5-17, line 12-13). The Department recommends including a
reference to this data.
The EIS/EIR states that "The Sacramento River channel is the main migration
route for winter-run juveniles; however, the Sutter and Yolo Bypasses also
provide significant outmigration passage during higher flow events" (page 4.5-
18, line 29-30). However, the proportion of outmigrants that use the bypass is
unknown. Only an occurrence when flow events top flood relief structures
coinciding with winter-run Chinook salmon emigration timing. The Department
recommends clarifying this statement that winter-run Chinook salmon will be in
the area regardless if the Sutter and Yolo bypasses are active.
Borrow Sites/Floodplain Restoration
The EIS/EIR states that SAFCA has identified three preferred borrow sites to
provide suitable material for levee improvements for the North Sacramento
Streams Levee Improvements. Site 1 - is located on the grounds of a new high
school, near Sorento Road and East Levee Road, Site 2 - is located above the
water surface in the adjacent NEMDC channel, and Site 3 - is located in an area
north of Robla Creek and the Dry Creek south Levee, east of Rio Linda
Boulevard. The Department recommends that borrow sites should not occur
along sides of levees, in river channels or flood plains. As water recedes after
flood events, all fish species are subject to becoming entrained in borrow pits.
The Department recommends that the EIS/EIR include specific measures to
reduce impacts from the borrow sites to less than significant level.
Exhibit 3-9 of the EIS/EIR shows the proposed borrow area locations. The
Department recommends separating the borrow sites into their own Exhibits to
better illustrate their proximity to the levee and water course.
Snags
Table 4.6 indicates that the Project will remove 45 snags. Snags provide a specific
habitat component for wildlife species which will not be mitigated for through
replanting. The Department recommends retaining snags wherever feasible and
proposing mitigation to offset those that must be removed through onsite
preservation of snags or other appropriate measure.
Jurisdictional Riparian Habitat
The Department is concerned with the project's impacts to riparian habitat. While
it is possible that the total trees/ acres of riparian habitat and individual trees being
removed compared to what is present as a whole many not be significant, but at
specific locations it may. The Sacramento River East Levee project has the
majority of the tree removal and very limited existing habitat. There are very few
large trees along this stretch of river, so for the species that depend on them in
that location it is potentially more significant of an impact that at other locations.
Also the single large riparian trees removed at this location may be providing
habitat those plantings off-channel may not provide ever or for many years. This
may not be in-kind mitigation if it does not replace the functions and values of
what is being removed. The Department recommends further
evaluation/discussion of impacts of loss of riparian and large trees in the
Sacramento River East Levee project area.
The mitigation being proposed for the amount of riparian habitat and high-hazard
trees being removed is unclear for how much existing habitat is being impacted at each location. The Department recommends adding to both the Forestry Resources section and the BIO section one table showing for each project the acres of existing riparian habitat, riparian habitat being removed, and what is proposed for mitigation so the impacts relative to each site and cumulatively are clear to the reader.

BIO-10-MM-Section 1602 states that “Valley oak woodland removed as a result of project actions shall be replaced on a no-net-loss basis in the same manner as riparian habitats covered under Section 1602 of the California Fish and Game Code.” The Department recommends that mitigation measure BIO-10 clarify what will be implemented per the “no-net-loss basis”. The Department recommends that permanent removal of riparian vegetation should be mitigated at a minimum of a 3:1 ratio and restoration is implemented on protected lands only, to ensure that long-term viability and ecological services will be assured.

Consistency with the Central Valley Flood Protection Plan and Conservation Strategy

Page 3-51 says that SAFCA’s Conservation Strategy is consistent with the 2012 Central Valley Flood Protection Plan (CVFPP) and the Lower Sac/Delta North Regional Flood Management Plan (RFMP). In January of 2015, Department of Water Resources (DWR) released a public draft of the Central Valley Flood System Conservation Strategy (CVFSCS) to support both the CVFPP and RFMP which presents measurable objectives that can be incorporated into flood risk reduction projects and programs to contribute to ecological improvements within the flood management system. The Department encourages SAFCA to read the CVFSCS and ensure consistency with it including incorporating the measurable objectives into your projects and Conservation Strategy whenever feasible.

South Sacramento Habitat Conservation Plan

The South Sacramento County Habitat Conservation Plan (SSCHCP) is a regional approach to addressing issues related to urban development, habitat conservation, and agricultural protection. While the SSCHCP has not been adopted yet, activities and mitigation requirements should be consistent with the developing plan. The Department recommends coordinating with the developing SSCHCP to ensure consistency.

Summary

The proposed project will have an impact to fish and/or wildlife habitat and should be evaluated in such a manner to reduce its impacts to biological resources. Assessment of fees under Public Resources Code §21089 and as defined by FGC §711.4 is necessary. Fees are payable by the project applicant upon filing of the Notice of Determination by the lead agency.

Pursuant to Public Resources Code §21092 and §21092.2, the Department requests written notification of proposed actions and pending decisions regarding the proposed Project. Written notifications shall be directed to: California Department of Fish and Wildlife Region 2, 1701 Nimbus Road, Rancho Cordova, CA 95670.

Thank you for considering our concerns for the proposed project. Department personnel are available for consultation regarding biological resources and strategies to minimize impacts. If you have questions please contact Kursen Sheridan, Environmental Scientist, by e-mail at Kursen.Sheridan@wildlife.ca.gov or by phone at (916) 358-2950.
Thank you,
Kursten
Kursten Sheridan
Environmental Scientist
California Department of Fish & Wildlife
North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670
916.358.2950
Kursten.Sheridan@wildlife.ca.gov
www.wildlife.ca.gov
COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and
privileged material for the sole use of the intended recipient. Any review,
copying, or distribution of this email (or any attachments thereto) by other
than the County of Sacramento or the intended recipient is strictly prohibited.
If you are not the intended recipient, please contact the sender immediately
and permanently delete the original and any copies of this email and any
attachments thereto.

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive
this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this
information and you should destroy the e-mail and any attachments or copies.
The comment states that the California Department of Fish and Wildlife (CDFW) reviewed the DEIR for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project. The comment summarizes CDFW’s roles as a trustee agency and as responsible agency, and further summarizes the project activities, locations, and schedule.

The comment provides a brief summary of the project and CDFW’s roles and review; no response is required.

The comment states that CDFW is primarily concerned with the project’s impacts to special-status species, including Swainson’s hawk, giant garter snake, bats, and Sacramento River win-run Chinook salmon, the potential loss of high-quality riparian habitat, and cumulative effects of other projects in the area.

Responses to specific comments raised by CDFW within the body of its letter are provided below.

The comment recommends that the reference to “stream” in the discussion of California Fish and Game Code Section 1602 be changed.

As shown in Chapter 4.6, “Biological Resources – Terrestrial,” page 4.6-4 of the DEIR has been modified as shown:

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by CDFW, or to affect riparian vegetation, or to use any material from the streambeds, without first notifying CDFW of such activity and obtaining a final agreement authorizing the activity.

“Stream” is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake, or associated riparian vegetation. Portions of the project study area that are anticipated to be subject to CDFW jurisdiction are discussed below under “Sensitive Habitats,” in Section 4.6.2, “Environmental Setting.” Activities associated with the proposed project that could result in alteration of areas under CDFW jurisdiction would require a streambed alteration agreement.

The comment describes the process for issuing a California Endangered Species Act (CESA) take permit; no response is required.
The comment indicates that the State listing status of the California tiger salamander was misidentified in the DEIR.

As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” Table 4.6-3, page 4.6-22 of the DEIR has been modified as shown:

<table>
<thead>
<tr>
<th>California tiger salamander</th>
<th>FT</th>
<th>ST</th>
<th>Vernal pools and other seasonal wetlands with adequate inundation period and adjacent uplands, primarily grasslands, with burrows and other refugia; no known occurrences in the project vicinity.</th>
<th>No potential to occur.</th>
<th>No potential to occur.</th>
<th>No potential to occur.</th>
<th>No potential to occur.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambystoma californiense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The comment states that it is not clear how the project sites were determined to fit under the term “building sites” in the description of the California Native Plant Protection Act. The comment recommended a text change; however, the recommended text was identical to the text already in the DEIR.

The project sites are areas where levee improvement actions would be taken to address channel roughness, floodwater conveyance capacity, levee seepage, foundation stability problems, and erosion and improve essential fish habitat and bank protection. These improvements would require construction of various improvements including cutoff walls, relief wells, drain trenches, landside berms, toe drains, and also the placement of embankment protection materials. Therefore, the project sites were determined to be building sites. The comment does not provide specific information to indicate the determination of the project sites as building sites is inadequate or erroneous and does not suggest that an alternative determination should be made. There is no specific definition in the California Fish and Game Code for “building sites.”

The comment recommends that the DEIR clarify how the project sites were determined to be “building sites.” The comment also seemed to recommend the addition of text to the discussion of the California Native Plant Protection Act.

As discussed above in Response to Comment A4-6, because levee improvements would require construction of various improvements including cutoff walls, relief wells, drain trenches, landside berms, toe drains, and also the placement of embankment protection materials, the project sites were determined to be building sites.

As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” page 4.6-3 of the DEIR, the text has been modified as suggested by the commenter to state: “Take of State-listed rare plants that may occur as a result of the proposed project may be permitted through an incidental take permit or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, Section 786.9 subdivision (b).”

The comment states that ground-disturbing activities in suitable habitat for giant garter snakes during any time of year have the potential to injure, harm, or kill giant garter snakes. The
comment recommends modifying Giant Garter Snake Conservation Measure GGS-3, which pertains to seasonal work restrictions, be modified to reflect this.

Giant Garter Snake Conservation Measure GGS-3, “Limit Ground Disturbance within 200 Feet of Suitable Giant Garter Snake Habitat and Conduct Activities Between May 1 and October 1, Unless Authorized by USFWS,” (see Chapter 3, “Project Description,” page 3-58), is a minimization measure that is recommended by U.S. Fish and Wildlife Service (USFWS) to minimize take, as defined by the Federal Endangered Species Act, of giant garter snake. As GGS-3 is not an impact analysis, it is not appropriate to incorporate the recommended changes. Other avoidance, minimization, and compensation measures within Mitigation Measure BIO-4 would be expected to avoid and minimize, or offset, any impacts that CDFW may determine to result from ground-disturbing activities occurring in suitable habitat for giant garter snakes during any time of year.

A4-9 The comment recommends modifying a portion of the text in Mitigation Measure BIO-4, which states “Alternatively, purchasing credits at a USFWS-approved mitigation bank may be identified as appropriate mitigation,” because the giant garter snake is both Federally and State-listed and the mitigation bank should be approved by both USFWS and CDFW.

As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” page 4.6-122 of the DEIR, the text in Mitigation Measure BIO-4 has been modified as suggested by the commenter to state: Alternatively, purchasing credits at a USFWS-approved mitigation bank approved by both USFWS and CDFW may be identified as appropriate mitigation.

A4-10 The comment recommends that references to replacement ratios for impacts to Swainson’s hawk foraging habitat be removed from Mitigation Measure BIO-7b.

SAFCA acknowledges that, if any mitigation is required to offset impacts to Swainson’s hawk foraging habitat, mitigation ratios will be determined in coordination with CDFW. Therefore, as shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” page 4.6-140 of the DEIR, the text in Mitigation Measure BIO-7b (last bullet) has been modified as suggested by the commenter to state: CDFW shall be consulted regarding the woodland mitigation and potential adverse effects on Swainson’s hawk foraging opportunities. Through consultation, it may be determined that compensation is required to offset adverse effects of foraging habitat loss. If so, an appropriate and feasible mitigation plan will be developed and provided to CDFW, for approval. Compensation may include preserving and/or enhancing Swainson’s hawk foraging habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with CDFW; ratios may vary (typically ranging from 0.5 to 1 acre of replacement habitat for every 1 acre of habitat lost), depending on the proximity of lost habitat to active nests and the habitat protection and management mechanisms. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, participating in the Sacramento County Swainson’s Hawk Mitigation Program or purchasing credits at a CDFW-approved mitigation bank may be identified as appropriate mitigation.
The comment recommends that Mitigation Measure BAT-1 include additional survey components. Therefore, as shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” page 4.6-150 (under Mitigation Measure BIO-9) of the DEIR, has been modified as suggested by the commenter to state: **BAT-1: Conduct Bat Surveys for Active Maternity Roosts for Trees With Suitable Roost Cavities or Dense Cover Designated for Removal.** If removal of trees with suitable roost cavities and/or dense cover must occur during the bat pupping season (April 1 through July 31), surveys for active maternity roosts shall be conducted by a qualified biologist in trees designated for removal. A habitat assessment and daylight survey of suitable trees and structures shall be conducted to determine if there is evidence of suitable roost cavities. These surveys shall be followed up with nighttime emergence surveys, conducted from dusk until dawn, to detect presence. The surveys shall be conducted from dusk until dark.

The comment states that fish migration seasons are more variable than those presented in the DEIR (**Table 4.5-1**), particularly when influenced by dry conditions. The comment recommends developing a contingency strategy during drought conditions.

SAFCA agrees that the timing of juvenile winter-run Chinook salmon outmigration is variable. If CDFW can provide the reports or data from the Knights Landing surveys, SAFCA could revise the outmigrant timing information accordingly.

SAFCA agrees that the timing of juvenile winter-run Chinook salmon outmigration can vary in response to environmental factors including river flow, which is influenced by precipitation and runoff. As stated in the DEIR, storm events and the resulting high-flow and turbidity appear to trigger downstream movement of substantial numbers of juvenile Chinook salmon in the Sacramento River basin. SAFCA assumes that drought conditions may result in later and fewer winter storms, thereby delaying the onset of the peak outmigration period and potentially reducing its duration. A contingency strategy to reduce potential impacts on juvenile and smolt Chinook salmon during drought conditions could therefore include limiting in-water construction work to the period from late spring to fall when juveniles are least likely to be outmigrating through the project area. The DEIR’s resource-specific conservation measure SSF-1 (page 3-66) specifies an in-water construction work window of June–October to avoid impacts to critical salmonid life stages, including outmigrating juveniles. By reducing potential impacts to listed salmonids during all conditions, including drought conditions, this conservation measure serves as a drought-condition contingency strategy. No modifications to the DEIR have been made in response to this comment.

The comment requests that a reference be provided for the statement, “Central Valley steelhead would not typically occur in Arcade Creek, as this stream regularly lacks water quality conditions for spawning” (**DEIR, page 4.5-17, lines 12–13**).

As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” pages 4.5-17 and 4.5-19 have been modified to include parenthetical citations and pages 10-8 and 10-14 of the DEIR have been modified to include the two following references to support information in the DEIR.
The comment recommends clarifying the statement that “the Sutter and Yolo Bypasses also provide significant outmigration passage during higher flow events” (DEIR, page 4.5-18, lines 19–20) because the proportion of outmigrants that use the bypass is unknown.

As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” page 4.5-18 of the DEIR, the statement has been modified as suggested by the commenter: The Sacramento River channel is the main migration route for winter-run juveniles; however, the Sutter and Yolo Bypasses also provide significant outmigration passage and rearing habitat during higher flow events, though the proportion of juvenile winter-run Chinook salmon using the bypasses during these events is unknown.

The comment recommends that borrow sites should not occur along sides of levees, in river channels, or flood plains because of the risk of fish becoming entrained as water recedes. The comment further recommends that the DEIR include specific measures to reduce impacts from the borrow sites to less than significant level.

The grading of borrow sites would not result in fish entrainment because design work on the borrow sites would ensure that the sites would be graded to drain, with the primary goal of enhancing the floodplain for fish species.

As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” the following measures have been added to Chapter 3, “Project Description,” page 3-66 (Section 3.5.1, “Conservation Strategy Avoidance and Minimization Measures,” “Special-Status Fish”), of the DEIR to reduce the potential for fish stranding in borrow areas:

- **SSF-4: Restore Borrow Sites Located on the Waterside of Levees or Within the River Floodplain.** After construction is completed, borrow sites located on the waterside of levees or within the river floodplain would be restored (e.g., filled with non-organic soil) to the extent necessary to eliminate the potential for water retention following flooding or high flow events.

- **SSF-5: Develop, and Where Necessary, Implement, a Fish Rescue Plan.** In the event a borrow site is overtopped with flood water during construction (i.e., prior to restoration), a fish rescue plan (Mitigation Measure BIO-F2) would be implemented to remove fish stranded in borrow areas and release them back into suitable aquatic habitat.
As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” Impact BIO-F5, Fish Entrapment at Floodplain Borrow Sites (Chapter 4.5, “Biological Resources – Fisheries,” pages 4.5-50 through 4.5-52), has been modified as follows:

**IMPACT BIO-F5 Fish Entrapment at Floodplain Borrow Sites.** Implementation of levee improvements in the North Sacramento Streams Levee Improvements area and the NEMDC/Steelhead Creek CMP would include restoration of borrow site 3 and would alter floodplain habitat within the North Sacramento Streams Levee Improvements area, including construction of Borrow Site 2, which could entrap fishes. The NEMDC/Steelhead Creek CMP would remove entrapment and stranding potential, enhancing habitat for native and special-status fishes in the North Sacramento Streams Levee Improvements area, and would improve habitat for native fishes. Therefore, a long-term beneficial impact would occur in the North Sacramento Streams Levee Improvements area. In the short term, fish could become entrapped (stranded) if a borrow site is overtopped with flood water during construction (i.e., prior to restoration), potentially resulting in mortality due to predation or desiccation. This direct, short-term impact would be potentially significant. There are no proposed project elements in the Sacramento River East Levee Improvements Area or the American River and Beach Lake Levees High-Hazard Encroachment and Vegetation Removal area that would affect fish entrapment, thus there would be no impact.

Floodplains bordering NEMDC/Steelhead Creek and the American River contain existing depressions that may entrap juvenile fishes using floodplain rearing habitat as the water recedes. Additionally, the proposed project would add additional depressions at borrow sites within floodplain habitat in support of the levee improvement element. Borrow sites within the stream channel or floodplain would also have the potential to entrap fishes and could provide habitat preferred by nonnative predatory fishes; deep off-channel pools may harbor non-native predatory fish (e.g., bass) which, when reconnected to the main channel during high-flow events, could prey on native listed species, such as outmigrating Chinook salmon and steelhead. The proposed project would grade small drainage swales or remove high mounds between discontinuous depressions that would connect the depressions with the low-flow channel, enabling more complete drainage and escapement of fish as floodwaters recede. After construction is completed, borrow sites located on the waterside of levees or within a floodplain will be restored (e.g., filled with non-organic soil) to the extent necessary to eliminate the potential for water retention following flooding or high-flow events.

**North Sacramento Streams Levee Improvements (Fourth Paragraph)**

As part of the Conservation Strategy, … Construction activities would occur primarily on floodplains, when fish would not be present. After construction is completed, borrow sites would be restored (e.g., filled with non-organic soil) to the extent necessary to eliminate the potential for water retention and fish stranding following flooding or high flow events. Therefore, these proposed project elements would result in a long-term beneficial impact. If a borrow site is overtopped with flood water during construction (i.e., prior to restoration), fish could become stranded and die, resulting in a short-term potentially significant impact. Mitigation Measure BIO-F2 has been identified to address this impact.
Mitigation Measure BIO-F2: Develop and Implement an Approved Fish Rescue Plan to Capture and Relocate Stranded Fish

To minimize fish mortality due to stranding, SAFCA shall prepare a fish rescue plan for approval by State and Federal fish agencies (i.e., CDFW, USFWS, and NMFS) and implemented during the period when borrow sites or other off-channel depressions contain water due to flooding or high-flow events. Development of the fish rescue plan shall include consideration of numerous sampling methods (e.g., seines, electrofishing, and traps) and events, as required by the fish agencies. Fish would be captured alive and transported to nearby suitable habitat for release. The fish rescue would occur under the direction of CDFW.

Timing: During construction.

Responsibility: Sacramento Area Flood Control Agency

Significance after Mitigation: With implementation of Mitigation Measure BIO-F2, the potentially significant impact associated with stranding of special-status fish would be reduced to a less-than-significant level because measures would be implemented to avoid or minimize the possible loss of special-status fish.

A4-16 The comment recommends separating the proposed borrow area locations into their own exhibits to better illustrate their proximity to the levee and water course.

The DEIR adequately describes the proximity of proposed borrow sites to the levee and watercourses; therefore, no new exhibits have been included. Borrow Sites 1 and 3 are set back from banks of the adjacent channels (NEMDC/Steelhead Creek and Robla Creek, respectively). Borrow Site 2 is adjacent to the NEMDC/Steelhead Creek. The site would be graded up to the bank, contoured, and planted to enhance seasonal wetlands and create new wetland habitat in the NEMDC/Steelhead Creek floodplain (see NEMDC/Steelhead Creek CMP Components on page 3-71 and Wetland Habitat Creation and Enhancement at 2K Borrow Site on page 3-79 of Chapter 3, “Project Description” in the DEIR).

A4-17 The comment recommends retaining snags wherever feasible and proposing mitigation to offset those that must be removed through offsite preservation of snags or other appropriate measures.

SAFCA will work to minimize snag removal, and more thoroughly evaluate the snags that need to be removed for compliance with levee safety standards. As discussed in Chapter 3, “Project Description” (Section 3.1.1, “Conservation Strategy Overview and Goals”), Guiding Principle No. 3 for the Conservation Strategy includes “closing gaps in riparian and oak woodland canopy by planting linear mitigation sites in reaches currently devoid of canopy and instream cover, and to expand the extent of shaded riverine aquatic habitat.” Snags are present in the existing woodlands, and would be retained on-site to the extent feasible. New vegetation would expand overall patch size of existing, isolated riparian, and oak woodland groves by enlarging the contiguous size of one or more groves, and by creating connecting woodland corridors across
gaps between existing groves. This expansion would improve the habitat value of existing snags that are adjacent to the woodland planting areas.

A4-18

The comment states that CDFW is concerned with project impacts to riparian habitat, particularly along the Sacramento River East Levee. The comment indicates that off-site mitigation may not replace the functions and values of what is being removed. The comment recommends further evaluation/discussion of impacts of loss of riparian and large trees in the Sacramento River East Levee project area.

SAFCA will consult CDFW on evaluating temporal loss of riparian habitat. See “Sacramento River Habitat Improvements” (pages 3-52 – 3-53) and Section 3.4.2, “Mitigation for Sacramento River Bank Protection Improvements” (pages 3-51 – 3-52), for a more in-depth discussion of the riparian habitat mitigation strategy along the Sacramento River East Levee, which would replace riparian habitat along the channel and support recruitment of native riparian vegetation.

A4-19

The comment recommends adding a table to the DEIR that summarizes for each project site the amount of existing riparian habitat, the amount of riparian habitat to be removed, and the location and amount of corresponding riparian habitat mitigation.

The “Methodology” section in Chapter 4.6, “Biological Resources – Terrestrial,” outlines the impacts to riparian habitats and woodlands, including how the acreage of impact was determined. As shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report,” a new table (Table 4.6-9) has been added to Chapter 4.6, “Biological Resources – Terrestrial,” page 4.6-106 (Section 4.6.3, “Environmental Impacts and Mitigation Measures – Impact Analysis”):

| Table 4.6-9. Comparison of Acreages of Existing and Impacted Riparian Habitat and Woodland in the Arcade Creek and Sacramento River East Levee Study Areas¹ |
|---------------------------------|---------------------------------|
|                                 | Arcade Creek                    | Sacramento River East Levee    |
|                                 | Existing                        | Impacted                       |
|                                 | Landside², Waterside³          | Landside², Waterside³          |
| Riparian Habitat and Woodlands  | 0.91                            | 0.09                           |
|                                 | 16.57                           | 0.12                           |
|                                 | 0.09                            | 0.12                           |
|                                 | 0.91                            | 0.09                           |
|                                 | 16.57                           | 0.12                           |
|                                 | 29.66                           | 76.93                          |
|                                 | 7.78                            | 8.21                           |
| Percent Change                  | Landside = -9.9; Waterside = -0.7; Total = -1.2 |
|                                 | Landside = -26.2; Waterside = -10.7; Total = -15.0 |

Notes:
¹ Study Area is the larger area that was surveyed for natural resources. The project footprint is a subset of the study area.
² Majority of landside woodlands are valley oak woodland.
³ Majority of waterside woodlands are Fremont cottonwood forest.
Source: Compiled by AECOM in 2015

The Conservation Strategy, which is outlined in Chapter 3, “Project Description,” pages 3-53 through 3-56, provides an overview of how and where riparian habitat and woodland impacts
would be mitigated. Any mitigation ratios will be developed in coordination with CDFW. Further, SAFCA will consult CDFW on evaluating temporal loss of riparian habitat. See “Sacramento River Habitat Improvements” (pages 3-52 – 3-53) and Section 3.4.2, “Mitigation for Sacramento River Bank Protection Improvements” (pages 3-51 – 3-52), for a more in-depth discussion of the riparian habitat mitigation strategy along the Sacramento River East Levee, which would replace riparian habitat along the channel and support recruitment of native riparian vegetation.

A4-20 The comment recommends that Mitigation Measure BIO-10 be modified to more clearly explain how valley oak woodland would be mitigated. Further, CDFW recommends that permanent removal of riparian vegetation should be mitigated at a minimum of a 3:1 ratio and restoration be implemented on protected lands.

Mitigation ratios were not discussed in the DEIR; mitigation ratios for valley oak woodlands will be developed in coordination with CDFW during Section 1602 consultation. As discussed in the Conservation Strategy, which is outlined in Chapter 3, “Project Description,” pages 3-53 through 3-56, habitat restoration and mitigation could occur on a combination of public and private lands.

A4-21 The comment encourages SAFCA to read the Central Valley Flood System Conservation Strategy and ensure consistency with it, including incorporating the measurable objectives into the project and Conservation Strategy wherever feasible.

SAFCA is involved in the development and review of the Central Valley Flood System Conservation Strategy.

A4-22 The comment recommends that SAFCA coordinate with the developing South Sacramento County Habitat Conservation Plan to ensure consistency.

SAFCA is involved in the development and review of the South Sacramento County Habitat Conservation Plan.

A4-23 The comment states that assessment of fees under California PRC Section 21089 and as defined by California Fish and Game Code Section 711.4 is necessary.

SAFCA will comply with State law concerning filing fees.
Pete Ghelfi  
Sacramento Area Flood Control Agency  
1007 7th Street, 7th Floor  
Sacramento, CA 95814

Subject: Draft Environmental Impact Report (Draft EIR) for the North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project, Sacramento, Yolo, Sutter & Solano Counties

Dear Mr. Ghelfi:

The California State Lands Commission (CSLC) staff has reviewed the subject Draft EIR for the North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project, Sacramento, Yolo, Sutter & Solano Counties (Project), being prepared by the Sacramento Area Flood Control Agency (SAFCA). SAFCA, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project involves work on sovereign lands, the CSLC will act as a responsible agency. Previous comments were submitted on the Notice of Preparation on June 13, 2014 (attached).

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and 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 but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat
preservation, and open space. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

Based on the information submitted in the Draft EIR, portions of the Project are or may be located on State-owned sovereign land in the Sacramento River and the American River. Portions of the Project that are located in the American River may also be on sovereign land granted to the city of Sacramento pursuant to Chapter 519, Statutes of 1868. To the extent the proposed Project involves State-owned sovereign lands in the Sacramento River and the American River, a lease will be required. Commission staff will need to review each of the specific proposed Project sites prior to determining whether the site involves land under the granted or ungranted jurisdiction of the CSLC and whether a lease is required. Staff’s preliminary review of additional Project sites are as follows:

1) the portions of the Project located in Natomas East Main Drainage Canal (NEMDC) are not under CSLC jurisdiction and therefore do not require a lease; and

2) the portions of the Project including Arcade Creek, Dry Creek, and Robla Creek may involve sovereign lands under the jurisdiction of the Commission, however, we are currently unable to determine the extent or location of any sovereign ownership interests of the State in these Project areas, so no lease will be required for these areas.

If you have any questions, please contact Wendy Hall, Public Land Management Specialist (see contact information below) to discuss the Commission’s leasing requirements.

Please also be advised that the waterways involved in the Project are subject to a public navigational easement. This easement provides that the public has the right to navigate and exercise the incidences of navigation in a lawful manner on State waters that are capable of being physically navigated by oar or motor-propelled small craft. Such uses may include, but are not limited to, boating, rafting, sailing, rowing, fishing, rowing, bathing, skiing, and other water-related public uses. The activities completed under the Project must not restrict or impede the easement right of the public.

Project Description

SAFCA proposes to implement flood control improvements to meet its objectives and needs as follows:

- Reduce flood risk along the Sacramento River, American River, Natomas East Main Drainage, and Arcade Creek in response to withdraw of levee accreditation by the U.S. Army Corps of Engineers.
From the Project Description, CSLC staff understands that the Project would include the following components:

- North Sacramento Streams Levee Improvements
- Sacramento River East Levee Improvements
- American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal
- NEMDC/Steelhead Creek Corridor Management Plan
- The Levee Accreditation Mitigation and Conservation

The Limited Footprint Alternative has been identified as the environmentally superior alternative because it would have fewer potential impacts on environmental resource areas. However, the Limited Footprint Alternative would have substantially higher costs than the proposed Project because of the greater use of Deep Mixing Method construction for the cutoff walls.

**Environmental Review**

CSLC staff requests that SAFCA consider the following comments on the Project’s EIR.

**Water Quality**

1. **Mercury/Methylmercury**: The Draft EIR study area includes the Sacramento River. In-water Project activities could result in turbidity and sediment release. CSLC staff requests that the Draft EIR include avoidance and minimization measures to reduce potential sediment release (and the subsequent release of mercury/methyl mercury) into waterways and onto State lands underlying those waterways.

On April 22, 2010, the Central Valley Regional Water Quality Control Board (CVRWQCB) identified the CSLC as both a State agency that manages open water areas in the Sacramento-San Joaquin Delta Estuary and a nonpoint source discharger of methylmercury (Resolution No. R5-2010-0043), because subsurface lands under the CSLC’s jurisdiction are impacted by mercury from legacy mining activities dating back to California’s Gold Rush. Pursuant to a CVRWQCB Total Maximum Daily Load (TMDL), the CVRWQCB is requiring the CSLC to fund studies to identify potential methylmercury control methods in the Delta and to participate in an Exposure Reduction Program. The goal of the studies is to evaluate existing control methods and evaluate options to reduce methylmercury in open waters under jurisdiction of the CSLC. Any action taken that may result in mercury or methylmercury suspension within the Sacramento-San Joaquin Delta Estuary may affect the CSLC’s efforts to comply with the CVRWQCB TMDL.

**Climate Change**

2. **Sea Level Rise**: Page 4.10-8 states that levee failure induced by sea level rise could lead to critical infrastructure damage in the Sacramento–San Joaquin Delta (Delta); however, no further discussion supporting how the Project would prevent levee
failure as it specifically relates to sea level rise (e.g., will the currently proposed Project provide ample protection based on sea-level rise predictions?).

A tremendous amount of state owned lands and resources under the Commission's jurisdiction will be impacted by rising sea levels. With this in mind, the County should consider discussing in the Draft EIR the effects of sea level rise on all resource categories potentially affected by the proposed Project. Because of their nature and location, these lands and resources are already vulnerable to a range of natural events, such as storms and extreme high tides. Note that the State of California released the final “Safeguarding California: Reducing Climate Risk; an Update to the 2009 California Climate Adaptation Strategy” (Safeguarding Plan) on July 31, 2014, to provide policy guidance for state decision-makers as part of continuing efforts to prepare for climate risks. The Safeguarding Plan sets forth “actions needed” to safeguard ocean and coastal ecosystems and resources as part of its policy recommendations for state decision-makers.

In addition, at its meeting on December 17, 2009, the CSLC approved the recommendations made in a previously requested staff report, “A Report on Sea Level Rise Preparedness” (Report), which assessed the degree to which the CSLC's grantees and lessees have considered the eventual effects of sea level rise on facilities located within the CSLC's jurisdiction. (The Report can be found on the CSLC’s website, www.slc.ca.gov.) One of the Report’s recommendations directs CSLC staff to consider the effects of sea level rise on hydrology, soils, geology, transportation, recreation, and other resource categories in all environmental determinations associated with CSLC leases. When considering lease applications, CSLC staff will (1) request information from applicants concerning the potential effects of sea level rise on their proposed projects, (2) if applicable, require applicants to indicate how they plan to address sea level rise and what adaptation strategies are planned during the projected life of their projects, and (3) where appropriate, recommend project modifications that would eliminate or reduce potentially adverse impacts from sea level rise, including adverse impacts on public access.

Cultural Resources

3. Title to Resources: The information provided in section 4.7 identifies many prehistoric and historic archeological sites within the various Project areas. The Draft EIR should mention that the title to all archaeological sites and historic or cultural resources on or in submerged lands of California is vested in the State and under the jurisdiction of the CSLC (Pub. Resources Code, § 6313). CSLC staff requests that SAFCA consult with Assistant Chief Counsel Pam Griggs (see contact information below) should any cultural resources on State lands be discovered during construction of the proposed Project. In addition, CSLC staff requests that the following statement be included in EIR's Mitigation and Monitoring Plan: “The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the CSLC must be approved by the Commission.”
4. As mentioned on page 4.7-29, Camp Pollock is a known historical built environment resource. Camp Pollock is owned by the State of California and managed by the CSLC. The CSLC has leased Camp Pollock to Sacramento Valley Conservancy. Although the proposed Project’s riparian woodland planting would not involve work on or related to the buildings, would not require the removal of the mature trees at the camp, and would contribute to the camp’s landscape and significance, Sacramento Valley Conservancy may be required to submit an application for a lease amendment prior to planting on this site. Please contact Wendy Hall, Public Land Management Specialist, listed below for additional information.

Thank you for the opportunity to comment on the Draft EIR for the Project. As a responsible and trustee agency, the CSLC will need to rely on the EIR for the issuance of any amended/new lease as specified above and, therefore, we request that you consider our comments prior to certification of the EIR.

Please send copies of future Project-related documents, including electronic copies of the Final EIR, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), CEQA Findings and, if applicable, Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Cynthia Herzog, Senior Environmental Scientist, at (916) 574-1310 or via e-mail at Cynthia.Herzog@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Assistant Chief Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Wendy Hall, Public Land Management Specialist, at (916) 574-0994 or via email at Wendy.Hall@slc.ca.gov.

Sincerely,

Cy R. Ogilvie, Chief
Division of Environmental Planning and Management

cc: Office of Planning and Research
    C. Herzog, CSLC
    W. Hall, CSLC
    S. Blackmon, CSLC
    P. Griggs, CSLC

Attachment
June 13, 2014

Pete Ghelfi
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

Subject: Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project, Sacramento, Yolo, Sutter & Solano Counties

Dear Mr. Ghelfi:

The California State Lands Commission (CSLC) staff has reviewed the subject NOP for an EIR for the North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project, Sacramento, Yolo, Sutter & Solano Counties (Project), being prepared by the Sacramento Area Flood Control Agency (SAFCA). SAFCA, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project involves work on sovereign lands, the CSLC will act as a responsible agency.

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and 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 but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

After review of the information contained in the NOP provided and a preliminary review of our records, CSLC staff has determined that the portions of the proposed Project in the Natomas East Main Drainage Canal and Arcade Creek are not located on State-owned sovereign land under the jurisdiction of the CSLC. It also appears that the portions of the Project in the American River area have been granted by the legislature to the city of Sacramento pursuant to Chapter 519, Statutes of 1868 and as amended, minerals reserved. Therefore, a lease will not be required for these portions of the Project.

The portions of the proposed Project in the Sacramento River, however, are, or may be located on State-owned sovereign land under the jurisdiction of the CSLC. Based on the information submitted in the NOP, we are currently unable to determine the exact extent or location of any sovereign ownership interests of the State. We request as the Project proceeds, SAFCA contact George Asimakopoulos (contact information at the end of this letter) to determine lease and formal authorization requirements from the CSLC for the use of sovereign land.

**Project Description**

SAFCA proposes to implement flood control improvements to meet its objectives and needs as follows:

- Reduce flood risk along the Sacramento River, American River, Natomas East Main Drainage, and Arcade Creek in response to withdrawal of levee accreditation by the US Army Corps of Engineers.

From the Project Description, CSLC staff understands that the Project would include the following components:

- Approximately 12 miles of seepage cutoff walls, associated drainage relief infrastructure, and small improvements for all watercourses;
- Approximately 3,000 feet of bank protection along the Sacramento River East Levee;
- Landslide berms and drainage features such as toe drains along two reaches of the Sacramento River East Levee;
- Removal of hazardous vegetation and encroachments; and
- Implementation of a conservation strategy to satisfy all environmental regulatory mitigation requirements through onsite and offsite actions.

**Environmental Review**
CSLC staff requests that the following potential impacts be analyzed in the EIR.

General Comments

1. **Project Description:** A thorough and complete Project Description should be included in the EIR in order to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives. The Project Description should be as precise as possible in describing the details of all allowable activities (e.g., types of equipment or methods that may be used, maximum area of impact or volume of sediment removed or disturbed, seasonal work windows, locations for material disposal, etc.), as well as the details of the timing and length of activities. Thorough descriptions will facilitate CSLC staff’s determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work that may be performed, and minimize the potential for subsequent environmental analysis to be required.

Biological Resources

2. The EIR should disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project area, including special-status wildlife, fish, and plants, and if appropriate, identify feasible mitigation measures to reduce those impacts. SAFCA should conduct queries of the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service’s (USFWS) Special Status Species Database to identify any special-status plant or wildlife species that may occur in the Project area. The EIR should also include a discussion of consultation with the CDFW, USFWS, and the National Oceanic and Atmospheric Administration (NOAA) Fisheries, including any recommended mitigation measures and potentially required permits identified by these agencies.

3. **Invasive Species:** One of the major stressors in California waterways is introduced species. Therefore, the EIR should consider the Project’s potential to encourage the establishment or proliferation of aquatic invasive species (AIS) such as the quagga mussel, or other nonindigenous, invasive species including aquatic and terrestrial plants. For example, construction boats and barges brought in from long stays at distant projects may transport new species to the Project area via hull biofouling, wherein aquatic organisms attach to and accumulate on the hull and other submerged parts of a vessel. If the analysis in the EIR finds potentially significant AIS impacts, possible mitigation could include contracting vessels and barges from nearby, or requiring contractors to perform a certain degree of hull-cleaning. The CDFW’s Invasive Species Program could assist with this analysis as well as with the development of appropriate mitigation (Information at www.dfg.ca.gov/invasives/).

In addition, in light of the recent decline of native pelagic organisms and in order to protect at-risk fish species, the EIR should examine if any elements of the Project (e.g., changes in bankside vegetative cover) would favor non-native fisheries within the four waterways with proposed levee improvements.
4. **Construction Noise:** The EIR should also evaluate noise and vibration impacts on fish and birds from construction, restoration or flood control activities in the water, on the levees, and for landside supporting structures. Mitigation measures could include species-specific work windows as defined by the CDFW, USFWS, and NOAA Fisheries. Again, staff recommends early consultation with these agencies to minimize the impacts of the Project on sensitive species.

**Climate Change**

5. **Greenhouse Gases:** A greenhouse gas (GHG) emissions analysis consistent with the California Global Warming Solutions Act (Assembly Bill [AB] 32) and required by the State CEQA Guidelines should be included in the EIR. This analysis should identify a threshold for significance for GHG emissions, calculate the level of GHGs that will be emitted as a result of construction and ultimate build-out of the Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures that would reduce them to less than significant.

**Cultural Resources**

6. **Submerged Resources:** The EIR should evaluate potential impacts to submerged cultural resources in the Project area. The CSLC maintains a shipwrecks database that can assist with this analysis. CSLC staff requests that SAFCA contact Senior Staff Counsel Pam Griggs (see contact information below) to obtain shipwrecks data from the database and CSLC records for the Project site. The database includes known and potential vessels located on the State’s tidelands and submerged lands; however, the locations of many shipwrecks remain unknown. Please note that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant.

7. **Title to Resources:** The EIR should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tidelands and submerged lands of California is vested in the State and under the jurisdiction of the CSLC. CSLC staff requests that SAFCA include a provision in the EIR to contact the CSLC immediately should any cultural resources on state lands be discovered during construction of the proposed Project.

**Mitigation Measures**

8. **Deferred Mitigation:** In order to avoid the improper deferral of mitigation, mitigation measures should either be presented as specific, feasible, enforceable obligations, or should be presented as formulas containing “performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way” (State CEQA Guidelines, §15126.4, subd. (b)).

Thank you for the opportunity to comment on the NOP for the Project. As a responsible agency, the CSLC will need to rely on the EIR for the issuance of any new lease as specified above and, therefore, we request that you consider our comments as you
develop the EIR. Please send additional information on the Project to the CSLC as plans become finalized.

Please send copies of future Project-related documents, including electronic copies of the Draft and Final EIR, Mitigation Monitoring and Reporting Program (MMRP), Notice of Determination (NOD), CEQA Findings and, if applicable, Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Mara Noelle, Senior Environmental Scientist, at (916) 574-2388 or via e-mail at mara.noelle@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Senior Staff Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact George Asimakopoulos, Public Land Management Specialist, at (916) 574-0990 or via email at george.asimakopoulos@slc.ca.gov.

Sincerely,

[Signature]

Cly R. Oggins, Chief
Division of Environmental Planning and Management

cc: Office of Planning and Research
    George Asimakopoulos, LMD, CSLC
    Mara Noelle, DEPM, CSLC
    Eric Milstein, Legal, CSLC
    Pam Griggs, Legal, CSLC
The comment summarizes the California State Lands Commission’s (CSLC) jurisdiction and management responsibilities over public trust lands, and notes that portions of the project may require a CSLC lease.

SAFCA understands that CSLC leases may be required, and will work with CSLC to obtain leases as necessary.

The comment notes that because waterways associated with the project are subject to a public navigational easement, project-related activities may not impede public use. The comment also summarizes the project description contained in the DEIR.

SAFCA acknowledges that project-related activities may not impede public use of waterways that are subject to public navigational easements.

The comments requests that the DEIR include mitigation measures to reduce potential sediment release in the Sacramento River, in order to limit the potential for release of mercury/methyl mercury from legacy mining activities.

As discussed in DEIR Section 4.9, “Geomorphology,” and Section 4.19, “Water Quality and Groundwater Resources,” SAFCA will implement several mitigation measures designed to reduce sediment transport, which would also help to limit the potential for release mercury/methyl mercury from legacy mining activities. Mitigation Measure GEO-1 would require that appropriate regulatory permits be acquired and that a Storm Water Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) specifically designed to reduce erosion and sediment transport be implemented. Mitigation Measure GM-1 (pages 4.19-14 through 4.19-16) requires that Conservation Strategy measures to reduce erosion and sediment transport be implemented. Applicable Conservation Strategy measures include:

- Limiting ground disturbance to construction areas and avoiding and limiting disturbance to river and creek banks and habitats when feasible;
- Clearly marking project construction limits to minimize ground and vegetation disturbance;
- Avoid disturbing or exceeding the minimum vegetation removal necessary;
- Replanting or reseeding with native species and monitoring and maintaining growth to ensure success for areas requiring vegetation removal;
- Limiting the amount of rock riprap to the minimum necessary for erosion protection;
- Installing, monitoring, and maintaining erosion control measures that minimize soil or sediment from entering waterways or wetlands;
- Avoiding use of materials in locations where it can erode from normal or expected high flows;
implementing precautionary measures to minimize turbidity/siltation during construction;

• inspecting sediment and turbidity control barriers daily during construction for proper function and replacing them immediately if not functioning effectively;

• removing sediment from sediment controls and implementing proper disposal;

• treating water with silt or mud from construction activities to prevent it from entering live waterways; and

• treating all disturbed soils with appropriate erosion control.

Finally, Mitigation Measure WQ-3 requires that an appropriate discharge and dewatering permit be obtained and that appropriate provisions for dewatering be implemented, including water quality monitoring to adhere to the strict effluent and receiving water quality criteria outlined in the permit. The commenter does not provide specific suggestions regarding additional mitigation measures that CSLC believes should be added. SAFCA believes that the mitigation measures contained in the DEIR provide adequate mitigation related to sediment transport and associated transport of potential legacy sources of mercury.

The commenter states that although sea level rise is mentioned on DEIR page 4.10-8, it is not analyzed in the DEIR, and suggests that such an impact analysis should be added. The comment also notes that CSLC will request information regarding the effects of sea level rise as part of the lease application review process.

The text provided on DEIR page 4.10-8, in Section 4.10, “Greenhouse Gas Emissions,” was intended to serve as a general background to the discussion of greenhouse gases. The California courts have determined that EIRs are only required to evaluate the potential impacts of a project on the environment, rather than potential impacts of the environment on a project (see Ballona Wetlands Land Trust v. City of Los Angeles [2011] 201 Cal.App.4th 455; City of Long Beach v. Los Angeles Unified School District [2009] 176 Cal.App.4th 889, 905; South Orange County Wastewater Authority v. City of Dana Point [2011] 196 Cal.App.4th; and Baird v. County of Contra Costa [1995] 32 Cal.App.4th 1464). The Ballona court specifically determined that an EIR need not examine the potential environmental impacts of sea level rise because that would constitute an impact of the environment on the project. Therefore, this topic does not require evaluation in the EIR.

It is important to note, however, that the proposed project has been designed to minimize future flooding in the Sacramento region.

The comment requests the text of Section 4.7, “Cultural Resources,” be changed to indicate that title to all archaeological sites and historic or cultural resources on or in submerged lands of California is vested in the State and is under the jurisdiction of CSLC. The comment also requests that the DEIR be changed to indicate that the final disposition of any resources recovered on lands under the jurisdiction of CSLC must be approved by CSLC.
The comment that resources on or in submerged lands are under the jurisdiction of CSLC is noted; however, the DEIR does not identify that any such resources would be affected by project-related activities. Therefore, SAFCA does not believe that text changes requested by the commenter are warranted. SAFCA understands that should any such resources be affected by the proposed project, the CSLC would be consulted.

A5-13  
*The comment summarizes the DEIR discussion related to the Camp Pollock historic resource, and notes that an application for a lease amendment may be required prior to project-related riparian planting activities in the vicinity.*

The comment is noted. An application for a lease amendment will be submitted, if necessary.

A5-14  
*The comment requests that CSLC be provided with future project-related environmental documents.*

The CSLC has been added to the project mailing list.
May 1, 2015

Pete Ghelfi, P.E.
Director of Engineering
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

Re: North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project Draft Environmental Impact Report (SCH #2014052038)

Dear Mr. Ghelfi:

Thank you for providing the Delta Protection Commission (Commission) the opportunity to review the Draft Environmental Impact Report for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project (Project).

Proposed projects within the Primary Zone of the Legal Delta must be consistent with the Commission’s Land Use and Resource Management Plan (LURMP). The Commission also provides comments on proposed projects in the Secondary Zone that have the potential to affect the resources of the Primary Zone. Portions of the Project are located within the Secondary Zone of the Legal Delta.

After careful review, we find that the Project provides necessary improvements to the Delta’s levees and flood management system that promotes the protection of life and property. We urge SAFCA to minimize potential impacts to aesthetic, agriculture, biological, cultural, and recreational resources where feasible, particularly with respect to using a 75-acre parcel designated as Prime Farmland for riparian plantings. The Draft EIR states that this parcel is located north of the Stone Lakes National Wildlife Refuge, but a 2010 land status map on the U.S. Fish and Wildlife Service website appears to show the parcel is within the refuge boundaries. Please clarify whether this parcel is within the refuge.

The Commission recommends that SAFCA consider the following LURMP policies and goal in its analysis of the Project:

Land Use, P-3. New non-agriculturally oriented residential, recreational, commercial, habitat, restoration, or industrial development shall ensure that appropriate buffer areas are provided by those proposing new development to prevent conflicts between any proposed use and existing adjacent agricultural parcels. Buffers shall adequately protect integrity of land for existing and future agricultural uses and shall not include uses that conflict with agricultural operations on adjacent agricultural lands. Appropriate buffer setbacks shall be determined in consultation with local Agricultural Commissioners, and shall be based on applicable...
general plan policies and criteria included in Right-to-Farm Ordinances adopted by local jurisdictions.

**Agriculture, P-2.** Conversion of land to non-agriculturally-oriented uses should occur first where productivity and agricultural values are lowest.

**Natural Resources, P-7.** Incorporate, to the maximum extent feasible, suitable and appropriate wildlife protection, restoration and enhancement on publicly-owned land as part of a Delta-wide plan for habitat management.

**Recreation, P-4.** Encourage new regional recreational opportunities, such as Delta-wide trails, which take into consideration environmental, agricultural, infrastructure, and law enforcement needs, and private property boundaries. Also, encourage opportunities for water, hiking, and biking trails.

**Levees Goal.** Support the improvement, emergency repair, and long-term maintenance of Delta levees and channels. Promote levee maintenance and rehabilitation to preserve the land areas and channel configurations in the Delta as consistent with the objectives of the Act.

Thank you for the opportunity to provide input. Please contact Blake Roberts, Associate Environmental Planner, at 916-375-4237 for any questions regarding the comments provided.

Sincerely,

[Signature]

Erik Vink
Executive Director

cc: Don Nottoli, Sacramento County Board of Supervisors
A6-1 The comment states that projects within the primary zone of the legal Delta must be consistent with the Commission’s Land Use and Resource Management Plan (LURMP), and that the Delta Protection Commission (Commission) also provides comments on the projects in the secondary zone, which include the proposed project.

The proposed project is not within the primary zone of the legal Delta.

A6-2 The comment urges SAFCA to minimize potential impacts to aesthetic, agriculture, biological, cultural, and recreational resources where feasible, particularly with respect to using a 75-acre parcel designated as Prime Farmland for riparian plantings.

As discussed in detail in DEIR Section 4.2, “Aesthetics,” Section 4.3, “Agriculture and Forestry Resources,” Section 4.5, “Biological Resources – Fisheries,” Section 4.6, “Biological Resources – Terrestrial,” Section 4.7, “Cultural Resources,” and Section 4.16, “Recreation Resources,” SAFCA believes that the proposed project appropriately minimizes and reduces impacts to impacts to aesthetic, agricultural, biological, cultural, and recreational resources where feasible, including the 75-acre parcel that may be used for riparian plantings. See also Chapter 3, “Project Description,” for a detailed discussion related to minimization of project impacts through implementation of the Conservation Strategy.

A6-3 The comment requests clarification as to whether the proposed 75-acre riparian planting site is located within the boundaries of the Stone Lakes National Wildlife Refuge, or is located to the north of said boundaries.

The proposed 75-acre riparian planting site is located within the approved boundary of the Stone Lakes National Wildlife Refuge; however, the site is owned by Sacramento County Regional Sanitation District, and is not under a conservation easement or cooperative agreement with the USFWS.

A6-4 The comment requests that SAFCA consider the following LURMP policies and goals in the DEIR: Land Use (page 3), Agriculture (page 2), Natural Resources (page 7), Recreation (page 4), and Levees (Goal).

SAFCA notes that the activities associated with the proposed project would not take place within the primary zone of the legal Delta. For the reasons discussed in detail in DEIR Chapter 3, “Project Description,” and in DEIR Sections 4.3, “Agriculture and Forestry Resources;” 4.6, “Biological Resources – Terrestrial;” 4.13, “Land Use and Planning, and Population, Housing, and Employment,” and 4.16, “Recreation Resources,” SAFCA believes that the proposed project would be consistent with the LURMP policies and goal listed by the commenter.
May 1, 2015

Mr. Pete Ghelfi
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814
peteghelfi@saccounty.net

RE: Draft North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project, SCH #2008072060

Dear Mr. Ghelfi:

Thank you for the opportunity to comment on the Draft North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project (Levee Accreditation Project). In addition, we appreciate your assistance in helping us to gain a better understanding of the scope of this project, background information, and project-related regional planning activities. The Delta Stewardship Council (Council) staff is pleased to see that this project is being proposed to improve the regional levee system to reduce flood risk in urban and urbanizing areas and to make the mandatory Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) flood insurance requirements optional for the residents in the areas protected by the project.

The Council has a legally enforceable management framework for the Delta and Suisun Marsh called the Delta Plan. The Delta Plan applies a common sense approach based on the best available science to restore habitat, increase the diversity and efficiency of California’s water supplies, enhance floodplains, improve the Delta’s levee system, and preserve the Delta’s agricultural values. In many cases, the Delta Plan calls for balancing competing needs in the Delta, e.g., protecting and restoring habitat while reducing flood risk. Since a portion of the proposed Levee Accreditation Project activities lie within the legal Delta and play a critical role in maintaining the integrity of the levee system in the Delta, it is essential that our agencies coordinate closely on these types of efforts.

Delta Plan Covered Actions and Certification of Consistency
Through the Delta Reform Act, the Council was granted specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh. The Council exercises that authority through development and implementation of the Delta Plan.

*Core goals* means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The core goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

– CA Water Code §15854

Chair
Randy Fiorini

Members
Aja Brown
Frank C. Colvin, Jr.
John Ferrai
Patrick Johnston
Mary Phipps
Susan Tait

Executive Officer
Jessica R. Pearson
Plan which includes 14 regulatory policies. State and local agencies are required to comply with these 14 regulatory policies.

According to the Delta Reform Act, it is the state or local agency approving, funding, or carrying out the project that must determine if a project is a "covered action" subject to regulations of the Delta Plan, and if so, certify consistency of the project with Delta Plan policies (Water Code Section 85225). Generally, the California Environmental Quality Act (CEQA) lead agency (the Sacramento Area Flood Control Agency (SAFCA), in the case of the Levee Accreditation Project), makes the determination if a project is a covered action. If it is determined that the project is a covered action, SAFCA will need to complete a certification of consistency that demonstrates that the project is consistent with the regulatory policies of the Delta Plan. (Please refer to our website at http://deltacouncil.ca.gov/covered-actions for more information about the covered action process.) Information and analysis needed to support a consistency certification could be taken directly from the EIR for this project.

Council staff has reviewed the draft EIR and has found that several of the proposed risk reduction measures are within the legal Delta and this proposed project may be a "covered action" and, therefore, subject to Delta Plan regulations, although that determination ultimately resides with SAFCA. Consequently, we have identified the issues below that we believe you should consider for the purposes of compliance with both the Delta Reform Act and CEQA.

Comments on the Draft EIR

For this letter, our comments are organized by subject area. Within each subject area we have included information on the Delta Plan policy (or policies) possibly implicated by this project and the requirements of these policies, as well as specific comments on the draft EIR. Where appropriate, we have also provided information on mitigation measures from the Delta Plan’s EIR that should be considered for this project if it is deemed a covered action.

Delta Plan EIR Mitigation Measures

Delta Plan Policy G P1 (23 CCR Section 5002) requires that actions not exempt from CEQA and subject to Delta Plan regulations must include applicable feasible mitigation measures consistent with or more effective than those identified in the Delta Plan Environmental Impact Report (EIR). The Delta Plan’s Program EIR provides a list of mitigation measures to consider including those to address impacts to biological resources and agricultural resources. (Mitigation measures can be found in the Delta Plan Mitigation and Monitoring Reporting Program document, http://deltacouncil.ca.gov/sites/default/files/documents/files/Agenda%20Item%206a_attach%202.pdf.) The Delta Plan mitigation measures most relevant to this project are discussed under the relevant subject area headings below.
Risk Reduction

Delta Plan Policy RR P1 (23 CCR Section 5012) calls for the prioritization of state investments in Delta flood risk management, including levee operation, maintenance and improvements. This policy includes interim priorities categorized as specific goals to guide budget and funding allocation for levee improvements and to assist the California Department of Water Resources (DWR) and the Central Valley Flood Protection Board in achieving a balance in funding the various goals.

According to SAFCA staff, one of the possible funding sources for the Levee Accreditation Project will be existing State grant programs (e.g., DWR’s Urban Flood Risk Reduction Program). To achieve consistency with the Delta Plan, the State of California’s investment in Delta flood risk management (i.e., the State’s cost share for the project) must be consistent with Delta Plan Recommendation RR P1. The objective of this project, as described in the draft EIR, appears to be consistent with one of the goals contained in Delta Plan Policy RR P1: to “Protect existing urban and adjacent urbanizing areas by providing 200-year level flood protection.”

The draft EIR states that the purpose of the proposed action under CEQA is to reduce flood risk to regional urban and urbanizing areas and make the mandatory NFIP flood insurance requirements optional for the residents in the areas protected by the project. We applaud your effort to meet the State requirements for urban level of flood protection. However, we are concerned that the Pocket Area may not attain the State-required 200-year level of flood protection. As the draft EIR indicated, the Levee Accreditation Project is a subset of the GRR project, therefore, it is appropriate and important to review these projects together to ensure that the localized goal of the Levee Accreditation Project would not only be consistent with, but also contribute to, the system-wide goal of the GRR project. According to the risk analyses from the GRR, with the Tentatively Selected Plan (TSP) in place, the flood protection assurance (e.g. non-exceedance probability) for the Pocket Area of Sacramento, given a 200-year flood event, is 94%. Conversely, given the GRR project conditions, the risk analyses show that a levee segment along the American River South Reach (index point A) around River Mile (RM) 8.9 can only provide 65% assurance, given a 200-year flood event. The results of the risk analyses from the GRR for the American River South (ARS) Reach concluded that the Annual Exceedance Probability (AEP) for the ARS Reach as a whole is 1 in 147. Even with a 94% flood protection assurance, given the elevations of the natural terrain and the indicated weak link of the levee system at RM 8.9 along the American River, it is not clear that the Pocket Area will attain the State-required 200-year level of flood protection. However, the GRR states that the TSP (as well as the Locally Preferred Plan) meets the goal of attaining FEMA level accreditation and meets the SB 5 criteria for urban level of protection.

In the final EIR, as this project is a subset of the GRR project, it is important to provide a consistent description and/or supporting risk analyses calculations to address this concern to avoid confusion. If SAFCA determines that the required levels of protection will not be met,
please provide additional information to support the analysis of different alternatives to address this potential issue. This information will be essential for assessing consistency with Delta Plan Policy RR P1.

Habitat Restoration

Our comments regarding habitat restoration pertain to work on the Sacramento River East Levee work and proposed associated off-site mitigation sites, since these areas are located within the legal Delta. There are two regulatory policies in the Delta Plan related to ecosystem restoration actions. Delta Plan Policy **ER P2** (23 CCR Section 5006) states that habitat restoration must be consistent with Appendix 3 of the Delta Plan regulations, which is an excerpt from the 2011 Draft Ecosystem Restoration Program Conservation Strategy. Delta Plan Policy **ER P4** (23 CCR Section 5008) calls for levee projects to evaluate and where feasible incorporate alternatives, including the use of setback levees, to increase floodplains and riparian habitats. The policy also calls for the evaluation of setback levees of certain areas of the Delta including the urban levees addressed in this EIR.

The North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements (Sacramento River East Levee) Project will involve extensive levee improvement work along the east bank of the Sacramento River, mainly along the City of Sacramento neighborhoods of Little Pocket and Pocket. As part of its strategy to achieve levee accreditation under the NFIP, SAFCA proposes extensive vegetation management along the landside, crown and upper 1/3 of the waterside slope of these urban levees. This work will involve removal of large trees it considers “high hazard”, as SAFCA states they may create large soil pit in the event they are uprooted. There will also be impacts to riparian vegetation and terrestrial wildlife associated with construction of centerline slurry cutoff wall trenches, sheet pile cutoff walls, relief wells, stability berms, and toe drains but these activities are not expected to have any appreciable impacts on shaded riverine vegetation benefitting channel margin habitat for fish species. Additionally, SAFCA is planning on a suite of erosion protection measures for the Sacramento River east bank levees that will protect the levees from impacts ranging from shallow, wake-generated erosion to deeper toe scour erosion. These measures will include placement of rock fill above and below the low summer/fall waterline and loss of vegetation in the immediate areas where the rock is being placed, but SAFCA will attempt to minimize any further impacts to riparian habitat and shaded riverine aquatic vegetation. Collectively, the vegetation management proposed by SAFCA along the Sacramento River East Levee will remove over 300 trees on the waterside and nearly 300 trees on the landside slopes of the levees as well as shrubs and herbaceous ground cover. The majority of the trees that will be removed on the waterside slope are native species.

One issue regarding SAFCA’s vegetation management that we are uncertain about is whether SAFCA will be seeking a vegetation variance for the Levee Accreditation Project.
The GRR assumes that a variance from vegetation standards will be requested from and approved by USACE, so we would like clarification whether SAFCA is similarly applying for a vegetation variance for its project and if the draft EIR assumes for the purposes of analysis that a variance would be in place. If SAFCA is seeking a variance, the final EIR should analyze the impacts to riparian habitat, shaded riverine aquatic habitat, and wildlife species with and without a variance.

Your Conservation Strategy proposes to plant shallow-water emergent vegetation within the newly placed rip-rap and plant riparian vegetation on the waterside slope of the levees where the erosion control impacts will occur to mitigate for the loss of shaded riverine aquatic habitat due to levee improvement activities. Such habitat replacement activities will occur in nine different sites, encompassing 3,000 linear feet of levee distributed over four miles of river channel. Additionally, SAFCA has identified eight locations along the Sacramento River east bank, interspersed between the nine levee erosion control sites, where improvement and restoration of riparian habitat could occur to improve upon the existing marginal habitat quality.

We support SAFCA’s effort to find opportunities to improve shaded riverine aquatic habitat, such as improving the eight additional locations along the Sacramento River east levee. However, it is unclear to us whether that additional habitat improvement is feasible because the details of the habitat creation elements have not been developed. Since the levees along the Little Pocket and Pocket neighborhoods are largely on private property, it is uncertain whether SAFCA or other authorities attempting to restore habitat along the eight identified locations will receive approval from the local landowner to do so. The draft EIR acknowledges this uncertainty and states that, if necessary, riparian woodland habitat will be restored off-site on a 75-acre parcel north of the Stone Lakes National Wildlife Refuge and/or within a 20-acre plot inside the Upper Beach Lake Wildlife Area, which is part of the Bufferlands owned and managed by the Sacramento Regional County Sanitation District.

Despite the challenges of executing the restoration of riparian habitat on the eight additional sites along the Sacramento River east bank levees, we recommend that restoration of shaded riverine aquatic habitat along the Sacramento River be prioritized first and foremost. This plan would have co-benefits for both native terrestrial and aquatic wildlife, such as listed native anadromous fish species that use this migratory corridor. Given the tremendous investment by State, federal, and local agencies as well as nonprofit organizations to promote recovery of salmonids and other listed species that use the Sacramento River as a migratory corridor, it is essential to make every effort to minimize impacts to these riparian and channel margin habitats. The off-site mitigation option should only be explored once all options to restore habitat along the Sacramento River channel are exhausted since restoration of the off-site locations would benefit terrestrial species like Swainson’s hawk, but would not benefit fish species.
As acknowledged in the draft EIR under Impact AG-2, SAFCA’s proposal is expected to have potentially significant impacts on riparian habitat. This would be due to removing established riparian vegetation and shaded riverine aquatic habitat through placement of rock fill and its vegetation management plan to remove trees and shrubs it considers detrimental to maintaining levee integrity. The Delta Plan’s EIR Biological Resources Mitigation Measure 4-3 calls for proponents to design projects that avoid impacts that would lead to substantial loss of fish and wildlife habitat. If there will be a loss of habitat for fish and wildlife species from a project, Mitigation Measure 4-3 calls for proponents to replace, restore, or enhance habitats for those species and preserve in-kind habitat.

The impacts on fish and wildlife habitat will range from degradation of channel margin habitat for fish species from in-water placement of rock fill to a loss of riparian trees for terrestrial wildlife. The SAFCA draft EIR’s Mitigation Measure BIO-F1 is intended to help redress the impacts of the levee work to aquatic habitat for fish species through on-site mitigation actions that consist of placement of in-water woody vegetation structure to provide cover for juvenile fish, construction of wetland benches with emergent vegetation plantings, and planting of riparian vegetation. The adverse effects of levee work are expected to last potentially for decades following construction because, while some of the effects will be mitigated through establishment and growth of planted wetland and riparian vegetation, it will take many years for this vegetation to take hold and redress the initial impacts of riparian vegetation removal (e.g., loss of riparian habitat for terrestrial species and loss of shading of nearshore aquatic habitat for native fish species). In SAFCA’s assessment of “high-hazard” trees that should be removed for maintaining levee integrity, large trees (i.e., diameter at breast height greater than 16 inches) are disproportionately targeted. Such trees provide important ecological functions, including serving as potential nesting habitat for Swainson’s hawk, which prefer tall trees, and shading of large areas. It will take decades for newly planted trees to reach the size of the large trees that will be removed and to provide similar ecological functions. Removal of large trees should be avoided to the maximum extent feasible; if removal of such trees is unavoidable, as we recommend above, mitigation for the loss of those riparian trees should only occur along the mainstem Sacramento River instead of an off-site location like the Stone Lakes National Wildlife Refuge site.

Invasive Species

Delta Plan Policy ER P5 (23 CCR Section 5009) calls for avoiding introductions and habitat improvements for invasive nonnative species. This policy states, "The potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem." Analysis on this matter should address both nonnative wildlife species (e.g., introduced sport fish species), as well as nonnative vegetation, including both aquatic and terrestrial weeds. In-water rock fill often provides cover for nonnative predators.
like striped bass, but is often negatively associated with native fish species like Chinook salmon. In the final EIR, please describe how the project will avoid or mitigate impacts associated with in-water rock fill, including the creation of habitat conducive to invasive fish predators which could impact listed native fish.

Delta Plan Biological Resources Mitigation Measure 4-1 includes a requirement that an invasive species management plan shall be developed and implemented for any projects where construction or operation could lead to introduction or facilitation of invasive species establishment. Based on the concerns raised above regarding invasive species, we believe that such a plan is necessary and should be developed soon to help guide site-specific levee improvement designs. This plan is to be developed in consultation with Department of Fish and Wildlife (DFW) and local experts. The invasive species management plan is to include the following elements: nonnative species eradication methods, nonnative species management methods, early detection methods, notification requirements, best management practices for preconstruction, construction, and post construction periods, monitoring, remedial actions and report requirements; and provisions for updating the target species list over the lifetime of the project as new invasive species become potential threats to the integrity of the local ecosystems.

**Land Use Conflicts**

Delta Plan Policy DP P2 (23 CCR Section 5011) states that plans for ecosystem restoration must be sited to avoid or reduce conflicts with existing uses when feasible, considering comments from local agencies and the Delta Protection Commission.

As discussed previously, SAFCA is proposing off-site mitigation for loss of riparian habitat in the event that mitigation along the Sacramento River bank is insufficient or infeasible. The proposed off-site mitigation sites include a 75-acre parcel north of the Stone Lakes National Wildlife Refuge and a 20-acre plot inside the Upper Beach Lake Wildlife Area. The parcel north of Stone Lakes is designated by Sacramento County as Prime Farmland and it is currently in agricultural production, while the site in Upper Beach Lake is not currently used for agricultural purposes but is designated by the County as agricultural land.

According to the draft EIR, the proposed project could result in significant and unavoidable impacts to agricultural resources due to the conversion of important farmland. Council staff appreciates the inclusion of Mitigation Measure AG-1 which includes an agreement between SAFCA and Sacramento County for acquisition of agricultural conservation easements at a ratio of 1:1 to offset some of the impacts from the permanent loss of farmland. We also recommend adding Delta Plan Agriculture and Forestry Resources Mitigation Measures 7-1 and 7-2 to ensure that farmlands are protected to the greatest extent possible. We also recommend that you consult with the Delta Protection Commission regarding ways to minimize impacts on the Delta agriculture.
Encourage Recreation

The Council recommends protecting and improving existing recreation opportunities while seeking ways of providing new, and better coordinated, opportunities. The Delta region offers diverse recreation experiences, such as fishing, hunting, boating, birdwatching, and other nature activities. The Delta also has a variety of recreational facilities, such as campgrounds, parks, picnic areas, and historic towns and buildings. Delta Plan Recommendation DP R11 calls for providing new and protecting existing recreational opportunities in the Delta and Delta Plan Recommendation DP R16 calls for increasing opportunities for recreation on public lands.

Construction-related activities, including staging, for the Sacramento River east levee improvement work will lead to various closures of parks and recreational facilities in Sacramento, mainly in and around the Little Pocket and Pocket neighborhoods. Additionally, the boat ramps at Miller Park and Garcia Bend Park will be temporarily closed. These are major recreational boat launch locations within the Delta serving the Sacramento metropolitan community. To the maximum extent practicable, we recommend avoiding closures of parks and boat launch areas in the Delta. If closures are necessary, their durations should be minimized and SAFCA should work with the City and County of Sacramento to ensure that the impacts to recreation are minimized. We also recommend that the Final EIR incorporate Delta Plan Recreation Mitigation Measure 18-2 which states that if substantial temporary or permanent impairment, degradation, or elimination of recreational facilities causes users to be directed towards other existing facilities, lead agencies shall coordinate with impacted public and private recreation providers to direct displaced users to under-utilized recreational facilities.

Best Available Science and Adaptive Management

Delta Plan Policy G P1 (23 CCR Section 5002) also states that actions subject to Delta Plan regulations must document use of best available science, as defined by Appendix 1A of the Delta Plan (refer to http://deltacouncil.ca.gov/sites/default/files/documents/files/AppB_Combined_2013.pdf). Additionally, this policy calls for ecosystem restoration projects to include adequate provisions for continued implementation of adaptive management, appropriate to the scope of the action. This requirement can be satisfied through the development of an adaptive management plan that is consistent with the framework described in Appendix 1B of the Delta Plan (refer to http://deltacouncil.ca.gov/sites/default/files/documents/files/AppB_Combined_2013.pdf), along with documentation of adequate resources to implement the proposed adaptive management process.

Based on our conversations with SAFCA staff, we understand that no monitoring or adaptive management plans have been developed related to the proposed habitat mitigation and enhancement activities. Prior to implementation of these habitat related actions, SAFCA and
its local levee maintaining partners should develop adaptive management plans consistent with the Delta Plan; particularly the plan’s Appendix C. The uncertainty of whether the proposed habitat mitigation and enhancement measures are able to offset the impacts of the project and provide net benefits for native fish and wildlife species highlights the need for an effective adaptive management strategy and associated monitoring framework. Council staff is available to assist you in developing an adaptive management plan as part of early consultation to promote consistency with the Delta Plan. We suggest including documentation of best available science and an adaptive management plan as an appendix to the final EIR in order to have it available for use in a consistency certification.

Inconsistencies with the Delta Plan

The final EIR should discuss any inconsistencies between the proposed plan and the Delta Plan, as required by 15125(d) of the CEQA Guidelines. Please note that the CEQA guidelines’ Appendix G states that a project that is inconsistent with any applicable land use plan, policy, or regulations may result in a finding of significant impact on biological resources. Based on our initial review of the project, we have found potential inconsistencies with Delta Plan Policies RR P1, ER P5, and G P1 as described above.

Early Consultation

The Council strongly encourages all agencies who propose to approve, fund, or carry out an action in the Delta, as early in the project’s development as possible, to consult with the Council and ensure the project (whether it is a covered action or not) is consistent with the Delta Plan. If SAFCA staff chooses to engage in early consultation, the Council staff will meet with you and offer guidance on determining whether the project meets the definition of a covered action, provided that the ultimate determination in this regard must be made by your agency. Council staff will also work with you to ensure consistency between the project and the Delta Plan’s policies and recommendations. We also can help guide you through the certification process.

As mentioned above, Delta Plan Policy G P1 requires that water management projects document use of best available science and include an adaptive management plan when filing a certification of consistency with the Delta Plan. We recommend that adaptive management for this project incorporate a monitoring, evaluation and reporting program that evaluates whether the project is successfully achieving the goals and objectives for the project. Delta Stewardship Council staff, including staff from the Delta Science Program, can provide early consultation to help in your preparation of documentation of use of best available science and adaptive management.
Next Steps

We look forward to continuing to work with your agency and other local, state, and federal agencies on this project. I encourage you to contact You Chen (Tim) Chao at YouChen.Chao@deltacouncil.ca.gov or Daniel Huang at Daniel.Huang@deltacouncil.ca.gov with your questions, comments, or concerns. We look forward to working with you to ensure consistency of the Levee Accreditation Project with the Delta Plan while also avoiding, minimizing, or mitigating potential environmental impacts.

Sincerely,

Cindy Messer
Deputy Executive Officer
Delta Stewardship Council
The comment notes that the Council is pleased that the project would improve the regional levee system to improve flood control, and summarizes the Delta Plan and the Council’s authority over actions in the Delta and Suisun Marsh. The comment further indicates that the Council has determined that the project may constitute an action that is covered under the Delta Plan and therefore may be subject to Delta Plan regulations and if so, SAFCA will need to complete a certification of consistency that demonstrates that the project is consistent with the regulatory policies of the Delta Plan.

SAFCA will complete the required certification of consistency.

The comment notes that covered actions must include feasible mitigation measures consistent with those identified in the Delta Plan EIR; the comment provides the Internet address where the Delta Plan EIR can be accessed.

The comment is noted. SAFCA believes that mitigation measures contained in the DEIR are consistent with those identified in the Delta Plan.

At the completion of the project, the project improvements would meet the 200-year finding associated with the State’s ULDC. USACE evaluates levels of protection in a different manner than the ULDC requirements.

The comment summarizes the impacts to waterside and landside trees that would result from implementation of levee improvements and vegetation management along the Sacramento River East Levee. The comment states that habitat restoration must be consistent with two regulatory policies in the Delta Plan related to ecosystem restoration actions.

The comment provides a brief summary of the proposed project and identifies the two regulatory policies in the Delta Plan; no response is required.

The comment requests confirmation of whether or not SAFCA would seek a vegetation variance for its Levee Accreditation Project.

As outlined in Section 3.4.2, “Vegetation Management,” of Chapter 3, “Project Description,” on pages 3-48 through 3-50, SAFCA will implement a vegetation management program that complies with the NFIP standards for levee accreditation and the ULDC, which both require removal or modification of vegetation that poses an unacceptably high risk to the performance and safety of a levee either by undermining its structural integrity or by interfering with necessary inspection, operation, and maintenance activities. Thus, SAFCA would only remove vegetation required for construction or for compliance with the ULDC; any remaining vegetation would be addressed as part of the USACE ARCF GRR, local maintaining agencies’ System Wide Improvement Framework, and/or local maintaining agencies’ regular maintenance practices. As stated in the GRR EIS (specifically, Section 1.4.5), USACE indicates that it would pursue a
A variance from the vegetation policy for the lower third of the waterside slope. SAFCA does not intend to seek a vegetation variance.

A7-9

The comment states that, if SAFCA is requesting a vegetation variance for its Levee Accreditation Project, then the DEIR should analyze the impacts to riparian habitat, shaded riverine aquatic habitat, and wildlife species with and without a variance.

The DEIR analyzes the impacts to riparian habitat, shaded riverine aquatic habitat, and wildlife species that would result from the removal of vegetation associated with both levee improvements and vegetation management in the project sites. As stated in the above response to Comment A7-8, SAFCA would not pursue a vegetation variance, and therefore, no additional analysis is necessary.

A7-10

The comment indicates support for SAFCA’s effort to find opportunities to improve shaded riverine aquatic habitat, such as improving the eight additional locations along the Sacramento River East Levee. The comment states that the DEIR acknowledges the uncertainty of whether habitat improvements at these eight locations are feasible and states that, if necessary, riparian woodland habitat will be restored off-site.

The comment provides a brief summary of the proposed project and identifies uncertainties already disclosed in the DEIR; no response is required.

A7-11

The comment recommends that restoration of shaded riverine aquatic habitat along the Sacramento River be prioritized over off-site woodland habitat restoration because off-site habitat restoration would only benefit terrestrial species but not fish species.

SAFCA acknowledges the comment. The Conservation Strategy, which is outlined in Chapter 3, “Project Description,” pages 3-53 through 3-56, provides an overview of how and where riparian habitat and woodland impacts would be mitigated. Mitigation for impacts to shaded riverine aquatic habitat along the Sacramento River would be developed in coordination with the National Marine Fisheries Service (NMFS) and CDFW.

A7-12

The comment summarizes the DEIR’s findings for Impact BIO-F1 [sic AG-2] that the removal of riparian vegetation and shaded riverine aquatic habitat would be potentially significant along the Sacramento River East Levee. The comment acknowledges that Mitigation Measure BIO-F1 would help redress the impacts of the levee work to aquatic habitat for fish species, but raises a concern that large trees are disproportionately affected and that there would be temporal loss of larger trees in the riparian habitat.

The Conservation Strategy, which is outlined in Chapter 3, “Project Description,” pages 3-53 through 3-56, provides an overview of how and where riparian habitat and woodland impacts would be mitigated. Any mitigation ratios would be developed in coordination with CDFW, and, as appropriate, NMFS. Further, SAFCA will consult CDFW on evaluating temporal loss of riparian habitat.
A7-13  The comment recommends that restoration of shaded riverine aquatic habitat along the Sacramento River be prioritized over off-site woodland habitat restoration because off-site habitat restoration would only benefit terrestrial species but not fish species.

SAFCA acknowledges the comment. The Conservation Strategy, which is outlined in Chapter 3, “Project Description,” pages 3-53 through 3-56, provides an overview of how and where riparian habitat and woodland impacts would be mitigated. Mitigation for impacts to shaded riverine aquatic habitat, riparian habitat, and woodland habitat along the Sacramento River would be developed in coordination with NMFS and CDFW.

A7-14  The comment requests that the DEIR describes how the project would avoid or mitigate impacts associated with in-water rock fill, including the creation of habitat conducive to invasive fish predators which could impact listed native fish.

The potential for creating new or improved habitat for nonnative predatory fishes at the levee repair sites is primarily a function of changes in bank substrate size. The use of coarse rock (>6 inch) for erosion protection (i.e., rip-rap) can create gaps, or interstitial spaces, between the rocks that when submerged can provide suitable habitat, including ambush cover, for nonnative predatory fish (USACE 2012). To minimize the creation of suitable predator habitat, rock used for waterside erosion protection would be covered with crushed gravel to minimize interstitial spaces in the rock that could provide habitat for nonnative predatory fish. Additionally, the use of rip-rap would be limited to the amount needed for erosion protection and establishment of planting benches (General Conservation Measure CM-6).

A7-15  The comment recommends that an invasive species management plan be developed in consultation with CDFW and local experts.

As described in the DEIR, the proposed Conservation Strategy would reduce the potential introduction and/or spread of aquatic introduced species during construction activities. Additionally, the measures included in the Conservation Strategy and the NEMDC/Steelhead Creek CMP would ensure that facilitation of invasive fish species establishment (i.e., creation or improvement of habitat for nonnative predatory fishes) would be avoided or minimized as a result of the proposed project. For example, the NEMDC/Steelhead Creek CMP would substantially improve native fish habitat on NEMDC/Steelhead Creek and Dry and Robla Creeks by improving through-flow and removing fish migration barriers and fish stranding sites, and reducing juvenile salmonid predation by eliminating shallow warm-water habitat for nonnative fish species. Along the Sacramento River East Levee, reconstruction of the riverbank following construction would include incorporating instream woody material (IWM; including large woody debris) above the rock bench to develop aquatic habitat for special-status fish, with the intent to provide areas of refuge from high-velocity water and cover from predators. With implementation of these project design features and conservation measures, an invasive species management plan for aquatic species should not be necessary.

A7-16  The comment recommends adding Delta Plan Agriculture and Forestry Resources Mitigation Measures 7-1 and 7-2 to the DEIR to further protect agricultural land that may be used for
riparian plantings at the 75-acre parcel north of the Stone Lakes National Wildlife Refuge and the 20-acre plot inside the Upper Beach Lake Wildlife Area.

Delta Plan Agriculture and Forestry Resources Mitigation Measures 7-1 and 7-2 call for projects to be designed, to the extent feasible, to minimize loss of high-value agricultural land; acquisition of conservation easements; reconnection of disturbed utilities; management of invasive species; placement of buffer zones adjacent to agricultural land; and avoidance of conflicts with Williamson Act Contracts. SAFCA believes that the proposed project is already consistent with the components of these measures, and therefore no changes to the DEIR are required (see DEIR Chapter 3, “Project Description;” Section 4.3, “Agriculture and Forestry Resources;” 4.6, “Biological Resources – Terrestrial;” and 4.13, “Land Use and Planning, and Population, Housing, and Employment”).

A7-17 The comment requests that closure of parks and recreational facilities along the Sacramento River be avoided to the maximum extent practicable, and that if closures are necessary, their durations should be minimized and SAFCA should work with the City and County of Sacramento to ensure that the impacts to recreation are minimized. The comment also recommends that the DEIR incorporate Delta Plan Recreation Mitigation Measure 18-2.

Temporary, short-term closures of the specific parks and recreational facilities along the Sacramento River identified in DEIR Chapter 3 “Project Description,” are required to implement the proposed project; however, SAFCA plans to minimize the duration of closure to the maximum extent practicable. Furthermore, the park facilities that are planned for short-term, temporary closure are not located within the primary zone of the legal Delta. As described in DEIR Mitigation Measures REC 1-a and REC 1-b (in Section 4.16, “Recreation Resources”), SAFCA would coordinate with the City and County of Sacramento, would provide closure notices and locations of alternate facilities, and would repair any damage to existing recreational facilities caused by construction activities. These DEIR mitigation measures incorporate the same requirements contained in Delta Plan Recreation Mitigation Measure 18-2; therefore, no changes to the DEIR are required.

A7-18 The comment recommends that, prior to implementation of habitat mitigation and enhancement activities, SAFCA and its local levee maintaining partners develop adaptive management plans consistent with the Delta Plan, particularly the plan’s Appendix C.

SAFCA will prepare Mitigation and Monitoring Plans and Long-Term Management Plans, as required by and in consultation with regulatory agencies. These plans will describe the management approach and performance monitoring that will occur during habitat establishment and long-term function. SAFCA will review the Delta Plan’s Appendix C for guidance during development of these plans.

A7-19 The comment states that the proposed project may be inconsistent with Delta Plan Policies RR P1, ER P5, and G P1, and that the DEIR is required to discuss potential inconsistencies with the Delta Plan under Section 15125(d) of the State CEQA Guidelines.
With respect to Delta Plan Policy RR P1, the temporary, short-term closure of a few park facilities in Sacramento would not substantially affect the ability of people to recreate in the Sacramento-San Joaquin Delta (Delta) because there are hundreds of other parks and boat launch ramps in the region that provide Delta access; thus, the proposed project would not be inconsistent with policy RR P1. Furthermore, the recreational facilities planned for temporary closure are not located within the primary zone of the legal Delta.

For the reasons stated in response to comments A7-14, A7-15, and A7-18 above, the proposed project would not be inconsistent with Delta Plan policies ER P5 or G P1.

A7-20  *The comment recommends early consultation with the Council for projects in the Delta, regardless of whether or not such actions are covered under the Delta Plan.*

The comment is noted.

A7-21  *The comment recommends development of an adaptive management plan for the project that incorporates a monitoring, evaluation, and reporting program to evaluate whether the project is successfully achieving the goals and objectives for the project.*

See response to comment A7-18.

A7-22  *The comment indicates the Council’s willingness to work with SAFCA on the project.*

SAFCA appreciates the Council’s willingness to work together on the proposed project.
May 1, 2015

Pete Ghelfi
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

Subject: EIR, North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project

Dear Mr. Ghelfi,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the EIR, North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project. SMUD is the primary energy provider for Sacramento County and the proposed project area. SMUD’s vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the EIR, North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project will acknowledge any project impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
  - https://www.smud.org/en/do-business-with-smud/documents/Guide-for-Transmission-Encroachment.pdf. Some of these requirements include the following
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable...
delivery of the proposed project. Please ensure that the information included in this response is conveyed to the project planners and the appropriate project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this project. Again, we appreciate the opportunity to provide input on this EIR. If you have any questions regarding this letter, please contact Emily Bacchini, SMUD Environmental Specialist at (916) 732-6334.

Sincerely,

Rob Ferrera
Environmental Specialist
Environmental Management
Legislative & Regulatory Affairs
Sacramento Municipal Utility District

Cc: Emily Bacchini
Rob Ferrera
Jose Bodipo-Memba
Pat Durham
Joseph Schofield
The comment requests that the DEIR acknowledge project impacts related to overhead and or underground transmission and distribution line easements, utility line routing, electrical load needs/requirements, energy efficiency, and climate change.

The proposed project would require relocation of existing utilities as discussed in DEIR Chapter 3, “Project Description,” the impacts of which are evaluated in Section 4.18-9, “Utilities and Service Systems.” Mitigation Measure UTL-1 (DEIR page 4.18-19), requires coordination with affected utility providers, notification to affected customers, preparation of a response plan for situations where utilities may be inadvertently damaged, and staging of utility relocations to minimize service disruptions. As indicated on page 4.18-7 of the DEIR, the proposed project would have no effect related to new electrical load requirements. The proposed project is a levee improvement project that would provide improved flood protection for the Sacramento region—it does not require the provision of new or expanded electrical services; thus, an evaluation of “energy efficiency” as suggested by the commenter is neither relevant nor required.

With regards to climate change, the California courts have determined that EIRs are only required to evaluate the potential impacts of a project on the environment, rather than potential impacts of the environment on a project (see Ballona Wetlands Land Trust v. City of Los Angeles [2011] 201 Cal.App.4th 455; City of Long Beach v. Los Angeles Unified School District [2009] 176 Cal.App.4th 889, 905; South Orange County Wastewater Authority v. City of Dana Point [2011] 196 Cal.App.4th; and Baird v. County of Contra Costa [1995] 32 Cal.App.4th 1464). An evaluation of climate change would constitute an impact of the environment on the project; therefore, this topic does not require evaluation in the DEIR. It is important to note, however, that the proposed project has been designed to minimize future flooding in the Sacramento region.
Pete Ghelfi  
Sacramento Area Flood Control Agency  
1007 7th Street, 7th Floor  
Sacramento, CA 95814  

Subject: North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project  
SCH #: 2014052038  

Dear Pete Ghelfi:  

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 1, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project’s ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.  

Please note that Section 21104(c) of the California Public Resources Code states that:  

“A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation.”  

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.  

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.  

Sincerely,  

Scott Morgan  
Director, State Clearinghouse  

Enclosures  
cc: Resources Agency
Document Details Report
State Clearinghouse Data Base

SCH# 2014052038  
Project Title  North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project  
Lead Agency  Sacramento Area Flood Control Agency  

Type  EIR  Draft EIR  
Description  SAFCA is proposing to implement flood system improvements to reduce flood risk along the Sacramento River, American River, Natomas East Main Drainage Canal, and Arcade Creek. SAFCA, in response to the U.S. Army Corps of Engineers withdrawing its levee accreditation for the levee systems which include the American River north and south levees, the NEMDC east levee, the Arcade Creek north and south levees downstream of Marysville Boulevard, the Sacramento River east levee from the mouth of the American River to Freeport, and the Beach Lake levees, is evaluating actions that would be needed to re-accredit these levee systems. SAFCA has divided the project into three categories of components.

Lead Agency Contact  
Name  Pete Gelfli  
Agency  Sacramento Area Flood Control Agency  
Phone  916-874-8733  
Fax  
email  
Address  1007 7th Street, 7th Floor  
City  Sacramento  
State  CA  Zip  95814  

Project Location  
County  Sacramento, Yolo, Sutter, Solano  
City  Sacramento  
Region  
Lat / Long  

Cross Streets  North Sacramento/Pocket-Greenhaven-many cross streets within study area  
Parcel No.  Multiple  
Township  

Proximity to:  
Highways  I-5, I-80  
Airports  Rio Linda; Borges-Clarksburg  
Railways  UPRR, Sierra Southern  
Waterways  Sacramento & American Rivers, Arcade Creek, NEMDC  
Schools  Several  
Land Use  Urban, Agriculture  

Project Issues  Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects  

Reviewing Agencies  Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 2; Delta Protection Commission; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Caltrans, District 3 S; Air Resources Board; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; State Lands Commission  

Date Received  03/18/2015  Start of Review  03/18/2015  End of Review  05/01/2015
Letter
A9
Response
Governor's Office of Planning and Research
Scott Morgan, Director
May 4, 2015

A9-1

The comment indicates that the DEIR has been submitted to selected State agencies for review, notes the limitations on comments from responsible agencies (as defined under CEQA), and acknowledges compliance with the State Clearinghouse review requirements for draft environmental documents pursuant to CEQA.

The comment is noted; no response is required.
State Water Resources Control Board

May 6, 2015

Pete Ghelfi
Director of Engineering
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814
PeteGhelfi@saccounty.net

Dear Mr. Ghelfi:

State Water Resources Control Board staff comments on the Draft Environmental Impact Report for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements, also referred to as the Levee Accreditation Project (Project) State Clearinghouse No. 2008072060

The State Water Resources Control Board staff provides these comments on a Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for the Draft Environmental Impact Report for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements/Levee Accreditation Project (Project) to be implemented by the Sacramento Area Flood Control Agency (SAFCA)

Staff of the State Water Resources Control Board (State Water Board) have reviewed this report, as announced at http://www.safca.org/documents/Levee_Certification/2015.03_DEIR_NoArea_Streams/residentquestionandanswers.pdf

SAFCA's Levee Accreditation Project is the focus of a Draft Environmental Impact Report, which is being released for public review. It is a subset of the American River Common Features General Re-evaluation Report (GRR) Project being released in a similar timeframe by U.S. Army Corps of Engineers (USACE). The Proposed Project would address: (1) levee foundation and embankment stability problems (erosion and under seepage vulnerability) along portions of the Sacramento River east levee in the Pocket area and along the lower reaches of the Arcade Creek north and south levees, as well as the lower reach of the NEMDC east levee in North Sacramento; (2) removal of high hazard vegetation and encroachments in and along portions of the American River north and south levees and the Beach Lake levee; and (3) implementation of a corridor management plan (CMP) for the

Felicia Murdock, Chair | Thomas Howard, Executive Director
1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

Recycled Paper
NEMDC/Steelhead Creek aimed at restoring the riparian character of the stream channel, removing invasive non-native plants, and reducing the roughness value so as to lower water surface elevations in large flood events.

Pursuant to CEQA guidelines, California Code of Regulations (CCR), title 14, section 15096, responsible agencies must specify the scope and content of the environmental information germaine to their statutory responsibilities. State Water Board staff has reviewed the Draft EIR to determine if the proposed Project will have significant adverse impacts to water quality and, ultimately, the beneficial use of waters of the state.

We recognize the great importance of flood protection for the communities and farms of the Sacramento River valley and the tributary streams that would be affected by the proposed project. We understand the enormous economic risk and the risk to human life that exists without a safe, functional levee system. However, significant ecological impacts are possible as a result of the proposed project.

In general, we encourage SAFCA to implement alternatives which conserve to the greatest extent the existing riparian vegetation, especially large mature trees.

State Water Board staff has prepared the attached comments on the Draft EIR (see Attachment 1, Table 1). Comments which pertain to the entire project and the entire document, or which are broadly applicable throughout the Draft EIR, are presented first. Specific comments about specific sections of text follow in the table, to facilitate location of the sections that are the subject of the comments.

State Water Board staff again thanks SAFCA for this opportunity to comment on the proposed project. If you have questions regarding any of the comments in this letter or Table 1, please contact:

Cliff Harvey
Environmental Scientist
(916) 558-1709
cillford.harvey@waterboards.ca.gov

Sincerely,

Cliff Harvey
Environmental Scientist

cc: see next page
Mr. Pete Ghelfi

cc: Jay Davis, SAFCA Project Ombudsman
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

Elizabeth Lee
401 Program Manager
Central Valley
Regional Water Quality Control Board
– Sacramento Office
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

May 6, 2015
### Table 1: State Water Board Staff Comments on Specific Contents of the Draft Environmental Impact Report (Draft EIR) for the SAFCA Levee Accreditation Project (Project) State Clearinghouse No. 2008072060

<table>
<thead>
<tr>
<th>GENERAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AUTHORITY</td>
</tr>
<tr>
<td>State law assigns responsibility for protection of water quality in the affected regions to the Regional Water Quality Control Boards (RWQCB); in this case, the Central Valley RWQCB. Any discharges of waste that may affect water quality and, ultimately, the beneficial uses of waters of the state may be regulated by the Water Boards.</td>
</tr>
<tr>
<td>All waters of the state are protected under California law pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne). All surface waters and groundwater are considered waters of the state, which include, but are not limited to, aquifers, drainages, streams, washes, ponds, pools, and wetlands. Surface water bodies may be permanent, intermittent, ephemeral or seasonal. Additional protection is provided for waters of the United States (WUS) under the federal Clean Water Act (CWA).</td>
</tr>
<tr>
<td>The water quality control plans (basin plans) for the affected regions contain policies that the Water Boards use with other laws and regulations to protect water quality. The basin plans provide guidance regarding water quality and how the Water Boards may regulate activities that have the potential to affect water quality within the regions.</td>
</tr>
<tr>
<td>Water Board staff request that the final environmental document refer to the basin plans and incorporate mitigation measures that consider all applicable water quality standards, prohibitions, and provisions found there.</td>
</tr>
<tr>
<td>2. FEDERAL AND STATE JURISDICTION</td>
</tr>
<tr>
<td>Some waters of the state are &quot;isolated&quot; from waters of the U.S., or do not have a &quot;significant nexus&quot; to WUS. It is important to note that some of these non-federal waters of the state may occur in the project area, and may be subject to impacts by the proposed project. When impacts may occur as a result of project activity to any waters of the state that are not also WUS, a Report of Waste Discharge (ROWD) must be submitted to the appropriate Regional Water Quality Control Board, and WDRs must be obtained from that Regional Water Board before the activity commences.</td>
</tr>
<tr>
<td>We request that the Project proponent consult with the Corps and the State Water Board when performing the necessary jurisdictional determinations for surface waters within the project area, to ensure that the full extent both state and federal jurisdictional areas are accurately documented, and to ensure that appropriate regulatory pathways are followed.</td>
</tr>
</tbody>
</table>
3. BENEFICIAL USE ANALYSES

We request that the FEIR/EIS identify and list the beneficial uses of the identified surface waters, as outlined in the basin plans, and evaluate the project's potential impacts to those beneficial uses. All mitigation measures proposed for the protection of surface waters should present evidence that the mitigation avoids, minimizes or compensates for all potentially impacted beneficial uses.

PROJECT-SPECIFIC COMMENTS

4. ANALYSIS OF DREDGE AND FILL IMPACTS TO WATERS OF THE STATE IN THE EXECUTIVE SUMMARY.

Table ES.2 summarizes environmental effects and mitigation measures for three project alternatives. No effects are listed for direct impacts or potential to surface waters of the state, including waters of the U.S.

Table ES.3 includes Impact BIO-10, Disturbance and Loss of Sensitive Habitats, Including Riparian Habitat, and Fill of Jurisdictional Waters of the U.S. and Waters of the State.

Impacts to waters due to the physical manipulation of the channels and levees that are to modified by the proposed Project are not confined to impacts to habitats. The Executive Summary the Final EIR/EIS should address these effects specifically; it should not be assumed that vegetation or habitat impacts are the same as impacts to waters. As stated above, potential impacts that would cause existing TMDL exceedance, or that might affect water bodies listed under CWA section 303(d), or that might be incompatible with any elements of the Basin Plan should be disclosed and analyzed. If such potential

5. PORTER COLOGNE WATER QUALITY CONTROL ACT (Porter-Cologne)

A discussion of Porter Cologne is also provided in section 4.6.1 (p. 4.6-4). This discussion correctly states that, "Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain those standards." For the proposed project, the Central Valley Regional Water Board's Water Quality Control Plan (or Basin Plan) sets forth those standards. This full and correct term should be introduced before subsequent references to the Basin Plan.

The RWQCB does not have "the discretion" to take jurisdiction over areas not Federally regulated under Section 401, as stated here. The RWQCB has the jurisdiction over all waters of the state and is required by law to exercise jurisdiction to control any impact or potential impact that may affect the beneficial uses of waters of the state. The EIR should clearly communicate this statutory authority and responsibility.
Table 1: State Water Board Staff Comments on Specific Contents of the Draft Environmental Impact Report (Draft EIR) for the SAFCA Levee Accreditation Project (Project) State Clearinghouse No. 2008072060

The EIR should therefore disclose any project impacts that may violate any water quality standards found in the Central Valley Region basin plan, which can be found at: [http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml).

If no project impacts would affect any water quality standards, this should be clearly stated in the EIR.

Also note that, for any dredge and fill impacts to waters of the state that are not also Waters of the U.S., a Notice of Waste Discharge to the Regional Water Board would be required, and Waste Discharge Requirements (WDRs) pursuant to Porter-Cologne must be obtained. While it is not likely that non-Federal waters would be encountered in the proposed Project, provision for this circumstance should be outlined in the EIR.

6. COMPENSATORY MITIGATION Section 4.6.3, p. 4.6-107

Mitigation Measure BIO-1 would, when impacts require, implement conservation strategy measures to avoid, minimize, compensate, and reduce impacts and offset loss of special-status plants. For all impacts requiring restoration of temporary impacts, or impacts requiring compensatory mitigation that are not met via mitigation banks or in-lieu fee programs, performance measures and monitoring strategies should be an integral part of the planning process. Performance standards should reflect a full range of stream and wetland functions. Reliance on habitat or species surveys is not sufficient to document recovery of stream and wetland functions. For both near-term and long-term monitoring of site performance, monitoring should be conducted in accordance with guidance provided by the California Water Quality Monitoring Council (see [http://www.mcvwaterquality.ca.gov/monitoring_council/index.shtml](http://www.mcvwaterquality.ca.gov/monitoring_council/index.shtml)). State Water Board staff are available to assist in meeting this recommendation.

7. SECTION 4.6.3 (p.4.6-101) SIGNIFICANCE CRITERIA AND MITIGATION

The description of significance criteria in section 4.6.5 includes activities that would "have a substantial adverse effect on Federally protected Waters of the U.S., including wetlands, as defined by Section 404 of the CWA through direct removal filling, hydrological interruption, or other means.”

This criterion should be restated to include potential to impact waters of the state, and should include reference to potential impacts to any beneficial uses of waters of the state as designated in the Basin Plan. This significance criterion should be provided for all potential impacts that may affect waters of the state, not just the biological impacts.
8. CONSIDERATION OF NON-HABITAT BENEFICIAL USES IN RESTORATION PLANNING

The discussion of Impact HH-1, *Potential Increase in Flood Water Surface Elevations,* (p. 4.12-14) includes this statement:

*“As identified in the Flood Protect Potential Conservation Sites report (FloodProtect 2014, Appendix A) prepared by the Lower Sacramento/Delta North Region Flood Management Plan (RFMP) group, impacts caused by levee improvements and high-hazard tree removal along Arcade Creek would be mitigated on-site by improving and expanding native wetland and riparian habitat within the stream reach between Rio Linda Boulevard and Marysville Boulevard.”*

Any stream “habitat improvements” that arise from the proposed project, including those at Arcade Creek, should be designed with consideration of a full range of stream functions and beneficial uses. Habitat is important, but habitat is not the only function provided by streams and wetlands.

9. ANTIDEGRADATION


If these are not the intended topics of discussion here, please provide legal or other citation of the source of the policy under discussion.
The comment summarizes the proposed project, acknowledges the importance of flood protection, and indicates that the State Water Resources Control Board (SWRCB) believes that significant ecological impacts may occur. The comment encourages SAFCA to preserve, to the greatest extent possible, the existing riparian vegetation, including large mature trees.

As described in detail in Chapter 3, “Project Description,” the proposed project includes a comprehensive Conservation Strategy to protect, avoid, minimize, reduce, and compensate for ecological impacts. Because certain mature trees pose a threat to levee stability, and therefore compromise the flood safety for the Sacramento region, certain “high-hazard” trees within the levee footprints have been identified for removal (see DEIR Chapter 3, “Project Description,” and Section 4.6, “Biological Resources – Terrestrial”). SAFCA understands the need to preserve riparian vegetation to the greatest extent possible.

The comment also briefly discusses the authority of the Central Valley Regional Water Quality Control Board (RWQCB), and summarizes the Porter-Cologne Water Quality Act (Porter-Cologne Act), the CWA, and the Basin Plan. The comment requests that the DEIR refer to the Basin Plan and incorporate mitigation measures that consider “all applicable water quality standards, prohibitions, and provisions found therein.”

The regulatory authority of the SWRCB and the Central Valley RWQCB, as well as the Porter-Cologne Act, the CWA, and the Basin Plan, are discussed in DEIR Section 4.19, “Water Quality and Groundwater Resources,” on pages 4.19-1 through 4.19-4. SAFCA understands that the proposed project is required by law to adhere to all of the relevant provisions of the above-named authorities, laws, rules, regulations, ordinances, and policies. Thus, mitigation measures requiring comprehensive compliance with all such authorities, laws, rules, regulations, ordinances, and policies is not required.

The comment notes that waters of the State may be affected by project-related activities, indicates that waste discharge reports (WDRs) may be required, and requests that SAFCA consult with USACE and SWRCB to determine wetland jurisdictions.

Waters of the State and the protection thereof are discussed in DEIR Section 4.6, “Biological Resources – Terrestrial,” on pages 4.6-4 and 4.6-5; impacts and mitigation measures related to waters of the State are presented in Impact BIO-10 (pages 4.6-153 through 4.6-160). SAFCA understands that WDRs may be required, and SAFCA will submit proposed wetland delineations, which are currently in process to the appropriate jurisdictional authorities for verification.

The comment requests that the DEIR identify and evaluate potential effects on the beneficial uses of affected water bodies, and that mitigation measures should be included as appropriate.

Impacts on water bodies that would be affected by project-related activities are identified in DEIR Section 4.9, “Geomorphology,” and Section 4.19, “Water Quality and Groundwater Resources.”
The proposed project includes a comprehensive Conservation Strategy (discussed in detail in DEIR Chapter 3, “Project Description”), which provides an overall framework for protecting, avoiding, minimizing, reducing, and compensating for ecological impacts, including the protection of beneficial uses of affected water bodies. DEIR Mitigation Measure GM-1 (pages 4.19-14 through 4.19-16) requires that numerous Conservation Strategy measures to reduce erosion and sediment transport be implemented (see response to comment A5-7 above)—these measures would protect beneficial uses of affected water bodies. In addition, DEIR Mitigation Measures GEO-1, HAZ-1, and WQ-3 would protect beneficial uses by requiring acquisition of appropriate regulatory permits, preparation and implementation of a storm water pollution prevention plan and associated best management practices, preparation and implementation of an accidental hazardous materials spill and countermeasures plan, and acquisition of a dewatering permit that would include water quality monitoring to ensure adherence to the effluent and receiving water quality criteria outlined in the permit along with treatment or proper disposal of the water prior to discharge if it is contaminated (see DEIR pages 4.8-16 through 4.8-17, 4.11-15 through 4.11-17, 4.19-14, and 4.19-21). Therefore, no changes to the DEIR are required.

The comment refers to Impact BIO-10, which considers impacts to sensitive habitats and jurisdictional waters, and states that although Table ES-2 does not include these impacts, they are included in Table ES-3. The comment further states that the DEIR should not assume that impacts to sensitive habitats are the same as impacts to waters.

Table ES-2 provides a summary of the project-level impacts and mitigation measures. Impact BIO-10 is included in Table ES-2 on DEIR pages ES-25 through ES-27. Impact BIO-10 addresses both sensitive habitats and jurisdictional waters, including waters of the State. They are combined within the same impact because the topics are related to one another. The impact analysis does not assume that impacts to sensitive habitats and impacts to jurisdictional waters are one and the same; they are discussed separately in Impact BIO-10 and they are summarized separately in Table ES-2. Table ES-3 provides a summary of the proposed project’s significant and unavoidable impacts—there are no impacts related to biological resources (including wetlands), or to water quality, in Table ES-3. Impacts related to water quality are addressed in DEIR Section 4.19, “Water Quality and Groundwater Resources,” and are summarized in Table ES-2 on page ES-47.

The comment requests that potential impacts that would cause existing total maximum daily load (TMDL exceedance), or that might affect water bodies listed under CWA section 303(d), or that might be incompatible with any elements of the Basin Plan, be disclosed and analyzed in the DEIR.

See response to comment A10-3.

The comment acknowledges the discussion of the Porter-Cologne Act on DEIR page 4.6-4, but requests that the text be modified to specifically state the name of the applicable Basin Plan.

SAFCA understands that the proposed project is under the jurisdiction of the Central Valley RWQCB’s Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins, which is described on page 4.19-4 of DEIR Section 4.19, “Water Quality and
Groundwater Resources.” SAFCA notes that the comments submitted by SWRCB throughout its letter are primarily related to water quality, and therefore DEIR Section 4.19, “Water Quality and Groundwater Resources,” is the primary location where this topic is addressed.

A10-7 The comment requests that the text on page 4.6-5 of the DEIR indicating that SWRCB has discretion to take jurisdiction be revised to more clearly indicate SWRCB’s jurisdictional authority.

The text on page 4.6-5 of the DEIR is hereby revised as follows: “The RWQCB has the discretion to take jurisdiction over areas not Federally regulated under Section 401, provided they meet the definition of waters of the State.”

A10-8 The comment requests that the DEIR disclose any project impacts that may violate any water quality standards found in the Central Valley RWQCB’s Basin Plan.

Impacts to water quality are addressed in DEIR Section 4.19, “Water Quality and Groundwater Resources.” See response to comment A10-3.

A10-9 The comment notes that WDRs may be required for dredge and fill in waters of the State.

SAFCA is aware that WDRs may be required, and will obtain all applicable permits prior to construction.

A10-10 The comment indicates that performance measures and monitoring strategies should be included as part of Mitigation Measure BIO-1.

Mitigation Measure BIO-1 requires implementation of the Conservation Strategy, which is an element of the proposed project. The Conservation Strategy is discussed in detail in Chapter 3, “Project Description,” and it includes both performance measures and monitoring strategies.

A10-11 The comment suggests that the significance thresholds related to biological resources should be changed to include potential impacts to waters of the State in addition to waters of the U.S. The comment also states that the DEIR should evaluate potential impacts to waters of the State and impacts to beneficial uses indicated in the Basin Plan for any affected water bodies.

Both waters of the U.S. and waters of the State are discussed throughout DEIR Section 4.6, “Biological Resources – Terrestrial,” and impacts to waters of the State are evaluated in Impact BIO-10 (pages 4.6-153 through 4.6-160). As discussed in Impact BIO-10, potential fill of waters of the State from project-related activities is considered a potentially significant impact. Mitigation Measure BIO-10 would require the implementation of Conservation Strategy measures designed to protect, avoid, minimize, reduce, and compensate for fill of waters of the State, and would require that Section 404, 401, and 1602 permits (and the actions associated with those permits that are designed to protect the environment) be obtained and implemented (see DEIR pages 4.6-155 through 4.6-157). With regards to impacts related to beneficial uses of water bodies as assigned by the Basin Plan, see response to comments A10-1 and A10-3. Therefore, no changes to the DEIR are required.
The comment indicates that habitat improvements associated with the proposed project, including those at Arcade Creek, should be designed with stream functions and beneficial uses in mind.

The Conservation Strategy has been designed to protect, avoid, minimize, reduce, and compensate for project-related impacts, including those associated with habitat improvements in Arcade Creek, along with stream functions and beneficial uses. The Conservation Strategy measures are described in detail in Chapter 3, “Project Description.” See also DEIR Section 4.9, “Geomorphology,” related to stream functions.

The comment indicates that it is unclear as to which policy is referred to under the discussion of the “California State Nondegradation Policy” on page 4.19-3 of the DEIR.

The heading and text on DEIR page 4.19-3 are hereby revised as follows:

**California State NonAntidegradation Policy**

In 1968, as required under the Federal antidegradation policy, the SWRCB adopted a nonantidegradation policy aimed at maintaining high quality of waters in California (i.e., the *Statement of Policy with Respect to Maintaining High Quality Waters in California, State Water Board Resolution No. 68-16*). The nonantidegradation policy states that the disposal of wastes into State waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the State. Any discharges associated with the proposed project would be required to comply with this policy. The nonantidegradation policy provides as follows.

- Where the existing quality of water is better than required under existing water quality control plans, such quality must be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the State and would not unreasonably affect present and anticipated beneficial uses of such water.

- Any activity which produces waste or increases the volume or concentration of waste and which discharges to existing high-quality waters is required to meet waste discharge requirements, which are intended to ensure: (1) pollution or nuisance does not occur, and (2) the highest water quality consistent with the maximum benefit to the people of the State is maintained.
Comment and ext request. File pls. Thx.

Sent from my iPad

Begin forwarded message:

From: SAFCA Levee Accreditation Program <PeteGhelfi@sacounty.net>
Date: April 28, 2015 at 9:48:24 PM CDT
To: "francine.dunn@aecom.com", "francine.dunn@aecom.com",
"jdavis@gualco.com", "jdavis@gualco.com", "aliatayyeh@gmail.com"
Subject: FW: SAFCA Levee Accreditation Project - request for comment period extension

By way of introduction, I am the staff person at the State Water Resources Control Board, Division of Water Quality - 401 Certification Unit assigned to the review of the SAFCA Levee Accreditation Project Draft Environmental Impact Report (State Clearinghouse No. 2008072060), and the Draft EIR for the American River Common Features General Re-evaluation Report (GRR) Project being released in a similar timeframe by U. S. Army Corps of Engineers (SCH No. 2009012081).

Given the complexity and importance of these projects, and so that we can provide comments that we hope will be more concise and helpful, we are concerned that we may not have sufficient time to fully review your project in the context of the GRR.

The public comment period for the GRR has just been extended to May 18, 2015. Given the interrelationships of the GRR and the SAFCA Levee Accreditation Project, we would like to request that you extend the public comment period for your project Draft EIR at least until May 18.
Thank you for your consideration of this request.

Cliff Harvey
Environmental Scientist
Division of Water Quality, 401 Unit
State Water Resources Control Board
1001 I St., 15th Floor
Sacramento, CA
A11-1 The comment requests an extension of time until May 18 for the State Water Resources Control Board Division of Water Quality - 401 Certification Unit to review the DEIR, citing an extension also granted to SWRCB for review of the ARCF GRR EIS.

Due to time constraints necessary for the start of project-related construction activities (if the EIR is certified and the proposed project is approved) SAFCA believes that the current 45-day comment period provides SWRCB with sufficient time to review the proposed project. Therefore, the requested extension of time has not been granted. However, a comment letter (A10) was received from Mr. Harvey, and responses to Mr. Harvey’s comments were provided as a courtesy.
STATE OF CALIFORNIA

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 372-3710
Fax (916) 372-5471

Terris L. Robinson, General Counsel
(916) 372-3716
Terris.Robinson@nahc.ca.gov

VIA EMAIL

July 15, 2015

Don Nottoli, Chair
Richard M. Johnson, Executive Director
Sacramento Area Flood Control Agency
1007 7th Street
Sacramento, CA 95814

Re: Public Comment of the California Native American Heritage Commission on the
Sacramento Area Flood Control Agency Meeting July 16, 2015 Agenda Item 2, North
Sacramento Streams, Sacramento River East Levee, Lower American River, and Related
Flood Improvements Project --- Opposition to Approval of the Final Environmental
Impact Report

Dear Chairman Nottoli and Mr. Johnson,

The California Native American Heritage Commission (NAHC) is a trustee agency under the
California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., for Native
American sacred sites and burials. It has been brought to my attention by counsel for the United Auburn
Indian Community (UAIC) that the tribal consultation conducted to determine the locations of Native
American sacred sites and burials for the Final Environmental Impact Report (FEIR) for the North
Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood
Improvements Project (Project) may not have been sufficient to adequately locate and protect such sites.
The NAHC would ask that approval of the FEIR be postponed until it has been determined that there has
been sufficient tribal consultation and confidential disclosure of these site locations within the Project so
that they may be avoided or damage to them sufficiently mitigated. I ask that this letter and the
attachments with it be included as part of public comment on Agenda Item 2 for your July 16, 2015
meeting and that the letter be read into the public record.

The NAHC would like to work with SAFCA and all involved to avoid the problems that
inadequate tribal consultation caused with respect to tribal cultural resources within the Sutter Butte Flood
Control Agency’s (SBFCA) Feather River West Levee Project (FRWLP). These problems included
irreparable damage to hundreds of ancient Native American burials; an NAHC investigative report and
subsequent decision to declare numerous burial sites within the FRWLP sacred sites and sanctified
cemeteries pursuant to Public Resources Code section 5097.97 because of the failure to protect them; a
protracted disagreement regarding whether Section 106 of the National Historic Preservation Act required
testing of ancient Native American remains as appropriate mitigation of impacts to Native American

1 Environmental Protection Information Center, Inc. v. Johnson (1985) 170 Cal.App.3d 604,
625-626.
burials despite the fact that many tribes consider such testing sacrilegious (this issue was resolved by the Advisory Council on Historic Preservation); and the decision of the NAHC to seek injunctive relief to protect the aforementioned sites under Public Resources Code sections 5097.94(g) and 5097.97. The NAHC has delayed seeking injunctive relief because UAIC is in negotiations with SBPCA, the U.S. Army Corps of Engineers, and the Central Valley Flood Protection Board (CVFPB) to reach an agreement to protect the affected sites once responsibility for operations and maintenance for the levee passes from SBPCA to CVFPB. The hope is that an agreement reached between these parties will serve as a model for the confidential disclosure of Native American sacred sites and burials as well as the avoidance of, or mitigation of damage to, such sites located within all levee projects in California.

{Because many of California’s levees were constructed long ago without regard to or respect for the ancient Native American village sites and burial mounds that existed along river banks, the likelihood that any levee in California is devoid of Native American burials, villages or sacred sites is remote at best.}

{The NAHC’s position has been that tribes that are traditionally and culturally affiliated with a project area, such as UAIC in this case, are the most knowledgeable about the tribal cultural resources in the area and have a great interest in protecting those tribal cultural resources. These tribes are a rich resource of tribal cultural knowledge and should be respected and consulted.} {In fact, pursuant to AB 52 (Gatto) (Chapter 523, Statutes of 2014), for any Notice of Preparation, Negative Declaration, or Mitigated Negative Declaration prepared after July 1, 2015, tribes must be consulted under CEQA if they have requested notification of projects and subsequent consultation.}

{To provide you some background on what went wrong with the protection of tribal cultural resources within the FRWLP, I have attached a copy of the NAHC’s investigative report as well as the letter from the Advisory Council on Historic Preservation regarding the issue of testing Native American remains as mitigation under Section 106.}

{We would welcome the opportunity to partner with you to avoid the damage and delay that occurred with the FRWLP, given that “[t]he Legislature has determined that the invaluable remnants of the vanished culture of the California Native Americans be protected as much as feasible.” Environmental Protection Information Center, Inc. v. Johnson (1985) 170 Cal.App.3d 604, 627}

Yours very truly,

Terrie L. Robinson
NAHC General Counsel

cc: Cynthia Gomez, NAHC Executive Secretary
    NAHC Commissioners
    Board of Directors, SAFCA
    Holly Gilchrist, General Counsel, SAFCA
    Antonette Cordaro, Deputy Attorney General, Department of Justice
    Brian Guth, Tribal Administrator and General Counsel, UAIC
    Courtney Coyle, Law Offices of Courtney Coyle, Counsel for UAIC
The commenter states that the California Native American Heritage Commission (NAHC) is a trustee agency under CEQA for Native American sacred sites and burials.

The comment is acknowledged. No further response is warranted.

The commenter states that the UAIC has brought to the attention of the NAHC that there has been inadequate Tribal consultation to identify the locations of Native American burial sites and sacred sites for analysis in the FEIR and for protection of those resources.

Although Native American consultation with both the NAHC and with Native American Tribes identified by the NAHC was conducted prior to completion of the DEIR and FEIR (and is documented in the DEIR), extensive additional consultation has occurred with the UAIC and other Tribes and is documented in the “Native American Consultation” section of the revised FEIR. Additional consultation has included meetings, field reviews with UAIC where UAIC identified sensitive locations and where those locations were mapped, and Native American monitoring during investigations. Mitigation measures have been revised to include provisions for continued Native American consultation, avoidance, where feasible, of Tribal Cultural Resources, and other measures consistent with recommendations made by Native American Tribes that have commented on the July 2015 FEIR and who have been consulting on the proposed project.

The commenter requests that approval of the FEIR be postponed until sufficient Tribal consultation has occurred for confidential disclosure of site locations has occurred.

Approval of the July 2015 FEIR was postponed as requested. Substantial additional Native American consultation to determine site locations and appropriate treatment has occurred and is continuing to occur.

The commenter requests that the comment letter be included as part of the public comment agenda for the SAFCA Board meeting on July 16, 2015 and that the letter be read into the public record.

The comment letter was included as part of the public comment agenda for the SAFCA Board meeting on July 16, 2015 and the letter was read into the public record.

The commenter states that the NAHC would like to work with SAFCA to avoid problems resulting from inadequate Native American consultation that occurred on Sutter Buttes Flood Control Agency’s Feather River West Levee Project. The comment describes the problems encountered and states that a possible agreement is being negotiated between consulting parties.

SAFCA welcomes the assistance of the NAHC to act in its capacity as a CEQA trustee agency charged with the protection of Native American sacred sites and burials. SAFCA is not involved
with the Feather River West Levee project and is not a party to any negotiations or agreements pertaining to that project.

**A12-6**

*The commenter states that many California levees were constructed without regard to the presence of Native American sites and that Native American burials and villages are likely present in most levees.*

SAFCA acknowledges that portions of the project area are sensitive for the presence of buried Native American sites. This understanding is stated in the “Findings” section of DEIR Section 4.7, “Cultural Resources,” beginning on page 4.7-25.

**A12-7**

*The commenter states that it is NAHC’s position that Traditionally and Culturally Affiliated Tribes are the most knowledgeable about tribal cultural resources in the area, that they have a great interest in protecting those resources, and that tribes should be consulted and respected.*

SAFCA acknowledges that Culturally Affiliated Tribes are knowledgeable about tribal cultural resources in the area with which they are traditionally affiliated and that tribes are concerned with protecting those resources. SAFCA has conducted and is continuing to conduct extensive Native American consultation with UAIC and other tribes. Additional consultation efforts conducted since the publication of the July 2015 FEIR are documented in the revised FEIR (“Native American Consultation” section). Revised mitigation measures require Native American consultation in identification and evaluation efforts, formulation of avoidance measures and formulation of treatment measures of Tribal Cultural Resources, consistent with the requirements of California Public Resources Codes implementing Assembly Bill 52.

**A12-8**

*Commenter states that, pursuant to Assembly Bill 52 for any Notice of Preparation, Negative Declaration, or Mitigated Negative Declaration prepared after July 1, 2015, tribes must be consulted under CEQA if they have requested notification of projects.*

SAFCA acknowledges the requirements of Assembly Bill 52. Although this EIR is not subject to the requirements of Assembly Bill 52 because the Notice of Preparation was published prior to July 1, 2015 (published on May 15, 2014), SAFCA has nevertheless made a good faith effort to conduct Native American consultation to identify and protect important Tribal Cultural Resources and other important cultural resources in the project area. These efforts were described in the DEIR, have been updated in the revised FEIR and are continuing. Additional Native American consultation efforts (beyond that which was required in the DEIR) is required under revised mitigation measures CR-3, CR-4a, CR-4b, CR-5, CR-6, and CR-7.

**A12-9**

*Commenter references attached documents that are associated with the Sutter Buttes Flood Control Agency’s Feather River West Levee Project.*

Information and guidance that was obtained through the experience on other projects has been taken into account in the revised mitigation measures in this revised FEIR, especially with respect to Native American consultation throughout the project, Native American involvement in the inventory and evaluation processes, determination of avoidance and other treatment measures, Native American monitoring, and respectful treatment of Native American burials and burial sites.
The commenter states that the NAHC welcomes the opportunity to partner with SAFCA to avoid damage and delay that occurred on the Sutter Buttes Flood Control Agency’s Feather River West Levee Project “given that the Legislature has determined that the invaluable remnants of the vanished culture of the California Native Americans be protected as much as feasible”.

SAFCA welcomes the assistance and support of the NAHC in its efforts to identify, protect, and respectfully treat important Tribal Cultural Resources.
July 16, 2015

Don Nottoli
Chairman
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

Dear Chairman Nottoli,

{The United Auburn Indian Community will be entering the attached memo as public comment into the record at today's hearing on Agenda Item 2, North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project.}

{As you know, the Tribe is deeply concerned with the adequacy of communication, consultation and identification of tribal cultural sites in this matter. While we recognize this item has been noticed for action today, we understand that it is the intention of the Commission to take testimony today but defer action on the Project and the EIR to another date. We support that course of action.}

{Further, because there are meetings set up between management of the Commission and the Tribe to discuss the Tribe's concerns and ways to productively address them, we respectfully request that public testimony on the Project and its EIR not be closed at the end of today's hearing. For our upcoming meetings to be meaningful, the Tribe requests that the hearing remain open to public testimony after today.}

{Thank you for considering the Tribe's views. We look forward to consulting in good faith with your agency on these issues of mutual importance.}

Sincerely,

Gene Whitehouse, Chairman

Tribal Office 10720 Indian Hill Road Auburn, CA 95603 (530) 883-2390 FAX (530) 883-2380
Memo to SAFCA

Date: 16 July 2015

From: Jason Camp, Chairman, Tribal Historic Preservation Committee and Tribal Historic Preservation Officer, United Auburn Indian Community of the Auburn Rancheria (UAIC)

RE: Public Meeting Held on July 16, 2015, at 3:00p.m. at the Sacramento County Administration Building, 700 H Street, in the County Board of Supervisors Chambers.

Subject: Sacramento Area Flood Control Agency (SAFCA) Levee Accreditation Project, Sacramento Area Flood Control Agency (SAFCA), North Sacramento Streams, Sacramento River East Levee, and Related Flood Improvements Project (SCH# 2014052038), Potential Failure to Comply with CEQA Resulting in Expensive, Unnecessary and Avoidable Damage to Ancestral Burial Sites

Summary:

Good Afternoon, my name is Jason Camp, Nisenan/Miwok, Chair of the Historic Preservation Committee, and Tribal Historic Preservation Officer for the United Auburn Indian Community. I am here to testify in OPPOSITION to the approval of the Project and the Final Environmental Impact Report for the Sacramento Area Flood Control Agency’s Levee Accreditation Project referred to as the North Area Streams, Sacramento River East Levee, Lower American River and Related Flood Improvement Project. My office was contacted in 2014 about the Sacramento River East Levee part of the Project. I am here today to tell you there are over 30 large ancestral burial sites within your total Project area. This was told to me by my tribal elders. These sites have been submitted to the Sacred Lands Inventory maintained by the California Native American Heritage Commission. The current FEIR fails to properly identify these sites, plan for avoidance, or otherwise mitigate the damage which means that the FEIR does not comply with CEQA. Ultimately this will result in expensive work stoppages when the project encounters burial sites, which SAFCA would probably like to avoid, and unnecessary destruction of our ancestor’s burial sites, which we would like to avoid. I have briefly outlined below the primary failures in the process to date, as well as the steps that are needed to address these failures.

Failures in the Process: One of the main purposes of the CEQA process is to evaluate design alternatives in order to avoid, minimize or mitigate impacts to historical or cultural resources such as burial sites. We received notification of your Project in mid-2014. Beginning in October 2014, our staff went out to the field and identified burials sites to your agency representatives on 10/30/2014, 1/9/2015, 3/4/2015. We also corrected the boundaries for previously known burial sites that were observed protruding from the levee and identified a simple and effective survey methodology to identify sites and confirm the horizontal and vertical limits of those sites so that they could be avoided or worked around in the design process. While the fact that your agency representatives met with us is included in the DEIR (it’s buried in Appendix I), the specific information that UAIC provided to your staff and consultants is either missing or dismissed as non-substantive in the DEIR, MMRP and FEIR. In fact, the EIR’s responses to our comments blame the Tribe for not providing such information when we did provide it. The entire point of consultation was so that your agency could use the information during the CEQA process and avoid the burial sites. To our further surprise and distress, mitigation measures CR-2 through CR-4 in your MMRP simply call for archaeological and Tribal Monitors to be present when you bulldoze through...
the recorded ancestral burial sites. There is no monitoring even required for the other sites - including the 30 plus cemetery areas known to the Tribe. This is not acceptable mitigation under CEQA or to UAIC. Your current FEIR is noncompliant with CEQA or industry practices since it fails to identify cultural resources, fails to evaluate impacts to those resources, fails to examine ways to avoid those impacts and fails to mitigate damages to those resources.

**How to Fix the Process:** The solution is simple. While our ancestors passed on information about burial sites to us, they didn’t anticipate they would be covered up by levees, and sometimes information about the location of burial sites takes time to gather. Even if these burials or cultural materials are in a disturbed condition, they still retain cultural value to UAIC and should be respected and protected. UAIC, once again, requests the following 4 steps be taken in consultation with the Tribe: (1) Basic pedestrian, forensic dog, geo-archaeological, geophysical surveys of the project APE need to be conducted with qualified Tribal Monitors to identify unrecorded and unknown burial sites, (2) limited testing of previously recorded and other sites needs to be conducted so that the vertical and horizontal boundaries of these sites can be determined, (3) project design should be modified to avoid destruction of these sites and appropriately prescribe mitigation whenever possible, and (4) plans need to be developed for the treatment of burials, grave goods, and cultural resources in a culturally-appropriate manner that incorporates respect for Tribal burial practices and traditions. Contrary to the proposed mitigation measures, SAFCA and the archaeologists do not decide what that treatment is.

**Conclusion:** These 4 basic requests will save you millions, possibly tens of millions of dollars long term. You also have the opportunity to do what is morally right by not turning a blind eye and bulldozing through our ancestor’s burial site. Urge you to update your FEIR, incorporate our recommendations into the MMRP and get boots on the ground now so that we can avoid and preserve our ancestor’s burial sites within your project’s timeline and budget.
A13-1 The comment requests an extension of time until May 18 for the State Water Resources Control Board Division of Water Quality - 401 Certification Unit to review the DEIR, citing an extension also granted to SWRCB for review of the ARCF GRR EIS.

Due to time constraints necessary for the start of project-related construction activities (if the EIR is certified and the proposed project is approved), SAFCA believes that the current 45-day comment period provides SWRCB with sufficient time to review the proposed project. Therefore, the requested extension of time has not been granted. However, a comment letter (A10) was received from Mr. Harvey, and responses to Mr. Harvey’s comments were provided as a courtesy.

A13-1 The commenter states that the UAIC will be entering an attached memorandum as a public comment into the record as an Agenda item.

The comment letter and the attached memorandum have been made part of the public comment record and were read into the record at the SAFCA Board meeting on July 16, 2015.

A13-2 Commenter states that UAIC is concerned with adequacy of communication, consultation, and identification of Tribal cultural sites.

SAFCA acknowledges that UAIC is concerned with the adequacy of communication and consultation and has made efforts to respond to UAIC’s concern. Additional Native American consultation has been conducted (documented in the revised FEIR [“Native American Consultation” section]) and is also reflected in revised mitigation measures CR-3, CR-4a, CR-4b, CR-5, CR-6, and CR-7.

A13-3 Commenter states that it is their understanding that testimony would be taken (on July 16 2015) and that action on certification of the EIR would be deferred and that UAIC supports that.

As stated by the commenter, at its July 16, 2015 meeting, the SAFCA Board deferred action on the FEIR to an unspecified date.

A13-4 Commenter notes that there are meetings arranged between the UAIC and the “Commission” to discuss the Tribe’s concerns and ways to address them. UAIC requests that public testimony not be closed.

SAFCA’s Board did not close public testimony following the July 2015 meeting.

A13-5 Commenter thanks SAFCA for considering the Tribe’s views and looks forward to consulting in good faith.

SAFCA appreciates UAIC’s participation in the process to identify and protect, where feasible, important cultural and Tribal resources. SAFCA has consulted extensively, and continues to
consult, with UAIC and has revised the mitigation measures (CR-3, CR-4a, CR-4b, CR-5, CR-6, and CR-7) to address UAIC’s concerns.

Comments and Responses from Memorandum Read into the Public Comment Record on July 16, 2015

A13-6  
UAIC Tribal Historic Preservation Officer (THPO) states that he is opposed to approval of the FEIR.

The EIR was not certified on July 16, 2015.

A13-7  
Commenter (UAIC THPO) states that his office was contacted in 2014 only about the Sacramento River East Levee portion of the proposed project.

The written record of Native American consultation (included as Appendix I in the DEIR) documents consultation with UAIC concerning the entire North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project.

A13-8  
Commenter states that he is aware of over 30 large burial sites in the project area and these sites have been submitted to the NAHC Sacred Lands Inventory.

SAFCA has conducted and continues to conduct additional Native American consultation with UAIC (documented in this revised FEIR (“Native American Consultation” section). This consultation is also reflected, in part, in revised Mitigation Measures CR-3, CR-4a, CR-4b, CR-5, CR-6, and CR-7. SAFCA’s consultant has contacted the NAHC two separate times and requested a search of their Sacred Lands Inventory for the proposed project area and both times the results were negative. SAFCA, however, will continue to consult with Culturally Affiliated Native Americans to identify and protect, where feasible, import Tribal cultural resources and other cultural resources.

A13-9  
The commenter states that July 2016 FEIR fails to properly identify these sites (over 30 large burial sites referenced in comment above), plan for avoidance or otherwise mitigate damage to these sites and therefore the FEIR does not comply with CEQA.

An adequate DEIR/FEIR does not include speculative impacts to specific resources whose locations are not known to the preparer of the document. Despite initial Native American consultation (documented as Appendix I in the DEIR), SAFCA was not aware of specific sites other than those identified in the DEIR. SAFCA has therefore conducted extensive additional consultation with UAIC to identify burial sites and sensitive areas and has revised mitigation measures in this revised FEIR that provide processes for continued efforts to identify, evaluate, avoid where feasible, or otherwise respectfully treat import cultural resources including Tribal Cultural Resources.

A13-10  
Commenter states that failure to identify Tribal Cultural Resources will result in expensive work stoppages and unnecessary destruction of burial sites when burial sites are discovered.

SAFCA agrees that it is desirable to identify important cultural resources in advance of construction so that appropriate avoidance or other treatment measures can be identified and has
continued to consult with UAIC in an effort to identify, avoid or otherwise respectfully treat important Tribal Cultural Resources.

A13-11  
Commenter states that they are presenting an outline of the failures in the process to date as well as the steps needed to address these failures.

No response required.

A13-12  
Commenter states that one of the purposes of CEQA is to evaluate design alternatives in order to avoid, minimize or mitigate impacts to historical or cultural resources such as burial sites.

SAFCA agrees that part of the CEQA process is to evaluate project and design alternatives and the DEIR analyzed impacts to resources known to the preparers of the document and identified feasible mitigation to avoid or reduce impacts to known sites. The DEIR also included mitigation measures to address potential impacts to unknown sites and sites that become known after certification of the EIR.

A13-13  
Commenter states that UAIC was notified about the project in mid-2014, participated in field reviews with SAFCA representatives, identified burial sites, and identified survey methods. The commenter also states that this specific information was not included in the DEIR or was dismissed as non-substantive.

SAFCA understands that while UAIC discussed site locations during these field reviews, that SAFCA’s representatives believed that specific site location information would be provided as GIS mapping data. For uncertain reasons, the understanding that GIS data would be provided by UAIC may have been incorrect. Transmittal of this information did not occur prior to publication of the DEIR and the preparers of the DEIR did not have specific information about specific sites.

A13-14  
The commenter states that the responses to comments made by UAIC on the DEIR blame UAIC for not providing site location information when UAIC did provide it.

As stated in response to comment A13-13, there may have been a misunderstanding of what constituted identification of site locations. The EIR preparers believed that site location information was going to be provided by transmittal of GIS data which was not provided prior to publication of the DEIR.

A13-15  
The commenter states that the point of Native American consultation is so that information that is obtained could be used to avoid burial sites, but that Mitigation Measures CR-2 through CR-4 only require monitoring while the project bulldozes through recorded burial sites.

While mitigation measures in the DEIR did require archaeological and Native American monitoring at certain locations, there were no recorded sites where there are plans to bulldoze or otherwise impact these sites. The burial sites that the commenter may be referring to are not recorded sites but are sites perhaps known to UAIC but not to the preparers of the DEIR, to the NAHC or the North Central Information Center of the California Historical Resources Information System. SAFCA has since this time conducted extensive consultation with UAIC to
develop a process for the identification, avoidance or respectful treatment of burial sites and other important cultural resources.

A13-16

_The commenter states that there is no monitoring required for other sites including the 30 plus burial sites known to the UAIC and this is not acceptable mitigation under CEQA or to UAIC._

This revised FEIR includes mitigation (CR-6) to develop and implement a Native American and archaeological monitoring plan in consultation with culturally affiliated Native Americans.

A13-17

_The commenter states that the current (July 2015) FEIR is noncompliant with CEQA, fails to identify cultural resources, fails to evaluate impacts to resources, fails to examine ways to avoid those impacts and fails to mitigate damages to those resources._

The DEIR and July 2015 FEIR adequately evaluated impacts and identified ways to avoid and mitigate impacts both to known and potential significant cultural resources. The DEIR and July 2015 FEIR did not address the 30 or more burial sites referenced by UAIC because the locations of these sites were not known to the preparers of the DEIR or the July 2015 FEIR. Revised mitigation in this revised FEIR require specific additional inventory methods (CR-5) and additional Native American consultation (CR-3, CR-4a, CR-4b, CR-5, CR-6, and CR-7) to identify all resources known to Culturally Affiliated Native Americans and that can be discovered during additional technical studies such as geoarchaeological investigations and non-invasive inventory methods where appropriate.

A13-18

_The commenter states that UAIC ancestors passed on information about burial sites but that it was not anticipated that these sites would be covered by levees and therefore it takes time to gather site location information._

The comment is acknowledged. SAFCA is currently consulting with UAIC to determine site locations and to develop ways to avoid, mitigate, or otherwise respectfully treat important Tribal Cultural Resources.

A13-19

_The commenter states that even if burials or cultural materials are in a disturbed condition they still retain cultural value to UAIC and should be protected and respected._

SAFCA acknowledges UAIC’s concern with all Native American resources, including those that may be disturbed.

A13-20

_Commenter states that UAIC requests that four steps be taken in consultation with the UAIC: 1. Pedestrian, forensic dog, geoarchaeological and geophysical surveys conducted with qualified Tribal monitors; 2. that limited testing of sites needs to be conducted to determine the boundaries of sites; 3. that whenever possible the project design should be modified to avoid destruction of sites; and 4. plans need to be developed for the treatment of burials and associated items in a culturally appropriate manner._

This revised FEIR includes mitigation (CR-5) specifying additional technical surveys (pedestrian, geoarchaeological and non-invasive); testing to define site boundaries (CR-5); provisions for...
avoidance whenever feasible (CR-5); and plans for the treatment of burials and associated items (CR-4a).

A13-21 Contrary to the proposed mitigation measures, SAFCA and the archaeologists do not decide what treatment is.

Treatment of Native American burials and associated items is determined by the Most Likely Descendant (MLD) in consultation with the landowner as described in Mitigation Measure CR4b. SAFCA, as the lead CEQA agency responsible for compliance with CEQA, it is SAFCA’s responsibility to determine treatment of Historical and unique resources under CEQA. As the lead CEQA agency, SAFCA intends to consult with Culturally Affiliated Native Americans to determine treatment of all Tribal cultural resources.

A13-22 The commenter states that following the four steps outlined in comment A13-20 will save SAFCA millions of dollars and will give SAFCA the opportunity to do what is morally right by not bulldozing burial sites.

As stated in the response to comment A13-20, SAFCA has revised the mitigation measures for this revised FEIR which address the four steps recommended. SAFCA does not intend to bulldoze through burial sites or any other significant cultural resources and has identified an array of mitigation measures which provide a process to identify, evaluate, avoid if feasible, treat in a culturally appropriate manner and mitigate impacts and potential impacts significant cultural resources.

A13-23 Commenter urges SAFCA to update the FEIR, to incorporate UAIC’s recommendations and to “get boots on the ground now” so that burial sites can be avoided and preserved.

SAFCA has revised the cultural resources mitigation measures for this revised FEIR and MMRP in a good faith effort to address the concerns raised by UAIC. Pedestrian surveys of the Sacramento River East Levee project area have been conducted by SAFCA’s consultant archaeologists with UAIC participation and other technical studies will be conducted during summer 2016.
PUBLIC MEETING FOR
NORTH SACRAMENTO STREAMS,
SACRAMENTO RIVER EAST LEVEE,
LOWER AMERICAN RIVER,
AND RELATED FLOOD IMPROVEMENTS PROJECT

---oOo---

Wednesday, April 8, 2015
5:00 p.m.

---oOo---

Joe Mims Jr. Community Center
3271 Marysville Boulevard
Sacramento, CA 95834

---oOo---

PUBLIC COMMENTS

Reported by: CATHERINE D. LAPLANTE
CSR License No. 10140

COURT REPORTER DEPOT
Phone (877) 808-3376 Fax (973) 353-9445
www.courtreporterdepot.com

CourtReporterDepot (877)808-DEPO

It's --

How do I explain this?

Periodically we get high water. In '95 because of a tree falling down - further on down the creek, and then it amazed me, the house flooded, and I was out of my house for five months.

Luckily, my mother -- I mean, it was her house. I was living with her because she had Alzheimer's. Luckily she had flood insurance, so we were okay, except financially -- except we were out of the house for five months, and if you ever had dealt with an Alzheimer's patient, it's traumatic.

So all these years I've carried flood insurance. Now, I have been notified by the flood insurance people, FEMA, that I'm losing my discount, but there's no -- there's no explanation as to what happens after that loss.

So we came one evening when Arcade Creek was mentioned. Run along the back of the property. Was that going to effect us in any rate? Didn't really get that answered.

But I have a phone number and a name, and I'm going to give him a call and see if they have any information.

The levy work that they're talking about does not appear to affect my house. It's not going to be in that area. It's to the west of us, which solves the problem of them cutting down trees, which I read that in the paper. That's not a worry.

I still don't know whether I'm considered in the flood plain or not, that the flood insurance people are concerned about.

Is the work that they're going to be doing going to make the bank and the flood insurance companies happier?

Is the City going to come in and clean all the silt out that has built up over the years?

I mean, it didn't rain very much in February, but the creek almost went over into my backyard because it's so shallow back there because of the crude buildup of silt.

So I solved the problem by being the squeaky wheel every year. I start in the spring, come clean the creek out, and in October they usually show up. They didn't this last year.

So that's where I'm at.

The City fenced off years ago, years ago fenced off the creek, so the homeowners can't get back there, and cut down weeds and clean up trash and do anything.

We can't get back there and get -- the City doesn't adequately take care of what they fenced off.

Okay.

THE REPORTER: Is there a number that they can reach you at?

MS. MAXWELL: Area code 916-922-3176. And they can --

I rarely answer the phone. If I don't recognize the phone number, I don't answer, but I will call back when they leave a message.

Okay. Thank you very much. Thank you.

(Conclusion at 7:00 p.m.)

REPORTER'S CERTIFICATE

I, CATHERINE D. LAPLANTE, a Certified Shorthand Reporter for the State of California, do hereby certify:

That the foregoing was reported in shorthand by me, CATHERINE D. LAPLANTE, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting, that the foregoing is a true and correct record given.

IN WITNESS WHEREOF, I hereby certify this transcript at my office in the County of Placer, State of California, this 15th day of April, 2015.

_______________________________
CATHERINE D. LAPLANTE, CSR #10140
<table>
<thead>
<tr>
<th>A</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>adequately</td>
<td>D</td>
</tr>
<tr>
<td>affect</td>
<td>1:14 5:3,7</td>
</tr>
<tr>
<td>ago</td>
<td>5:14 5:3,7</td>
</tr>
<tr>
<td>Alzheimer’s</td>
<td>5:3,7</td>
</tr>
<tr>
<td>AMERICAN</td>
<td>5:4,11</td>
</tr>
<tr>
<td>answer</td>
<td>5:14 4:2</td>
</tr>
<tr>
<td>answered</td>
<td>5:14 4:2</td>
</tr>
<tr>
<td>appear</td>
<td>5:14 4:2</td>
</tr>
<tr>
<td>April</td>
<td>5:14 4:2</td>
</tr>
<tr>
<td>Arcade</td>
<td>5:14 4:2</td>
</tr>
<tr>
<td>area</td>
<td>5:14 4:2</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>back</td>
<td></td>
</tr>
<tr>
<td>backyard</td>
<td>1:14 5:3,7</td>
</tr>
<tr>
<td>bank</td>
<td>5:14 5:3,7</td>
</tr>
<tr>
<td>Boulevard</td>
<td>5:14 5:3,7</td>
</tr>
<tr>
<td>buildup</td>
<td>5:14 5:3,7</td>
</tr>
<tr>
<td>built</td>
<td>5:14 5:3,7</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td></td>
</tr>
<tr>
<td>call</td>
<td></td>
</tr>
<tr>
<td>care</td>
<td></td>
</tr>
<tr>
<td>carried</td>
<td></td>
</tr>
<tr>
<td>2:16</td>
<td></td>
</tr>
<tr>
<td>CATHERINE</td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td></td>
</tr>
<tr>
<td>CERTIFICATE</td>
<td></td>
</tr>
<tr>
<td>Certified</td>
<td></td>
</tr>
<tr>
<td>certify</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td></td>
</tr>
<tr>
<td>clean</td>
<td></td>
</tr>
<tr>
<td>code</td>
<td></td>
</tr>
<tr>
<td>come</td>
<td></td>
</tr>
<tr>
<td>COMMENTS</td>
<td></td>
</tr>
<tr>
<td>concerned</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
</tr>
<tr>
<td>considered</td>
<td></td>
</tr>
<tr>
<td>correct</td>
<td></td>
</tr>
<tr>
<td>County</td>
<td></td>
</tr>
<tr>
<td>COURT</td>
<td></td>
</tr>
<tr>
<td>crazy</td>
<td></td>
</tr>
<tr>
<td>creek</td>
<td></td>
</tr>
<tr>
<td>crude</td>
<td></td>
</tr>
<tr>
<td>CSR</td>
<td></td>
</tr>
<tr>
<td>cut</td>
<td></td>
</tr>
<tr>
<td>cutting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>day</td>
<td></td>
</tr>
<tr>
<td>dealt</td>
<td></td>
</tr>
<tr>
<td>DEPOT</td>
<td></td>
</tr>
<tr>
<td>discount</td>
<td></td>
</tr>
<tr>
<td>disinterested</td>
<td></td>
</tr>
<tr>
<td>doing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
<tr>
<td>E-R-A-N-O</td>
<td></td>
</tr>
<tr>
<td>effect</td>
<td></td>
</tr>
<tr>
<td>explain</td>
<td></td>
</tr>
<tr>
<td>explanation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
</tr>
<tr>
<td>falling</td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
</tr>
<tr>
<td>FEMA</td>
<td></td>
</tr>
<tr>
<td>fenced</td>
<td></td>
</tr>
<tr>
<td>financially</td>
<td></td>
</tr>
<tr>
<td>five</td>
<td></td>
</tr>
<tr>
<td>flood</td>
<td></td>
</tr>
<tr>
<td>flooded</td>
<td></td>
</tr>
<tr>
<td>foregoing</td>
<td></td>
</tr>
</tbody>
</table>

CourtReporterDepot (877) 808-DEPO
<table>
<thead>
<tr>
<th>L</th>
<th>K</th>
<th>J</th>
<th>IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAPLANTE</td>
<td>know</td>
<td>Joe</td>
<td>1:8</td>
</tr>
<tr>
<td>3:8</td>
<td>1:4</td>
<td>12</td>
<td>1:12</td>
</tr>
<tr>
<td>IMPROVEMENTS</td>
<td>information</td>
<td>2:124.183.912</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4:12</td>
<td>Insurance</td>
<td>2:10.316</td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>J</td>
<td>1:8</td>
</tr>
<tr>
<td>12</td>
<td>2:10.316</td>
<td>METING</td>
<td>3:2</td>
</tr>
<tr>
<td>2:22</td>
<td>4:12</td>
<td>message</td>
<td>3:2</td>
</tr>
<tr>
<td>1:8</td>
<td>5:12</td>
<td>mentioned</td>
<td>3:2</td>
</tr>
<tr>
<td>3:8</td>
<td>1:14</td>
<td>mean</td>
<td>3:2</td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>house</td>
<td>3:2</td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>Maxwell</td>
<td>3:2</td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>Marveille</td>
<td>3:2</td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>people</td>
<td>3:2</td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>2:18.912</td>
<td></td>
</tr>
<tr>
<td>1:4</td>
<td>1:8</td>
<td>2:15.12</td>
<td></td>
</tr>
</tbody>
</table>

Further:
- Give: 3:14
- Going: 5:10
- Living: 2:23.3.14.11.12.14
- License: 2:29.14
- Losing: 2:18.912
<table>
<thead>
<tr>
<th>Word</th>
<th>Page 1</th>
<th>Page 2</th>
<th>Page 3</th>
<th>Page 4</th>
<th>Page 5</th>
<th>Page 6</th>
<th>Page 7</th>
<th>Page 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>rate</td>
<td>2:23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reach</td>
<td>4:7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>read</td>
<td>3:6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>really</td>
<td>2:23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>recognize</td>
<td>4:11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>record</td>
<td>5:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELATED</td>
<td>1:4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reported</td>
<td>1:14</td>
<td>5:6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporter</td>
<td>1:22</td>
<td>4:6</td>
<td>5:4:7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REPORTER'S</td>
<td>5:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>resident</td>
<td>2:2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIVER</td>
<td>1:3:3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Runs</td>
<td>2:22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>2:2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SANDRA</td>
<td>2:2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacramento</td>
<td>1:2,3,9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandra</td>
<td>2:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>see</td>
<td>3:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shallow</td>
<td>3:18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>shorthand</td>
<td>5:3,6,7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>show</td>
<td>3:22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sit</td>
<td>3:15,19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>solved</td>
<td>3:20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>solves</td>
<td>3:5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>spring</td>
<td>3:21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>squeaky</td>
<td>3:20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>start</td>
<td>3:21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>5:4,7,12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STREAMS</td>
<td>1:2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td>2:3,3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>take</td>
<td>4:4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>talking</td>
<td>3:3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thank</td>
<td>4:13,13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tonight</td>
<td>2:21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transcribed</td>
<td>5:8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transcript</td>
<td>5:12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trash</td>
<td>4:2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>traumatic</td>
<td>2:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tree</td>
<td>2:7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trees</td>
<td>3:6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>true</td>
<td>5:9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>typewriting</td>
<td>5:9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>usually</td>
<td>3:22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>2:3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verano</td>
<td>2:3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor</td>
<td>2:3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>water</td>
<td>2:6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>1:6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weeds</td>
<td>4:2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>went</td>
<td>3:17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>west</td>
<td>3:5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wheel</td>
<td>3:21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHEREOF</td>
<td>5:11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WITNESS</td>
<td>5:11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>work</td>
<td>3:3,11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>worry</td>
<td>3:7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.courtreporterdepot.com">www.courtreporterdepot.com</a></td>
<td>1:23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>year</td>
<td>3:21,23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>years</td>
<td>2:16</td>
<td>3:15,25,25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10140</td>
<td>1:14</td>
<td>5:16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15th</td>
<td>5:13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CourtReporterDepot (877)808-DEPO
M1-1 The comment mentions that Arcade Creek has flooded in the past, and because Arcade Creek runs along the back of the commenter’s property (on Verano Street), the commenter inquires as to whether the proposed project would affect the commenter.

The locations where project-related activities would occur are shown on the exhibits contained in DEIR Chapter 3, “Project Description.” Verano Street is not located immediately adjacent to any of the planned work activity areas.

The commenter also inquires as to whether the proposed project would affect the FEMA issuance of flood insurance and associated insurance rates.

As described in detail in Chapter 3, “Project Description,” the proposed project would strengthen levee stability and improve flood protection for the Sacramento region. The determination of flood insurance rates does not relate to the environmental analysis contained in the DEIR and is not a CEQA issue.

The comment also inquires as to whether the City is going to clean up silt that has accumulated in Arcade Creek, and that the City does not adequately clean up trash and other debris that has accumulated.

SAFCA is the lead agency for work that would be performed under the proposed project. Streambed restoration and enhancement along Arcade Creek is proposed as part of the Conservation Strategy, which is described in detail in Chapter 3, “Project Description.” Cleanup of trash and other debris is a City and/or County maintenance issue that is not related to SAFCA’s proposed Levee Accreditation Project and the environmental analysis contained in the DEIR.
PUBLIC MEETING FOR
NORTH SACRAMENTO STREAMS,
SACRAMENTO RIVER EAST LEVEE,
LOWER AMERICAN RIVER,
AND RELATED FLOOD IMPROVEMENTS PROJECT

--o0o--

Thursday, April 9, 2015
5:00 p.m.

--o0o--

Sacramento Elks Lodge #6
6446 Riverside Boulevard
Sacramento, CA 95831

--o0o--

PUBLIC COMMENTS

Reported by: CATHERINE D. LAPLANTE
CSR License No. 10140

COURT REPORTER DEPOT
Phone (877) 808-3376 Fax (973) 353-9445
www.courtreporterdepot.com

CourtReporterDepot (877) 808-DEPO
MS. NASON: My name is Beverly, B-E-V-E-R-L-Y. Last name is Nason, N-A-S-O-N. And I live at 6728 Benham Way, B-E-N-H-A-M Way, and that's 95831. And my email address is L-U-S-N-A-S-O-N, 308 Yahoo, dot com. And my comment is we have been at our house like 30, 35, 36 years, so we've gone through a lot of -- two times digging down the slurry. Our house backs up to the levy, and so they've done two times with the -- down the middle of the levy, and if it rains a foot, which I'm grateful of. I don't know how many years ago that was, the last incident, which quite made me come to this, is they put, I guess, erosion, the cement, the big berms came, and then they would dump the -- the big cement. I guess they were for erosion, which I was glad they were doing but didn't realize it was cracking our house, which it did.

We have a stucco house, and it got cracked. I didn't know anything about it. I was just glad they were doing the work that I wouldn't get flooded again. And my friend lived about half a mile in the new section, and they're three houses from the levy. Our house backs up to the levy. Here's the new units, are the levy, and they're three houses in. All three houses from the levy had cracked damage, and they were all fixed. They put in a complaint, and they were all fixed.

I did not know to do that, so that's why I'm here today, so in case that was going to happen again, I would know who to call. So I appreciate the meeting tonight so that I'm a more informed consumer. Yeah. So that's what it's all about because I didn't get it done, and I should have because I was a victim of, but I'm glad to see it raised, glad to see it was not going to flood again. Glad everyone did it, but I wished I would have put in for the damage. I did have damage. So now I have a card, and I will be able to -- if they do do that. I didn't think it was going to be done again because they've done it, erosion correction, that's where the big cement, that's where the vibration cracked the houses, damage was done from the -- I guess the soil is such that -- So now I'm glad that we had this meeting. Thank you.

MS. BIGELOW: Pamela Bigelow, B-I-G-E-L-O-W. Address 9, Martin, M-A-R-I-N, Court, Sacramento, just the number 9, 95831. The first thing I want to say is I have a walnut tree within 15 feet of the levy that I would like removed. It has the family of squirrels that live in it. You can replace it with another tree, that's just fine.

It is, however, on City property, but there are quite a few squirrels that have lived there for many, many years, so I'm sure there are a lot of burrows there. Right behind it is a large oak tree, which they live in. The squirrels live in the oak tree because they eat the acorns, and they eat the walnuts. Second thing is I'd like consideration for not having -- for not having a staging area on the big lot next to Martin Court.

We had one there in the early '90s, and we think we've done our duty, so if you could please find another place for a staging area, we would very much appreciate it. Third thing, which goes to the City of Sacramento, the cul-de-sac and levy need to have the grass cut once a month basis rather than an annual basis. The group of neighbors in our cul-de-sac is paying a gardener to cut the levy grass because it's a fire hazard, and it's dangerous, and people fall down the levy all the time because they can't see where they're going because the grass is so tall.

So we would like to request the grass be cut much more often.

That's it.

MS. SHORT: My name is Shirley. Last name Short, S-H-O-R-T, and I live along the river and brick yard, and I don't want to be contacted. There's no reason to.

I was just disappointed, that my impression was this was going to be a meeting tonight, and that there was going to be a presentation by the agencies involved, and we would have an opportunity to ask questions, and we have had an opportunity to ask questions, and they have provided a lot of really good information.

But I think a meeting where they gave us a presentation would have been more helpful to us, and some -- you know, some things to take away, some handouts would have also been more helpful. I was disappointed. I thought this was going to be a meeting. That's what they told us it was going
to be, so why didn't they have a meeting?
That's my comment.

My first concern is the vegetation, the existing vegetation that is on the water side of the levy behind my property.

Prior to any removal of the vegetation, will there be a report or a document available on which trees or which -- what vegetation will be removed prior to the removal on the event that I can challenge, legally challenge whether or not it meets the criteria of a hazardous tree or the question -- the reason for the removal.

I know the trees are tagged, and I would like to see in the proposal that these tag numbers be included on which trees will be removed and which trees won't be removed.

My piece of property is actually between Reach 15 and 16. That's the first concern.

And the second will be the privacy issue.
Right now we're not allowed to have privacy fences because of the regulations on the fence sizes, heights, has to be see-through.

Whether or not there's going to be any screens or any sort of privacy protection, so while we're enjoying our pool or backyard during the construction phase of it, whether or not we just have to live with one or two, three months, however long the project is, of people in our backyard with little or -- giving us little or no privacy are my two biggest concerns.

So vegetation removal and the privacy issue are my two issues with this particular project.

Also, the existing permits, the use permits that we have on our piece of property, if they encroach -- for the encroachment permits, if they encroach into the area of the levy that will be constructed or affected by the construction, and it's required to be removed.

A, who's going to pay for the cost of removal, and, B, whether or not it will be replaced after the construction's over, and the cost to that, and whether or not I'll have to reapply for a new permit, or if I can use the existing permit and reconstruct what was in there.

So the three issues are cost of removal, the cost of replacing it after the construction is over, and whether or not I will be able to get a permit, or if I can use -- if I'll have to apply for a permit all over again, or if I can just use the existing permit to repair what was removed.

(Conclusion at 7:00 p.m.)

REPORTER'S CERTIFICATE

I, CATHARINE D. LAPLANTE, a Certified Shorthand Reporter for the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing was reported in shorthand by me, CATHARINE D. LAPLANTE, a Certified Stenographic Reporter of the State of California, and thereafter transcribed into typewriting; that the foregoing is a true and correct record given.

IN WITNESS WHEREOF, I hereby certify this transcript at my office in the County of Placer, State of California, this 15th day of April, 2015.

CATHARINE D. LAPLANTE, CSR #10140

CourtReporterDepot (877) 808-DEPO
GEI Consultants, Inc. North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project FEIR
Comments and Responses
3-116
Sacramento Area Flood Control Agency


<table>
<thead>
<tr>
<th>told</th>
<th>5:25</th>
</tr>
</thead>
<tbody>
<tr>
<td>tonight</td>
<td>3:8 5:15</td>
</tr>
<tr>
<td>transcribed</td>
<td>9:8</td>
</tr>
<tr>
<td>transcript</td>
<td>9:12</td>
</tr>
<tr>
<td>tree</td>
<td>4:5,7,13,14 6:14</td>
</tr>
<tr>
<td>trees</td>
<td>6:10, 16, 18, 18</td>
</tr>
<tr>
<td>true</td>
<td>9:9</td>
</tr>
<tr>
<td>two</td>
<td>2:8, 10 7:5, 7, 9</td>
</tr>
<tr>
<td>typewriting</td>
<td>9:9</td>
</tr>
<tr>
<td>units</td>
<td>2:25</td>
</tr>
<tr>
<td>use</td>
<td>7:10, 20, 25 8:1</td>
</tr>
<tr>
<td>vegetation</td>
<td>6:6, 7, 9, 11 7:8</td>
</tr>
<tr>
<td>vibration</td>
<td>3:20</td>
</tr>
<tr>
<td>victim</td>
<td>3:11</td>
</tr>
<tr>
<td>walnut</td>
<td>4:5</td>
</tr>
<tr>
<td>walnuts</td>
<td>4:15</td>
</tr>
<tr>
<td>want</td>
<td>4:4 5:12</td>
</tr>
<tr>
<td>water</td>
<td>6:7</td>
</tr>
<tr>
<td>Way</td>
<td>2:3, 3 6:5</td>
</tr>
<tr>
<td>we're</td>
<td>6:23 7:2</td>
</tr>
<tr>
<td>we've</td>
<td>2:7 4:20</td>
</tr>
</tbody>
</table>

| WHEREOF | 9:11 |
| wished | 3:14 |
| WITNESS | 9:11 |
| work | 2:21 |
| wouldn't | 2:21 |
| www.courtreporterdepot.com | 1:23 |

<table>
<thead>
<tr>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
</tr>
<tr>
<td>Yahoo</td>
</tr>
<tr>
<td>yard</td>
</tr>
<tr>
<td>Yeah</td>
</tr>
<tr>
<td>years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>10140</td>
</tr>
<tr>
<td>1:15 9:16</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>4:5 6:21</td>
</tr>
<tr>
<td>15th</td>
</tr>
<tr>
<td>9:13</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>6:21</td>
</tr>
</tbody>
</table>

| 2 |
| 2015 |
| 1:6 9:13 |

| 3 |
| 30 |
| 2:7 |
| 308 |
| 2:4 |
| 35 |

CourtReporterDepot (877) 808-DEPO
M2-1

The comment notes that several houses near a previous levee project experienced damage, and that although the damage was corrected, the commenter was not aware that she could have applied for compensation. The commenter expresses support for flood protection and understands that she can contact SAFCA if there is damage to her property.

The commenter’s support for flood protection is appreciated; the comment is noted.

M2-2

The comment requests that SAFCA remove a walnut tree that the commenter states is within 15 feet of the levee on City property behind her house.

The locations of trees that would be removed as part of the proposed project are shown on Exhibit 3-17 in Chapter 3, “Project Description” (page 3-110 of the DEIR).

M2-3

The comment requests that a staging area not be located adjacent to Marlton Court.

SAFCA understands the commenter’s concerns related to the use of staging areas within existing developed neighborhoods. However, such staging areas are necessary to carry out the proposed project. SAFCA will minimize disturbance in the staging areas to the extent feasible.

M2-4

The comment requests that the grass at the end of Marlton Court along the levee be cut on a monthly basis rather than an annual basis because it represents a fire hazard.

Although SAFCA has no jurisdictional authority over grass cutting activities along the levee, the commenter’s concern for this potential fire hazard is appreciated and SAFCA will bring this issue to the attention of the appropriate State levee maintenance agency.

M2-5

This comment expresses disappointment that the public meeting did not involve a presentation and handouts.

The purpose for the public meeting was to provide interested members of the public and agencies with an opportunity to provide comments on the environmental analysis contained in the DEIR, and to respond to questions regarding the proposed project.

M2-6

This comment inquires whether there will be a report on each individual tree that would be removed under the proposed project because the commenter questions whether or not the trees do indeed represent a hazardous condition.

The locations of trees that would be removed as part of the proposed project are shown on Exhibit 3-17 in Chapter 3, “Project Description” (page 3-110 of the DEIR). Details regarding the evaluation criteria for trees and other vegetation that would be removed are contained on pages 3-48 through 3-50 of Chapter 3, “Project Description,” and in DEIR Appendix B. A report on each individual tree that will be removed will not be prepared.
The comment inquires whether there will be privacy fences erected between the construction activities and adjacent homeowners.

As discussed in DEIR Section 4.2, “Aesthetics,” Impact AES-2 (pages 4.2-38 through 4.2-42) the short-term, temporary presence of construction equipment along the levees was determined to be a less-than-significant impact. Therefore, no mitigation measures are required. Privacy fences between construction activities and adjacent properties are not included as part of the proposed project.

The comment inquires about the cost of removing encroachments and the cost for the homeowner to replace them after the work is completed.

The proposed project would entail the permanent removal of high-hazard levee encroachments, as described in Chapter 3, “Project Description” (pages 3-43 through 3-50). Homeowner replacement of these encroachments will not be permitted because those high-hazard encroachments threaten the stability and integrity of the levee and must be removed prior to accreditation of the levee. Other encroachments that may be present in the project area but that are not classified as high-hazard encroachments would not be affected by the proposed project. SAFCA will be contacting individual landowners to address the presence of specific high-hazard encroachments.
PUBLIC COMMENT TRANSCRIPT
SAPCA MEETING
APRIL 15, 2015
---oOo---

COURT REPORTER DEPOT
Phone (877) 808-3376 Fax (973) 353-9445
www.courtreporterdepot.com

CourtReporterDepot (877) 808-DEPO
JOHN LUNDEGEN: On behalf of the county's regional parks director, Jeff Leathersen, I'm just a little bit concerned about a lack of specificity for the improvements along the American River because it makes it hard for us to evaluate the impacts to American River Parkway. We're specifically concerned about a loss of revenue from parkway fees and sales of annual passes, and we're concerned about a loss of use, meaning that that park won't be available for the regular users.

We agree with the draft document that the impacts to recreation will be significant and unavoidable, but we would like to see more specific mitigation with performance criteria. We're also concerned that the Campus Commons Golf Course will be impacted, and we're not sure we saw that in the document to date, and with past Corps projects in the parkway, we've experienced some confusing information from the contractor when directing parkway users around closed areas and would like extra effort and coordination in the future to work on a more consistent, unified public information system.

Okay. Now the comments are from me, so I'm representing the county's mining program. And the SAFCA portion of the project has several borrow sites identified. For those sites within unincorporated

Sacramento County, they will need to obtain a borrow site permit pursuant to county code and the State Surface Mining and Reclamation Act, SMARA, S-M-A-R-A. Please leave enough time in the process to coordinate permitting with the county. We've been available to assist with early consultation to streamline the process.

Some of the areas may not require a borrow permit, but still will require a grading permit. If the specific impacts of that grading are not analyzed in this document, you will need to leave time in the process for analyzing them under a future CEQA document. There's a potential borrow site identified in the Dry Creek Parkway. Please be aware that the area is particularly sensitive for cultural resources and may be regulated by the Dry Creek Parkway Plan.
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act</td>
<td>behalf</td>
<td>California</td>
</tr>
<tr>
<td>agree</td>
<td>bit</td>
<td>Campus</td>
</tr>
<tr>
<td>2:10</td>
<td>2:3</td>
<td>2:14</td>
</tr>
<tr>
<td>American</td>
<td>Board</td>
<td>CEQA</td>
</tr>
<tr>
<td>2:4,5</td>
<td>4:9</td>
<td>3:11</td>
</tr>
<tr>
<td>analyzed</td>
<td>borrow</td>
<td>Certificate</td>
</tr>
<tr>
<td>3:9</td>
<td>2:24 3:1,7,12</td>
<td>4:1,8</td>
</tr>
<tr>
<td>analyzing</td>
<td></td>
<td>Certified</td>
</tr>
<tr>
<td>3:11</td>
<td></td>
<td>4:6,7</td>
</tr>
<tr>
<td>annual</td>
<td></td>
<td>certify</td>
</tr>
<tr>
<td>2:7</td>
<td></td>
<td>4:13</td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>date</td>
</tr>
<tr>
<td>1:9 4:15</td>
<td></td>
<td>4:13</td>
</tr>
<tr>
<td>area</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>3:13</td>
<td></td>
<td>2:16</td>
</tr>
<tr>
<td>areas</td>
<td></td>
<td>Dated</td>
</tr>
<tr>
<td>2:19 3:7</td>
<td></td>
<td>4:15</td>
</tr>
<tr>
<td>assist</td>
<td></td>
<td>DEPOT</td>
</tr>
<tr>
<td>3:5</td>
<td></td>
<td>1:22</td>
</tr>
<tr>
<td>available</td>
<td></td>
<td>directing</td>
</tr>
<tr>
<td>2:9 3:5</td>
<td></td>
<td>2:18</td>
</tr>
<tr>
<td>aware</td>
<td></td>
<td>director</td>
</tr>
<tr>
<td>3:13</td>
<td></td>
<td>2:2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>document</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:10,15 3:10,11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>draft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3:12,15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>duly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>early</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3:5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:19 4:10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>evaluate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>experienced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>extra</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fax</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1:22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>force</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>foregoing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:12,12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>full</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>future</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:20 3:11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G</td>
</tr>
<tr>
<td></td>
<td></td>
<td>given</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4:13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Golf</td>
</tr>
</tbody>
</table>

CourtReporterDepot (877)808-DEPO
<table>
<thead>
<tr>
<th>2:14</th>
<th>grading</th>
<th>meaning</th>
<th>portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:8,9</td>
<td></td>
<td>2:8</td>
<td>2:24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEETING</td>
<td>potential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1:8</td>
<td>3:12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mining</td>
<td>process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:23</td>
<td>3:4,6,10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mitigation</td>
<td>program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:13</td>
<td>2:23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>public</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1:7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pursuant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3:2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>qualified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4:6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reclamation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3:3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>record</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4:13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>recorded</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4:11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>recreation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>regional</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>regular</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>regulated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3:14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>reporter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1:22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4:7,8,11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REPORTER'S</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4:1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reporters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4:9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>representing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2:23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>require</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3:7,8</td>
</tr>
</tbody>
</table>

North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project FEIR
GEI Consultants, Inc.
Sacramento Area Flood Control Agency
3-125
Comments and Responses
| resources | sure | 4:8,19 |
| 3:14      | 2:15 | 15 |
| revenue   | Surface | 1:9 |
| 2:7       | 3:2  |     |
| River     | system |     |
| 2:4,5     | 2:21 |     |
| RPR       |     |     |
| 4:19      |     |     |
| S.M.A.R.A. | transcript | 3:4,10 |
| 3:3       | 1:7 | 4:12,13 |
| Sacramento | true | 4:13 |
| 3:1       |     |     |
| SAFCA     |     |     |
| 1:8 2:23  | 3:14 |     |
| sales     |     |    |
| 2:7       |     |    |
| saw       |     |    |
| 2:15      |     |    |
| see       |     |    |
| 2:12      |     |    |
| sensitive |     |    |
| 3:14      |     |    |
| Shorthand |     |    |
| 4:6,8     |     |    |
| significant |     |    |
| 2:11      |     |    |
| site      |     |    |
| 3:1,12    |     |    |
| sites     |     |    |
| 2:24,25   |     |    |
| SMARAR    |     |    |
| 3:3       |     |    |
| specific  |     |    |
| 2:12 3:9  |     |    |
| specifically |     |    |
| 2:6       |     |    |
| specificity |     |    |
| 2:3       |     |    |
| ss        |     |    |
| 4:2       |     |    |
| State     |     |    |
| 3:2 4:2,7 |     |    |
| stenographically |     |    |
| 4:11      |     |    |
| streamline |     |    |
| 3:6       |     |    |
| time      |     |    |
| 3:4,10    |     |    |
| transcript |     |    |
| 1:7 4:12,13 |     |    |
| true      |     |    |
| 4:13      |     |    |
| unavoidable |     |    |
| 2:12      |     |    |
| unified   |     |    |
| 2:20      |     |    |
| unincorporated |     |    |
| 2:25      |     |    |
| use       |     |    |
| 2:8       |     |    |
| users     |     |    |
| 2:9,18    |     |    |
| V         |     |    |
| W         |     |    |
| we're     |     |    |
| 2:6,8,13,15 3:5 |     |    |
| we've     |     |    |
| 2:17      |     |    |
| work      |     |    |
| 2:20      |     |    |
| www.courtreporterdepot.com | 1:23 |    |
| 1:23      |     |    |
| X         |     |    |
| Y         |     |    |
| Z         |     |    |
| 0         |     |    |
| 1         |     |    |
| 12806     |     |    |

CourtReporterDepot (877) 808-DEPO
M3-1 The comment expresses concern regarding a perceived lack of specificity in the DEIR regarding proposed improvements along the American River, which makes it difficult for the County Department of Parks and Recreation to evaluate impacts to the American River Parkway. The comment expresses Department of Parks and Recreation’s concern about loss of revenue from parkway fees and sales of annual passes, and loss of use.

As discussed in Chapter 3, “Project Description,” work along the American River would entail removal of high-hazard vegetation and other encroachments. The specific locations of high-hazard vegetation to be removed are shown on Exhibits 3-18 (Chapter 3, “Project Description”) and on Exhibits 4.6-3a through 4.6-3d (Section 4.6, “Biological Resources – Terrestrial”). As described on DEIR page 4.16-9 (Section 4.16, “Recreation Resources”), removal of high-hazard vegetation and other encroachments would occur mostly within the American River Parkway from the confluence with the Sacramento River eastward to the eastern project boundary (i.e., Jeffrey Lane, on the north side of the American River across from River Bend Park), in addition to an approximately 7-acre portion of the 270-acre Woodlake site in the American River Parkway. Impacts to the American River Parkway are evaluated on pages 4.16-11 through 4.16-19. As described on page 4.16-17, encroachment removal along the Lower American River would occur on the landside of the levees, in association with residences. Removal of retaining walls and residential landscaping that are encroaching on the levee would not occur in the vicinity of any recreational facilities and would not require closure of on-street bikeways or the American River Parkway Bike Trail. As described on page 4.16-18, although most of the vegetation management activities along the American River Levee would take place within the levee footprint, temporary road closures would be needed in some areas, which could interfere with pedestrians and cyclists along these roads. Also, pedestrian and bicycle access to portions of the American River Bike Trail would be temporarily closed during project-related activities.

Implementation of Mitigation Measure REC-1a and TR-3a would entail preparing and implementing a bicycle detour plan for all bike trails and on-street bicycle routes, providing construction period information on bicycle facility closures, coordinating with the City of Sacramento and/or County Department of Parks and Recreation to allow repair of damage to bicycle facilities, and providing advance notice of bicycle and pedestrian facility closures and detour routes. SAFCA understands the commenter’s concern and will work with the County Department of Parks and Recreation regarding site-specific work locations and the need for short-term, temporary closures and detours along the American River Bike Trail.

M3-2 The comment expresses agreement with the DEIR’s purported conclusion that impacts to recreation would be significant and unavoidable. The comment also requests that additional mitigation measures be added with performance criteria.

The DEIR concludes that all impacts to recreation would be reduced to a less-than-significant level with implementation of Mitigation Measures REC-1a, REC-1b, REC-1c, and TR-3a (see DEIR page 4.16-19). As discussed in response to comment 3-1 above, SAFCA would implement Mitigation Measures REC-1a and TR-3a for work along the American River. The performance
standards for the contents of the Bicycle Detour Plan required in Mitigation Measure REC-1a are spelled out on page 4.16-13 of the DEIR. The components of Mitigation Measure TR-3a are spelled out on page 4.17-31 of the DEIR. The commenter did not specify any additional mitigation measures that he believes should be implemented. Because the DEIR contains specific mitigation measures with performance standards for plans where appropriate, SAFCA believes that the impacts to recreation would be reduced to a less-than-significant level, and therefore no additional mitigation measures are necessary.

M3-3 The comment expresses concern that the Campus Commons Golf Course may be affected by project-related activities. The comment also states that in the past, there has been some confusion from contractors involved in directing park users away from closed areas for previous USACE projects in the parkway, and therefore the County would like to see additional coordination in the future.

The Campus Commons golf course would not be affected by the proposed project construction. SAFCA understands the County’s concern and will work with its construction contractors to ensure that proper public notice and signage is provided around closed areas where work would occur.

M3-4 The comment indicates that use of some of the borrow sites may require a Surface Mining and Reclamation Act (SMARA) permit.

SAFCA is aware that some of the proposed borrow sites may require a SMARA permit, and will coordinate with the County and the California Department of Conservation as necessary to obtain appropriate permits, if required.

M3-5 The comment indicates that although some of the borrow sites may not require a SMARA permit, they may still require a grading permit, and if grading impacts are not analyzed in the DEIR, then SAFCA should allow additional time to prepare a future CEQA document related to those grading impacts.

Impacts from grading that would occur through the entire project study area and for all project-related facilities have been analyzed in DEIR Section 4.8, “Geology, Soils, and Paleontological Resources.” SAFCA would coordinate with the County to acquire all appropriate regulatory permits, including grading permits, as required.

M3-6 The comment notes that the potential borrow site near Dry Creek is within the Dry Creek Parkway, that the County believes that area is sensitive for cultural resources, and that work at that borrow site may be regulated by the Dry Creek Parkway Plan.

SAFCA understands the County’s concern and agrees that one of the proposed borrow sites is within the Dry Creek Parkway (which is discussed and evaluated throughout Chapter 4 of the DEIR), and that it may be regulated by the Dry Creek Parkway Plan. Project-related impacts to cultural resources have been analyzed in DEIR Section 4.7, “Cultural Resources.” SAFCA will coordinate with the County regarding work with the Dry Creek Parkway, if that borrow site is selected for use.
BE IT REMEMBERED, that on Friday, April 17th, 2013, commencing at the hour of 5:00 p.m., at the Dirick Library, 881 Watt Avenue, Sacramento, California before me, JILLIAN M. SUMNER, a Certified Shorthand Reporter in and for the county of Sacramento, state of California, was present and recorded verbatim the following proceedings:

COMMENTS BY THE PUBLIC:
(Comments made by Pat Hara and Jack Burrows, collectively):

PAT HARA:

Basically, we live in -- what is it -- Walnut View Estates. That's off of Sierra Boulevard. And my flood insurance goes up 100 bucks a year, $1,700. And I'm going, that's just -- what can we do?
So we talked to Pete about the issues of the flooding in that area and the drainage issues, and I need to find a way to get my flood insurance down, if at all possible.

JACK BURROWS:

What Pete was telling us was that what was really required is a larger pump capacity. But the cross-benefit analysis is not there. So he's recommending that we get something from the County, meet with a man by the name of George Booth to evaluate her elevation.

Because I'm not paying any flood insurance in my home, I have another home a few houses down that I'm paying 400 and something. June is paying -- across the street from me -- paying 400 and something.

PAT HARA:

And the kids are right next to the canal. So, yeah, that's the issue.

We originally wanted to have to put up another Cal Expo to pump water out of the slough when the water backs up. But obviously that's not going to work. We have too many issues working against us there.

JACK BURROWS:

So Pete said to bring the comment to your attention, and he'll bring it to the County's --

George Booth and the County to see if there's anything we can do. And we'll bring it to his attention also.

Thank you.

(Next commenter)

JUDITH SCOTT:

I just wanted to say everybody was very helpful and friendly, and I love the charts. And several people answered a lot of questions that we've had.
And another neighbor came in, and we picked Pete's brain, and heard we're supposed to talk to George -- somebody.

It was all very well done and everybody was very helpful. We got our questions answered. But we're not as affected as the other people here are.

(Whereupon, the meeting concluded at 7:00 p.m.)
<table>
<thead>
<tr>
<th>H</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hara</td>
<td>2:16</td>
</tr>
<tr>
<td>2:11,14</td>
<td></td>
</tr>
<tr>
<td>3:13</td>
<td></td>
</tr>
<tr>
<td>he'll</td>
<td>3:25</td>
</tr>
<tr>
<td>heard</td>
<td>4:13</td>
</tr>
<tr>
<td>HELD</td>
<td>1:4</td>
</tr>
<tr>
<td>helpful</td>
<td>4:9,16</td>
</tr>
<tr>
<td>home</td>
<td>3:9,9</td>
</tr>
<tr>
<td>hour</td>
<td>2:2</td>
</tr>
<tr>
<td>houses</td>
<td>3:9</td>
</tr>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td>insurance</td>
<td>2:18,22</td>
</tr>
<tr>
<td>issue</td>
<td>3:16</td>
</tr>
<tr>
<td>issues</td>
<td>2:20,21</td>
</tr>
<tr>
<td>J</td>
<td></td>
</tr>
<tr>
<td>Jack</td>
<td>2:11</td>
</tr>
<tr>
<td>3:1,22</td>
<td></td>
</tr>
<tr>
<td>Jane</td>
<td>3:10</td>
</tr>
<tr>
<td>JILLIAN</td>
<td>1:11</td>
</tr>
<tr>
<td>2:4</td>
<td>5:6,22</td>
</tr>
<tr>
<td>JUDITH</td>
<td>4:7</td>
</tr>
<tr>
<td>K</td>
<td></td>
</tr>
<tr>
<td>kids</td>
<td>3:15</td>
</tr>
<tr>
<td>L</td>
<td></td>
</tr>
<tr>
<td>larger</td>
<td>3:4</td>
</tr>
<tr>
<td>Library</td>
<td>1:4</td>
</tr>
<tr>
<td>2:3</td>
<td></td>
</tr>
<tr>
<td>licensed</td>
<td>5:7</td>
</tr>
<tr>
<td>live</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1:11</td>
</tr>
<tr>
<td>2:4</td>
<td>5:6,22</td>
</tr>
<tr>
<td>man</td>
<td>3:6</td>
</tr>
<tr>
<td>meet</td>
<td>3:6</td>
</tr>
<tr>
<td>meeting</td>
<td>4:19</td>
</tr>
<tr>
<td>name</td>
<td>3:6</td>
</tr>
<tr>
<td>5:17</td>
<td></td>
</tr>
<tr>
<td>need</td>
<td>2:21</td>
</tr>
<tr>
<td>neighbor</td>
<td>4:12</td>
</tr>
<tr>
<td>N</td>
<td></td>
</tr>
<tr>
<td>o00-----</td>
<td>1:2,9</td>
</tr>
<tr>
<td>oaths</td>
<td>5:8</td>
</tr>
<tr>
<td>obviously</td>
<td>3:19</td>
</tr>
<tr>
<td>originally</td>
<td>3:17</td>
</tr>
<tr>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>questions</td>
<td>4:11,16</td>
</tr>
<tr>
<td>R</td>
<td></td>
</tr>
<tr>
<td>really</td>
<td>3:3</td>
</tr>
<tr>
<td>recommending</td>
<td>3:5</td>
</tr>
<tr>
<td>P</td>
<td></td>
</tr>
<tr>
<td>P.M.</td>
<td>1:8</td>
</tr>
<tr>
<td>2:2</td>
<td>4:19</td>
</tr>
<tr>
<td>Pat</td>
<td>2:11,14</td>
</tr>
<tr>
<td>paying</td>
<td>3:8,10,10,11</td>
</tr>
<tr>
<td>people</td>
<td>4:10,17</td>
</tr>
<tr>
<td>person</td>
<td>5:16</td>
</tr>
<tr>
<td>Pete</td>
<td>2:20</td>
</tr>
<tr>
<td>3:3,24</td>
<td></td>
</tr>
<tr>
<td>Pete's</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td></td>
</tr>
<tr>
<td>REPORTED</td>
<td>1:11</td>
</tr>
<tr>
<td>Reporter</td>
<td>1:22</td>
</tr>
<tr>
<td>2:5</td>
<td>5:7,23</td>
</tr>
<tr>
<td>REPORTER'S</td>
<td>5:1</td>
</tr>
<tr>
<td>required</td>
<td>3:4</td>
</tr>
<tr>
<td>right</td>
<td></td>
</tr>
</tbody>
</table>

CourtReporterDepot (877) 808-DEPO
S
Sacramento
1:6 2:3, 5:5, 5:4
SAFCA
1:3
SCOTT
4:7
Section
5:9
see
4:1
Shorthand
2:5 5:6, 23
Sierra
2:17
slough
3:18
somebody
4:14
ss
5:3
state
2:6 5:3, 7
stenographically
5:12
street
3:11
subscribed
5:17
SUMNER
1:11 2:4 5:6, 22
supposed
4:13

T
talk
4:13
talked
2:20
telling
3:3
Thank
4:3
transcribed
5:12
transcript
5:14
transcription
5:13
true
5:14

W
Walnut
2:16
wanted
3:17 4:9
water
3:18, 18
Watt
1:5 2:3
way
2:22
we'll
4:2
we're
4:13, 16
we've
4:11
WHEREOF
5:17
WITNESS
5:17
work
3:19
working
3:20
www.courtreporterdepot.com
1:23

X
yeah
3:15
year
2:18

V
1,700
2:18
100
2:18
13619
1:11 5:23
17
1:7
17th
2:2
2015
1:7 2:2 5:18
2093
5:9
25
5:18
353-9445
1:22
400
3:10, 11
5
1:8 2:2
6
7
7:00
4:19
8
808-3376
1:22
877
1:22
891
1:5 2:3
M4-1  *The comment expresses concern regarding the cost of flood insurance.*

This comment does not relate to the environmental analysis contained in the DEIR; the comment is noted.

M4-2  *The comment notes that some houses in the project area pay for flood insurance, but others do not.*

This comment does not relate to the environmental analysis contained in the DEIR and is not a CEQA issue; the comment is noted.

M4-3  *The commenter expresses a desire to have another Cal Expo pump installed to pump water out of the slough when the water backs up, but the commenter understands that is not going to occur.*

This comment does not relate to the environmental analysis contained in the DEIR; the comment is noted.

M4-4  *The comment indicates that concerns related to flood insurance rates and installation of another Cal Expo pump will also be brought to the County’s attention.*

This comment does not relate to the environmental analysis contained in the DEIR; the comment is noted.

M4-5  *The comment expresses appreciation for the public meeting and the availability of SAFCA personnel to answer public questions.*

SAFCA appreciates the commenter’s note.
NAME: Mary M. Schwarz
PHONE: 916-421-2861
ADDRESS: 642 Ironwood Way (c/o Riva Lake W)
E-MAIL: None

COMMENT/QUESTION:
I live across from the corner of Ironwood and Riva Lake Way. I have been living there since 1970. I did not get a notice. I found the Facebook page for this project and the presenters' knowledge was interesting. The big black mark is not all residents including me can walk about and stand for 5+ minutes to speak to a presenter. I thought public information meetings had to be handicap friendly.

I would like clarification the levy system in the west or in the USA and now the power to be say it can't be fixed until 2017?

If I can help get this through some source let me know.

1/11/15
The comment states that the commenter did not receive notice of the meeting, notes that the open house format of the public meeting was not handicapped-friendly, and that the repair work would not be completed until 2017.

This comment does not relate to the environmental analysis contained in the DEIR; the comment is noted.
Public Comment Sheet

NAME: Ellen Brooms
ADDRESS: 22 Marlton Court
E-MAIL: ellen-brooms@comcast.net

COMMENT/QUESTION: I am an senior and not in the best health. I am concerned about the proposed staging area behind my house. Please don't have it there. That is my major concern.

Also, the trees (orange) and the grassy area at the foot of the area are a concern as well. What does SAFCA propose to do about that and other vegetation that attracts burrowing animals like squirrels and voles.
M6-1  *The comment states that the commenter is concerned about the proposed staging area behind the commenter’s house.*

SAFCA understands the commenter’s concerns related to the use of staging areas within existing developed neighborhoods. However, such staging areas are necessary to carry out the proposed project. SAFCA will minimize disturbance in the staging areas to the extent feasible.

M6-2  *The commenter asks what SAFCA will do with vegetation that attracts burrowing animals.*

The Vegetation Management Decision Key (included as Appendix B of the DEIR) states that fruit- and nut-bearing trees will be assessed and removed from both landside and waterside levee slopes. Fruit- and nut-bearing trees at these locations were identified as high-hazard trees for removal as part of the proposed project. The locations of trees that would be removed as part of the proposed project are shown on Exhibit 3-17 in Chapter 3, “Project Description” (page 3-110 of the DEIR).
NAME: George Baker  PHONE: 916/949-2574
ADDRESS:
E-MAIL: cabaker906@gmail.com

COMMENT/QUESTION:
Very concerned about vegetation removal - trees, shrubs + habitat for threatened/endangered species. Hopeful ACE will rethink philosophy to allow many/most of veg to remain. Prefer SAFCA approval. ACE needs to update its printed materials (e.g. brochure) to reflect more enlightened reality, not "slash & burn" mentality that all veg in footprint will be removed. Hope SAFCA gets the job done.
The comment expresses concern about the USACE vegetation policy and expresses preference for the SAFCA approach to vegetation management.

SAFCA describes vegetation management activities on pages 3-48 to 3-50 in Chapter 3, “Project Description.” The locations of trees that would be removed as part of the proposed project are shown on Exhibit 3-17 in Chapter 3, “Project Description” (page 3-110 of the DEIR). SAFCA intends to implement the specific levee improvements in the North Sacramento Streams and Sacramento River East Levee areas; other improvements identified in USACE’s GRR may be implemented by others, including USACE.
NAME: Lissa McKee
PHONE: (415) 806-0210
POA for Ann McKee
ADDRESS: 913 Piedmont Drive
E-MAIL: Lissamck@hotmail.com

we have no dock
we have erosion
we are interested in restoration
of cottonwood

COMMENT/QUESTION:
M8-1

The comment touches on docks, erosion, and vegetation restoration.

This comment does not relate to the environmental analysis contained in the DEIR; the comment is noted.
Note: This comment was made verbally while at a public meeting on August, 21, 2015, so no letter or comment sheet was provided.

M9-1  The comment specifically requests that the EIR consider an alternative that would save trees and mitigate the impact of the project on trees.

Construction of levee improvements could require removal of trees from the actual footprint of construction (i.e., from the area where the levee must be degraded to accommodate installation of cutoff walls, or from areas where berms are being constructed on the levee slope) or from construction-related activities at staging areas, or to enable access to construction sites.

The DEIR describes alternatives in Chapter 7. The process by which engineering alternatives were evaluated is described briefly in Section 7.1.3, “Alternatives Development Process.” On October 27, 2015, GEI Consultants Inc. (GEI) prepared a memorandum (Appendix A to the FEIR) summarizing the selection of the engineering alternatives for the Sacramento River East Levee in more detail. This memo identifies the various types of possible remediation for through-and underseepage (including conventional slurry trench cutoff wall, deep mixing method, relief wells, stability berms, toe drains, and seepage berms), and provides a comparison of their engineering and environmental advantages and disadvantages.

Section 7.1.4, “Alternatives Considered and Rejected,” addresses three alternatives, two of which (toe drain trenches and steel or vinyl sheet piles) would have the potential to reduce impacts of the proposed project on trees by reducing the footprint of required construction. These alternatives were rejected from detailed consideration due to infeasibility or potential lack of effectiveness in addressing through- or underseepage problems.

As described in Appendix A, Section 7.1.3, and Section 7.1.4, a full range of alternatives has been evaluated. Based on this evaluation, no additional engineering alternatives have been identified that could meet the project objectives while reducing impacts on trees due to through-and underseepage remediation.

See also Master Response 2: Evaluation of Project Impacts to Vegetation.
McFerran, Suzanne

From: Dunn, Francine
Sent: Monday, March 30, 2015 9:08 AM
To: McFerran, Suzanne
Subject: FW: SAFCA Levee Accreditation Project

Francine Dunn
Principal | CEQA, NEPA, Environmental Compliance Environmental Planning Business Unit Leader, Greater Northern
CA/NV D +1 916.414.5840 francine.dunn@aecom.com

AECOM
2020 I Street, Suite 400, Sacramento, CA 95811 USA T +1 916.414.5800 F +1 916.414.5850 wwwaecom.com

-----Original Message-----
From: SAFCA Levee Accreditation Program [mailto:PeteGheffi@saccounty.net]
Sent: Sunday, March 29, 2015 6:55 PM
To: Dunn, Francine; jdavis@gualco.com
Subject: FW: SAFCA Levee Accreditation Project

-----
From: Lissa McKee
Sent: Sunday, March 29, 2015 6:55:10 PM (UTC-08:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program
Cc: anne.e.baker@usace.army.mil
Subject: FW: SAFCA Levee Accreditation Project

To save you the effort of checking your database for my address (the recent postcard notifying me about the project is evidence that you have my address) I am providing two mailing addresses from which you may choose.

307 Starling Road
Mill Valley, CA 94941

913 Piedmont Drive
Sacramento, CA 95822

-----
From: lissamck@hotmail.com
To: petegheffi@saccounty.net
CC: anne.e.baker@usace.army.mil
Subject: SAFCA Levee Accreditation Project
Date: Sun, 29 Mar 2015 18:51:04 -0700

1. I hereby request a copy of the DVD for the above project.


2. I also request a copy of the cultural resource survey and identification report completed for the project’s obligation pursuant to 36CFR Part 800.4. You may redact the prehistoric archaeological findings if you so choose.

3. I also request a copy of any correspondence with California State Historic Preservation Office staff that covers review and concurrence with said report.

Elizabeth McKee, POA
Ann E McKee Survivors Trust

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.
The commenter requests a copy of the DEIR and a copy of the “cultural resource survey and identification report,” citing to the procedures outlined in 36 Code of Federal Regulations Section 800.4 related to the identification of historic properties. The commenter also requests a copy of any correspondence with California State Historic Preservation Office related to the proposed project.

A copy of the DEIR has been mailed to the commenter. The process and documentation related to the identification of historic properties is contained in DEIR Section 4.7, “Cultural Resources” and DEIR Appendix I. Consultation with the California State Historic Preservation Office has not yet been initiated. The regulations to which the commenter refers are the implementing guidelines to Section 106 of the NHPA, as amended. The need for USACE 14 Rivers and Harbors Act of 1899 (aka 33 U.S. Code 408/Section 408) to grant permission for the alteration of the levees and authorization under Section 404 of the CWA for wetland impacts requires USACE to ensure compliance with Section 106 of the NHPA. SAFCA has initiated the permitting process; however, the Section 106 studies are not complete and therefore we do not have a technical report or any correspondence with the State Historic Preservation Officer available.

The Section 106 technical report will include confidential information regarding prehistoric and historic archaeological sites, which SAFCA is not allowed to release to the public. At this time SAFCA does not plan to prepare a non-confidential version of the Section 106 technical report for public review.
Francine Dunn
Principal | CEQA, NEPA, Environmental Compliance Environmental Planning Business Unit Leader, Greater Northern CA/NV D +1 916.414.5840 francine.dunn@aecom.com

AECOM
2020 I Street, Suite 400, Sacramento, CA 95811 USA T +1 916.414.5800 F +1 916.414.5850 www.aecom.com

-----Original Message-----
From: SAFCA Levee Accreditation Program [mailto:PeteGhelfi@saccounty.net]
Sent: Monday, March 30, 2015 11:07 AM
To: Dunn, Francine; jdavis@gualco.com
Subject: FW: SREL

From: John Bertke
Sent: Monday, March 30, 2015 11:06:39 AM (UTC-08:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program
Subject: SREL

Hello, my name is John Bertke. I live at 6224 North Point Way, Pocket Green Haven area. During the last levee work you used an unimproved park adjacent to the ramp area for staging. Since that time the neighborhood has made improvements, planted trees and so on. Based on the information in the draft EIR it appears this area is being proposed for staging. Attached picture. We are requesting that this area not be used for a staging area. The neighborhood kids play there on a regular basis and equipment stored in this area would not be in tune with the current use of the park. Perhaps the temporary ramp left behind that cuts through the middle of the entire park area could be removed when the work is completed.

Sent from my iPad

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.
P2-1  The comment requests that one of the neighborhood parks identified as a potential staging location in the Pocket area not be used. The comment also requests that the temporary ramp to the levee in the park be removed when the project is completed.

SAFCA understands the commenter’s concerns related to the use of staging areas within existing developed neighborhoods and parks. However, such staging areas are necessary to carry out the proposed project. SAFCA will minimize disturbance in the staging areas to the extent feasible. The ramp within the park is necessary for continued levee access and maintenance and therefore cannot be removed.
Francine Dunn
Principal | CEQA, NEPA, Environmental Compliance Environmental Planning Business Unit Leader, Greater Northern CA/NV D +1 916.414.5840 francine.dunn@aecom.com

AECOM
2020 L Street, Suite 400, Sacramento, CA 95811 USA T +1 916.414.5800 F +1 916.414.5850 www.aecom.com

-----Original Message-----
From: SAFCA Levee Accreditation Program [mailto:PeteGheffi@sacounty.net]
Sent: Tuesday, March 31, 2015 9:44 AM
To: Dunn, Francine; jdavis@ualco.com
Subject: FW: New $1.5B round of levee work planned for Sacramento River

Hi Pete,

I read Matt Weiser’s article in the Sacramento Bee regarding the New $1.5B round of levee work planned for Sacramento River and would like to receive information on the planned series of public meetings in April. Thank you.

Russell C. Sherman
Vice President, Business Development
Tutor Perini Corporation
Heavy Civil Division
15901 Olden Street
Sylmar, CA 91342
Mobile: 818-307-5484
Phone: 818-362-8391
Russell.Sherman@tutorperini.com<mailto:Russell.Sherman@tutorperini.com>

Please visit us at www.tutorperini.com<http://www.tutorperini.com/>

NYSE: TPC

1
The commenter indicates that he read an article by Matt Weiser in the Sacramento Bee related to the proposed project, and requests further information regarding the public meetings to be held in April.

The information related to the dates and times of the April public meetings was included at the end of Mr. Weiser’s article in the Sacramento Bee (see http://www.sacbee.com/news/local/environment/article16860728.html).
Dear Francine Dunn,

I am writing to you as the Principal CEQA, NEPA, Environmental Compliance Environmental Planning Business Unit Leader, Greater Northern CA/NV D +1 916.414.5840 francine.dunn@aecom.com

AECOM
2020 L Street, Suite 400, Sacramento, CA 95811 USA T +1 916.414.5800 F +1 916.414.5850 wwwaecom.com

----Original Message----
From: SAFCA Levee Accreditation Program [mailto:PeteGhelfi@sacounty.net]
Sent: Tuesday, March 31, 2015 3:49 PM
To: Dunn, Francine; j.davis@gualco.com
Subject: FW: Please help save our shoreline

Hello, my name is John Bertke. I reside at 6224 North Point Way in Sacramento. I am writing to bring to your attention the destruction of our shoreline and restoration area. The area is described as within Reach 17, marker LM 3.5, Mile 51.28. Prior to the most recent levee improvement and restoration the area was plagued with people leaving garbage, and generally destroying the natural resources. The area over the years since the restoration has become a beautiful and natural setting. We now have sighted fox, beavers, otters and Swanson Hawks have been nesting in the trees in this area for several years in a row. What preserved this area was signage posted as a restoration area and a no fishing area. There was also a short wire fence that over the years had become overgrown and created a natural looking barrier.

We are now seeing the destruction of all the great effort to both provide a safe levee and restore the shoreline as a natural habitat for all to enjoy. The folks I know that fish consider themselves conservators of nature. Unfortunately this area attracts those that fish (seldom with a license showing) and have no respect for nature.

As part of their standard operating procedure the Department of Water Resources removed the fence and signs. Since the removal of the signs and fence there has been much destruction by many of the people going to the area to fish.

Sincerely,

John Bertke
They are tearing down the dead orchard trees placed along the shoreline as part of the restoration to both clear a fishing spot and to burn for their camp fires. Additionally they are removing the rip rap to clear areas to set up chairs and so on.

Below are pictures that show about 75ft or more of restoration shoreline that has been cleared of the orchard trees placed during restoration and burned in the fire pit made from the rip rap. Also depicts some of the area where the rip rap was cleared. Other restoration areas north of the marker are now also being destroyed.

We are requesting that this area be designated with signs as no fishing area and natural habitat not to be destroyed. That way folks that just want to visit and enjoy nature can do so.

Allot of hard work and money went into the levee improvement and restoration, please help us preserve this wonderful natural resource. Thank you in advance for your consideration.

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.
The commenter states that the area along the Sacramento River within Reach 17, marker LM 3.5, Mile 51.23 formerly attracted people leaving trash and “destroying the natural resources,” but since the last levee improvement project, the area has been restored to a beautiful natural setting. The comment expresses concern that the proposed project would destroy the current natural setting in order to provide improved flood protection.

The current land cover within Reach 17 consists of Freemont cottonwood forest, sandbar willow thickets, and wild oats grassland. Seven high-hazard trees would be removed within this area, and a conventional seepage cutoff wall would be installed through the crown of the levee (see Exhibit 4.6-2h in Section 4.6, “Biological Resources – Terrestrial”). SAFCA intends to avoid impacts to riparian vegetation to the maximum amount feasible. SAFCA has developed a comprehensive regional Conservation Strategy that is designed to protect, avoid, minimize, reduce, and compensate for impacts to ecological resources (see pages 3-50 through 3-67 of Chapter 3, “Project Description”).

The comment indicates that the California Department of Water Resources removed warning signage and exclusionary fencing, and that fishermen are tearing down dead orchard trees, removing riprap, and depositing garbage.

The concerns raised by the commenter relate to DWR policies and incidents of public use along the Sacramento River. Although SAFCA has no jurisdictional authority over signage and garbage, the commenter’s concern for degradation along Reach 17 is appreciated and SAFCA will bring this issue to the attention of the appropriate State levee maintenance agency.

The comment requests that the area within Reach 17 be designed as a no fishing area and that signage be erected indicated that the natural habitat is not to be destroyed.

See response to comment P4-2.
Jay, thank you for your response. I was talking with the DWR employees that were removing the fence and signs and they told me that it is SOP to remove them after a given amount of time. That is where I got the SOP referenced in my letter.

John Bertke

From: Jay Davis <jdavis@qulco.com>
To: MBK93@qat.net
Cc: PeterCheff@saccounty.net; RickJennings@cityofsacramento.org; DennisRogers@cityofsacramento.org
Sent: Wednesday, April 1, 2015 4:20 PM
Subject: Fwd: Please help save our shoreline

Mr. Bertke,

I am responding on behalf of SAFCA to your email. Thank you for making us aware of your concerns.

While the Sacramento Area Flood Control Agency (SAFCA) has no jurisdictional authority over signage and garbage, we appreciate your concern for the degradation of the site and would like to bring it to the attention of the appropriate State levee maintaining agency and see how they would like to address these important issues.

I have highlighted and underlined a portion of your email message and perhaps you are aware of DWR – Standard Operating Procedures of which we are not. And with that, we will make an inquiry to see how they would like to respond either directly to you or back to this email. We plan to make the inquiry today so please allow some time for them to reply.

As part of their standard operating procedure, the Department of Water Resources removed the fence and signs. Since the removal of the signs and fence there has been much destruction by many of the people going to the area to fish.

Sincerely,

Jay Davis
SAFCA Project Ombudsman
Qulco Consulting
11230 Gold Express Dr. #310
Gold River, CA 95670
(916) 351-0600 tele
(916) 351-9392 fax
jdavis@qulco.com
From: John Bertke
Sent: Tuesday, March 31, 2015 3:52:06 PM (UTC-08:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program; director@wildlife.gov; secretary@recources.gov; rjennings@cityofsacramento.org
Cc: Ray Harrison; Rene Roman; Mbk92@att.net
Subject: Please help save our shoreline

Hello, my name is John Bertke. I reside at 6224 North Point Way in Sacramento. I am writing to bring to your attention the destruction of our shoreline and restoration area. The area is described as within Reach 17, marker LM 3.5, Mile 51.23. Prior to the most recent levee improvement and restoration the area was plagued with people leaving garbage, and generally destroying the natural resources. The area over the years since the restoration has become a beautiful and natural setting. We now have sighted fox, beavers, otters and Swanson Hawks have been nesting in the trees in this area for several years in a row. What preserved this area was signage posted as a restoration area and a no fishing area. There was also a short wire fence that over the years had become overgrown and created a natural looking barrier.

We are now seeing the destruction of all the great effort to both provide a safe levee and restore the shoreline as a natural habitat for all to enjoy. The folks I know that fish consider themselves conservators of nature. Unfortunately this area attracts those that fish (seldom with a license showing) and have no respect for nature.

As part of their standard operating procedure the Department of Water Resources removed the fence and signs. Since the removal of the signs and fence there has been much destruction by many of the people going to the area to fish. They are tearing down the dead orchard trees placed along the shoreline as part of the restoration to both clear a fishing spot and to burn for their camp fires. Additionally they are removing the rip rap to clear areas to set up chairs and so on.

Below are pictures that show about 75ft or more of restoration shoreline that has been cleared of the orchard trees placed during restoration and burned in the fire pit made from the rip rap. Also depicts some of the area where the rip rap was cleared. Other restoration areas north of the marker are now also being destroyed.

We are requesting that this area be designated with signs as a no fishing area and natural habitat not to be destroyed. That way folks that just want to visit and enjoy nature can do so.

Allot of hard work and money went into the levee improvement and restoration, please help us preserve this wonderful natural resource. Thank you in advance for your consideration.

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review,
copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

Sent from my iPad
| Letter  
| Response | John Bertke  
<table>
<thead>
<tr>
<th></th>
<th>April 1, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>P5-1</td>
<td></td>
</tr>
</tbody>
</table>

The commenter clarifies the source of information cited in his previous communication, identified as P4 in the FEIR.

This comment does not relate to the environmental analysis contained in the DEIR; the comment is noted.
FYI, and file.

Francine Dunn
Principal | CEQA, NEPA, Environmental Compliance
Environmental Planning Business Unit Leader, Greater Northern CA/NV
D +1 916.414.5840
francine.dunn@aeacom.com

AECOM
2020 L Street, Suite 400, Sacramento, CA 95811 USA
T +1 916.414.5800  F +1 916.414.5850
www.aecom.com

-----Original Message-----
From: Claire Marie Turner [mailto:turner@mbkengineers.com]
Sent: Monday, April 06, 2015 7:31 AM
To: Barbara Gaucho; Jay Davis; Ric Reinhardt; Pete Gieff; Tim Washburn (SAFCA)
Cc: Dunn, Francine; Ric Reinhardt; Peter Buck
Subject: FW: [EXTERNAL] Question about levee work (UNCLASSIFIED)

Good morning,

Forwarding the below for SAFCA team action.

-----Original Message-----
From: Baker, Anne E SPK [mailto:Anne.E.Baker@usace.army.mil]
Sent: Monday, April 6, 2015 10:27 AM
To: Buck, Peter; Claire Marie Turner; Dunn, Francine
Subject: FW: [EXTERNAL] Question about levee work (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

All,

Not sure who from your team is handling public inquiries, but I received the below e-mail and I think perhaps one of you could better respond to her concerns, since they are construction-oriented? The area behind Ms. Broms house is a designated staging area in your plan. Could you please take a look and cc me on any response to her?

Thanks,

Anne E. Baker
Environmental Manager
Environmental Analysis Section, Planning Division Sacramento District, US Army Corps of Engineers
1325 J Street
Sacramento, CA 95814-2922
(916) 557-7277
---Original Message---
From: Ellen Broms [mailto:ellen-broms@comcast.net]
Sent: Friday, April 03, 2015 2:08 PM
To: Baker, Anne E SPK
Cc: 'candace schurcke'
Subject: [EXTERNAL] Question about levee work

I have a question about the levee work along the Sacramento River. I live in the Pocket/Greenhaven area and I was wondering the extent of the work in my area. I live next to the levee. There is a grassy area between my house and the levee area. I plan to change my front yard to a drought tolerant landscape. Will the levee work preclude this redesign? Should I wait? It is very costly to put in a drip watering system and take out the lawn and relandscape. I don’t want to do it if the big machinery will be making a problem for me. I have a friend in West Sacramento who told me about the loss of farm houses and all of the property that was taken over for levee work. Will that be happening in the Pocket? I will be attending the meeting at the Elks Lodge next Thursday but I wanted to know as soon as possible. The landscape design work will be started soon.

Please advise.

Thank you,
Ellen Broms
22 Marlton Court
Sacramento, CA 95831

Classification: UNCLASSIFIED
Caveats: NONE

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.
P6-1  The commenter indicates that she plans to change her landscaping to be drought-tolerant, but notes that since this would be an expensive project, she wants to wait until after the proposed project is completed if the proposed project would affect her property. The commenter also asks if any part of her property would be taken over as part of the project.

The proposed project would not entail any actions related to eminent domain. Proposed levee remediation would only occur within the existing levee footprint and within identified access and staging areas.
Here is a clean copy for filing.

Francine Dunn
Principal | CEQA, NEPA, Environmental Compliance
Environmental Planning Business Unit Leader, Greater Northern CA/NV
D +1 916.414.5840
francine.dunn@aecom.com

AECOM
2020 L Street, Suite 400, Sacramento, CA 95811 USA
T +1 916.414.5800 F +1 916.414.5850
wwwaecom.com

-----Original Message-----
From: SAFCA Levee Accreditation Program [mailto:PeteGhelli@saccounty.net]
Sent: Thursday, April 09, 2015 1:22 PM
To: Dunn, Francine; jldavis@gualco.com; aliatayeh@gmail.com
Subject: FW: Biological studies for Draft EIR NORTH SACRAMENTO STREAMS, SACRAMENTO RIVER EAST LEVEE, LOWER AMERICAN RIVER, AND RELATED FLOOD IMPROVEMENTS PROJECT

From: Deborah Snider
Sent: Thursday, April 9, 2015 1:21:43 PM (UTC-08:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program
Subject: Biological studies for Draft EIR NORTH SACRAMENTO STREAMS, SACRAMENTO RIVER EAST LEVEE, LOWER AMERICAN RIVER, AND RELATED FLOOD IMPROVEMENTS PROJECT

I would like a copy of supporting study results for biological resources for the above draft EIR. Please mail to 15550 Barney Road, Plymouth, CA 95669. Deborah Snider. My mom owns property abutting the Sacramento River in the project boundary. If there are no studies other than scoping level information gleaned from database reviews and communication with resource agencies to date please respond and state as such. Thank you.

Deborah Snider
COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any
P7-1  

The commenter requests a copy of “supporting study results” for biological resources in the DEIR.

Pages 4.6-8 of Section 4.6, “Biological Resources – Terrestrial,” contains a detailed discussion under the heading “Methodology and Surveys.” As stated therein, several biological resource databases were queried, including CDFW California Natural Diversity Database (CNDDB), the database of endangered species under the jurisdiction of USFWS Sacramento Fish and Wildlife Office, and the California Native Plant Society’s (CNPS’) online Inventory of Rare and Endangered Vascular Plants of California. The South Sacramento County Habitat Conservation Plan was reviewed for background information on biological resources that occur in the County and policies and ordinances protecting such resources that could be applicable to the proposed project. Numerous additional sources of information on individual plant and wildlife species were also reviewed. On June 18, 20, 23, 24, and 25, 2014, AECOM biologists conducted field surveys of portions of the two areas where levee improvements would be constructed: Arcade Creek within the North Sacramento Streams Levee Improvements area and the Sacramento River East Levee Improvements area. NEMDC/Steelhead Creek was surveyed by AECOM biologists on September 3 and 8, 2014. Site-specific information for Dry Creek was obtained from a wetland delineation conducted for SAFCA by AECOM in 2008. A qualitative survey of additional areas where other proposed project elements would occur, including American River, Beach Lake, and Robla Creek, were conducted by AECOM biologists through interpretation of aerial imagery. Protocol-level plant or wildlife surveys have not been conducted. This information has been incorporated and presented in the discussion and exhibits contained in DEIR Section 4.6, “Biological Resources – Terrestrial,” as well as DEIR Appendices B, D, E, F, G, and H.
From James E. Houpt
Sent: Sunday, April 12, 2015 10:17:08 AM (UTC-06:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program
Subject: Levee Accreditation Project

Hi, Pete,

May I get a DVD copy of the draft EIR for the SAFCA Levee Accreditation Project? I will be happy to come by to pick it up to save the cost of mailing.

Jim Houpt
(Friends of the Sacramento River Parkway)

JAMES E. HOUPT
Attorney at Law
5960 South Land Park Drive, #224
Sacramento, CA 95822-3313
916-394-7239 (tel)
916-394-4897 (fax)

IRS CIRCULAR 230 DISCLOSURE: Pursuant to requirements imposed by the Internal Revenue Service, any tax advice contained in this communication (including any attachments) is not intended to be used, and cannot be used, for purposes of avoiding penalties imposed under the United States Internal Revenue Code or promoting, marketing, or recommending any tax-related matter to another person.

IF YOU BELIEVE YOU RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY OF THE ERROR; BY RETURN E-MAIL AND PLEASE DELETE THIS MESSAGE FROM YOUR SYSTEM. THIS E-MAIL WAS SENT ONLY FOR THE USE OF THE INTENDED RECIPIENT AND MAY BE A PRIVILEGED COMMUNICATION PROTECTED BY LAW; ANY REVIEW, USE, DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS E-MAIL IS STRICTLY PROHIBITED.

COUNTY OF SACRAMENTO E-MAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.
<table>
<thead>
<tr>
<th>Letter</th>
<th>James Houpt</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8</td>
<td>April 12, 2015</td>
</tr>
</tbody>
</table>

P8-1  

*The commenter requests a copy of the DEIR.*

A copy of the DEIR has been mailed to the commenter.
From: James Geary
Sent: Sunday, April 12, 2015 1:28:07 PM (UTC-08:00) Pacific Time (US & Canada)
To: SACPA Levee Accreditation Program
Subject: Pocket levee Project

During the project, I strongly urge that the fences across the levee should not be replaced since each one is illegal and/or not properly permitted by SACPA. The project should not be engaged in any activity that replaces an illegal fence with another illegal fence. No government agency should be engaged in obstructing the levee with illegal fences.

Jim Geary
988 Cobble Stone Dr
Sacramento, CA 95831

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.
The commenter states that existing fences across the levee are illegal, and therefore should not be replaced after project-related work is completed.

SAFCA intends to replace any fence sections that may need to be removed during project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions. Enforcement of permit conditions is the responsibility of CVFPB rather than SAFCA.
From: Dennis M. Rogers
Sent: Sunday, April 12, 2015 4:47 PM
To: SAFCA Levee Accreditation Program
Cc: Jim Combes, Jerry Way
Subject: FW: Request for removal for Walnut Tree on Mariton Court cul-de-sac

Pete,

Can you help me navigate this issue and how it interplays with the levee improvements project?

As a nut producing tree, is this one that will be impacted by the project?

I just want to see what would be possible,

Dennis

Sent from my iPad

BEGIN MESSAGE

From: Pam Bigelow <pambigelow@comcast.net>
Date: April 12, 2015 at 4:19:49 PM PDT
To: Dennis M. Rogers <d/roses@cityofsacramento.org>

Hi Dennis,

Thank you for talking with us about the removal of the walnut tree next to the levee on Mariton Court.

There is a large number of squirrels that live in the tree and they are a safety issue for the stabilization of the levee. The tree is within 25 feet of the levee bank.

In addition, the tree has multiple cycles of leaves, cones, and then walnuts which drop into my backyard garden area. The city no longer allows yard pickup in the street, so my personal playground can be filled with the debris from the city tree.

I've attached a photo per your request.

Thanks again,

Pamela Bigelow
City of Sacramento
(916) 264-5633
Sacramento, CA 95831

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged materials for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete this original and any copies of this email and any attachments thereto.
The comment requests that SAFCA remove a walnut tree on Marlton Court which the commenter states is within 25 feet of the levee and represents a nuisance to the homeowner from leaf, twig, and nut drop on the homeowner’s property.

The proposed project includes removal of specific high-hazard trees that have been identified on or near the levee toe. Upon review of the specific tree in question in this comment, the tree was found not to meet the criteria to be designated as a high-hazard tree. SAFCA does not propose to remove the tree in question.
Another.

Sent from my iPhone

Begin forwarded message:

From: Lissa McKee <lissamck@hotmail.com>
Date: April 15, 2015 at 2:32:30 PM PDT
To: "PeteGhelfi@SacCounty.net" <peteghelfi@saccounty.net>
Cc: "Jdavis@gualco.com" <jdavis@gualco.com>,
"francine.dunn@aecom.com" <francine.dunn@aecom.com>,
"erin.brehmer@water.ca.gov" <erin.brehmer@water.ca.gov>, "Deb Sniders@zetabroadband.com" <sniders@zetabroadband.com>
Subject: SAFCA Levee Accreditation Project

I am writing to express my concern that the proposed project will expose the property at 913 Piedmont Drive in Sacramento to property damage, the owners to tort liability and, the occupants to personal injury during the period when the gates protecting Little Pocket private property are removed for construction (see page 3-25 of the EIR).

I insist that the responsible agencies ensure that trespass is prevented during the period of construction. I request communication by email or letter about the measures that will be employed. If you have any questions, you can reach me by (415) 806-6740.

Elizabeth McKee, POA
Ann McKee Survivors Trust
913 Piedmont Drive
Sacramento, CA 95822

alternate postal address:
307 Starling Road
Mill Valley, CA 94941

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.
P11-1  

The comment expresses concern that when private property fences across the levee are removed for project-related work, property owners may be exposed to personal injury and property damage. Therefore, the comment requests that SAFCA ensure that trespass is prohibited while work is occurring.

SAFCA intends to replace any fence sections that may need to be removed during project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA. To the extent feasible, access to work areas will be restricted during construction activities.
April 25, 2015

Mr. Pete Ghelfi, P. E.
Director of Engineering
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

RE: North Sacramento Streams, Sacramento River East Levee, Lower Sacramento River, and Related Projects DEIR

Dear Mr. Ghelfi:

As a resident of the Pocket Area, whose house is on a cul-de-sac that ends at a portion of the levee covered by this DEIR, I'm very supportive of all SAFCA's efforts to strengthen the levee and bring it up to current state-of-the-art standards. Thus, I'm very disappointed to conclude the DEIR does not meet CEQA (and NEPA) standards and supports a proposal that is not consistent with the Department of Water Resources Urban Levee Design Criteria. There are substantial impacts that have either not been mitigated, or have been insufficiently mitigated. I would hope your Agency would correct these deficiencies prior to the adoption of the final EIR to prevent possible litigation that could delay a very worthwhile project.

In summary, the DEIR supports (1) replacing encroachments without the necessary Civil Engineer's report; (2) replacing penetrations without the necessary Civil Engineer's report; (3) does not properly mitigate the finding of a significant impact on Greenhouse gases; (4) does not properly mitigate the traffic effects and air quality damage by material delivery/hauling trucks; (5) does not properly mitigate the effect on alternative modes of transportation; (6) does not properly mitigate noise impacts; (7) does not properly consider/mitigate the socioeconomic and Environmental Justice aspects of the project; (8) and does not provide proper mitigation for the significant impact on recreational activities that the DEIR concludes will occur.

Additionally, the subject DEIR either ignores or does not properly consider all the issues raised in American River Watershed Common Features General
Reevaluation Report (March 2015) prepared for the U. S. Corps of Engineers, and covering in part the same project.

1. Improper Replacing of Encroachments

Without explanation or justification, the DEIR concludes "...Gates would be removed as needed prior to construction and replaced following the completion of construction-related activities to preproject conditions.” (Section 4.16.44). Apparently it is SAFCA's intent to replace all fences regardless of their permit status, original purposes, or effect on the integrity of the rebuilt levee.

This action apparently ignores the Urban Levee Design Criteria (Department of Water Resources, May 2012): "[A] civil engineer needs to assess existing encroachments and render an opinion as to their impact on the reliable performance of the levee/floodwall for the full range of loading up the HTOL..." (Section 7.12.1). There is no reference to any such engineering study, or any acknowledgement of DWR's criteria. More pointedly, the Department of Water Resources as long opposed fences on the pocket levee:

This office does not approve of cross fences and gates on the levee section, as they hinder efficient maintenance and increase maintenance costs.

Letter from Howard J. Sullivan, Assistant Secretary to W. B. Groza, June 13, 1972, p. 1, re application 8005

Since almost all the fences continue to the waterline, they present an impediment to the free flow of water during high-water periods:

Based on past experiences and from a flood control standpoint, we do not approve of high cyclone fences extending down the waterward slope of the levee below flood plane elevations. During high flows debris can collect on the fence and cause erosion of the levee slope.


Additionally, SAFCA proposes to replace these fences without regard to their original purpose, whether that purpose still exists, and the cost to SAFCA (which is to say, the taxpayers). For example, there are three "pipe-gates" owned by the City of Sacramento that were designed to stop auto traffic in areas where there is no longer that concern: two formerly formed the boundaries for the old Garcia Bend Marina (approximately behind 6880 Arabella, where Arabella makes a 90 degree turn at the levee) and one behind Zacharias Park (at the top of the access path from the park). None of these gates have SAFCA permits and there
is no need to replace them as the Marina is long deserted with no public access and the roadway to the levee behind Zacharias Park has a separate auto gate at the Riverside Blvd. access. Since these are heavy pipes designed to stop motor vehicles, their support arms are 6" or 8" in diameter and necessarily penetrate the levee for some distance.

The original concern for most, if not all, of the private fences likewise no longer exists. A report to the Reclamation Board from the Department of Water Resources regarding cross-fences in Maintenance Area No. 9 (which includes the Pocket and Little Pocket), indicated the major problem where fences might be necessary was "...four-wheel drive vehicles or motorcycles or like equipment..." an issue that no longer exists with the full development of the area. Likewise, the Powell application of September 13, 1977 was submitted to "...keep out motorcycles and some cars that happen to be on the levee..." (Application 6649-A) and the "Greenhaven 70 Unit #6" (Riverlake Way) first reason for a fence was "The levee in this area has become a haven for motorcyclists..." (Application 7949).

Additionally, the costs to inspect the levees are considerably increased by the continued existence of the private gates. The Department of Water Resource's District Engineer estimated as long ago as 1968 that the increase in cost for regular inspection of the levee for each gate was $39 per annum (1968 dollars when employees made $13 an hour). (Report to The Reclamation Board, August 9, 1968, from Carl A. Werner, District Engineer).

Since none of these factors have been considered in the DEIR, it fails to meet CEQA standards.

2. Improper consent to new penetrations

Like encroachments, the Urban Levee Design Criteria disallows new penetrations without an engineer's report (section 7.13.1). The DEIR fails to even address the penetrations that will be caused by replacement fences, again failing to comply with CEQA standards.

3. Failure to consider impact of greenhouse gases.

While the DEIR finds there will be a significant impact on greenhouse gases (sec. 4.10), it offers no mitigation for this. Since this increase will be caused almost entirely by motorized equipment, proper mitigation should include facilitating non-motorized transportation. It would appear the easiest way for SAFCA to meet its obligations would be to finish the levee parkway to encourage non-motorized transportation, such as more bike commuting.

4. Failure to properly mitigate traffic effects/air quality.
While the DEIR properly finds a significant impact on traffic effects and air quality, no substantive mitigation is offered (Sec. 4.4). While the DEIR does not provide a specific time schedule for completion, the joint draft EIR-EIS indicates there may be 5 years of construction in the pocket area, with a 6-month construction season. Again, to properly mitigate the effects of more motorized transportation, work that would facilitate non-motorized transportation is necessary (Sec. 4.17.13). Completion of the parkway would meet this requirement.

5. No mitigation for effect on alternative transportation

The DEIR does indicate that there would be a substantial impact on alternative transportation, such as biking and waking by interfering with existing levee access (Sec. 4.16.1; TR-3). The only mitigation is the placement of “detour” signs, which would push bicyclists and pedestrians onto already heavily traveled streets. To offset this significant impact, completion of the parkway would be adequate mitigation.

6. Insufficient mitigation for noise impact

Again, the DEIR concedes a significant impact based on the increased noise, but offers no substantive mitigation (Sec. 4.15, 6.2.4). Mitigation should include long-term provisions that would reduce noisy, motorized vehicles for essentially “noise-less” alternatives.

7. There is no adequate mitigation for socioeconomic and environmental justice

The project envisions replacing existing fences, which eliminate access to the levee and river by those not fortunate enough to be able to afford the relatively pricey homes backing up to the levee. Not allowing fences to be replaced would be adequate mitigation.

8. There is no adequate mitigation for the significant impact on recreational activities

The DEIR finds there will be a significant impact on recreational activities, primarily the effect on the use of the bikeway. While noting the effect on the Sacramento City/County Bikeway Master Plan and the interference with it (Sec. 4.16.1), the DEIR provides no mitigation except for detour signs to direct bicyclists onto much more dangerous city streets. Adequate mitigation should provide for a significant upgrade in the bikeway in the post-construction state.
Overall, the Levees are not being rebuilt to state-of-the-art standards.

As noted, the DEIR attempts to support a project that entails a rebuilding of the levees to a less than state-of-the-art standard. In addition to the points raised above, patrol roads are to have “all-weather support,” (sec. 7.8.2) but the plan calls for a continued dirt and gravel levee crown/patrol road. The top of the levee should be asphalted for the safety of the community. Asphalting will additionally greatly reduce the chances of levee saturation/failure during heavy rainfalls and rainfall seasons.

I respectfully request that the matters raised in this letter be addressed and corrected prior to the final EIR being submitted.

Very truly yours,

Ronald W. Beals
ronbeals3@yahoo.com
P12-1  The comment expresses support for levee strengthening but states that the document does not meet CEQA (and NEPA) standards and there are substantial impacts that have either not been mitigated or insufficiently mitigated, and indicates the commenter’s concern that the proposed project is not consistent with DWR’s ULDC.

The document is a CEQA document and not a NEPA document. Therefore the EIR does not meet NEPA standards. As a general matter, SAFCA believes that the DEIR has appropriately identified all potentially significant and significant impacts of the proposed project on the physical environment, and that appropriate and feasible mitigation measures have been identified to avoid, compensate, or reduce the level of potentially significant and significant impacts, where necessary. As described for specific improvements throughout Chapter 3, “Project Description,” the proposed project improvements are designed to meet DWR’s ULDC. Responses to detailed comments are provided below. See also Master Response 1: Disagreement Regarding the Conclusions of the Draft Environmental Impact Report.

P12-2 and 12-3  The comment states that the DEIR proposes to replace encroachments and penetrations without a civil engineer’s report.

Please see the response to P-12-11 to 12-15, below, which addresses more detailed and specific comments concerning replacement of encroachments and penetrations.

P12-4  The comment states that the DEIR does not properly mitigate the finding of a significant impact on greenhouse gases.

As stated on DEIR page 4.10-14 (Section 4.10, “Greenhouse Gas Emissions”), implementation of Mitigation Measures AIR-1a would require implementation of SMAQMD Basic Construction Emission Control Practices. Mitigation Measure AIR-1c has been modified in the FEIR at the request of SMAQMD; as shown in Chapter 4, “Corrections and Revisions to the Draft Environmental Impact Report.” This Mitigation measure would require the use of SMAQMD-Enhanced Exhaust Control Practices for Construction Equipment. Mitigation Measure GHG-1 would require the purchase of carbon offset credits from a California ARB- or SMAQMD-approved offset program. These mitigation measures would reduce temporary and short-term construction-related GHG emissions through efficient operation of construction equipment engines, and minimization of equipment idling when not in use. Implementation of Mitigation Measure GHG-1, in addition to Mitigation Measures AIR-1a and AIR-1c, would reduce the remaining construction emissions resulting from construction of proposed project elements to a less-than-significant level because SAFCA would also contribute to an ARB- or SMAQMD-approved carbon offset program. These mitigation measures are consistent with SMAQMD-approved measures for reduction of CEQA impacts related to GHGs and are considered industry standard. Furthermore, the commenter does not suggest any other types of mitigation measures that he believes would be appropriate. Therefore, no changes to the DEIR are required.
The comment states that the DEIR does not properly mitigate the traffic effects and air quality damage by material delivery/hauling trucks.

As discussed in detail in Impacts TR-1, TR-2, TR-3, and TR-4 (DEIR Section 4.17, “Transportation and Traffic,” pages 4.17-21 through 4.17-35), significant impacts associated with potential temporary and short-term traffic volume increases (TR-1), increased emergency response times (TR-2), decreased performance or safety of alternative modes of transportation (TR-3), and increased hazards due to slow-moving heavy-duty truck traffic on local roadways (TR-4) resulting from construction activities would be considered significant. However, implementation of Mitigation Measures TR-1, TR-2, TR-3a, and TR-3b would reduce these impacts to a less-than-significant level. Furthermore, the commenter does not provide any details as to why he believes that Mitigation Measure TR-1, TR-2, TR-3a, and TR-3b are not appropriate or would not be effective, nor does the commenter suggest any alternative mitigation measures.

As discussed in detail in Impact AIR-2 (DEIR Section 4.4, “Air Quality,” pages 4.4-28 through 4.4-33), project construction would contribute vehicle traffic on existing roadways and would operate diesel-fueled construction equipment, both of which could generate localized pollutant concentrations impacting nearby receptors. However, the proposed project’s net contribution to existing and future roadway traffic would not cause an exceedance of the California 1- or 8-hour carbon monoxide standard. In addition, the temporary and intermittent nature of construction activities would avoid exposing sensitive receptors to substantial toxic air contaminant concentrations. Therefore, the proposed project’s construction-related activities would not expose sensitive receptors to substantial air pollutant concentrations through on-road vehicle traffic or diesel-fueled construction equipment and this impact would be less than significant for the entire project study area. Therefore, no mitigation measures are required.

For the reasons stated above, no changes to the DEIR are required.

The comment states that the DEIR does not properly mitigate the project’s effect on alternative modes of transportation.

As discussed on DEIR pages 4.17-30 through 4.17-33 (Impact TR-3), although most of the levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy activities would take place within the project footprint, temporary road closures would be needed in some areas, which could interfere with pedestrians and cyclists along these roads. Also, pedestrian and bicycle trails along the Arcade Creek Levees (which would include portions of the Ueda Parkway), the Sacramento River Parkway, and the American River Bike Trail would be temporarily closed for short periods during project-related activities. Pedestrian and bicycle trails adjacent to the borrow sites, such as the Ueda Parkway and the Sacramento Northern Bike Trail, may also require temporary closures and/or detours. As discussed on DEIR page 4.17-31, SAFCA would implement Mitigation Measure TR-3a, which would include the following measures to improve access to and provide for the safety of pedestrian and bicycle facilities during construction.
• Coordinate with and provide notice to the appropriate City and/or County departments at least 10 days before the start of construction activities that would require closure and/or detours of pedestrian and bicycle routes.

• Provide clearly marked pedestrian detours to address any sidewalk or pedestrian walkway closures or if pedestrian safety would be otherwise compromised.

• Provide clearly marked bicycle detours to address bicycle route closure or if bicyclist safety would be otherwise compromised.

• Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.

• Locate all stationary equipment as far away as possible from areas used by vehicles, bicyclists, and pedestrians.

• Post alternative bicycle or pedestrian routes and facilities that can be used during construction activities showing when detours or route closures are required at least 10 days before the start of construction activities.

• Reconstruct pedestrian/bicycle trails and paths to preproject conditions at the completion of project-related construction activities.

Therefore, impacts related to alternative modes of transportation would be reduced to a less-than-significant level. The commenter does not provide any details as to why he believes that Mitigation Measure TR-3a would be insufficient, nor does the commenter suggest any alternative or additional mitigation measures. No changes to the DEIR are required.

The comment states that the DEIR does not properly mitigate noise impacts.

As discussed in detail in Impacts NOI-1, NOI-2, NOI-3, and NOI-4 (DEIR Section 4.15, “Noise,” pages 4.15-36 through 4.15-59), potentially significant impacts associated with exposure to or generation of noise levels in excess of City’s standards (NOI-1), exposure to or generation of ground-vibration levels in excess of the Federal Transit Administration’s (FTA’s) threshold (NOI-2), substantial temporary or periodic increase in noise levels relative to the ambient condition (NOI-3), and exposure of construction workers to aircraft noise (NOI-4) would be reduced through implementation of Mitigation Measures NOI-1 and NOI-2. These mitigation measures contain a list of 25 different bulleted measures specifically designed to reduce noise impacts (see pages 4.15-38, 4.15-39, 4.15-44, and 4.15-45). The DEIR concludes that even with implementation of these comprehensive noise and vibration reduction measures, impacts NOI-1, NOI-2, and NOI-3 would be significant and unavoidable. SAFCA believes that the DEIR contains a comprehensive list of all feasible mitigation measures that could be implemented to reduce project-related noise impacts. The commenter does not provide any details as to why he believes that Mitigation Measure NOI-1 and NOI-2 would be insufficient, nor does the commenter suggest any alternative or additional mitigation measures. No changes to the DEIR are required.
The comment states that the DEIR does not properly consider or mitigate the socioeconomic and environmental justice aspects of the project.

Socioeconomic and environmental justice issues are required topics of evaluation for Federal projects under NEPA. NEPA compliance will be required for portions of the proposed project that are Federal actions, and will include analyses of socioeconomics and economic justice. However, the EIR was prepared under CEQA, which does not require an evaluation of either socioeconomics or environmental justice. Furthermore, the commenter does not present any socioeconomic or environmental justice issues that he believes the DEIR should have evaluated or mitigated. No changes to the DEIR are required.

The comment states that the DEIR does not provide proper mitigation for the significant impact on recreational activities that the DEIR concludes will occur.

The DEIR identifies several potentially significant impacts related to recreation. Because the commenter does not identify a specific impact, nor does the commenter provide any suggested revisions or additions to the current mitigation measures contained in DEIR Section 4.16, “Recreation Resources,” SAFCA is unable to respond with specificity other than to state SAFCA believes that the DEIR appropriately identifies and provides feasible mitigation that would reduce the proposed project’s recreation impacts to a less-than-significant level.

The comment states that the DEIR does not consider the issues raised in the ARCF GRR.

The commenter does not identify any specific issues that were not considered in SAFCA’s EIR; furthermore, the GRR document covers a broader range of project actions than SAFCA’s proposed project and a larger footprint. Topics or issues raised in the ARCF GRR beyond SAFCA’s Levee Accreditation Project are not relevant to SAFCA’s proposed project, and therefore not considered in the DEIR, except in Chapter 5, “Cumulative Impacts.”

The comment states that existing privately-owned fences across the levee should not be replaced by SAFCA at the conclusion of the project because the commenter believes the fences would be inconsistent with DWR’s ULDC and because the commenter believes that the fences hinder water flow during periods of high water. The comment also states that SAFCA inappropriately proposes to replace the fences without regard to whether their purpose is still being served or the cost, and that the DEIR is deficient because it fails to consider the fencing issue.

SAFCA intends to replace any fence sections that may need to be removed during project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA. The fences and penetrations associated with the fence posts have been evaluated by the certifying engineer, who determined that they are not an impediment to making the necessary findings under ULDC. The final civil engineer’s report will be part of the ULDC findings, which are scheduled to be made after other improvements have been made after approximately 2019. CVFPB, in issuing permits, is responsible for making the determination that the fences would not be an impediment to flood flows.
P12-16  The comment states that the DEIR is deficient because it fails to consider that replacement of the fences will result in levee penetrations, which would occur without an engineer’s report.

See response to comments P12-11 through -15.

P12-17 to -18  The comment states that the DEIR inappropriately fails to provide mitigation for the project’s significant impact on greenhouse gases. The comment further states that mitigation should be provided in the form of completing the parkway trail in order to facilitate non-motorized transportation which would, in turn, reduce the project’s generation of greenhouse gases.

The proposed project is intended to strengthen existing levees in the Sacramento region in order to provide an increased level of flood protection. Completing the Sacramento River Parkway Trail would not reduce the impact of the proposed project’s greenhouse gas emissions, which are solely related to construction activities, in any way. Furthermore, contrary to the commenter’s assertion, the DEIR contains an extensive suite of feasible mitigation measures that would reduce the proposed project’s impact on greenhouse gases to a less-than-significant level—see response to comment P12-4. Finally, completion of the Sacramento River Parkway Trail is not under SAFCA’s jurisdiction.

P12-19 to -20  The comment states that the DEIR fails to provide mitigation for the project’s traffic and air quality impacts, and that mitigation should be provided in the form of completion of the Sacramento River Parkway Trail, which would facilitate non-motorized transportation.

The proposed project is intended to strengthen existing levees in the Sacramento region in order to provide an increased level of flood protection. Completing the Sacramento River Parkway Trail would not reduce the impact of the proposed project’s traffic or air quality impacts, which are solely related to construction activities, in any way. Furthermore, contrary to the commenter’s assertion, the DEIR contains an extensive suite of feasible mitigation measures that would reduce the project’s impacts on traffic and air quality to less-than-significant levels—see response to comment P12-5. Finally, completion of the Sacramento River Parkway Trail is not under SAFCA’s jurisdiction.

P12-21  The comment states that mitigation in the DEIR for closure of access to levee bicycle and pedestrian trails is insufficient because it would push those users onto crowded City streets; the commenter therefore states that the DEIR should provide mitigation in the form of completion of the Sacramento River Parkway Trail.

There are several hundred miles of Class Class I (bike paths), Class II (bike lanes), and Class III (bike routes) that are maintained on City and County roadways as shown on Exhibits 4.17-1, 4.17-2, and 4.17-4 in Section 4.17, “Transportation and Traffic.” The purpose of this existing bicycle network is to facilitate alternative modes of transportation. Therefore, temporary, short-term detours from the levee bike trails onto the extensive City and County network of Class I, II, and III bike routes is considered feasible mitigation that would reduce the proposed project’s impact to a less-than-significant level. See also response to comment P12-6. Finally, completion of the Sacramento River Parkway Trail is not under SAFCA’s jurisdiction.
P12-22  The comment states that the DEIR offers no substantive mitigation for the project’s noise impacts, and suggests that completion of the Sacramento River Parkway Trail should be included as a mitigation measure.

The proposed project is intended to strengthen existing levees in the Sacramento region in order to provide an increased level of flood protection. Completing the Sacramento River Parkway Trail would not reduce the impact of the proposed project’s noise impacts, which are solely related to construction activities, in any way. Furthermore, contrary to the commenter’s assertion, the DEIR contains an extensive suite of feasible mitigation measures that would reduce the project’s impacts on noise—see response to comment P12-5. Finally, completion of the Sacramento River Parkway Trail is not under SAFCA’s jurisdiction.

P12-23  The comment asserts that the DEIR is deficient because it fails to provide mitigation for the socioeconomic and environmental justice impacts of fencing that restricts the access of poor people to the levee.

The levee fencing is part of the baseline condition for analysis of the project under CEQA. Although SAFCA intends to replace any fence sections that may need to be removed during project-related construction activities or compensate property owners for damaged property, replacing existing fence sections would not change existing, baseline conditions related to access to the levee. Furthermore, access restrictions to the levee are general, and affect people of all income categories. There could be no disproportionate negative effect on lower income residents. See also response to comments P12-8 and P12-11 to 12-15.

P12-24  The comment asserts that the only mitigation for closure of levee bike trails during construction consists of detours onto busy City streets, and therefore additional mitigation should be included in the form of a “significant upgrade in the bikeway in the post-construction state.”

The commenter’s request that additional mitigation for a “significant upgrade in the bikeway in the post-construction state” is unclear. Mitigation Measure TR-3a requires SAFCA to reconstruct pedestrian/bicycle trails and paths to preproject conditions at the completion of project-related construction activities. Changes to the existing bike trails, or completion of additional bike trails, is outside SAFCA’s jurisdiction.

P12-25  The comment asserts that the levees would not be rebuilt to state-of-the-art standards.

The commenter provides no substantiation or evidence to support his claim that the levees would be not be reconstructed to appropriate standards, nor does the commenter provide any suggested alternative designs from a registered civil engineer. As described in detail in DEIR Chapter 3, “Project Description,” the levees would be repaired and rebuilt to USACE and State of California levee design criteria.

P12-26  The comment states that levee access roads should be paved “for the safety of the community.” The comment also asserts that paving the levee crown roads would reduce the chances of levee saturation/failure during heavy rainfalls.
The current condition of the levee and standard practice is to have an all-weather access road, which is typically a gravel surface. The commenter offers no evidence that paved levee access roads would enhance community safety, or that paving levee crown roads would affect the potential for levee failure.
And this one, which I think is a duplicate.

Sent from my iPhone

Begin forwarded message:

From: SAFC Levee Accreditation Program <PeteGhelfi@saccounty.net>
Date: April 26, 2015 at 1:27:42 PM CDT
To: "francine.dunn@aecom.com" <francine.dunn@aecom.com>,
"jdavis@gualco.com" <jdavis@gualco.com>, "alatayyeb@gmail.com"
<alatayyeb@gmail.com>
Subject: FW: DEIR for SAFC Levee Accreditation Project

From: Lissa McKee
Sent: Sunday, April 26, 2015 11:27:38 AM (UTC-08:00) Pacific Time (US & Canada)
To: SAFC Levee Accreditation Program; francine.dunn@aecom.com;
erin.brehmer@water.ca.gov
Cc: Deb Sniders@zetabroadband.com
Subject: DEIR for SAFC Levee Accreditation Project

The DEIR is deficient in part due to the failure to complete the requirement of Section 106 of the National historic Preservation Act. Specifically, survey methodology is inadequate to make reasonable conclusions for the purposes of 35 CFR Part 800.5 of the federal regulations.

I am focusing my Section 106 comments for this communication on the neighborhood of the Little Pocket (within the Sacramento East Levee portion of the project), wherein some thirty eight residential properties are situated within the Area of Potential Effect for the proposed project. Landscaping and structures are present with the the area of direct impact for the proposed project and yet the DEIR does not inventory potential contributors to historic properties there nor assess the impact of destruction of contributors should that be required for the proposed project.

Elizabeth McKee
913 Piedmont Drive
Sacramento, CA 95822
COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and
privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information and you should destroy the e-mail and any attachments or copies.
P13-1  The comment states that the DEIR is deficient with respect to Section 106 of the Historic Preservation Act because it fails to consider 38 residential properties in the Little Pocket area that are within the project’s Area of Potential Effect (APE).

See response to comment P1-1. Compliance with Section 106 is a Federal requirement, and CEQA requirements differ with respect to analysis of historic and cultural resources. No APE has been defined for the proposed project, and the commenter does not identify which 38 residential properties would be affected.
And the duplicate.

Sent from my iPhone

Begin forwarded message:

From: SAFCA Levee Accreditation Program <PeteGheffi@saccounty.net>
Date: April 26, 2015 at 3:45:47 PM CDT
To: "francine.dunn@aecom.com" <francine.dunn@aecom.com>, "jdavis@qualco.com" <jdavis@qualco.com>, "alatayyeb@gmail.com" <alatayyeb@gmail.com>
Subject: FW: DEIR for SAFCA Levee Accreditation Program-Biological Resources-Terrestrial

From: Lissa McKee
Sent: Sunday, April 26, 2015 1:45:44 PM (UTC-08:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program
Cc: francine.dunn@aecom.com; erin.brehmer@water.ca.gov; Deb Sinders@zetabroadband.com; jdavis@qualco.com; Kursten.Sheridan@wildlife.ca.gov
Subject: FW: DEIR for SAFCA Levee Accreditation Program-Biological Resources-Terrestrial

Contrary to what I was told by SAFCA staff at the community meeting held on April 9th at the Elks Lodge on Riverside Boulevard regarding the above proposed project, The DEIR identifies multiple locations on private property for tree removal in the Little Pocket neighborhood. Ten trees are proposed for removal from my family’s property alone. I believe that this constitutes deforestation of sensitive habitat. On our property alone hawks nested and fledged last year, owls are present, and turtles were observed on the land side of the levee last year, among other wildlife.

And yet on page 38 of the Section of Chapter 4.6 of the DEIR “No protocol-level special-status wildlife surveys have been conducted within the Sacramento River East Levee Improvements area to date.” Further more, mitigation proposed consist of a replanting plan that is non-specific as well as infeasible in a drought. This is a glaringly inadequate approach to compliance with state and federal environmental compliance.
The comment states that the removal of high-hazard trees constitutes deforestation of sensitive habitat.

The potential impacts of the proposed project on forestry resources were evaluated in DEIR Section 4.3, “Agriculture and Forestry Resources.” As discussed in detail in Impact AG-2 (pages 4.3-22 through 4.3-26, levee improvements along Sacramento River East Levee would result in the permanent loss of about 0.46 acre of Fremont cottonwood forest and about 4.9 acres of valley oak woodland that meets the definition of forestland (California PRC Section 12220[g]). The amount of woodland habitat that would be lost as a result of levee improvements represents 0.8 percent of the existing Fremont cottonwood forest (approximately 0.46 acre of an estimated 57.5 acres) and 10 percent of the existing valley oak woodland (approximately 4.9 acres of an estimated 49.1 acres) in the Sacramento River East Levee Improvements area. SAFCA would implement Mitigation Measure AG-2b, which would implement Conservation Strategy enhancements to Sacramento River riparian habitats. The proposed Conservation Strategy is a regional-level program that would protect, avoid, minimize, reduce, and compensate for the proposed project’s ecological impacts. The proposed elements of the Conservation Strategy are described in detail in DEIR Chapter 3, “Project Description,” on pages 3-50 through 3-67.

SAFCA has conducted tree and other vegetation surveys. Details regarding the evaluation criteria for trees and other vegetation that would be removed are contained on pages 3-48 through 3-50 of Chapter 3, “Project Description,” and in DEIR Appendix B. Mitigation Measure AG-2b requires implementation of the Conservation Strategy, which is an element of the proposed project. With respect to the fact that the region is currently experiencing a drought, the Conservation Strategy would entail replacement of existing vegetation with new vegetation in different locations—thus, the same amount of water would be used. The Conservation Strategy is a long-term program that would be implemented over many years, the specifics of which are described in detail in DEIR Chapter 3, “Project Description,” on pages 3-50 through 3-67.
Re: Comments to DEIR, North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project

Dear Mr. Ghelfi:

Please accept these comments to the Draft Environmental Impact Report for the North Sacramento Streams, Sacramento River East Levee, Lower American River and Related Flood Improvements Project ("DEIR"). As a resident of the Pocket neighborhood of Sacramento, my home is in a vulnerable area for flooding. Of course, I fully support SAFCA’s plans to improve the levee. But I am also concerned that misguided political expediency has caused SAFCA to exhibit an unhealthy and risky attitude to preserve private fences crossing the levee in my neighborhood and in the Little Pocket neighborhood.

As you are aware from prior discussions, I have a number of concerns with and objections to SAFCA’s plans for dealing with private fences and gates. However, in the interest of brevity, I will limit my comments to a single critical assertion in the DEIR that is, at best, troubling and, at worst, foolhardy. History contradicts this conclusory assertion that ignores actual conditions on the levee.

My concerns arise from the following:

The following is a list of the types of encroachments that exist in the project study area and how they could affect levee performance.

- Fencing – Fences are commonly found throughout the project study area generally along the property line marking the landside limit of the levee. In some areas where the levee occupies private parcels that extend through to the river (Sacramento River East Levee), property owners have erected fences that run along their property lines perpendicular to the levee. As a general rule, fences which have been properly located and constructed along the landside levee toe do not pose a significant risk to the structural integrity or operation and maintenance of the levee. Perpendicular fences that meet Title 23 requirements do not pose an unacceptable risk if they are properly gated to allow access to and along the levee crown for levee inspection, monitoring, operation, and maintenance activities.
The statement suffers from demonstrable flaws and serious shortcomings. Furthermore, relying on this questionable principle to plan SAFCA’s work could expose SAFCA to liability.

I. History and More Recent Evidence Show that Fences on the Waterside of the Levee Do Pose a Risk to the Structural Integrity of the Levee.

The unsupported opinion that fences do not impose an unacceptable risk contradicts several decades of contrary experience. This experience begins with the earliest consideration of encroachment permits for levee fences – long before fences reached the water’s edge at low flow as most now do.

In 1968, the Reclamation Board approved a cross-levee fence and gate over the objection of DWR that cross-levee fences would add costs to levee maintenance and operation. The approval soon exposed a more serious problem:

Extensive erosion caused by cyclone fence catching drift and deflecting water against levee slope. . . RECOMMENDATION: Have fence & gate removed from levee section and levee section resloped and reseeded to restore original sod on levee slope this [sic] should be done by parties responsible for fence.

(Memo, Sacramento Operations Section to Reclamation Board, April 8, 1969.) The problem worsened over the next few months:

Bob Curtis & Myself checked this out again on 2-17-70 & there is additional erosion plus some drift against the fence. Is this fence going to be allowed to remain here?

(Memo, Sacramento Operations Section to Reclamation Board, updated February 17, 1970.) Encroachment permit files catalog other issues with cross-levee fences. I won’t bother to detail those complaints here but would be happy to make them available to you. But the problems with fences did not end in the 60s and 70s.

In 1995, DWR believed it necessary to remove private fences during high water and to issue a warning to owners. For example:

The Board revised your existing permit for a fence on the levee and berm of the left bank of the Sacramento River to require you to construct the waterside portion so that it will break away when subjected to debris loading during high water. Your existing permit requires removal during high water. You did not comply with this condition of our permit, forcing the Department of Water Resources to remove the fence during high water earlier this year.
Speaking in opposition to an encroachment permit for a new cross-levee fence in the Pocket neighborhood, the Reclamation Board’s chief engineer testified in 2005 about the risks posed by private fences:

Like I said before, the removable sections of the fence require active management during a flood event. That means somebody has to be there, has to remember to remove those fences so that they don’t collect debris and block the flow of water or, worse, redirect the flow towards the levee.

(Transcript, Reclamation Board, June 17, 2005, at 80-81 [testimony of Chief Engineer Steven Bradley] (emphasis added).) In 2011, the U.S. Army Corps of Engineers echoed these concerns at the public hearing on another encroachment permit application:

And we talk about removable fences, but human nature is they’re not going to remove it. By the time they figure out the water is coming up, they’re trying to do other things. They’re not going to remove the removable pieces of the fences. So I don’t think you’ll ever see us approving a portion of the fence on the waterside. The fence on the – the portion of the fence on the waterside, I don’t think you’re going to see the Corps approve any of those ever again, unless it’s a very unique situation. That catches debris when the water is high. It just causes a problem.

(Transcript, Central Valley Flood Protection Board, January 28, 2011, at 132 [testimony of Meegon Nagy, U.S. Army Corps of Engineers].)

These complaints are not ill-founded. I can provide relatively recent photographs showing levee erosion under fences, and I can show evidence that owners continue to shirk any duty to remove fences as the river rises. Additionally, I can provide photographs showing where the levee is eroding around fence posts sunk into the levee – an issue that’s seemingly separate and apart from the problem caused by debris loading in fences. Yet, the DEIR’s absolution for fences does not raise or address any of these problems.

In short, how can fences cause professionals to raise serious concerns for levee safety in 1969, 1970, 1995, 2005, and 2011, and cause the Reclamation Board, the Central Valley Flood Protection Board, and the Corps of Engineers to act on those concerns in the later years, yet the DEIR asserts in 2015 that fences “do not pose a significant risk to the structural integrity” of the levee. At a minimum, I believe the EIR must address and explain this unacceptable contradiction or remove any representations that fences pose no significant risks.
II. The DEIR Implicitly Proposes to Reconstruct Fences to “Pre-Project Conditions”
Even If Fences Are Not Compliant with Title 23, but SAFCA Will Violate State Law
and CVFPB Regulations If it Does So.

Although the DEIR states only that “[g]ates would be removed as needed prior to construction
and replaced following the completion of construction related activities to pre-project
conditions” (DEIR at 4.13-21), you made it clear in the scoping meeting and in other
conversations that SAFCA proposes to replace fences in the same manner. However, the DEIR
fails to account for the fact that some fences are not Title-23 compliant, yet fails to explain if or
how SAFCA intends to address the distinction between allegedly compliant fences and
unquestionably non-compliant fences.

The relevant provision of the statute places explicit requirements on encroachments permits for
fences:

Fences that are designed to give way during high water events shall not be
allowed on the water side of a levee. Fences on the water side of a levee that are
partially or wholly under water during high water events, and that are located
within state maintenance areas within city limits under the jurisdiction of the
board, shall be constructed so as to be removable by the permittee in segments
during times of high water events as the water level rises up the levee.

Water Code § 8709.3(a). Of nine existing private fences crossing the levee in the Pocket and
Little Pocket, three or four do not comply with this provision. In my opinion, the Reclamation
Board exceeded its statutory authority by grandfathering existing but non-compliant fences, but
the regulation will still require SAFCA to replace non-compliant fences with compliant fences:

Fences proposed to be constructed after January 1, 1998 on the water side of a
levee that are partially or wholly under water during high water events, and that
are located within state maintenance areas within city limits under the jurisdiction
of the board, shall be constructed so as to be removable by the permittee in
segments during times of high water events as the water level rises up the levee.

Cal. Code Regs., tit. 23, § 126(a)(5). Removal and replacement of fences will require
encroachment permits from the Central Valley Flood Protection Board, thus SAFCA must
propose construction that is Title-23 compliant. Additionally, you have stated in conversation
that SAFCA will replace fences to pre-project conditions even if the fences violate conditions of
their encroachment permits – and I can assure you that every fence does violate terms of its
encroachment permit.

SAFCA staff has taken the position in the past that it cannot use public funds to provide
recreational opportunities on the levee or public access to the river. No less so, SAFCA cannot
use public funds to replace fences that suffer from numerous defects, or to provide the upgrades
that are necessary to make the fences compliant. I expect that many taxpayers will not be
satisfied if SAFCA proposes to use tax dollars to ensure that an unwarranted level of privacy continues for a small group of levee-adjacent property owners.¹

At a minimum, a final EIR must: (1) satisfactorily address the conclusory statement that fences “do not pose a significant risk to the structural integrity . . . of the levee”; (2) distinguish between risks presented by Title-23-compliant and non-compliant fences; and (3) present a compelling justification for spending tax dollars to benefit a minuscule number of homeowners by upgrading their fences to satisfy statutory and regulatory requirements.

* * * *

Thank you for considering my concerns. Please add me to the list of interested persons to receive notice about all matters with respect to the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project. If I can provide any additional information or documentation, please let me know.

Yours truly,

James E. Houpt

¹ For the sake of brevity, I will leave for another day my concern that SAFCA also misstates the law when the DEIR describes ownership on the levee:

In some areas where the levee occupies private parcels that extend through to the river (Sacramento River East Levee), property owners have erected fences that run along their property lines perpendicular to the levee.

(DEIR at 3-44.) No private parcel extends “through to the river.” The land under ordinary high water mark is state-owned and reserved for public use. See, e.g., Civ. Code § 830. SAFCA’s plan to reconstruct fences that cross this property could expose SAFCA to an attorneys fee award by any residents who wish to enforce their right to access this property. See generally Code Civ. Pro. § 1021.5 (“[A] court may award attorneys’ fees to a successful party against one or more opposing parties in any action which has resulted in the enforcement of an important right affecting the public interest . . . .”); Nat’l Audubon Soc’y v. Superior Court, 33 Cal. 3d 419, 431 n.11 (1983) (“[A]ny member of the general public has standing to raise a claim of harm to the public trust . . . .” (citation omitted)).
The comment provides discussion relating to the commenter’s assertion that reinstallation of private fences across the levees at the conclusion of project-related work is inappropriate and would reduce the structural integrity of the levee.

The commenter submits no evidence demonstrating that the placement of fences in the top few inches of soil would create levee instability, and SAFCA disagrees with the commenter’s opinion in this regard. SAFCA intends to replace any fence sections that may need to be removed during project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA.
FYI

Sent from my iPhone

Begin forwarded message:

From: SAFCRA Levee Accreditation Program <PeteGhelfi@saccounty.net>
Date: April 29, 2015 at 10:36:34 AM CDT
To: "francine.dunn@aecom.com" <francine.dunn@aecom.com>, "jdavis@gualco.com" <jdavis@gualco.com>, "alatayyeb@gmail.com" <alatayyeb@gmail.com>
Subject: FW: Levee Improvements Projects

From: Denise Dutra
Sent: Wednesday, April 29, 2015 8:36:27 AM (UTC-08:00) Pacific Time
(US & Canada)
To: SAFCRA Levee Accreditation Program
Cc: "jdavis@gualco.com"
Subject: Levee Improvements Projects

Pete,

I attended one of your community meeting regarding the $1.46 Billion in levee improvements. Dutra is very interested in learning more about the projects. I was able to find SAFCRA Draft Environmental Impact Report. Can you please help me find the USACE Environmental Impact Report?

Thank you,

Denise

Denise Dutra  
Director of Business Development

THE DUTRA GROUP
2350 Kerner Boulevard, Suite 200
San Rafael, CA 94901
P17-1  The comment requests assistance finding a copy of the DEIR.

The DEIR is available on the Internet at the following website address:
From: Jody Wright  
Sent: Thursday, April 30, 2015 7:05:09 AM (UTC-07:00) Pacific Time (US & Canada)  
To: SAFCA Levee Accreditation Program  
Subject: DEIR for SAFCA Sacramento River East Levee Improvement Project  

Dear Mr. Ghelfi,

As a resident of Park River Oak Estates, only about a block from the Sacramento River levee, I am very supportive of SAFCA's plan for levee improvements. In studying the Draft Environmental Impact Report, however, I am concerned about one paragraph.

In the Little Pocket and Paddock areas, homeowners often own land on both sides of the levee, with the State having an easement for levee operation and maintenance. In such areas, there are several fences running across the levee with locked gates that hamper access. Gates would be removed as needed prior to construction and replaced following the completion of construction-related activities to prevent project conditions. Thus, implementation of the proposed project would not provide additional access to the Sacramento River East Levee.

The fences that run perpendicular to the levee have been subjects of concern to a number of agencies, from the Reclamation Board to the Central Valley Flood Protection Board, since the 1960's. Issues include erosion of the levee caused by these fences as well as concerns about their necessary abrupt removal in emergency situations. In an emergency, would a landowner necessarily take the time to remove the fence? It would be unfortunate to spend so much money making improvements to the levee only to have it ultimately fail as a result of leaving these fences in place.

I hope SAFCA will reconsider its position on these fences. If any part of a fence is removed in the improvement process, it should not be replaced.

Thank you for your time and consideration.

Jody Wright  
7798 Park River Oak Circle  
Sacramento, CA 95833  

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:  
This email and any attachments thereto may contain private, confidential, and privileged materials for the sole use of the intended recipient. Any review, copying or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copy of this email and any attachments thereof.
<table>
<thead>
<tr>
<th>Letter P18</th>
<th>Jody Wright</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>April 30, 2015</td>
</tr>
</tbody>
</table>

P18-1  

*The comment states that the reinstallation of private fences across the levees at the conclusion of project-related work is inappropriate and would reduce the structural integrity of the levee.*

See response to comments P16-1 to -7.
Keith McCallin  
6895 Riverside Boulevard  
Sacramento, CA 95831  
yokes@hotmail.com  
(831) 262-9839

May 1, 2015

Pete Ghelfi, P.E.  
Director of Engineering  
Sacramento Area Flood Control Agency  
1007 7th Street, 7th Floor  
Sacramento, CA 95814

Re: Comments to DEIR Flood Improvements Project

Dear Mr. Ghelfi:

I am all for the SAFCA’s plans to improve the levee. I am also very concerned that undue deference is being given to local nonsense which will undercut your best efforts.

New to the Pocket neighborhood and to living life protected by levees, it has been quite a task to keep my daughters well-informed regarding levees, the purpose of levees, life in Sacramento prior to levees, all the fighting between feuding neighbors over levee laws, politicians that seek safety for the community but exclude levee integrity from that category, conflicting signs with strong messages along the levees which may or may not be worth taking the time to read because they may or may not have any basis in law...

True story: My daughter and I found ourselves on the levee and trapped between two posted signs that told us do not dare to cross. Jokingly, I told her that we were going to need to call 911 and ask to be rescued. Or swim west.

Please, do not think this is an argument for public access to the levees. This letter is all about the original and necessary purpose of the levees, and the levee laws that followed because all that is getting lost in the above nonsense.

Here's what's going to happen, because such is life in our country: Those who fought effectively to become exceptions to levee laws will be the first in line with their lawyers when catastrophe, such as can be seen when Googling "California" and levee" and "break," comes our way.

Thanks for your consideration of these comments.

Respectfully submitted,

Keith McCallin
The comment expresses support for levee improvements and suggests that comments submitted on other issues (such as fencing) undermine the necessary flood protection for area residents.

SAFCA appreciates the support expressed by the commenter for the proposed project.
Another to log.
Sent from my iPhone

Begin forwarded message:

From: Jay Davis <jdadis@gualco.com>
Date: May 1, 2015 at 3:23:24 PM CDT
To: Francine Dunn <Francine.Dunn@aecom.com>, Drew Sutton <Drew.Sutton@aecom.com>, Barbara Gualco <bgualco@gualco.com>, Pete Ghelfi <ghelfip@saccounnty.net>
Cc: Tim Washburn <washburnt@saccounnty.net>, Peter Buck <buckp@saccounnty.NET>
Subject: Fwd: DEIR comment

DEIR comment submission.

Begin forwarded message:

From: FOSH <swainsonshawk@sbcglobal.net>
Subject: DEIR comment
Date: May 1, 2015 at 1:18:15 PM PDT
To: Jay Davis <jdaus@gualco.com>, Washburn Tim <washburnt@saccounnty.NET>, Buck Peter <buckp@saccounnty.NET>

We believe trees identified by Ca Fish and Wildlife as known raptor nesting sites should be exempt from removal under the policy and this should be included in the EIR as a mitigation measure for impacts on migrating raptors.

Friends of the Swainson's Hawk

Judith Lamare, president 916 769 2857 swainsonshawk@sbcglobal.net

On Apr 21, 2015, at 2:28 PM, Jay Davis <jdaus@gualco.com> wrote:

Good afternoon:

Due to everyone's busy schedules and seemingly so many time conflicts, the briefing on SAFCA's Levee Accreditation Project we had set up for tomorrow, April 22, at SAFCA offices at 2:00PM is canceled. Some invitees received a briefing through other venues while others were able to attend one of
the 4 community outreach meetings. We appreciate your interest in the project.

As a reminder, information about the proposed project, including an electronic copy of the Draft EIR, can be viewed online at: http://www.safca.org/2015_MARCH_DEIR.htm. We encourage the submission of comments on the Draft EIR, which must be received no later than May 1, 2015.

If you need additional information or would like to meet at a later time, please feel free to contact me.

Regards,

Jay Davis
Gualco Consulting
11230 Gold Express Dr. #310
Gold River, CA 95670
(916) 351-0600 tele
(916) 351-9392 fax
jdavis@gualco.com

Begin forwarded message:

From: Jay Davis <jdavis@gualco.com>
Date: April 7, 2015 at 11:32:59 AM PDT
Subject: Fwd: Enviro. stakeholders invite
To: Jay Davis <jdavis@gualco.com>

Good morning,

The Sacramento Area Flood Control Agency (SAFCA) has issued for public review a Draft EIR on proposed flood control system improvements along the Lower Sacramento River and North Sacramento Streams. The proposed “SAFCA Levee Accreditation Project” is aimed at constructing certain levee improvements ahead of what is being proposed in the U.S. Army Corps of Engineers General Reevaluation Report (GRR) in order to reduce flood risk as quickly as possible and retain eligibility in FEMA’s National Flood Insurance Program.

SAFCA’s proposed project includes levee improvements along approximately 6 miles of the Sacramento River East Levee from downtown Sacramento to Freeport and approximately 4 miles along the North Sacramento Streams levee system, as well as approximately 3,000 feet of bank protection along the Sacramento River East Levee. Construction is anticipated to take place no earlier than 2016 in North Sacramento and 2017 along the Sacramento River.
SAFCA staff is providing interested stakeholders the opportunity to receive a project briefing during the Draft EIR comment period, which is from March 18 - May 1, 2015.

To that effect, SAFCA would like to invite you to attend a briefing it is hosting at its office. Briefing details are as follows:

Wednesday, April 22, 2015 at 2:00PM
SAFCA
1007 7th Street, 6th Floor (corner of 7th and J)
Sacramento, CA

Please let me know if you are planning to attend.

If you would like to learn more about SAFCA’s project in advance, the Draft EIR and a Project Q&A can be viewed on SAFCA’s website at http://www.safca.org/2015_MARCH_DEIR.htm. Information regarding the Corps’ GRR can be found at http://www.spk.usace.army.mil/Missions/CivilWorks/SacramentoOAreaLevees.aspx.

If you are unable to attend the briefing, SAFCA is also hosting a series of community meetings that you are welcome to attend. You can view a list of these meetings at http://www.safca.org/documents/Levee_Certification/2015_03_DEIR_NoArea_Streams/community_meeting_dates.pdf

Sincerely,

Jay Davis
Gualco Consulting
11230 Gold Express Dr. #310
Gold River, CA 95670
(916) 351-0600 tele
(916) 351-9392 fax
j.davis@gualco.com

This e-mail and any attachments contain AECOM confidential information that may be proprietary or privileged. If you receive this message in error or are not the intended recipient, you should not retain, distribute, disclose or use any of this information.
The comment states that trees identified by CDFW as known raptor nesting sites should be exempt from removal “under the policy” and this should be included in the EIR as a mitigation measure for impacts on migrating raptors.

It is unclear to which “policy” the commenter is referring, but SAFCA assumes the comment refers to the removal of high-hazard trees as part of the proposed project. As discussed in detail in Impact BIO-8 in DEIR Section 4.6, “Biological Resources – Terrestrial,” (pages 4.6-143 through 4.6-148), SAFCA would implement Mitigation Measure BIO-8, which would implement Conservation Strategy measures to avoid and minimize effects to nesting special-status birds, including raptor species such as Swainson’s Hawk. A detailed list of specific measures is contained on DEIR pages 4.6-144 and 4.6-155. The proposed Conservation Strategy is a regional-level program that would protect, avoid, minimize, reduce, and compensate for the proposed project’s ecological impacts. The proposed elements of the Conservation Strategy are described in detail in DEIR Chapter 3, “Project Description,” on pages 3-50 through 3-67.
From: Nicholas Avdis [mailto:NAvdis@thomaslaw.com]
Sent: Friday, May 01, 2015 1:04 PM
To: Ghelfi, Pete
Subject: Levee Accreditation EIR Comments (aka N Sac Streams, Sac River E Levee, Lower American River, and Related Flood Improvements Project DEIR)

Pete, just wanted to provide a few comments on the above project on behalf of Valley View Acres.

1. The EIR should provide some analysis into impacts of heavy truck traffic from Borrow Site 2 (and Borrow Site 1) along the NEMDC to bicycle and pedestrian use of East Levee Road between Main Ave and Elkhome Blvd and describe any traffic control measures that will be implemented to ensure the safety of the trucks and bicyclists/pedestrians. Currently, there are several homes, including mine, that access their properties solely off of East Levee Road.

2. East Levee Road is currently substandard roadway that has been significantly degraded over the years. What improvements will be made to the surface of the roadway once the proposed work is completed, at least for the area between Sotnips Road and Sorenco Road?

Thanks

Nick

Nicholas S. Avdis
Of Counsel

Please note: On May 1, 2015 we will open our Oakland office located at One Kaiser Plaza, Suite 875. The phone number for both offices will continue to be (916) 287-9292 and our e-mail addresses will also remain the same. More information to follow.

Thomas Law Group

455 Capitol Mall Ste. 801, Sacramento, CA 95814 P (916) 287-9292 F (916) 737-5858
navdis@thomaslaw.com
www.thomaslaw.com

Confidentiality Note: The information contained in this e-mail and any attached files is confidential and
The comment states that the DEIR should provide an analysis of heavy truck traffic and associated effects on bicycle and pedestrian use along East Levee Road, and should describe traffic control measures that would be implemented to protect the safety of drivers and bicyclists.

The impact analysis and mitigation measures requested by the commenter are contained in DEIR Section 4.17, “Traffic and Transportation.”

The commenter states that East Levee Road has been substantially degraded and inquires as to what improvements would be made to the roadway surface at the completion of project construction activities.

As indicated in Mitigation Measure TR-1 (DEIR pages 4.17-22 and 4.17-24), SAFCA would assess and repair any damage to roadways that are used during construction, and repair all project-related potholes, fractures, or other damages.
14 July 2015

Anne Baker
Department of the Army
U.S. Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Re: Response to Comments Published in the ARCF Final EIR/EIS (Letter U)

Dear Ms. Baker,

I am replying to the Agency’s response to my comments regarding the proposed Cultural Resources Mitigation Measures (MMs) for the American River Common Features Project. I reiterate my concern regarding the high likelihood of encountering buried Native American midden sites during construction. As I stated in my letter of May 4th, a similar nearby project was recently conducted where nine sites were found within a nine-mile stretch, some including human burials.

As I acknowledged, MM CR-3, Archaeological Monitoring, does address the possibility for post-review discoveries. However, I also point out that discoveries made during critical construction operations are not impact free. Further, they can result in significant scheduling delays and cost overruns. Given these concerns, I suggested an addition proactive mitigation measure, to identify archaeological resources before construction through subsurface investigations using geophysics and ground-truthing.

The Agency, in response, has made the following points:

1) The methodologies employed for identifying cultural resources were consistent with the industry standard approach;
2) Mitigation Measures CR-1 through 4 will reduce the proposed project’s impacts to a less-than-significant level;
3) The Agency is not required to analyze every imaginable measure;
4) Only feasible measures (i.e., those capable of being accomplished in a successful manner within a reasonable period of time), need to be required; and lastly,
5) Mitigation measures must be ‘roughly proportional’ to potential impacts.

The Agency, further, claims that both the cost and time required to conduct a geophysical investigation and ground-truthing of 30+ levee miles would be prohibitive and disproportionate to the potential level of impact. As such, they
argue that the proposed mitigation measure is unfeasible. For these reasons they conclude that no changes to the DEIR are warranted.

In reply, I assert the following:

1. The ARCF levees have undergone multiple episodes of enlargement over the past century, not to mention record overbank deposits resulting from hydraulic mining. As a result, Native American resources tend to be buried out of visual range. While surface surveys to identify resources may be standard practice under most circumstances, they are wholly inadequate in this instance; and

2. Modern geophysical methods and technologies have undergone considerable advancement in the last 15 years. Thirty levee-miles can be examined and analyzed in a few days and costs are a minute fraction of the project budget. For this reason, I believe a geophysical approach is entirely feasible. Not only would it significantly reduce the risk of post-review discoveries, it would impacts to cultural resources, as well as maintain project schedules and budgets.

Respectfully, I request the Agency reconsider its position regarding this proposed mitigation measure.

Sincerely,

Kim Tremaine

Address: 1220 Smith Court, Dixon, CA 95620
Phone: 916-637-9717
The commenter states that the comment letter is addressing the cultural resources mitigation measures for the ARCF project.

Although the commenter’s comment letter was intended for the ARCF FEIS/FEIR, the comments are being addressed in the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project FEIR because it appears that the comments may have been intended, at least in part, to apply to this document.

Commenter states concern for high likelihood of encountering buried Native American midden sites and Native American burials during construction.

The EIR expressly acknowledges the high archaeological sensitivity of some portions of the project area, especially along portions of the Sacramento River East Levee. In the Findings subsection of Section 4.7, “Cultural Resources,” in the DEIR (beginning on page 4.7-25), it is stated that, “In addition, during a tour of the area with Native American representatives, it became apparent that this area is very sensitive for Native American resources, including the possibility of human burials.”

Commenter states that although archaeological monitoring does address potential for post-review discoveries, such discoveries may result in impacts and may also affect the project construction schedule and budget. Commenter recommends additional mitigation to identify archaeological resources prior to construction, including the use of geophysics.

The EIR has been revised to include a mitigation measure (CR-5) that identifies additional investigative techniques that shall be used to identify potential resources that may be buried, including subsurface archaeological investigations which may include the use of non-invasive techniques, if warranted.

In reference to comments previously made by the commenter on the DEIR, the commenter lists 5 responses to those comments (provided in the July 2015 FEIR), which indicated the impracticality of conducting geophysical investigations through the entirety of the project area.

The commenter correctly characterized the responses to the previous comments on the DEIR.

The commenter states that levees have undergone multiple episodes of enlargement over the years and these areas have also been subject to deposition from flooding and hydraulic mining, resulting in burial of Native American sites. The commenter also states that that surface surveys are inadequate to identify these resources under these circumstances.

The EIR has been revised to include mitigation (CR-5) identifying several additional procedures for inventory and evaluation of cultural resources including subsurface investigations such as archaeological excavation and non-invasive techniques as appropriate.
The commenter states that geophysical methods and technologies have advanced and that these studies can feasibly be conducted, that it would reduce the risk of post-review discoveries, that it would reduce impacts to cultural resources and that it would help maintain project schedules and budgets.

The EIR has been revised to include mitigation (CR-5) identifying several additional procedures for inventory and evaluation of cultural resources including subsurface investigations such as archaeological excavation and non-invasive techniques as appropriate and additional Native American consultation and monitoring. For the reasons described in the response to comments on the DEIR, the revised mitigation measures do not require geophysical investigations over the entire project area, but do include the use of geophysical investigations as one option in an array of techniques to be used to inventory cultural resources in the project area, where appropriate.
From: Suzanne Taylor <istaylor7@sbcglobal.net>
Subject: Re: Taylor: Copy of EIR
Date: August 6, 2015 at 10:48:45 AM PDT
To: Jay Davis <jdavis@qualco.com>
Cc: James Geary <jgeary@me.com>, Carolyn Baker <cabaker905@gmail.com>, Heather Fargo <h-fargo@comcast.net>, Ray Treheway <ray@sactree.com>
Reply-To: Suzanne Taylor <istaylor7@sbcglobal.net>

Hi Jay,

{Thanks for your response, but as I believe will be the case as we proceed, it only raises more questions. To start, you use the word "could" two times and make reference to a risk assessment analysis. Where can we find that risk assessment analysis as well as a list of those who contributed to it and their credentials? Were there any contrary opinions provided that contradict the conclusions of your experts? I am sure there is a great deal of expert analysis out there which is contrary to how you are choosing to proceed. Furthermore, the state guidelines appear to talk about trimming and visibility, which does not require wholesale removal of trees. So would you please walk me through those guidelines and how they mandate your course of action? I really don’t think that they do, although I am open to listening to you.}

{In your email to me, you seem to indicate that the answers to some of the questions I asked can be found on pages 3-48 to 50. Those pages contain a discussion of a "decision key" which SAFCA staff developed for deciding which trees are to be removed. Yet, unless it is contained in Appendix B which I apparently do not have, there is not a single word as to how the decision key was derived. Nor is there any reference to the experts upon whom SAFCA staff relied, their credentials and any competing views. Interestingly enough, the chapter on cultural resources contains precisely this kind of information. And, the decision key itself repeatedly uses the words "may" and "can" which, unless augmented by some other materials in Appendix B or elsewhere, hardly constitutes a risk analysis. To be adequate, the document needs to have a risk analysis indicating the actual likelihood that the projected events will occur. Absent such information, the ultimate decision makers will not be fully informed regarding the environmental impacts of the proposed action.}

And finally on this subject, please note the following statements from page 3-48, one of the three pages to which you made reference:

"The Decision Key identifies several tree/shrub characteristics that may increase (or decrease) the relative threat to levee integrity as follows: All trees within the upper three feet (vertical) of the levee top
where the levee is the narrowest and supports the levee inspection and maintenance road. Trees and shrubs in this upper 3-foot zone may impair levee inspection, damage the levee road if uprooted by windthrow, or drop large branches on the levee crown that obstruct access impede flood fight activities." (emphasis added)

Best I can tell, these are the sole statements made in the EIR concerning SAFCA staff's proposal to remove trees falling in this 3 foot category. They, however, contain no analysis whatsoever and merely reflect various conclusions as if they were cardinal truths. These sentences need to be justified with solid scientific and engineering analysis which takes the "mays" and tells the reader the likelihood that the predicted occurrences will actually take place. Obviously this is another request for the risk analysis which you indicated in your email is reflected in the decision key.

Furthermore, did the environmental analysis consider the impact that the slurry wall will have on existing trees? It would seem that a slurry wall would likely provide significant strength and stability to the levee structure if a tree were to become uprooted. Was this evaluated?

Please consider the comments contained in the preceding four paragraphs as comments on the EIR for which responses must be provided before it may be certified by your Board.

Incidentally, while on the levee and in the neighborhood, I have discussed SAFCA's tree removal plans with a variety of folks, not a single one of whom knows a thing about what is being proposed. They inevitably, and very quickly, become outraged when I tell them what is occurring. Nobody wants to risk flood safety, but people fail to see how what you are proposing will at all protect us. Obviously, greater outreach is needed. Some folks have suggested that every tree to be removed should be tagged so everybody knows clearly what is going to happen. Apparently, according to one person I heard from who has experience in this subject matter area, the city has a process of tagging every tree before it is to be removed, thereby providing notice and then a potential hearing before a tree can be removed. The party telling me this was curious as to why that process is not being followed here. Would you provide me with an answer to that concern?

One other thing I have heard repeatedly is why, if accessibility is so important, are the levee blocking fences and appurtenant structures being allowed to remain? People simply don't get what appears this rather substantial inconsistency. Please provide me with an answer I can provide to others with whom I talk.
Finally and generally, it is my belief that science and engineering are what need to be controlling in the rendering of this decision. My strong suspension is that to date that has not occurred to the degree that it should. I tell you this because, if SAFCA is going to proceed with substantial tree removal, it is going to need to provide to the community and in the EIR a justification for doing so which is based on solid science and engineering. It would, moreover, be useful if I were to receive those comments separately before publication of a revised final EIR.

Sincerely,

Suzanne Taylor

---

From: Jay Davis <jdavis@qualco.com>
To: Suzanne Taylor <staylor7@shcpalbe.net>
Cc: Jamee Geary <jgeary@btme.com>, Carolyn Baker <cabaker906@gmail.com>, Heather Fargo <h.fargo@comcast.net>
Sent: Tuesday, July 28, 2015 3:56 PM
Subject: Re: Taylor. Copy of EIR

Hi Suzanne,

My apologies for the delayed response, thank you for your patience. SAFCA is still planning to host a field tour. An alternative date from the original proposed will be sent in a subsequent email for everyone’s consideration. Regarding your question about vegetation management within the upper three feet of the levee crown, SAFCA’s response is as follows:

The State’s Urban Levee Design Criteria (ULDC) provides risk management criteria that states vegetation on levees must be modified or removed if it presents an unacceptable risk to the structural integrity or impedes the operation and maintenance of the levee. SAFCA assembled a multidisciplinary team of engineers, levee managers and vegetation ecologists to develop risk assessment guidelines in order to certify the levees.

The guidelines developed concluded that vegetation existing within the top three feet of the levee crown poses an unacceptable risk to the performance of the levee (see Draft EIR Page 3-48). The primary reason being that tree trunks located near the crown could be blown over during high winds. This overturning could potentially remove a portion of the levee crown impeding levee patrol and flood fight ability. One of the highest priorities is to ensure access for patrolling and flood fighting during a flood event.
These guidelines will be further explained along with additional information shared during the levee tour.

Regards,

Jay Davis
Gualco Consulting
11230 Gold Express Dr. #310
Gold River, CA 95670
(916) 351-0600 tele
(916) 351-9392 fax
jdavis@gualco.com

On Jul 27, 2015, at 1:00 PM, Suzanne Taylor <jstaylor7@sbcglobal.net> wrote:

Hi Jay,

I picked up the EIR copy but am still awaiting the response on the levee vegetation question. It is rather surprising that it would take a week plus to draft an explanation regarding the basis for the vegetation removal standard.

I believe it is critical that public officials, SAFCA board members, and those who have been involved in recent meetings have an opportunity to walk the levee and see exactly what is proposed for removal. Has a time to do this been scheduled?

Thank you,
Suzanne Taylor

From: Jay Davis <jdavis@gualco.com>
To: jstaylor7@sbcglobal.net
Sent: Monday, July 20, 2015 5:26 PM
Subject: Fwd; Taylor; Copy of EIR

Hi Suzanne— I am responding on behalf of Pete to your inquiry. SAFCA would be happy to provide you a copy of the document. A hardcopy of the EIR will be available for you to pick up at SAFCA’s front desk any time after 10:00AM tomorrow.
SAFCA is working on a detailed response to your question regarding vegetation management along the upper 3 feet of the levee, which will be forwarded to you in a subsequent email some time this week.

Regards,

Jay Davis
Gualco Consulting

From: Suzanne Taylor
Sent: Monday, July 20, 2015 8:53:27 AM (UTC-08:00) Pacific Time (US & Canada)
To: SAFCA Levee Accreditation Program
Subject: Copy of EIR

Hi Pete,

We would like to get a copy of the draft EIR for the levee project. I will be downtown tomorrow--is it possible to stop by and pick one up?

Also, can you let me know exactly where the vegetation removal to 3" of the levee crown proposal originates? I looked thru documents online from the Army Corp and FEMA but was not able to find anything which specified this tree removal standard. After walking the levee this weekend, it would appear such a policy would effectively remove all areas of shade along the parkway used by bicyclists, joggers and walkers.

Thank you,
Suzanne Taylor

COUNTY OF SACRAMENTO EMAIL DISCLAIMER:
This email and any attachments thereto may contain private, confidential, and privileged material for the sole use of the intended recipient. Any review, copying, or distribution of this email (or any attachments thereto) by other than the County of Sacramento or the intended recipient is strictly prohibited.

If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments thereto.
The comment requests information on the contributors of the Vegetation Management Decision Key for Levee Accreditation.

As stated in Section 3.4.2 of the project description (DEIR pages 3-49 through 3-50), “To conduct an appropriate assessment of the risk associated with vegetation occupying the levees in the project study area, SAFCA assembled a multidisciplinary team of consulting engineers, levee managers, and vegetation ecologists to survey, document, evaluate, and make recommendations on what actions, if any, that should be taken with respect to waterside and landside levee vegetation, including vegetation within the landside right-of-way area beyond the toe of the levee.” The scientific information to support the Vegetation Management Decision Key for Levee Accreditation was developed by this multidisciplinary team, in coordination with the State and project area local maintaining agencies (LMAs). DWR and SAFCA partnered with State and Federal agencies to fund the CLVRP. The purpose of CLVRP was to undertake and fund original research related to tree root architecture, slurry cutoff walls and tree roots, slope stability and tree roots, tree windthrow, levee failure forensics, and effects of burrowing mammals and their habitat associations from 2009–2012. This partnership was a result of the 2007 Levee Vegetation Research Symposium sponsored by SAFCA, DWR, and the CVFPB (formerly the Reclamation Board). The 2007 symposium was a response to the USACE’s Draft Final White Paper Treatment of Vegetation within Local Flood-Damage-Reduction Systems, dated April 20, 2007. In 2012, the scientific research was presented at the Levee Vegetation Research Symposium in Sacramento, California. Final research reports, including scientific papers and presentations, can be found at the CLVRP website: http://www.safca.org/Protection/Environmental_CLVRP_Research.html. See also Master Response 2: Evaluation of Project Impacts to Vegetation.

SAFCA recognizes that the vegetation currently present on urban levees, including the Sacramento River East Levee, provides important habitat for both terrestrial and aquatic wildlife species, and are a valuable visual and aesthetic resource for the people who live in the proximity of the levee system and who use the levee crown and river for recreational purposes. The local levee system provides functions and services to wildlife and humans alike; however, first and foremost the levee system provides public safety, and the management of the levee system must consider levee integrity, operations and maintenance activities, and environmental protection. With the understanding that trees provide functions and values to both for wildlife and to the human environment, and the need to comply with Federal and State standard for vegetation management, SAFCA assembled a multidisciplinary team, which also included State and LMAs to evaluate the local levees and identify vegetation that poses a risk to levee.
The Vegetation Management Decision Key for Levee Accreditation is based on vegetation guidelines contained in DWR’s ULDC and the USACE ETL 1110-2-583, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*. ETL 1110-2-583 states that “trees and other woody vegetation, such as shrubs and vines, can create both structural and seepage instabilities, prevent inadequate inspection, and create obstacles to maintenance and flood-fighting/flood-control activities.” The ETL also states that root-related penetration into the levee prism can result in shortened seepage paths through levee embankments and foundations, voids in embankments and foundations as a result of root decay, or fallen trees, and that create cracks in floodwalls constructed though the levee prism. The ETL specifically identifies the need to control vegetation to limit “those habitat characteristic that encourage the creation of animal burrows.” The USACE ETL states that the entire levee prism and a distance of 15 feet from both the waterside and landside from the levee toe should be maintained free of vegetation. ULDC criteria regarding vegetation state that vegetation should not be present from 15 feet landward of the toe, on the landside levee slope, levee crown, nor 20 feet below the top of the waterside levee slope. The vegetation removal criteria established in the Vegetation Management Decision Key for Levee Accreditation are not as expansive as the USACE ETL 1110-2-583, nor the ULDC criteria, and implementing the Decision Key criteria would require a vegetation variance from the USACE. The Vegetation Management Decision Key for Levee Accreditation establishes a vegetation-free zone on the landside levee slope, within 15 feet of the landside levee toe, within three vertical feet of the levee crown, and three vertical feet below the waterside levee hinge point (top of the waterside levee slope). Removal of trees present on the upper one third of the waterside levee slope is not required, unless these trees have multiple defects that pose a threat to levee integrity, or are present within 3 vertical feet of the waterside hinge point. This three-vertical-foot clearance zone was established to maintain visibility and access to the levee crown for regular levee inspections and inspection during wet weather. A tree failure event in this zone has the potential to block levee access along the crown since the tree is likely to land on the crown, and branch drop could also prevent access along the crown.

The Decision Key recognizes that levee geometry (width, freeboard height, and slope angle), levee composition (stable, cohesive, uniform material versus material that is of uncertain origin, contains sand or silt lenses, or is composed of historic dredge material), the presence of landside or waterside berms, and existing condition of the levee are a factor in establishing criteria for hazardous vegetation. The Decision Key considers the evergreen trees to be more susceptible to windthrow when compared to deciduous trees since high winds in the region typically are accompanied by winter precipitation events that can cause saturated foliage. Evergreen species, such as redwood and eucalyptus, generally lack tap roots and have shallow root systems, another contributing factor for predicting vulnerability to wind throw. Fruit and nut bearing trees were determined to be high-hazard vegetation since these species provide a food source for burrowing animals, and the ETL explicitly states that habitat characteristics that attract burrowing animals must be limited. Oak trees were excluded from trees that the Decision Key considers fruit and nut-bearing. Although oak trees produce acorns, a food source that is used notably by California ground squirrel (*Spermophilus beecheyi*), a burrowing animal, acorn crops are highly variable year to year and the removal of other fruit and nut bear trees limits the variety and temporal availability of food options for the species. In addition to available food sources, levee soil
composition, vegetation, and maintenance practices are predictors of levee use by burrowing mammals.

See also Master Response 2: Evaluation of Project Impacts to Vegetation.

**P23-3**

_The commenter has heard that the City of Sacramento has a process of tagging trees scheduled for removal and having a hearing prior to tree removal. The commenter inquires as to why that has not occurred for the North Sacramento Streams, Sacramento River East Levee, Lower American River, and Related Flood Improvements Project._

Section 12.56 of the Sacramento City Code addresses tree resources. The code does not require tree tagging, nor does the code contain mention of a hearing prior to tree removal. The current tree ordinances are under review and revision. The new proposed ordinance does state that a hearing may be required. However, the proposed language has not been adopted by the city council and is not currently in effect.

The construction footprint of the proposed project, including the Sacramento East River Levee portion of the project, is entirely within the levee prism and an easement held by the State for operations and maintenance. These areas are under the jurisdiction of the Sacramento and San Joaquin Drainage District and are not subject to local laws, ordinances, or policies. Staging areas not located on lands under the jurisdiction of Sacramento and San Joaquin Drainage District may be subject to the Sacramento City code. Staging areas have been sited to avoid impacts to sensitive biological resources, including trees. If tree removal is required in staging areas, tree permits would be obtained from the city in accordance with the City code.

**P23-4**

_The commenter asks why the fences and appurtenant structures are being allowed to remain._

SAFCA intends to replace any fence sections that may need to be removed during Levee Accreditation Project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA.

**P23-5 to P23-7**

_The commenter states that SAFCA must provide a justification for tree removal based on science and engineering and requests response prior to publication of a revised FEIR. The commenter also requests a copy of the EIR._

Please refer to the Response to Comment M9-1 for a discussion of tree removal associated with the construction of the levee improvements. Please refer to the Response to Comment P23-2 and Master Response 2: Evaluation of Project Impacts to Vegetation for discussion of vegetation removal under the Decision Key. A hard copy of the EIR was provided, as requested by the commenter.
3.6 RELATED COMMENTS AND RESPONSES

This section includes relevant comments received by USACE and CVFPB on the ARCF GRR DEIS/DEIR, and SAFCA’s responses to those comments because some of the comments are relevant and could apply to the SAFCA’s Levee Accreditation Project, or a portion of it. Each comment letter is reproduced in its entirety and is followed by the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter. In some letters with multiple comments, not all comments were deemed to be related to SAFCA’s Levee Accreditation Project or analysis; responses are included only for those related comments.
From: Dan Kopp [rey_ality@hotmail.com]
Sent: Tuesday, April 07, 2015 3:35 PM
To: Baker, Anne E SPK
Subject: [EXTERNAL] American river Common Features Project (UNCLASSIFIED)

Hi Anne,

I already sent the following question/comment to a DWR contact several days ago; I made it a bit less caustic at the end for you:

My home abuts the levee on the south side of the American River Parkway between Howe and Watt Aves, and I noticed trees were tagged several years ago, I believe 30 feet away from the toe on the river side and 20 feet or so on the residential side; does this project intend to remove trees? If so, how many and why?

If there is a tree removal component to this project, have measures been put in place to manipulate vegetation outside the breeding season for birds (starting in January for Great-horned Owls and Anna’s Hummingbirds; beginning late February/early March for songbirds and continuing through August)? I can see an active Swainson’s Hawk nest from my living room, and there are noise buffers that are usually put in place for this listed California Threatened species.

Also, I noticed at the bottom of page 13 of the Environmental Site Assessment, under Sacramento East Maps, the last bullet states:

The Sacramento East map of 1975 was a photo revision of the 1967 edition and added a crossing at Howe Road.

I am a firm believer in getting the small details correct, especially in a project like this, so when I see that Howe Avenue was mis-named as Howe Road, even though it was correct in the bullet right above, it makes me wonder if any other details were mixed-up in the analysis.

Anyway, those are my main concerns: unnecessary tree removal (from my perspective) and limbing/tree removal during the avian nesting season.

The comment reflects my duties as an editorial board member for the Central Valley Bird Club Bulletin, where I read every word to help ensure everything is as grammatically and factually correct as possible. It is not meant as a personal attack, just an observational extrapolation.
Thanks,

Dan Kopp
Sacramento

> From: Anne E. Baker @usace.army.mil
> To: rey_ality@hotmail.com
> Subject: RE: [EXTERNAL] American river Common Features Project (UNCLASSIFIED)
> Date: Tue, 7 Apr 2015 21:39:09 +0000
> Classification: UNCLASSIFIED
> Caveats: NONE
> Hi Dan,
> You can send your comments to me via e-mail. I will look forward to seeing them!
> Thank you,

Anne E. Baker
Environmental Manager
Environmental Analysis Section, Planning Division
Sacramento District, US Army Corps of Engineers
1325 J Street
Sacramento, CA 95814-2922
(916) 557-7277

-----Original Message-----
From: Dan Kopp [mailto:rey_ality@hotmail.com]
Sent: Tuesday, April 07, 2015 2:10 PM
To: Baker, Anne E SPK
Subject: [EXTERNAL] American river Common Features Project
Anne,
Can I send my comments about the DEIS/DEIR via email or do I need to send them in the regular mail?
Thanks,

Dan Kopp
Sacramento

Classification: UNCLASSIFIED
Caveats: NONE
I-1  *The comment states that trees have been tagged along the levee and inquires whether the proposed project would entail tree removal and the reasons for removal.*

As discussed in detail throughout DEIR Chapter 2, “Background,” and “Chapter 3, “Project Description,” work throughout the project area would entail removal of high-hazard vegetation (and other high-hazard encroachments) in order to provide improved levee stability. The specific locations of high-hazard vegetation to be removed are shown on Exhibits 3-18 (Chapter 3, “Project Description”) and 4.6-3a through 4.6-3d (Section 4.6, “Biological Resources – Terrestrial”). Details regarding the evaluation criteria for trees and other vegetation that would be removed are contained on pages 3-48 through 3-50 of Chapter 3, “Project Description,” and in DEIR Appendix B.

I-2  *The comment inquires as to whether there are mitigation measures directing that vegetation removal occur outside of the bird breeding season, and states that noise measures should be implemented to protect Swainson’s hawks.*

As discussed in detail in Impact BIO-8 in DEIR Section 4.6, “Biological Resources – Terrestrial,” (pages 4.6-143 through 4.6-148), SAFCA would implement Mitigation Measure BIO-8, which would implement proposed Conservation Strategy measures to protect, avoid, minimize, reduce, or compensate effects to nesting special-status birds, including raptor species such as Swainson’s Hawk. As detailed list of specific measures is contained on DEIR pages 4.6-144 and 4.6-155. The proposed Conservation Strategy is a regional-level program that would protect, avoid, minimize, reduce, and compensate for the proposed project’s ecological impacts. The proposed elements of the Conservation Strategy are described in detail in DEIR Chapter 3, “Project Description,” on pages 3-50 through 3-67.
From: Stan Jones [geezenski2@sbcglobal.net]  
Sent: Friday, April 10, 2015 12:10 PM  
To: Baker, Anne E SPK  
Cc: Stan Jones  
Subject: [EXTERNAL] Sac. River Levee Work

Hi,

Thank you for providing an opportunity to comment on the proposed levee upgrades. I have a few thoughts on this.

The public should be able to see what we're getting for the millions & millions being spent. I propose some "viewing areas" along the levee during the work, to see what's being done. These should be accessible to the public. Maybe a sign or 2 explaining what is being done.

Get rid of all the gates & fences that crisscross the levees in South Sacramento. They are an "attractive nuisance" to kids, who have been seen climbing on them. Some fences have barbed wire, another has 'concertina wire' at the top. This could be a huge liability. Most all of the fences can be bypassed by walking down to the water's edge and going around them, so they don't really accomplish anything. Most of the fences do not have legally valid permits anyway. Removal of all the gates & fences will certainly make the repair work easier and more efficient.

There are a number of dead & sick trees along the Pocket and Little Pocket areas of the levee. Also a number of trees infested with mistletoe that need attention. Were any of these dead trees to topple over in a storm, they might take out a huge rootball of dirt and rock, and leave a large gaping hole in the side of the levee. This work should receive a high priority.

I live 3 blocks from the Sacramento River, and enjoy walking and bike riding on the levee, and kayaking on the Sacramento River. We are very much in favor of stronger levees! I'd be happy to provide additional information to you if requested.

Best Regards,

Stan Jones
J-1 The comment proposes that viewing areas be established along the levees so that members of the public can see the project-related construction, with signage explaining to the public why the construction is occurring.

It is unclear what the purpose would be for providing “viewing areas” for members of the public to see the project-related construction activities. Furthermore, such “viewing areas” would result in a safety hazard for members of the public in proximity to construction equipment, and would not reduce the environmental impacts of the proposed project in any way.

J-2 The comment states that the fences and gates on private property along the levee should be removed because the commenter believes they represent a climbing hazard for children, access to the private areas can be obtained by going down to the water and walking around the fences, the fences do not have legally valid permits, and it would make construction easier.

SAFCA intends to replace any fence sections that may need to be removed during Levee Accreditation Project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA.

J-3 The comment states that there a number of dead and dying trees along the levee, as well as trees containing mistletoe, and that such trees should be removed.

The commenter’s concerns are noted. The specific locations of high-hazard vegetation to be removed are shown on Exhibits 3-18 (Chapter 3, “Project Description”), and 4.6-3a through 4.6-3d (Section 4.6, “Biological Resources – Terrestrial”). Details regarding the evaluation criteria for trees and other vegetation that would be removed are contained on pages 3-48 through 3-50 of Chapter 3, “Project Description,” and in DEIR Appendix B.
From: Janet Fullwood [jfullwood@me.com]
Sent: Friday, April 10, 2015 5:08 PM
To: Baker, Anne E SPK
Subject: [EXTERNAL] public comment - levee reinforcement

Hello there - I would like to submit the following public comments regarding levee improvements in the Pocket Area. Would you please forward to Tyler Stalker, who is evidently the person collecting them? That's who the hand-out forms on the table at the Elk's Club last night were addressed to. But email is much more efficient than filling out a form by hand and mailing by snail mail.....

Name: Janet Fullwood
Address: 6470 Surfside Way 95831
Phone: 916.718.5666
Email: jfullwood@me.com

Comment No. 1:

The last round of levee reinforcement, in 2007, stopped at my house on the downstream end (My property is at the intersection of Surfside and Cruise Way). Only one time since has the river come up high enough for the effectiveness of the repairs to be tested, that being during the high-water winter of 2010-2011. Before the reinforcement, water seeped and weeped from the sidewalks in front of every river-side house on my block. This last time, every sidewalk on the street was dry except mine, which kept just as badly as before. I also had water pooled under my house that had to be pumped out via the sump installed after the 1997 floods that brought eight inches of water under my house (neither federal or homeowners flood insurance would pay for repairs by the way; hydrostatic seepage is not covered, only breaches in the levee). Evidently the water is creeping in through angled sediments. Please make note of this and get in touch if you need more detail.

Comment No. 2:

During the 2007 repairs, new sod was planted on the river side of the levee. Unfortunately, what came up was two species of spear grass, colloquially known as foxtails, that are lethal to animals. Every farmer and rancher in the state is trying to get rid of this invasive, unwanted stuff, and we get stuck with a sea of it. The explanation I've gotten is that the seeds were embedded in "imported" soil. Imported from where, I don't know, but these invasive species are an unwelcome hazard. Last year, the levee was not mowed until after the awns had set and it was bad news for a number of pets that were infected and incurred huge vet bills. Who knows how many wild animals were hurt, too?. When the next round of repairs is made, can we please kill that stuff off and replant with certified weed-free native grasses? Something needs to be done; it's a shameful situation.

That's all for now. My thanks to all the Corps and SAFCA and city representatives who turned out last night at the Elk's Lodge and for all the great graphics and explanations.
Sincerely,

Janet
The comment states that during the last high-water winter of 2010-2011, water seeped underneath and seeped from the sidewalks in the front of the commenter’s home (at the intersection of Surfside and Cruise Way in the Pocket area), as well as water pooled underneath the house that was removed via a sump for which the homeowner had to pay. The commenter requests that the seepage issue through the levee at her location be remedied.

As shown on Exhibit 3-12c (DEIR page 3-100, Chapter 3, “Project Description”), the commenter’s property is located adjacent to Reach 20. As described in detail on pages 3-31 and 3-32, SAFCA would construct a conventional seepage cutoff wall through the crown of the levee along the portions of levee that have experienced continued seepage. The seepage cutoff wall would extend to the base of the fine-grained blanket layer to cut off the more permeable granular layers in the blanket that may be conveying seepage to the landside toe and “stitch” the blanket together. Cutoff walls would extend to depths of about 40 to 70 feet below the levee crest (to Elevation -5 to -30 feet) to reach the bottom of the fine-grained blanket layer.

The commenter states that sod planted after the 2007 levee repairs contained two species of spear grass (or “foxtails”) and this weed species has resulted in injuries to animals that walk through the grass, including pets owned by nearby property owners. The commenter requests that this invasive species be removed from the levees.

Although SAFCA has no jurisdictional authority over grass maintenance activities along the levee, the commenter’s concern for this hazard from invasive species is appreciated and SAFCA will bring this issue to the attention of the appropriate State levee maintenance agency. SAFCA also notes that proposed Conservation Strategy Policy SSP-1 requires that construction vehicles and equipment must be cleaned inside and out at an authorized washing facility before arrival at the project construction areas and must be inspected in an attempt to ensure they are free of soil and debris that could harbor nonnative plant seeds, roots, or rhizomes. If invasive or noxious weeds are already present in portions of the project areas, vehicles must be cleaned before moving from infested areas to areas that are weed free. Exterior cleaning must consist of pressure washing vehicles and equipment, with close attention paid to the tracks, feet, and/or tires and on all elements of the undercarriage. Vehicle cabs must be swept out, and refuse must be disposed at an approved off-site location. Proposed Conservation Strategy Policy SSP-2 requires that all imported straw used in project activities shall be certified weed-free (see DEIR page 3-66 in Chapter 3, “Project Description”).
From: James Geary [jgeary@me.com]
Sent: Saturday, April 11, 2015 12:38 PM
To: Baker, Anne E SPK
Subject: [EXTERNAL] Public Workshop with SAFCA & the Army Corp of Engineers at Elk’s Lodge #6, 4/14/15

As part of these projects, neither SAFCA or the Army Corps should replace any of the nine fences that presently cross the levees in the Pocket areas. None of the fences are in compliance with their permits and most of the permits are not held by the present homeowners. No government agency should be engaged in replacement of obstructions on the levee that are illegal and add to the danger of the flooding in the Pocket area.

James Geary
989 Cobble Shores Dr.
Sacramento, CA 95831
The comment states that the privately-owned fences across the levee are illegal and add to the danger of flooding in the Pocket area, and therefore the fences should not be replaced at the conclusion of project-related activities.

SAFCA intends to replace any fence sections that may need to be removed during Levee Accreditation Project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA.
From: Maggie Beddow [mbeddow@att.net]
Sent: Sunday, April 12, 2015 3:03 PM
To: Baker, Anne E SPK
Subject: [EXTERNAL] SAFCA public comment feedback

Hello Ms. Baker,

I am writing to provide SAFCA public comment on the upcoming levee project. As a resident of Sacramento and the Pocket community, I would like to strongly urge that the fences across the levee NOT be replaced during this levee improvement as each one of those fences are illegal and/or are not properly permitted by SAFCA. Replacing the illegal fences will only further exacerbate community concerns about levee access, impartiality, and objectivity. With this new levee project, SAFCA has a perfect opportunity to not only save taxpayer dollars, but to also disengage in any activity that replaces illegal fences with more illegal fences.

Thank you for your consideration.

Respectfully submitted,

Dr. Maggie Beddow, Pocket resident
The comment states that the privately-owned fences across the levee are illegal and therefore the fences should not be replaced at the conclusion of project-related activities.

SAFCA intends to replace any fence sections that may need to be removed during Levee Accreditation Project-related construction activities or compensate property owners for damaged property. The commenter’s concerns related to fencing are related to compliance with permit conditions, which are the responsibility of CVFPB rather than SAFCA.
April 27, 2015

Ms. Alicia E. Kirchner  
Environmental Resources Branch Sacramento District  
U.S. Army Corps of Engineers,  
1325 J Street  
Sacramento, CA 95814-2922


Dear Mr. Johnson:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. Alternative 1 of the project involves the construction of fix-in-place levee remediation measures to address seepage, slope stability, erosion, and overtopping concerns. Alternative 2 of the project seeks to improve levees and widen the Sacramento Weir and Bypass. The study area includes: (1) approximately 12 miles of the north and south banks of the American River immediately upstream from the confluence with the Sacramento River; (2) the east bank of the Natomas East Main Drainage Canal (NEMDC), Dry, Robla, and Arcade Creeks and the Magpie Creek Diversion Channel (collectively referred to as the East Side Tributaries); (3) the east bank of the Sacramento River downstream from the American River to Freeport, where the levee ties into Beach Lake Levee, the southern defense for Sacramento; and (4) the Sacramento Weir and Bypass, located along the north edge of the city of West Sacramento.

Caltrans new mission, vision, and goals signal a modernization of our approach to California’s transportation system. We review this local development project for impacts to the State Highway System (SHS) in keeping with our mission, vision, and goals for sustainability/livability/economy, and safety/health. We provide these comments consistent with the State’s smart mobility goals that support a vibrant economy, and build communities, not sprawl. The following comments are based on the DEIR/EIS.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability."
Levee Stability

Caltrans recognizes the importance of levee improvements to the mobility of travelers using the SHS. The continued stability of the levee is necessary to prevent a complete levee failure, which would result in harm, and perhaps total destruction of a highway segment. Additionally, levee work is necessary to prevent seepage, which could undermine a substantial section of the adjoining highway.

Bridge Structures and Maintenance

Below is the list of bridges in Sacramento County in which Caltrans has identified as scour critical. A complete modeling of any affected bridge may be required for Alternatives 2 and 3.

<table>
<thead>
<tr>
<th>Bridge No.</th>
<th>Feature Intersected</th>
<th>Dist Cnty</th>
<th>Route</th>
<th>Mile Post</th>
<th>Insp Date</th>
<th>Structure Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>240001L</td>
<td>AMERICAN RIVER</td>
<td>03</td>
<td>SAC</td>
<td>00160</td>
<td>44.47</td>
<td>05/28/2013</td>
</tr>
<tr>
<td>24 0020L</td>
<td>COSUMNES RIVER</td>
<td>03</td>
<td>SAC</td>
<td>00099</td>
<td>6.40</td>
<td>01/29/2014</td>
</tr>
<tr>
<td>24 0020R</td>
<td>COSUMNES RIVER</td>
<td>03</td>
<td>SAC</td>
<td>00099</td>
<td>5.40</td>
<td>01/29/2014</td>
</tr>
<tr>
<td>24 0021R</td>
<td>COSUMNES RIVER OVERFLOW</td>
<td>03</td>
<td>SAC</td>
<td>00099</td>
<td>7.92</td>
<td>01/29/2014</td>
</tr>
<tr>
<td>24 0046L</td>
<td>LAGOON CREEK</td>
<td>03</td>
<td>SAC</td>
<td>00099</td>
<td>4.68</td>
<td>01/24/2014</td>
</tr>
<tr>
<td>24C00034</td>
<td>COSUMNES RIVER</td>
<td>03</td>
<td>SAC</td>
<td>00000</td>
<td>0.00</td>
<td>04/09/2013</td>
</tr>
<tr>
<td>24C00800</td>
<td>ARCADE CREEK</td>
<td>03</td>
<td>SAC</td>
<td>00000</td>
<td>0.00</td>
<td>01/18/2014</td>
</tr>
<tr>
<td>24C0293</td>
<td>ELDER CREEK</td>
<td>03</td>
<td>SAC</td>
<td>00000</td>
<td>0.00</td>
<td>11/13/2014</td>
</tr>
<tr>
<td>24C0328</td>
<td>CHICAGO CREEK</td>
<td>03</td>
<td>SAC</td>
<td>00000</td>
<td>0.00</td>
<td>04/01/2014</td>
</tr>
</tbody>
</table>

Caltrans routinely inspects bridges for the purposes of bridge maintenance. Therefore, bridge engineers and other authorized workers require access to the underside of the bridges. In the path of levees or flood wall height increases, a Caltrans-approved method of bridge access needs to be designed and installed.

A bridge embankment seepage analysis, including any mitigation, needs to be submitted to Caltrans for review.

Any new bridge or existing bridge modification needs to be designed based on the current Caltrans Bridge design codes.

Flood walls or levees cannot exceed the bridge embankment in height proportionally.

Construction Traffic

As identified by this project’s traffic study, this project plans to transport 1 million yards of borrow material and 2.8 million tons of rock for construction. The construction period is estimated to take approximately 10 years. As the result, there will be substantial increases in traffic on local roadways associated with truck haul trips during construction activities. In addition, traffic controls would cause, or contribute to, temporary substantial increases in traffic levels and speed differentials on several roadways, as traffic is detoured or slowed. Traffic controls could cause delays particularly during the morning and evening peak commute hours.

*Provide a safe, sustainable, integrated, and efficient transportation system to enhance California’s economy and livability*
Ms. Alicia E. Kirchner / USACE
April 27, 2015
Page 3

The project sponsor would require the contractor to prepare a Traffic Control and Road Maintenance Plan to address its construction traffic impacts. Caltrans requests the project sponsor to haul its building materials by barges as much as possible to reduce truck trips. If the building materials could be hauled by barges, this would reduce the project’s traffic impacts significantly. Caltrans would like to review the Traffic Control and Road Maintenance Plan.

**Bicycle and Pedestrian Travel on Levees**

The Pocket levees are a well-used recreational and commute bicycle route. Please consider providing convenient alternate means of travel for bicyclists and pedestrians during construction of the levees. Also, please consider providing for connected bicycle and pedestrian access along the levees following construction. The levee paths provide important parallel alternatives for non-motorized travel and help reduce demand on the SHS.

Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any questions regarding these comments or require additional information, please contact Larry Brohman, Intergovernmental Review Coordinator, at (916) 274-0627 or by email at: larry.brohman@dot.ca.gov.

Sincerely,

[Signature]

ERIC FREDERICKS, Chief
Office of Transportation Planning – South

c: Scott Morgan, State Clearinghouse

“Provide a safe, sustainable, integrated, and efficient transportation system to enhance California’s economy and livability.”
The comment states that preparation of Traffic Control and Road Maintenance Plan has been identified as mitigation, and that the California Department of Transportation (Caltrans) would like an opportunity to review said plan. The comment also requests that project-related building materials be hauled by barges as much as possible, to reduce the amount of truck trips and therefore reduce the project's traffic impacts.

As indicated in DEIR Mitigation Measure TR-1 (pages 4.17-22 and 4.17-24 in Section 4.17, “Transportation and Traffic”), SAFCA would submit the Traffic Control and Road Maintenance Plan to Caltrans for review to cover points of access from the State Highway system (Interstate 5, SR 160, and U.S. 50) for haul trucks and other construction equipment. Barge transportation was not considered for detailed analysis in the DEIR due to the potential for increased air quality impacts compared to truck-based hauling as included in the proposed project.

The comment requests consideration for provision of alternative means of travel for bicyclists and pedestrians during levee construction activities.

As discussed on DEIR page 4.16-13 (Section 4.16, “Recreation Resources”), SAFCA would implement the following measures to reduce temporary, short-term construction impacts on pedestrian and bicycle facilities.

► Prepare a bicycle detour plan for all bike trails, including the Ueda Parkway and Sacramento Northern Bike Trail, and on-street bicycle routes in consultation with the City of Sacramento and/or Sacramento County Bicycle and Pedestrian Coordinator at least 10 days before the start of construction activities, as applicable. The detour plan shall include posted signs at major entry points for bicycle trails clearly indicating closure routes, roadway markings to designate temporary bike lanes, information signs to notify motorists to share the road with bicyclists, and a contact number to call for questions or concerns. SAFCA shall maintain and implement the detour plan throughout the construction period and during all construction seasons. Provide public information through the media and on the SAFCA’s website regarding detours and alternative access routes to bicycle facilities affected by project construction. SAFCA shall coordinate with the City of Sacramento and/or Sacramento County Department of Parks and Recreation to make available information to the public regarding closure of bicycle facilities and detours at least 10 days before the start of construction activities. SAFCA shall continue to provide public information regarding closure of bicycle facilities and detours throughout the construction period.

► Upon completion of levee improvements, coordinate with the City of Sacramento and/or Sacramento County Department of Parks and Recreation for these agencies to restore access and repair any construction-related damage to bicycle facilities to preproject conditions.
As discussed on DEIR page 4.17-31 (Section 4.17, “Transportation and Traffic”), SAFCA would implement Mitigation Measure TR-3a, which would include the following measures to improve access to and provide for the safety of pedestrian and bicycle facilities during construction.

- Coordinate with and provide notice to the appropriate City and/or County departments at least 10 days before the start of construction activities that would require closure and/or detours of pedestrian and bicycle routes.

- Provide clearly marked pedestrian detours to address any sidewalk or pedestrian walkway closures or if pedestrian safety would be otherwise compromised.

- Provide clearly marked bicycle detours to address bicycle route closure or if bicyclist safety would be otherwise compromised.

- Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.

- Locate all stationary equipment as far away as possible from areas used by vehicles, bicyclists, and pedestrians.

- Post alternative bicycle or pedestrian routes and facilities that can be used during construction activities showing when detours or route closures are required at least 10 days before the start of construction activities.

- Reconstruct pedestrian/bicycle trails and paths to preproject conditions at the completion of project-related construction activities.

The comment also requests that the project include additional connection of pedestrian and bicycle paths along the levees to facilitate non-motorized travel.

SAFCA appreciates the commenter’s concern related to connectivity of bicycle and pedestrian paths. However, the provision of additional connections for pedestrian and bicycle paths along the levees is not under SAFCA’s jurisdiction.
Ms. Anne Baker  
U.S. Army Corps of Engineers  
Sacramento District  
1325 J Street  
Sacramento, CA 95814  
Anne.E.Baker@usace.army.mil

Erin Brehmer  
Department of Water Resources  
3464 El Camino Avenue Room 200  
Sacramento, CA 95821  
erin.brehmer@water.ca.gov

SUBJECT: COMMENTS ON NOTICE OF AVAILABILITY (NOA) OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) AND GENERAL REEVALUATION REPORT (GRR) FOR AMERICAN RIVER COMMONS.

Dear Ms. Baker and Ms. Brehmer:

The Sacramento County Department of Transportation (SACDOT) has reviewed the NOA of the DEIR and GRR for American River Commons, dated March 2015. We appreciate the opportunity to review this document. We have following comments to offer:

1. **General.** The proposed levee improvements require the transport of approximately one million yards of soil and nearly three million tons of rock over Sacramento County roads to various levee sites within Sacramento County. The high volume of trucks and heavy weight associated with these trucks will significantly degrade affected County roadways and shorten the life of these haul roads. Due to the roadway impacts site specific studies should be done for each levee improvement area. The study should contain detailed truck traffic information including haul routes, haul volumes per truck (soil and rock), associated haul truck types, number and frequency of trucks, proposed hauling hours, and associated roadway traffic volumes. Based on the results of the project specific reports, the project applicant should provide to Sacramento County a summary of the roadway impacts and proposed remediation efforts that will be undertaken by the project sponsor to account for County roadway degradation and damage.

2. **General.** Please coordinate with the SACDOT staff in implementing the Traffic Safety and Control Plan for construction related truck traffic and any bike trail and/or roadway closures.

May 1, 2015
Comments on the NOA of DEIR and GRR for American River Commons.

Page 2

If you have any questions please call me at (916) 875-2844.

Sincerely,

Kamal Atwal, P.E.
Associate Transportation Engineer
Department of Transportation

KA/mp

c: Matt Darrow, DOT
Dean Blank, DOT
The comment states that the high volume of trucks for project activities and heavy weight associated with these trucks would degrade affected County roadways and shorten the life of these haul roads. The comment requests site-specific impact studies for each levee improvement area with reports containing various data such as truck volumes and travel routes. Finally, the comment requests that Sacramento County be provided with a summary of the roadway impacts and proposed remediation efforts.

Site-specific roadway impacts with the data requested by the commenter (e.g., truck volumes and travel routes) are provided throughout DEIR Section 4.17, “Transportation and Traffic,” for each of the project study areas (i.e., North Sacramento Streams Levee Improvements, Sacramento River East Levee Improvements, American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal, and NEMDC/Steelhead Creek CMP). Roadway impacts are analyzed in Impacts TR-1, TR-2, TR-3, and TR-4 on DEIR pages 4.17-21 through 4.17-35. SAFCA would implement Mitigation Measures TR-1, TR-2, TR-3a, and TR-3b (see DEIR pages 4.17-21 through 4.17-35) to reduce project-related traffic impacts (including repair of damaged roadways) to a less-than-significant level.

The comment requests coordination with Sacramento County Department of Transportation for implementation of the Traffic Safety and Control Plan and for any bike trail and/or roadway closures.

As discussed on DEIR page 4.17-31 (Section 4.17, “Transportation and Traffic”), implement Mitigation Measure TR-3a includes coordination with and notice to the appropriate City and/or County departments at least 10 days before the start of construction activities that would require closure and/or detours of pedestrian and bicycle routes. As also discussed on DEIR page 4.16-13 (Section 4.16, “Recreation Resources”), SAFCA would prepare a bicycle detour plan for all bike trails and on-street bicycle routes in consultation with the City of Sacramento and/or Sacramento County at least 10 days before the start of construction activities, as applicable.
4 May 2015

Anne Baker
Department of the Army
U.S. Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Re: ARCF Draft EIR/EIS Comments

Dear Ms. Baker,

I reviewed the Cultural Resources Section in light of recent discoveries along the Feather River levees during degrading operations in preparation for improvements to address levee deficiencies. It is my understanding that the Sutter Buttes Flood Control Agency encountered nine buried American Indian midden sites within a nine-mile stretch in Butte County alone, some including human burials. Cultural deposits ranged anywhere from 9 to 18 feet below levee grade.

Historically, sites along the river were situated on high ground (the natural levees) in the form of mounds. As such, it stands to reason that when Euro-Americans began raising these embankments to combat floods, archaeological sites were incorporated, if possible, to save on the cost of construction efforts. Such early improvements to natural levees were then subsequently raised, enlarged, and bolstered with slope stability berms, essentially covering over any evidence pointing to the existence of cultural resource today.

My concern is that some sites within the ARCF study area are likely to have remained unidentified during this initial stage of the Section 106 process, given that investigations were restricted to surface observations. Mitigation Measure CR-3, Archaeological Monitoring, while addressing the possibility for undiscovered resources, essentially serves to defer the identification effort. Unfortunately, post-review discoveries occur during critical construction operations when it is too late to treat them properly and delays can be ill-afforded. I am not suggesting this mitigation measure be removed... only that, in addition, subsurface investigations be required to ensure that sites are found prior to construction when it is still possible to avoid or limit impacts. This proactive approach can be achieved through geophysical survey and ground-truthing.

Sincerely,

Kim Tremaine

Address: 1220 Smith Court, Dixon, CA 95620
Phone: 916-637-9717
The comment states that some archaeological sites in the project study area may not have been identified given that observations were limited to surface exploration. The comment further states that Mitigation Measure CR-3 inappropriately defers the identification of subsurface sites. The comment requests that additional mitigation, requiring implementation of subsurface geophysical surveys and ground-truthing prior to the start of construction activities, be added.

Records searches at the appropriate archaeological repositories, as well as outreach to and input from the Native American community, have been conducted throughout the entire project study area. The results have been described in detail in DEIR Section 4.7, “Cultural Resources,” and DEIR Appendix I. The methodologies employed for evaluation of cultural resources in the DEIR are consistent with the industry standard approach, as well as the CEQA statutes and guidelines. Mitigation Measures CR-1, CR-2a, CR-2b, CR-3, and CR-4 (described in detail on pages 4.7-28 through 4.7-41) are feasible and would reduce all of the proposed project’s impacts to a less-than-significant level (with the exception of high-hazard trees identified as historical resources, which cannot be avoided). These mitigation measures require:

- conducting a landscape inventory, preparing a cultural landscape report, and implementing treatment measures prior to the removal of any Victory Trees along State Route 160;
- conducting archaeological monitoring during ground disturbance within 100 feet of known archaeological resources and preparing and implementing a monitoring plan;
- avoiding archaeological sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H;
- implementing specific procedures for inadvertent discovery of cultural resources (listed in Mitigation Measure CR-3, page 4.7-35); and
- implementing specific procedures for inadvertent discovery of human remains (listed in Mitigation Measure CR-4, pages 4.7-38 and 4.7-39).

A lead agency is required to implement feasible mitigation measures that would reduce or avoid significant or potentially significant impacts (State CEQA Guidelines Section 15126.4[a][1]). “‘Feasible’ means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, social, and technological factors” (State CEQA Section 21061.1). Furthermore, “CEQA does not require analysis of every imaginable alternative or measure; its concern is with feasible means of reducing environmental effects;” and, the discussion of mitigation measures in an EIR “must be assessed in accordance with the ‘rule of reason,’” Concerned Citizens of South Central Los Angeles v. Los Angeles Unified School District (2d District 1994) 24 Cal.App.4th 841 [29 Cal.Rptr. 2d 492]. Finally, “[t]he mitigation measure must be ‘roughly proportional’ to the impacts of the project (Dolan vs. City of Tigard, 512 U.S. 374 [1994] and State CEQA Guidelines Section 15126.4[a][4][B]). Implementing the additional mitigation suggested by the commenter would require subsurface geophysical surveys.
and ground-truthing over an area of at least 30 lineal miles prior to the start of construction activities and regardless of the potential likelihood as to whether or not archaeological materials may even be present—such an effort would be infeasible both from a financial and project time-period perspective, and would be disproportionate to the potential level of impact. Finally, Mitigation Measures CR-1, CR-2a, CR-2b, CR-3, and CR-4 contain sufficient performance standards and therefore do not constitute deferral. “[F]or kinds of impacts for which mitigation is known to be feasible, but where practical considerations prohibit devising such measures earlier in the planning process, the agency can commit itself to … devising measures that will satisfy specific performance criteria articulated at the time of project approval. Where future action to carry a project forward is contingent on devising means to satisfy such criteria, the agency should be able to rely on its commitment as evidence that significant impacts will in fact be mitigated.” (Sacramento Old City Assn. v. City Council [1991] 229 Cal.App.3d at pp. 1028-1029; see also Rio Vista Farm Bureau Center v. County of Solano [1992] 5 Cal.App.4th 351.)

For the reasons set forth above, no changes to the DEIR are required.
4 CORRECTIONS AND REVISIONS TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

4.1 INTRODUCTION

This section presents specific text changes made to the DEIR since its publication and public review. The changes are presented in the order in which they appear in the original DEIR and are identified by the DEIR page number. Text deletions are shown in strikethrough (strikethrough) and text additions are shown in underline (underline).

4.2 CORRECTIONS AND REVISIONS

EXECUTIVE SUMMARY

Page ES-13

In Table ES-2, the text of Mitigation Measure AIR-1c has been revised as follows:


As shown above in Table 4.4-4, maximum daily construction-related NOX emissions would exceed SMAQMD’s construction threshold of significance. A majority of the construction-related NOX emissions are generated from off-road construction equipment. Therefore, Mitigation Measure AIR-1c requires that at least 15 percent of the construction equipment used for the proposed project shall be Tier 3 engines or achieve Tier 3 engine emission standards. Table 4.4-4 presents the proposed project’s mitigated construction emissions with inclusion of Mitigation Measure AIR-1c, off-road construction equipment use SMAQMD’s Enhanced Exhaust Control Practices.

- The construction contractor shall submit to SAFCA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.

- The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The SMAQMD Equipment List Form can be used to submit this information. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

- The construction contractor shall provide a plan for approval by SAFCA and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NOX reduction and 45 percent particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

- SMAQMD’s Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction. The construction contractor shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than 3 minutes in any 1 hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately.
Non-compliant equipment will be documented and a summary provided to SAFCA and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly. A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

Page ES-16

In Table ES-2, the text of Mitigation Measure BIO-F1 (CM-32) has been revised as follows:

- **CM-32: Clean Construction Vehicles and Equipment Used Within the Stream Channel Before Arrival at the Project Construction Areas, and Inspect Vehicles/Equipment to Ensure They Are Free of Soil, Debris, and Nonnative Aquatic Species.** Construction vehicles and equipment operated within the channel margins (high water line) shall be cleaned of mud and other debris with a scrub brush and dry, or pressure-washed with hot (>140 degrees Fahrenheit [°F]) water, before arrival at the project construction areas and prior to transporting the equipment to another stream or watershed. All equipment operated within the channel margins shall be carefully inspected for signs of aquatic invasive species, including mussels and plant materials, with special attention paid to shaded, sheltered, and protected areas which might contain standing water and areas that form ‘edges’ or ‘right angles,’ such as tracks, feet, and/or tires. If vehicles or equipment are found to be contaminated with non-native invasive species, vehicles and equipment shall be stored in a dry location for at least one week prior to transport to a different stream or watershed, or alternatively, will be pressure-washed with hot (>140°F) water after each use. All water shall be drained from watercraft, including motor cooling system and bilge, and allow to dry as thoroughly as possible prior to entering a new stream or watershed. Large vessels and barges transported via the stream channel shall be contracted from nearby locations or shall undergo similar hull-cleaning prior to use for the project. Watercraft transported from distant areas, including barges, shall not release bilge water into the project area, unless screened to prohibit fish, plant, or other animal transport.

In addition to the specific measures, the Conservation Strategy identifies several types of habitat improvements to be implemented. SAFCA shall implement improvements from the Conservation Strategy, including:

- To replace habitat loss due to tree removal required during levee improvements, native riparian trees shall be planted to fill gaps in the riparian woodland corridor in the Sacramento River East Levee area.
- To replace habitat loss following levee improvement construction and vegetation management tree removal, riparian trees and shrubs shall be planted on recontoured middle and upper bank slopes in natural soil, and low rock-lined benches with soil-filled trenches with native riparian trees, shrubs, and herbaceous species.
- To increase SRA habitat quality under low summer/fall river stage, tule and buttonbush would be planted along the shoreline.
- Following construction, native wetland vegetation (e.g., Santa Barbara sedge, Baltic rush) shall be planted along the banks of Arcade Creek, and two parallel rows of large riparian tree species (e.g., valley oak) shall be planted on both banks of the low-flow channel.
- To replace habitat loss due to high-hazard tree removal, native riparian trees shall be planted to fill existing gaps in the oak and riparian woodland corridor.
- To replace vegetation removed as part of the vegetation management element within the Beach Lake Levee, gaps within the riparian corridor shall be filled, or, in coordination with the SRCSD, an area within the nearby Upper Beach Lake Wildlife Area shall be identified where riparian vegetation could be planted to mitigate for hazard tree removal along the Beach Lake Levee (see Exhibit 3-26 in Chapter 3, “Project Description”).
- To minimize water quality impairment at and downstream of construction sites: a storm water pollution prevention plan shall be developed; construction related erosion shall be controlled; precautions shall be taken to minimize turbidity/siltation during construction and from construction equipment; precautions shall be
taken to protect streams and other waters from construction pollutants, including the use of safer alternative products (such as biodegradable hydraulic fluids).

Page ES-17

In Table ES-2, the text of Impact BIO-F5 has been revised as follows:

BIO-F5: Fish Entrapment at Floodplain Borrow Sites. Implementation of levee improvements in the North Sacramento Streams Levee Improvements area and the NEMDC/Steelhead Creek CMP would include restoration of borrow site 3 and would alter floodplain habitat within the North Sacramento Streams Levee Improvements area, including construction of Borrow Site 2, which could entrap fishes. The NEMDC/Steelhead Creek CMP would remove entrapment and stranding potential, enhancing habitat for native and special-status fishes in the North Sacramento Streams Levee Improvements area, and would improve habitat for native fishes. Therefore, a long-term beneficial impact would occur in the North Sacramento Streams Levee Improvements area. In the short term, fish could become entrapped (stranded) if a borrow site is overtopped with flood water during construction (i.e., prior to restoration), potentially resulting in mortality due to predation or desiccation. This direct, short-term impact would be potentially significant. There are no proposed project elements in the Sacramento River East Levee Improvements Area or the American River and Beach Lake Levees High-Hazard Encroachment and Vegetation Removal area that would affect fish entrapment, thus there would be no impact.

A new mitigation measure has been added to address Impact BIO-F5:

No mitigation is required.

Mitigation Measure BIO-F2: Develop and Implement an Approved Fish Rescue Plan to Capture and Relocate Stranded Fish

To minimize fish mortality due to stranding, a fish rescue plan shall be prepared by SAFCA for approval by State and Federal fish agencies (i.e., CDFW, USFWS, and NMFS) and implemented during the period when borrow sites or other off-channel depressions contain water due to flooding or high-flow events. Development of the fish rescue plan shall include consideration of numerous sampling methods (i.e., seines, electrofishing, and traps) and events, as required by the fish agencies. Fish would be captured alive and transported to nearby suitable habitat for release. The fish rescue would occur under the direction of CDFW.

Page ES-18

In Table ES-2, bullet SSP-3 under Mitigation Measure BIO-1 has been modified as follows:

- SSP-3: Conduct Preconstruction Special-Status Surveys during the Blooming Period within 25 Feet of Areas of Project Disturbance within 5 Years of Ground-Disturbing Activities. Preconstruction special-status plant surveys shall be conducted by a qualified botanist in suitable habitat to determine the occurrence of special-status plant populations within 25 feet of areas of project disturbance. Surveys shall be conducted at an appropriate time of year during which the species are likely to be detected, generally during the blooming period. Surveys shall be conducted within 5 years prior to initial ground-disturbing activities.

Page ES-21

In Table ES-2, the second-to-last paragraph under Mitigation Measure BIO-4 has been modified as follows:

If potentially occupied habitat for giant garter snake cannot be avoided during project construction, an appropriate and feasible mitigation plan to compensate for potential disturbance, displacement, injury, or death individuals shall be developed and provided to USFWS and, as necessary, CDFW for approval. Compensation for direct
impacts may include preserving, enhancing, and/or creating giant garter snake habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with USFWS; ratios typically required by USFWS depend on the duration of the impact and may range from 1 to 3 acres of replacement habitat for every 1 acre of habitat affected. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, purchasing credits at a USFWS-approved mitigation bank approved by both USFWS and CDFW may be identified as appropriate mitigation.

Page ES-23

In Table ES-2, the last bullet under Mitigation Measure BIO-7b has been modified as follows:

- CDFW shall be consulted regarding the woodland mitigation and potential adverse effects on Swainson’s hawk foraging opportunities. Through consultation, it may be determined that compensation is required to offset adverse effects of foraging habitat loss. If so, an appropriate and feasible mitigation plan will be developed and provided to CDFW, for approval. Compensation may include preserving and/or enhancing Swainson’s hawk foraging habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with CDFW; ratios may vary (typically ranging from 0.5 to 1 acre of replacement habitat for every 1 acre of habitat lost), depending on the proximity of lost habitat to active nests and the habitat protection and management mechanisms. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, participating in the Sacramento County Swainson’s Hawk Mitigation Program or purchasing credits at a CDFW-approved mitigation bank may be identified as appropriate mitigation.

Page ES-25

In Table ES-2, the first bullet under Mitigation Measure BIO-9 has been modified as follows:

- BAT-1: Conduct Bat Surveys for Active Maternity Roosts for Trees With Suitable Roost Cavities or Dense Cover Designated for Removal. If removal of trees with suitable roost cavities and/or dense cover must occur during the bat pupping season (April 1 through July 31), surveys for active maternity roosts shall be conducted by a qualified biologist in trees designated for removal. A habitat assessment and daylight survey of suitable trees and structures shall be conducted to determine if there is evidence of suitable roost cavities. These surveys shall be followed up with nighttime emergence surveys, conducted from dusk until dawn, to detect presence. The surveys shall be conducted from dusk until dark.

Page ES-29

In Table ES-2, the text of Mitigation Measure CR-1 has been revised as follows:

Mitigation Measure CR-1: Conduct Landscape Inventory, Prepare Cultural Landscape Report, and Implement Treatment Measures.

Prior to the removal of any Victory Trees along SR 160, SAFCA shall conduct a cultural landscape inventory, prepare a cultural landscape report, and implement the recommended treatment measures. The inventory shall identify which of the trees along the tree row are original and will identify treatment measures for the retention and for mitigating the effects of the historic landscape features. The cultural landscape inventory shall include an inventory of traditional cultural landscapes including any Native American plant gathering areas and other areas of Native American traditional use. The report shall summarize traditional Native American ecological knowledge of the project area based on information obtained from culturally affiliated Native Americans. The inventory and report shall be prepared by an historical landscape architect and other qualified...
In Table ES-2, the text of Mitigation Measure CR-2a has been modified as follows:

Mitigation Measure 2a: Conduct Archaeological Monitoring during Ground Disturbance within 100 feet of Known Archaeological Resources and Prepare and Implement a Monitoring Plan.

- SAFCA shall retain the services of a professional archaeologist to prepare and implement a monitoring plan. The archaeologist and SAFCA shall seek the input of Native American Tribes that are traditionally and culturally affiliated with the geographic area. The plan shall contain, at a minimum, the following elements:
  - background context;
  - relevant project components that may impact anticipated archaeological or other cultural resources; definition of the construction footprint, including the use of a buffer around the construction footprint;
  - archaeological sensitivity of the construction footprint;
  - archaeological monitor qualifications;
  - monitoring procedures;
  - the activities to be monitored;
  - chain of command;
  - procedures for discoveries during construction ground-disturbing activities;
  - procedures for discovery of human remains;
  - laboratory and analysis methodologies;
  - daily monitoring documentation requirements; and
  - final monitoring report requirements.

- SAFCA shall retain the services of a professional prehistoric archaeologist and culturally-affiliated a Native American monitor during on-site earthwork within 100 feet of the recorded site boundaries of P-34-219/CA-SAC-192, P-34-66/CA-SAC-39, 34-000069/CA-SAC-42, 34-000057/CA-SAC-30, and 34-000070/CA-SAC-43. In addition, a professional historical archaeologist shall monitor ground-disturbing activities adjacent to and within the site boundary of P-34-749/SAC-574H and P-34-858/SAC-657H.

- SAFCA shall retain the services of culturally affiliated Native American monitors during on-site earthwork (including archaeological testing) within known sensitive cultural resource areas and within the boundaries of any identified Tribal Cultural Resources.

If cultural materials (e.g., unusual amounts of shell, animal bone, historic-era glass, metal, or ceramics, human remains) are encountered during project-related construction ground-disturbing activities, SAFCA, in consultation with the qualified archaeologist, shall develop additional appropriate protection measures. If the cultural material is Native American in origin, SAFCA shall seek the input of Native American Tribes that are traditionally and culturally affiliated with the geographic area. Measures shall comply with State CEQA Guidelines CCR Section 15126.4 if the resource is an historic resource of an archaeological nature and/or with CEQA Section 21083.2 if the resource is a unique archaeological resource. Additional protection measures may include, but are not necessarily limited to, additional documentary research, use of noninvasive investigation methods, subsurface testing, excavation, and preservation-in-place.

If the discovery could potentially be human remains, work shall stop immediately and the appropriate procedures described in California Health and Safety Code Section 7050 et seq. and California Public Resources Code.
Section 5097.9 et seq. shall be implemented. Protection measures may include, but are not necessarily limited to, redesign of the project to avoid archaeological resources, capping the site with a layer of fill, excavation and removal of the burial under the direction of a qualified archaeologist, reburial of the discovery according to the wishes of the designated Most Likely Descendant (MLD), preservation in place, or other protection measures that are mutually acceptable to the SAFCA and to the MLD Native American representative/s.

Project personnel shall not collect archaeological/cultural resource material found on the project site.

Native American representative/s shall be consulted regarding the need for culturally-appropriate treatment, additional excavation and/or further laboratory analysis and provided with draft and final hard copies and digital copies of any reports documenting inadvertent discovery of cultural resources on site and shall be consulted regarding the need for additional excavation and further laboratory analysis.

Timing: Before and during construction ground-disturbing activities.

Responsibility: Sacramento Area Flood Control Agency.

In Table ES-2, the text of Mitigation Measure CR-2b has been modified as follows:

Mitigation Measure 2b: Avoid Archaeological Sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H and other Culturally Sensitive Areas.

- SAFCA shall locate the approximately 5-acre Woodlake planting site and all associated staging areas in a location that is at least 100 feet away from the recorded boundaries of sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H.
- SAFCA shall use temporary fencing around the recorded boundaries of sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H to avoid encroaching on the archaeological sites during project-related activities.
- SAFCA shall consider project design alternatives, construction method alternatives and use of noninvasive investigation methods to avoid any identified significant cultural resources and identified sensitive areas if feasible.

Timing: Before and during construction ground-disturbing activities.

Responsibility: Sacramento Area Flood Control Agency.

In Table ES-2, the text of Mitigation Measure CR-3 has been revised as follows:

Mitigation Measure CR-3: Implement Procedures for Inadvertent Discovery of Cultural Resources.

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

SAFCA and their primary contractor(s) for engineering design and construction shall ensure that the following measures are implemented to reduce the potential for previously undiscovered cultural resources to be encountered and damaged during ground-disturbing activities:

- Before the commencement of ground-disturbing activities, a qualified professional archaeologist and a tribal monitor or representative shall give a presentation to all construction personnel regarding the likelihood and type of resources that might be found during ground-disturbing operations associated with the individual flood control projects, and measures that shall be taken in the event that potential archaeological or historical resources are found. The presentation shall include providing all construction personnel with standard operating procedures and points of contact in the event of a discovery of cultural material during ground-disturbing activities. Consulting culturally affiliated Native American Tribes shall be provided with project schedule information and points of contact in the event of a discovery of cultural material.

- If unrecorded cultural resources (e.g., shell, animal bone, bottle glass, ceramics, structure/building remains) are encountered during the site survey or during ground-disturbing activity, all ground-disturbing activities shall be restricted within a 100-foot radius of the find or a distance determined by a qualified professional archaeologist in consultation with a tribal representative to be appropriate based on the potential for disturbance of additional cultural resource materials. A qualified archaeologist, in consultation with a monitor or representative from a culturally affiliated Native American Tribe, shall identify the materials, determine their potential to meet the definition of a unique archaeological resource or a historical resource and formulate appropriate measures for their treatment, which shall be implemented by SAFCA. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, no action (i.e., resources determined not to be significant), avoidance of the resource through changes in construction methods or project design, implementation of protection and management measures, alternative mitigation, and/or implementation of a program of testing and data recovery, and use of noninvasive investigation methods in accordance with applicable Federal and State requirements.

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

SAFCA shall retain the services of a professional archaeologist to perform monitoring during on-site earthwork, with appropriate actions if potential cultural resources are discovered, as described below.

- If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, human remains, bottle glass, ceramics, building remains) is made at any other time during project-related construction activities, SAFCA, in consultation with the qualified archaeologist, shall develop additional
appropriate protection measures. If the cultural material is Native American in origin, SAFCA shall seek the input of Native American tribes that are traditionally and culturally affiliated with the geographic area. Measures shall comply with State CEQA Guidelines CCR Section 15126.4 if the resource is an historic resource of an archaeological nature and/or with CEQA Section 21083.2 if the resource is a unique archaeological resource. Additional protection measures may include, but are not necessarily limited to, additional documentary research, subsurface testing, excavation, and preservation in place.

- If the discovery could potentially be human remains, work shall stop and the appropriate procedures described in California Health and Safety Code Section 7050 et seq. and California Public Resources Code Section 5097.9 et seq. shall be implemented. Protection measures may include, but are not necessarily limited to, redesign of the project to avoid archaeological resources, capping the site with a layer of fill, excavation, removal of the burial under the direction of a qualified archaeologist, reburial of the discovery according to the wishes of the designated MLD, preservation in place, or other protection measures that are mutually acceptable to SAFCA and to the Native American representative(s).

- Project personnel shall not collect archaeological material found on the project site.

- Native American representative/s shall be provided with hard copies and digital copies of any reports documenting inadvertent discovery of cultural resources on site and shall be consulted regarding the need for additional excavation and further laboratory analysis.

In Table ES-2, a new mitigation measure has been added to address potentially significant impacts resulting from North Sacramento Streams Levee Improvements under Impact CR-3, as follows:

**Mitigation Measure CR-6: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas during Ground-Disturbing Activities**

If the results of the inventory of cultural resources, including the results of Native American consultation, indicates that portions of or all of the project area is sensitive for the presence of buried or otherwise obscured or unidentified cultural resources or Tribal Cultural Resources (including Native American burials), a Native American and archaeological monitoring plan shall be developed and implemented in consultation with Culturally Affiliated Tribes. The monitoring plan shall specify under what conditions monitoring will be conducted, the methods of monitoring, the conditions under which ground-disturbing activities may be stopped or slowed, the conditions under which ground-disturbing work may be resumed, the roles and authority of monitors, communication protocols, and reporting requirements. Archaeological monitoring shall be conducted by or under the supervision of an archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards for Archaeology. Native American monitoring shall be conducted by one or more Monitors or Representatives of a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the project.

**Timing:** During ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.
In Table ES-2, a new mitigation measure has been added to address potentially significant impacts resulting from Sacramento River East Levee Improvements under Impact CR-3, as follows:

Mitigation Measure CR-5: Implement Procedures for Inventory and Evaluation of Archaeological Resources, Implement Feasible Avoidance or Treatment Measures

SAFCA shall inventory and evaluate archaeological resources in the project area. At a minimum, the inventory shall include records searches at the Information Center of the California Historical Resources Information System (already completed but updates should be conducted if the project footprint changes); additional Native American consultation and other ethnographic research; NAHC Sacred Lands File (already completed but updates should be conducted if the project footprint changes or if there is a delay of more than 1 year in project implementation); a pedestrian archaeological survey of undeveloped and unpaved areas; and subsurface archaeological investigations if needed to identify buried archaeological deposits. Additional non-invasive methods may also be warranted and should be determined in consultation with all consulting parties. Resource recording procedures shall be implemented consistent with DPR 523 forms requirements and reporting requirements and shall be done in consultation with affected interested Native Americans (for Tribal Cultural Resources) or with the MLD if one is already designated.

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

Following completion of the cultural resources inventory, an inventory report shall be prepared by qualified cultural resources specialists that describes the cultural setting of the program area; the methods used in the investigation; all identified cultural resources, including archaeological sites, Tribal Cultural Resources and Traditional Cultural Properties, and cultural landscapes; and recommendations for further investigations, avoidance or other management actions. Each cultural resource identified in the component program area shall be evaluated for eligibility for listing on the CRHR and NRHP. Tribal Cultural Resources shall be evaluated in consultation with culturally affiliated Tribes and the views of consulting Tribes shall be included in the report. The cultural resources inventory report shall meet the documentation standards as described in 36 CFR 800.11 and shall be prepared by individuals meeting the Secretary of the Interior’s Professional Qualifications Standards (48 Federal Register 44738–44739).

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

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

Avoidance and preservation-in-place is the preferred manner of mitigating impacts to a cultural resources and may be accomplished by several means, including planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering archaeological sites; deeding a site into a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources will be reviewed by SAFCA, culturally affiliated Native American Tribes, and other appropriate agencies in light of factors such as costs, logistics, technological feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the program area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources, or modification or realignment to avoid highly significant features within a cultural resource. Culturally affiliated Native American Tribes shall be invited to review and comment on these analyses and shall have the opportunity to meet with SAFCA and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

SAFCA shall ensure that required protection actions are implemented before construction begins at the site. If artifacts are recovered from significant resources, their disposition shall be determined in consultation with Native Americans and consulting State and Federal agencies. The results of the identification, evaluation, and/or data recovery program shall be presented in a professional report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the appropriate repositories.

**Timing:** Prior to construction activities.

**Responsibility:** Sacramento Area Flood Control Agency.

In Table ES-2, Mitigation Measure CR-6 has been added to address potentially significant impacts resulting from Sacramento River East Levee Improvements under Impact CR-3, as follows:

**Mitigation Measure CR-6: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas during Ground-Disturbing Activities.**

**Timing:** Prior to and during ground-disturbing activities.
Responsibility: Sacramento Area Flood Control Agency.

In Table ES-2, a new mitigation measure has been added to address potentially significant impacts resulting from Sacramento River East Levee Improvements under Impact CR-3, as follows:

**Mitigation Measure CR-7: Implement Procedures for Inventory and Evaluation of Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.**

California Native American Tribes that are traditionally and culturally affiliated with the geographic area in which a program component is located may have expertise concerning their Tribal Cultural Resources (California PRC Section 21080.3.1) and shall continue to be consulted concerning the proposed project, Tribal Cultural Resources that may be impacted, and measures to avoid or minimize impacts. If SAFCA determines that the project may cause a substantial adverse change to a Tribal Cultural Resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation measures that, if feasible, that may be considered to avoid or minimize significant adverse impacts:

1. Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

2. Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
   a) Protecting the cultural character and integrity of the resource.
   b) Protecting the traditional use of the resource.
   c) Protecting the confidentiality of the resource.

3. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.

4. Protecting the resource.

As a part of the consultation, the parties may propose mitigation measures (as broadly defined in State CEQA Guidelines CCR Section 15370), including, but not limited to, those recommended in Section 21084.3 (listed above), capable of avoiding or substantially lessening potential significant impacts to a Tribal Cultural Resource or alternatives that would avoid significant impacts to a Tribal Cultural Resource. If the California Native American Tribe requests consultation regarding alternatives to the proposed project, recommended mitigation measures, or significant effects, the consultation shall include those topics. The consultation may include discussion concerning the type of environmental review necessary, the significance of tribal cultural resources, the significance of the proposed project’s impacts on the tribal cultural resources, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation which may include a) avoiding the impact by not taking a certain action; b) minimizing impacts by limiting the action; c) rectifying the impact by repairing, rehabilitating, or repairing the environment; d) reducing or eliminating the impact over time by preservation and...
Any information, including, but not limited to, the location, description, and use of the Tribal Cultural Resources, that is submitted by a California Native American Tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the Tribe that provided the information. If the lead agency publishes any information submitted by a California Native American Tribe during the consultation or environmental review process, that information shall be published in a confidential report or maintained in a confidential section of the administrative record unless the Tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. The confidential information, may, however, be exchanged between public agencies that have lawful jurisdiction over the proposed project.

SAFCA shall inventory and evaluate Tribal Cultural Resources in the project area. At a minimum, the inventory shall include additional Native American consultation and other ethnographic research focused on the identification of such resources; NAHC Sacred Lands File (already completed but updates should be conducted if the project footprint changes or if there is a delay of more than 1 year in project implementation); and a Native American pedestrian survey (conducted by cultural affiliated Native Americans). Locations identified by culturally affiliated Native Americans as Tribal Cultural Resources shall be considered to be Tribal Cultural Resources which are potentially significant resources under CEQA.

All identified Tribal Cultural Resources shall be recorded on DPR 523 forms, and the location of each Tribal Cultural Resource shall be recorded using a Global Positioning System device, both in consultation with the Tribe affiliated with that resource. Noninvasive investigation methods may be used to further delineate such resources.

Following completion of the Tribal Cultural Resources inventory, a confidential inventory report shall be prepared by qualified cultural resources specialists in cooperation with Native Americans that identified any Tribal Cultural Resources. This report may be incorporated into the Cultural Resources Inventory Report (CR-5) or may be a separate report if the consulting Native American request separation of the reports for consideration of confidentiality. The report shall include recommendations for further investigations, avoidance, treatment, mitigation or other management actions which may also include a long term operations and maintenance plan.

Each Tribal Cultural Resource identified in the project area shall be evaluated for eligibility for listing on the CRHR. Tribal Cultural Resources shall be evaluated in consultation with culturally affiliated Tribes and the views of consulting Tribes shall be included in the report.

If ground-disturbance would be required in the vicinity of a known Tribal Cultural Resource that was found to be eligible for the CRHR, culturally affiliated Native Americans shall establish the boundaries of the resource before the commencement of any ground-disturbance. If feasible, the project activities shall be designed to prevent disturbance of the resource. If, in the judgment of the Tribal representative, project activities could disturb the resource, SAFCA in consultation with Tribal representatives and other qualified professionals shall prepare and implement a treatment plan for Tribal Cultural Resources.

If the resource is determined to be ineligible for listing on the CRHR no further mitigation shall be required.

Recommendations for avoidance of Tribal Cultural resources will be reviewed by SAFCA, culturally affiliated Native American Tribes, and other appropriate agencies in light of factors such as costs, logistics, technological
feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the program area to avoid Tribal Cultural Resources, modification of the design to eliminate or reduce impacts to Tribal Cultural Resources, or modification or realignment to avoid highly significant features within a Tribal Cultural resource. Culturally affiliated Native American Tribes shall be invited to review and comment on these analyses and shall have the opportunity to meet with SAFCA and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

SAFCA shall ensure that required protection actions are implemented before ground-disturbance begins at the site. If artifacts are recovered from significant resources, their disposition shall be determined in consultation with Native Americans and consulting State and Federal agencies. The results of the identification, evaluation, and treatment or avoidance shall be presented in a professional report that details all methods and findings and evaluates the nature and significance of the resources.

The confidential nature of the location, nature, qualities, use, function, and character of Tribal Cultural Resources shall be respected. These aspects of Tribal Cultural Resources shall not be included in public documents or in confidential cultural resources inventory reports without the express written permission of the culturally affiliated Native American tribe that provided such information. In order to appropriately protect, avoid or otherwise treat identified Tribal Cultural Resources, certain aspects of these resources, such as location and boundaries, may be provided to project design and planning personnel on a need-to-know basis and the locations and boundaries shall be designated on project construction plans generically as an “Environmentally Sensitive Area”.

**Timing:** Prior to ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

In Table ES-2, a new mitigation measure, Mitigation Measure CR-4a, has been added to address potentially significant impacts resulting from North Sacramento Streams Levee Improvements and Mitigation Measure CR-4 (as it appeared in the DEIR) has been renamed to Mitigation Measure CR-4b and text has been revised, under Impact CR-4, as follows:

Mitigation Measures CR-4a and CR-4b, described below, have been identified to address this impact.

**Mitigation Measure CR-4a: Prepare and Implement a Native American Burial Discovery and Treatment Plan.**

SAFCA shall retain the services of a professional archaeologist to prepare a Native American Burial Discovery and Treatment Plan (Burial Plan) prior to commencement of ground-disturbing project-related activities at the project locations addressed by the environmental impact report. The Burial Plan shall be prepared and implemented to effectively, appropriately, and respectfully implement the requirements of the California Native American Historic Resources Protection Act and its implementing regulations (California Public Resources Code Section 5097) which establish procedures for the culturally-appropriate and dignified treatment of human remains of Native American origin and associated grave items in California on non-Federal land.
The purpose of the Burial Plan is to specify appropriate and respectful procedures and guidelines to be followed upon discovery of Native American burials, burial objects, burial materials, objects of cultural patrimony, and sacred objects that may be encountered during project construction and project-related ground-disturbing activities under the jurisdiction of SAFCA.

Although SAFCA shall be responsible for the preparation and implementation of the Burial Plan, the contents of the plan shall be prepared in cooperation and consultation with affected interested Native Americans or with the MLD if one is already designated.

USACE, Sacramento District, as the Federal agency responsible for compliance with Section 106 of the NHPA, shall be invited to review and comment upon the Burial Plan prior to its finalization to ensure that no provisions of the Burial Plan are in conflict with the regulations implementing the NHPA or its implementing regulations (36 CFR Part 800 and 33 CFR Part 325 Appendix C).

The Burial Plan will also be consistent with the guidance offered by the Advisory Council on Historic Preservation’s March 31, 2015, letter in the Feather River West Levee Project matter.

The implementation of the Burial Plan, should Native American human remains and associated grave items and materials be discovered, shall be accomplished in cooperation and consultation between SAFCA and the MLD who will be identified by the California NAHC.

The Burial Plan shall contain, at a minimum, the following elements:

- definitions of burial, burial associated, burial objects and materials, and other key terms used in the Burial Plan;
- conditions under which ground-disturbing activities shall be halted and conditions under which ground-disturbing work may resume;
- procedures for notification of Native Americans and agencies in the event of a discovery of objects, materials, or locations addressed by the Burial Plan;
- procedures for avoidance and preservation when determined to be feasible;
- monitoring requirements;
- procedures for archaeological exploration and delineation of the subject area including both horizontal and vertical dimensions;
- requirements for respectful behavior in the immediate vicinity of a burial or sacred location and identification of prohibited actions and behaviors at locations where Native American burial remains are visible, and the process for determining the geographic extend of prohibited actions;
- procedures for the respectful recovery of burials and associated items and materials;
- procedures for respectful temporary storage of burials and associated items and materials until the MLD can determine the appropriate final disposition of the items;
• qualifications of individuals who may excavate or otherwise treat Native American burials and associated items and materials;

• roles, responsibilities, and authority of key participants;

• procedures and timeframe for reinterment (under direction of the MLD) and development of long term operation, maintenance and monitoring protocols to protect burials and reburial areas;

• procedures for dispute resolution; and

• requirements for documentation, reporting, and work logs.

**Timing:** Before construction or other ground-disturbing activities including archeological and other testing.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure CR-4b: Implement Procedures for Inadvertent Discovery of Human Remains.**

In accordance with the California Health and Safety Code, if human remains are discovered on non-Federal land during ground-disturbing activities, SAFCA shall immediately halt potentially damaging excavation in the area of the burial and notify the Coroner in the county of which the discovery was made and retain the services of a professional archaeologist and consult with affected interested Native Americans or with the MLD if one is already designated to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050.5[c]). California PRC Section 5097.98 (d) states that human remains of a Native American may be an inhumation or cremation, and be in any state of decomposition or skeletal completeness. Further, any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. After the Coroner’s findings have been made, the archaeologist and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains. The responsibilities of SAFCA for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

• Upon the discovery of potential Native American remains, SAFCA shall require that all construction and all other ground-disturbing activities must immediately stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including preservation-in-place, nondestructive removal and analysis, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. SAFCA and the MLD may also:
1. Record the site with the NAHC or the appropriate Information Center.

2. Record a document with the county in which the property is located.

- SAFCA or SAFCA’s authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. SAFCA or SAFCA’s authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the agency. SAFCA shall implement measures for the protection of the burial remains. Ground-disturbing activities in the vicinity of the burials shall not resume until the mitigation is completed.

**Timing:** During ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

- In accordance with the California Health and Safety Code, if human remains are uncovered during ground disturbing activities, SAFCA shall immediately halt potentially damaging excavation in the area of the burial and notify the Sacramento County Coroner 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 (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). After the coroner’s findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains. The responsibilities of SAFCA for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

- Upon the discovery of Native American remains, SAFCA shall require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that SAFCA shall employ:

  1. Record the site with the NAHC or the appropriate Information Center.
  2. Record a document with the county in which the property is located.

- SAFCA or SAFCA’s authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. SAFCA or SAFCA’s authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the agency. SAFCA shall implement measures for the protection of the burial remains. Ground-disturbing activities in the vicinity of the burials shall not resume until the mitigation is completed.
subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a
recommendation within 48 hours after being granted access to the site. SAFCA or SAFCA’s authorized
representative may also reinter the remains in a location not subject to further disturbance if he or she
rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures
acceptable to SAFCA. SAFCA shall implement mitigation for the protection of the burial remains.
Construction work in the vicinity of the burials shall not resume until the mitigation is completed.

<table>
<thead>
<tr>
<th>Timing</th>
<th>During construction activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>Sacramento Area Flood Control Agency</td>
</tr>
</tbody>
</table>

Page ES-44

In Table ES-2, the text of Impact TR-1 has been revised as follows:

**TR-1: Increase in Traffic Volumes or Decrease in Capacity along Designated Roadways in the Project Study Area.** Project-related construction traffic generated during activities associated with levee improvements, encroachment removal, and vegetation management would increase the traffic volumes above the applicable thresholds on the surrounding roadway network. Therefore, this impact would be **potentially significant** throughout the project study area for the North Sacramento Streams and Sacramento River East Levee Improvements areas. The impact would be **less than significant** for the American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal areas and Natomas East Main Drainage Canal/Steelhead Creek Corridor Management Plan.

Page ES-45

In Table ES-2, the text of Impact TR-2 has been revised as follows:

**TR-2: Potential for Increased Emergency Response Times or Inadequate Emergency Access.** Project-related activities associated with levee reconstruction, encroachment removal, and vegetation management would temporarily increase construction traffic levels and/or reduce roadway capacity, resulting in traffic delays that could substantially increase emergency response times or reduce emergency vehicle access. Therefore, this impact would be **potentially significant** throughout the project study area.

**CHAPTER 1 – INTRODUCTION**

Page 1-4

The second paragraph in Section 1.5, “Agency Roles and Responsibilities” has been modified as follows:

A CEQA trustee agency is a State agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California. The California Department of Fish and Wildlife (CDFW) and possibly the California State Lands Commission (CSLC) and the Native American Heritage Commission (NAHC) are trustee agencies that have jurisdiction over resources (i.e., fish, plants, and wildlife; State lands; and cultural resources) potentially affected by the proposed project.
The following subsection and bulleted list has been added to list potential state actions, permits, authorizations, and other regulations approvals that may be required. This subsection and list has been added following the “Federal Actions/Permits/Authorizations/Permissions” bulleted list:

**STATE ACTIONS/PERMITS/AUTHORIZATIONS/REGULATORY APPROVALS**

- **California Department of Fish and Wildlife:** Issuance of a Streambed Alteration Agreement under Section 1602 of the California Fish and Game Code. Endangered Species Act Consultation under Section 2081 of the California Fish and Game Code, including issuance of either a Take Permit or Consistency Determination.

- **Central Valley Regional Water Quality Control Board:** Water Quality Certification in accordance with Section 401 of the CWA.

- **Central Valley Flood Protection Board:** Issuance of an Encroachment Permit in compliance with the California Water Code, Section 8710, and Title 23 of the CCR, Sections 1 through 193.

- **California State Lands Commission:** Formal lease and authorization for use of sovereign land of the State of California.

**CHAPTER 3 – PROJECT DESCRIPTION**

Text has been added to the last full paragraph as follows:

Two types of levee improvements to remediate underseepage and stability were developed, evaluated, and compared: 1) construction of an SB cutoff wall at the centerline of the levee, and 2) construction of a CB cutoff wall at the waterside toe combined with waterside slope replacement. Construction of an SB cutoff wall at the centerline of the levee was selected as the preferred levee improvement. The two levee improvement types are summarized in in Chapter 7, “Alternatives.” Construction of an SB cutoff wall at the centerline of the levee would require partial closure of Norwood Avenue during construction activities.

Text has been added to the second full paragraph as follows:

Two types of levee improvements to remediate underseepage and stability were developed, evaluated, and compared: 1) construction of an SB cutoff wall at the centerline of the levee, and 2) construction of a CB cutoff wall at the waterside toe. Construction of an SB cutoff wall at the centerline of the levee was selected as the preferred levee improvement. The two types of levee improvements are summarized in **Table 7-1** in Chapter 7, “Alternatives.” Construction of an SB cutoff wall at the centerline of the levee would require partial closure of Rio Linda Boulevard during construction activities.
The third and fourth paragraphs following the bulleted list have been modified as follows:

Borrow Sites 1 and 2 are in close proximity to the NEMDC/Steelhead Creek levee and East Levee Road located on the NEMDC/Steelhead Creek levee crown. From these two sites, haul trucks would travel down the levee slope, cross a short span temporary bridge, and proceed up a new sloping ramp to use East Levee Road from the borrow sites down to a point just north of the existing Del Paso/Main Avenue Bridge over NEMDC/Steelhead Creek. At this point, haul trucks would divert off the road, down the levee slope, and pass under the bridge on an existing road. Just downstream of the Del Paso/Main Avenue Bridge, a short span temporary bridge would cross a narrow section of the low flow NEMDC/Steelhead Creek channel. A temporary culvert crossing of the low flow channel is also possible. From the temporary bridge (or culvert) crossing, the haul trucks would proceed up a new sloping ramp constructed on the waterside of the NEMDC/Steelhead Creek East Levee to the levee crown. Trucks would then continue down the levee crown to Arcade Creek North Levee. At the Arcade Creek North Levee, trucks would cross the existing Union Pacific Railroad (UPRR) at the existing at-grade crossing and proceed along the north levee crown to the improvement sites.

To access the Arcade Creek South Levee and work on the NEMDC/Steelhead Creek East Levee, haul trucks would continue south following an access ramp down the levee slope to Arcade Creek. At the creek, a short temporary bridge would be constructed to cross the low flow channel. A temporary culvert crossing of the low flow channel is also possible. From the temporary bridge (or culvert) crossing, the haul trucks would south along the NEMDC/Steelhead Creek East Levee waterside toe road, to a temporary bridge (or culvert) crossing, from which they would proceed up a new sloping ramp constructed on the waterside of the NEMDC/Steelhead Creek East Levee in the vicinity of the existing railroad at-grade crossing near the existing City of Sacramento Pump Station north of El Camino Avenue. Trucks would then cross NEMDC/Steelhead Creek on El Camino Avenue, and use the controlled crossing of the UPRR tracks. Trucks would turn left immediately east of the UPRR tracks onto an access road leading to the NEMDC/Steelhead Creek East Levee. Trucks would then proceed up the Arcade Creek South along the levee crown to the Arcade Creek South Levee, or south to the improvement sites on the NEMDC/Steelhead Creek East Levee south of Arcade Creek.

The text under the heading, “Reach 4 – Station 1094+50 to 1102+00” has been modified as follows:

**Reach 4 – Station 1094+50 to 1102+00**

Reach 4 is adjacent to the Pioneer Reservoir, which is a detention facility for temporary storage of combined sewage and storm water from Old Sacramento and surrounding areas. The reservoir extends below existing adjacent site grades. A 10-foot-diameter pipe runs through the levee when storage capacity is exceeded and discharges the reservoir contents to the Sacramento River. There are two railroad tracks and a paved pedestrian trail along the top of the levee. There are also two below-grade PG&E gas mains that parallel the levee landside toe along Reach 4 (continuing into Reach 5). The pipes turn inland before crossing into Reach 3. Reach 4 is divided into two sub-reaches (north and south) delineated by the Pioneer Reservoir discharge pipe penetration at Station 1096+75. In the northern portion of Reach 4, USACE installed four fully penetrating relief wells and associated discharge piping in 2005 to reduce elevated seepage pressures for the then-defined 100-year design water surface elevation.
The reach is deficient due to underseepage. The seepage gradients at the toe of levee were found to meet design criteria, but the ground surface elevation drops beyond (east of) the existing relief wells; seepage gradients are elevated above design criteria in this lower-elevation area to the east of the existing relief wells. Due to the limited space at the toe of the levee, remedial measures are limited to installation of four additional relief wells and lowering two existing well discharge inverts, if the existing discharge system has the capacity to convey the additional flows. Upgrades to the discharge conveyance facilities may be required to increase discharge capacity.

In the southern portion of Reach 4, downstream of the 10-foot-diameter discharge pipe, USACE constructed a drained seepage berm that extends from the levee toe to the western wall of the reservoir. The berm drain consists of ASTM C33 sand placed as an inclined chimney drain on the levee landside slope and a blanket drain horizontally at the bottom of the berm. The collected underseepage flows are conveyed through a series of slotted pipes (laterals) spaced on 30-foot centers that tie into one main header pipe that then ties into the same collection system as the relief wells. The seepage berm is located over the two aforementioned PG&E gas mains that parallel the levee. Two additional relief wells were also installed in the low area south of Pioneer Reservoir.

This southern portion of Reach 4 was found to be deficient due to the low factor of safety against uplift at the base of the fine-grained blanket layer. The identified remedial actions consist of thickening the seepage berm assuming that the additional fill would not have an adverse effect on the PG&E gas mains crossing the site. A drained berm on the landside of the levee and a shallow cutoff wall on the crest would also be constructed. Also, an additional relief well may be needed near the southern edge of the Pioneer Reservoir.

Construction of additional relief wells (if the existing discharge system has the capacity to convey the additional flows) as well as thickening of the existing berm and shallow cutoff wall in the south portion was selected as the preferred levee improvement. This approach is described further in Chapter 7, “Alternatives.”

Page 3-30

The text under the heading, “Reach 9 – Station 1197+00 to 1206+00” has been modified as follows:

**Reach 9 – Station 1197+00 to 1206+00**

Reach 9 parallels I-5, and is the tallest section of levee within the Sacramento River East Levee Improvements area, with a landside levee height of about 28 feet. The railroad diverges from the levee near the upstream boundary of Reach 9 and crosses I-5 as the levee follows the Sacramento River to the southwest. The levee is wide and the crown is used as a pedestrian trail.

The reach is deficient due to underseepage and low landside slope stability factors of safety. I-5 construction resulted in low landside toe elevations creating the potential for excessive underseepage gradients at the toe of levee. The identified remedial actions consist of construction of a conventional cutoff wall through the levee crown (to Elevation -30 to -35 feet; about 75–80 feet below the crest). The cutoff wall would extend about 200 feet upstream into Reach 8 (Station 1197+00) to provide sufficient overlap to reduce the potential for end-around effects. Construction of seepage cutoff walls were selected as the preferred levee improvement. This approach is described further in Chapter 7, “Alternatives.”
The text under the heading, “Reach 12 – Station 1285+00 to Reach 13 Station 1294+60” has been modified as follows:

Reach 12 – Station 1285+00 to Reach 13 Station 1294+60

Reach 12 is located just downstream of a segment of levee that has previously been remediacted with a deep cutoff wall. Residential development abuts the landside toe and environmentally sensitive habitat is located riverward of the levee. The Reach 12 levee was previously remediacted by USACE with a shallow seepage cutoff wall.

The reach is deficient due to underseepage. Review of past performance information compiled by SAFCA and DWR indicates portions of the levee have experienced post-shallow-wall-construction seepage along the levee landside toe. The identified remedial action for Reach 12 consists of construction of a deep cutoff wall through the levee crown (to Elevation -8065 to -95 feet; about 12005 to 135 feet below the crest). The wall depth must be confirmed with additional explorations conducted during the design phase. The seepage cutoff wall would be extended into Reach 13 (to Station 1294+60) to provide sufficient overlap between remedial measures. Construction of deep seepage cutoff walls were selected as the preferred levee improvement. This approach is described further in Chapter 7, “Alternatives.”

The text under the heading, “Reaches 15 through 21; Reach 15 - Station 1344+00 to 1364+00; Reach 16 - Station 1383+00 to 1391+50; Reach 17 - Station 1391+50 to 1407+50; Reach 20 - Station 1447+00 to 1476+50; Reach 21 - Station 1476+50 to 15052+00” has been modified as follows:

Reaches 15 through 21; Reach 15 - Station 133644+00 to 137364+00; Reach 16 - Station 137383+00 to 1391+50; Reach 17 - Station 1391+50 to 1407+50; Reach 20 - Station 1424+50  47+00 to 1476+50; Reach 21 - Station 1476+50 to 15052+00

These reaches occupy a long and relatively straight or gently curving portion of the levee at the northern half of the Pocket area. Residential developments (Greenhaven area homes and apartments) are located along the toe of the levee, except for a park and residential street located along the toe of levee in Reach 17. Along Reaches 20 and 21, the levee is paralleled by a mix of residences, short length of roads, and a series of cul-de-sacs that dead end near the toe of the levee. Many of the homes have swimming pools. The levee was previously remediacted by USACE with a shallow seepage cutoff wall.

Seepage and stability analysis found that these reaches meet ULDC for existing conditions. However, meeting criteria is not the only parameter applied when determining the need for remedial action. Review of past performance information compiled by SAFCA and DWR indicates portions of the levee have experienced extensive post-shallow-wall-construction seepage along the levee landside toe. The identified remedial action consists of constructing a conventional seepage cutoff wall through the crown of the levee along the portions of levee that have experienced continued seepage. The seepage cutoff wall would extend to the base of the fine-grained blanket layer to cut off the more permeable granular layers in the blanket that may be conveying seepage to the landside toe and “stitch” the blanket together. Cutoff walls would extend to depths of about 450 to 70 feet below the levee crest (to Elevation -10S to -30 feet) to reach the bottom of the fine-grained blanket layer. Relief wells would also be constructed from Station 1424+50 to Station 1447+00. Construction of cutoff walls through
the fine-grained blankets were selected as the preferred levee improvement. This approach is described in Chapter 7, “Alternatives.”

Page 3-33

The text under the heading, “Reach 23 – Station 1530+30 to 1534+40 (City of Sacramento Sump 132)” has been modified as follows:

**Reach 23 – Station 1530+30 to 1534+40 (City of Sacramento Sump 132)**

The limits of Reach 23 are confined to the existing Sump 132 facility. This is the main pumping facility for interior drainage within the Pocket area. The sump is fed by a series of interior drainage canals. Past performance issues have included the formation of seepage boils on the approach canal floor and associated loss of foundation soils due to piping. The site has since been remediated by installing 10 relief wells around the sump and canal structures, constructing a deep seepage cutoff wall through the levee extending beyond the width of the facility to cut off potential foundation defects, and restoring the approach channel. The cutoff wall was intended to be a hanging wall and does not extend into a low permeability aquiclude.

This reach is deficient for underseepage due to the existing relief wells not sufficiently reducing high pore pressures beneath the fine-grained blanket underlying the pump station approach canal. Additional geotechnical data indicate that the upper blanket is thinner and of lower permeability than estimated for the design of the existing relief well system. Also, it appears that the discharge pipes of the relief wells may have been installed at a higher elevation than assumed for the design. These factors contribute to higher calculated underseepage gradients, and the cumulative impact is that the gradients that are now calculated exceed criteria. The existing relief wells were found to improve underseepage conditions for the 200-year design water surface elevation, but in the current configuration they do not lower seepage gradients sufficiently to meet design criteria. Upper blanket is variable in the southern subreach of Reach 23, with an area of incomplete cutoff and "leaker" layer at the boundary with Reach 24. The proposed drained berm extends from the south (Reach 24), tying-in to the widened levee section at Sump 132. The remedial measures proposed for this reach is a drained stability berm between Stations 1533+30 and 1536+30 are limited to modifying existing relief wells by either lowering risers or installing pumps.

A variation to the preferred remedial measure would consist of installing additional relief wells between the existing relief wells if the Sump 132 operators prefer not to modify the existing relief wells. The new wells would discharge into the sump at a lower elevation than the existing wells. This variation would be evaluated further during detailed design, if needed. Modifying existing relief wells by either lowering risers or installing pumps were selected as the preferred levee improvement. This approach is further described in Chapter 7, “Alternatives.”

Page 3-33

The text under the heading, “Reach 24 – Station 1534+40 to 1550+00” has been modified as follows:

**Reach 24 – Station 1534+40 to 1550+00**

Reach 24 is located just downstream of Sump 132. Like Reach 22, it is a relatively short and straight portion of levee along the southwest edge of the Pocket area. Residential streets and landscaped areas are located along the toe of levee. The levee was previously remediated by USACE with a shallow seepage cutoff wall.
The reach is deficient due to underseepage. The identified remedial actions consist of installation of relief wells discharging to the drainage canal at Sump 132.

Relief wells in Reach 24 (in combination with the proposed remediation for Reaches 22 and 23) would provide a continuous line of relief wells beginning at the upstream end of Reach 22 (Station 1517+00) and extending to the downstream end of Reach 24 (Station 1547+00), thus providing a 2,000-foot-long line of pressure relief. Extend for approximately 1,310 feet from Station 1534+40 to Station 1547+50. Due to the pronounced meander that forms the Pocket area, there is a potential that a cutoff wall might not be as effective in reducing pressures within the underlying aquifer as expected from 2-D model results due to end around effects from flows upstream of the reach. A line of relief wells is believed to be less sensitive to 3-D effects in pore pressure distribution. Construction of relief wells discharging to the drainage canal at Sump 132 were selected as the preferred levee improvement. This approach is further described in Chapter 7, “Alternatives.”

Page 3-34

The text under the heading, “Reach 25 – Station 1550+00 to 1554+50” has been modified as follows:

Reach 25 – Station 1550+00 to 1554+50

Reach 25 is located along the Garcia Bend Park parking area that abuts the landside toe of the levee. A boat launch facility is located on the waterside of the levee. The reach was previously remediated with a shallow seepage cutoff wall.

The reach is deficient due to potential through-seepage breakout on the landside levee slope in combination with erodible soils in the levee. Past performance information compiled by SAFCA and DWR indicates the reach has experienced post-shallow-wall-construction seepage. The blanket layer is interbedded and may have heterogeneities that allow excessive seepage. The identified remedial actions consist of constructing a conventional seepage cutoff wall through the levee crown starting at Station 1547+50 and extending across the length of Reach 25 to Station 1554+50 address the through-seepage deficiency (to Elevation -20 to -30 feet; about 55 to 65 feet below the crest). The seepage cutoff wall would extend beyond the base of the fine-grained blanket layer to an intermediate aquiclude and would cut off the more permeable granular layers in the blanket that may be conveying seepage to the landside toe and “stitch” the blanket together. Construction of conventional cutoff wall to “stitch” the fine grained blankets were selected as the preferred levee improvement. This approach is further described in Chapter 7, “Alternatives.”

Page 3-34

The text under the heading, “Reach 26 – Station 1554+50 to 1570+00” has been modified as follows:

Reach 26 – Station 1554+50 to 1570+00

Reach 26 is located at the southwest corner of the Pocket area. The downstream end of the Garcia Bend Park field area and residences are located along the toe of levee. The levee was previously remediated by USACE with a shallow seepage cutoff wall.

Existing conditions analysis found Reach 26 meets levee design criteria. However, meeting criteria is not the only parameter applied when determining the need for remedial action. Review of past performance information
compiled by SAFCA and DWR indicates portions of the levee have experienced post-shallow-wall-construction seepage along the levee landside toe. The identified remedial actions consist of continuing the conventional seepage cutoff wall through the levee crown across the length of Reach 26 (to Elevation -30 to -10 feet; about 45 to 65 feet below the crest). The seepage cutoff wall would extend to the base of the fine-grained blanket layer to cut off the more permeable granular layers in the blanket that may be conveying seepage to the landside toe and “stitch” the blanket together. Construction of conventional cutoff wall to “stitch” the fine granulated blankets were selected as the preferred levee improvement. This approach is further described in Chapter 7, “Alternatives.”

Page 3-37

The paragraph under the heading, “Erosion Protection” has been modified as follows:

Protecting the levee bank from erosive forces due to wave action and/or high flow velocities would require additional placement of embankment protection material such as rip-rap or other selected rock material in the erosion zone and landscaping fill to reestablish the slope above the erosion zone. The method and equipment to remediate the erosion site would depend on the access to the site. Excavators would be used to place the embankment protection material as per design; however, steep levee slopes and riparian vegetation may impede construction access from the levee crown. Alternatively, material and equipment could be transported by barge with the installation of the embankment protection accomplished from barge mounted equipment.

Page 3-38

The fourteenth bullet has been deleted from the list of staging areas identified on Exhibit 3-16:

► Pocket Road at Nasca Way,

Page 3-47

The second bullet under the heading, “Proposed Encroachment Removal Actions” has been modified as follows:

► **High/Moderate-risk** – impedes operation, maintenance, and inspection, removable within 3 years after the levee is accredited, and analyzed as a project-level action as part of the proposed Levee Accreditation improvements evaluated in this EIR; or

Page 3-61

The following text has been added to the bullet for GGS-5:

► **GGS-5:** Conduct a Preconstruction Survey within 200 Feet of Suitable Giant Garter Snake Habitat Within 24 Hours Before Commencement of Ground-Disturbing Activities. Within 24 hours before the commencement of ground-disturbing activities, areas within 200 feet of suitable giant garter snake habitat shall be surveyed for giant garter snakes by a qualified biologist. The biologist shall provide USFWS and CDFW with written documentation of the monitoring efforts within 48 hours after the survey is completed. The project area shall be reinspected by a qualified biologist whenever a lapse in construction activity of 2 weeks or greater has occurred.
The following text has been added to the bullet for SWH-1:

► **SWH-1: Conduct Swainson’s Hawk Preconstruction Surveys in Suitable Nesting Habitat within 0.25-Mile of Project Disturbance within 14 Days of Project Activities.** Preconstruction surveys for active Swainson’s hawk nests shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 0.25-mile of project disturbance that would occur when Swainson’s hawks would be present (March-July). To the extent feasible, guidelines provided in *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in the Central Valley* (Swainson’s Hawk Technical Advisory Committee 2000) will be followed. A minimum of one survey shall be conducted no more than 14 days before project activities commence. A letter report documenting the survey methods and results shall be prepared and submitted to CDFW.

The bullet for BAT-1 has been modified as follows:

► **BAT-1: Conduct Bat Surveys for Active Maternity Roosts for Trees With Suitable Roost Cavities or Dense Cover Designated for Removal.** If removal of trees with suitable roost cavities and/or dense cover must occur during the bat pupping season (April 1 through July 31), surveys for active maternity roosts shall be conducted by a qualified biologist in trees designated for removal. A habitat assessment and daylight survey of suitable trees and structures shall be conducted to determine if there is evidence of suitable roost cavities. These surveys shall be followed up with nighttime emergence surveys, conducted from dusk until dark, to detect presence. The surveys shall be conducted from dusk until dark.

Two new bullets have been added to the list under the heading “Special-Status Fish”

► **SSF-4: Restore Borrow Sites Located on the Waterside of Levees or Within the River Floodplain.** After construction is completed, borrow sites located on the waterside of levees or within the river floodplain will be restored (e.g., filled with non-organic soil) to the extent necessary to eliminate the potential for water retention following flooding or high flow events.

► **SSF-5: Develop, and Where Necessary, Implement, a Fish Rescue Plan.** In the event a borrow site is overtopped with flood water during construction (i.e., prior to restoration), a fish rescue plan (Mitigation Measure BIO-F2) will be implemented to remove fish stranded in borrow areas and release them back into suitable aquatic habitat.

The third and fourth bullets under the heading “Special-Status Plants” have been renumbered and the text modified as follows:

► **SSP-34: Conduct Preconstruction Special-Status Surveys during the Blooming Period within 25 Feet of Areas of Project Disturbance within 5 Days-Years of Ground-Disturbing Activities.** Preconstruction special-status plant surveys shall be conducted by a qualified botanist in suitable habitat to determine the...
occurrence of special-status plant populations within 25 feet of areas of project disturbance. Surveys shall be conducted at an appropriate time of year during which the species are likely to be detected, generally during the blooming period. Surveys shall be conducted within 5 years prior to initial ground-disturbing activities.

- **SSP-45: Mark Special-Status Plant Populations and Occupied Habitat in the Field for Avoidance during Construction Activities and Include a Habitat Buffer of a Minimum of 25 Feet.** If special-status plant populations are detected and if those plants can be avoided during project implementation, a qualified botanist shall clearly mark the special-status plant populations and occupied habitat in the field for avoidance during construction activities. The avoidance area shall include a habitat buffer. The buffer width shall be determined by a qualified botanist based on site-specific conditions, but shall be a minimum of 25 feet.

**Page 3-97**

**Exhibit 3-11** (North Sacramento Streams Staging Areas) has been modified to reflect changes to Proposed Staging Area 1 for the North Sacramento Streams Levee Improvement area. This staging area has been expanded to provide additional space to enable project construction contractors to avoid potential impacts to an underground natural gas pipeline owned by PG&E. Use of some or all of the additional area for staging (staging activities are discussed on page 3-18 of Chapter 3, “Project Description,” in the DEIR) would not result in changes to the significance of impacts analyzed in the DEIR, or increase the severity or intensity of impacts. The additional area was included in the radius of the cultural and biological resource record and database searches. The same mitigation measures applied throughout the DEIR to avoid or reduce potential significant and significant impacts would still be effective on the expanded staging area. No additional mitigation measures are required beyond those already disclosed in the DEIR.
Exhibit 3-11. North Sacramento Streams Staging Areas

Source: URS Corporation 2014, adapted by AECOM in 2014
Exhibit 3-16 (Sacramento River East Levee Borrow Areas, Haul Routes, Access Points, and Staging Areas) has been modified to remove the access point and staging area at the intersection of Pocket Road and Nazca Way:
### SECTION 4.4 – AIR QUALITY

**Page 4.4-20**

Table 4.4-4 has been revised as follows:

<table>
<thead>
<tr>
<th>Construction Phase</th>
<th>Pollutants (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROG</td>
</tr>
<tr>
<td>Mobilization</td>
<td>0.03</td>
</tr>
<tr>
<td>Slope Stripping</td>
<td>3.08</td>
</tr>
<tr>
<td>Gravel Crest to Stockpile</td>
<td>2.10</td>
</tr>
<tr>
<td>Gravel Crest to Waste</td>
<td>2.10</td>
</tr>
<tr>
<td>Degradation Levee to Waste (On-site</td>
<td>3.03</td>
</tr>
<tr>
<td>Disposal</td>
<td></td>
</tr>
<tr>
<td>Degradation Levee to Waste (Grade</td>
<td>3.02</td>
</tr>
<tr>
<td>Raising</td>
<td></td>
</tr>
<tr>
<td>Degradation Levee to Blending</td>
<td>5.32</td>
</tr>
<tr>
<td>Setback Borrow Import for Blending</td>
<td>3.48</td>
</tr>
<tr>
<td>Setback Wall Excavation to Waste</td>
<td>2.24</td>
</tr>
<tr>
<td>Setback Wall Construction</td>
<td>4.22</td>
</tr>
<tr>
<td>Restored Levee</td>
<td>17.19</td>
</tr>
<tr>
<td>Restored Levee Gravel</td>
<td>3.05</td>
</tr>
<tr>
<td>Cutback Toe Excavation to Waste</td>
<td>3.99</td>
</tr>
<tr>
<td>Cutback Toe Excavation to Blending</td>
<td>3.35</td>
</tr>
<tr>
<td>Excavate and Haul CB Excavation to</td>
<td>2.24</td>
</tr>
<tr>
<td>Waste</td>
<td></td>
</tr>
<tr>
<td>Excavate and Haul CB Excavation to</td>
<td>2.83</td>
</tr>
<tr>
<td>Blending</td>
<td></td>
</tr>
<tr>
<td>Cutback Wall Construction</td>
<td>3.04</td>
</tr>
<tr>
<td>Cutback Wall Import from Borrow for Toe</td>
<td>3.45</td>
</tr>
<tr>
<td>Cutback Wall Toe Construction</td>
<td>17.20</td>
</tr>
<tr>
<td>Rock Slope Protection</td>
<td>3.46</td>
</tr>
<tr>
<td>Hydroseeding</td>
<td>0.06</td>
</tr>
<tr>
<td>Conservation Strategy</td>
<td>0.46</td>
</tr>
<tr>
<td>Maximum Daily Emissions</td>
<td>64.69</td>
</tr>
<tr>
<td>SMAQMD Threshold</td>
<td></td>
</tr>
<tr>
<td>Total Emissions (tons)</td>
<td></td>
</tr>
<tr>
<td>Allowable Emissions (tons)</td>
<td></td>
</tr>
<tr>
<td>Emissions To Be Mitigated (tons)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: lb/day = pounds per day; ROG = reactive organic gases; NOX = oxides of nitrogen; PM10 = particulate matter with aerodynamic diameter less than 10 microns; PM2.5 = particulate matter with aerodynamic diameter less than 2.5 microns; SMAQMD = Sacramento Metropolitan Air Quality Management District

1 All emissions are shown in units of pounds per day unless noted otherwise.
As shown in Table 4.4-4, the maximum daily construction emissions for levee reconstruction, encroachment removal, vegetation management, and the Conservation Strategy would exceed SMAQMD’s threshold of significance for NOX.

Page 4.4-22

Mitigation Measure AIR-1c has been revised as follows:


As shown above in Table 4.4-4, maximum daily construction-related NOX emissions would exceed SMAQMD’s construction threshold of significance. A majority of the construction-related NOX emissions are generated from off-road construction equipment. Therefore, Mitigation Measure AIR-1c requires that at least 15 percent of the construction equipment used for the proposed project shall be Tier 3 engines or achieve Tier 3 engine emission standards. Table 4.4-4 presents the proposed project’s mitigated construction emissions with inclusion of Mitigation Measure AIR-1c.

The construction contractor shall submit to SAFCA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.

The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager, and on-site foreman. This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. The SMAQMD Equipment List Form can be used to submit this information. The inventory shall be updated and submitted monthly throughout the duration of the

<table>
<thead>
<tr>
<th>Table 4.4-4. North Sacramento Streams Levee Improvements Area Construction Emissions (Unmitigated/Mitigated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Maximum daily NOX, ROG, PM10, and PM2.5 emissions for construction of levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy in the North Sacramento Streams Levee Improvements area would occur in the 4th month of construction. As noted above, this analysis assumes the North Sacramento Streams Levee Improvements area would be constructed in a single construction season, which would result in the worst-case maximum daily emissions shown above. In the case that construction activities would extend into 2017, maximum daily emissions in 2016 would likely be less than those shown in the table, but year 2017 emissions would occur simultaneously with Sacramento River East Levee Improvement area construction.</td>
</tr>
<tr>
<td>3 The encroachment removal and vegetation management elements in the North Sacramento Streams Levee Improvements area have been incorporated into the each of the subphases shown. Therefore, the maximum daily emissions listed accounts for all components of the North Sacramento Streams Levee Improvements area (i.e., levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy).</td>
</tr>
<tr>
<td>4 Allowable emissions are estimated by multiplying the SMAQMD daily threshold of significance by the total number of works days. Sources: Data modeled by AECOM in 2014 and 2015</td>
</tr>
</tbody>
</table>

Page 4.4-21

The following text has been added to the end of the first sentence in the first paragraph:

As shown in Table 4.4-4, the maximum daily construction emissions for levee reconstruction, encroachment removal, vegetation management, and the Conservation Strategy would exceed SMAQMD’s threshold of significance for NOX.
The construction contractor shall provide a plan for approval by SAFCA and SMAQMD demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NOX reduction and 45 percent particulate reduction compared to the most recent California ARB fleet average. This plan shall be submitted in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

SMAQMD’s Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction. The construction contractor shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to SAFCA and SMAQMD monthly. A visual survey of all in-operation equipment shall be made at least weekly. A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

Page 4.4-23

The Significance after Mitigation under Mitigation Measure AIR-1d has been revised as follows:

**Significance after Mitigation:** Implementation of Mitigation Measures AIR-1a, AIR-1b, and AIR-1c would reduce fugitive PM dust and equipment exhaust emissions. For fugitive PM dust emissions, SMAQMD considers projects that would not disturb more than 15 acres per day and implement their Basic Construction Emission Control Practices to reduce any potential fugitive PM dust emissions to a less-than-significant level. Therefore, with implementation of Mitigation Measure AIR-1a and because the proposed project would not disturbe more than 15 acres per day, fugitive PM dust emissions would be less than significant. However, exhaust-related NOX emissions would not be reduced to a less-than-significant level with implementation of Mitigation Measures AIR-1a, AIR-1b, and AIR-1c. Implementation of Mitigation Measure AIR-1d would, however, reduce the remaining construction emissions resulting from construction of the proposed levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy elements to a less-than-significant level by contributing to SMAQMD’s off-site mitigation fee program.

Page 4.4-24

The Significance after Mitigation under Mitigation Measure AIR-1d has been revised as follows:

**Significance after Mitigation:** Implementation of Mitigation Measures AIR-1a, AIR-1b, and AIR-1c would reduce fugitive PM dust and equipment exhaust emissions. For fugitive PM dust emissions, SMAQMD considers projects that would not disturb more than 15 acres per day and implement their Basic Construction Emission Control Practices to reduce any potential fugitive PM dust emissions to a less-than-significant level. Therefore, with implementation of Mitigation Measure AIR-1a and because the proposed project would not disturb more than 15 acres per day, fugitive PM dust emissions would be less than significant. However, exhaust-related NOX emissions would not be reduced to a less-than-significant level with implementation of Mitigation Measures AIR-1a, AIR-1b, and AIR-1c. Implementation of Mitigation Measure AIR-1d would, however, reduce the remaining construction emissions resulting from construction of the proposed levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy elements to a less-than-significant level by contributing to SMAQMD’s off-site mitigation fee program.
Control Practices to reduce any potential fugitive PM dust emissions to a less-than-significant level. Therefore, with implementation of Mitigation Measure AIR-1a and because the proposed project would not disturb more than 15 acres per day, fugitive PM dust emissions would be less than significant. However, exhaust-related NO\textsubscript{X} emissions would not be reduced to a less-than-significant level with implementation of Mitigation Measures AIR-1a, AIR-1b, and AIR-1c. Table 4.4-5 presents the proposed project’s emissions from construction of levee improvements, encroachment removal, soil/bank erosion repair, vegetation management, and Conservation Strategy activities for the Sacramento River East Levee Improvements area with implementation of Mitigation Measures AIR-1a, AIR-1b, and AIR-1c. Implementation of AIR-1d would, however, reduce the remaining construction emissions resulting from construction of all of the Sacramento River East Levee Improvements area proposed components (i.e., levee reconstruction, soil/bank erosion repair, encroachment removal, vegetation management, and Conservation Strategy) to a less-than-significant level by contributing to SMAQMD’s off-site mitigation fee program.

Table 4.4-5 has been revised as follows:

| Table 4.4-5. Sacramento River East Levee Improvements Area Construction Emissions (Unmitigated/Mitigated) |
|---------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Construction Phase                                          | ROG             | NO\textsubscript{X} | PM\textsubscript{10} | PM\textsubscript{2.5} |
| **Year 2017 Construction**                                   |                 |                 |                 |                 |
| Mobilization                                                 | 0.12/0.12       | 3.16/3.16       | 0.16/0.16       | 0.09/0.09       |
| Vegetation and Encroachment Removal                          | 0.77/0.6677     | 9.03/8.427/62   | 0.54/0.5036     | 0.45/0.4228     |
| Levee Degradation for Cutoff Wall Installation               | 8.20/6.918/20   | 101.57/90.258/47 | 826.02/209.438/18 | 128.48/34.673/50 |
| Construction of Stability Berm/Toe Drains                   | 7.25/6.087/25   | 79.16/69.296/43 | 90.98/25.332/41 | 16.88/6.555/41  |
| Utility Relocation                                          | 0.90/0.890      | 10.01/9.408/25  | 0.60/0.563/8     | 0.51/0.483/1    |
| Levee Reconstruction                                         | 12.06/10.2912/06 | 156.65/140.4813/52 | 7.03/6.147/30   | 6.12/5.346/31   |
| Site Restoration and Demobilization                         | 0.10/0.10       | 1.33/1.33       | 0.08/0.08        | 0.04/0.04       |
| Conservation Strategy                                       | 0.45/0.294/5    | 4.20/3.144/4    | 0.36/0.282/3     | 0.31/0.241/8    |
| **Year 2018 Construction**                                   |                 |                 |                 |                 |
| Mobilization                                                 | 0.15/0.15       | 3.49/3.49       | 0.21/0.21        | 0.11/0.11       |
| Vegetation and Encroachment Removal                          | 0.64/0.586/4     | 7.57/7.286/42   | 0.45/0.443/1     | 0.37/0.362/3    |
| Levee Degradation for Cutoff Wall Installation               | 7.33/6.222/33   | 89.34/80.337/46 | 825.45/208.997/86 | 127.96/33.273/21 |
| Cutoff Wall Installation                                     | 11.88/9.9611/88 | 130.32/111.479/104/94 | 22.36/9.547/61 | 8.16/5.653/82   |
| Bank Erosion Repairs                                         | 5.65/4.823/65   | 72.11/65.461/18 | 220.34/87.226/34 | 35.71/10.759/93 |
| Utility Relocation                                          | 0.75/0.667/5     | 8.38/7.296/92   | 0.50/0.473/3     | 0.42/0.402/6    |
| Levee Reconstruction                                         | 10.79/9.4910/79 | 138.24/125.2011/7/15 | 1.183/0.99/23 | 183.57/49.30/7/4 |
| Relief Wall Installation                                     | 0.71/0.627/1     | 8.61/8.457/04   | 0.50/0.493/1     | 0.43/0.425/2    |
| Site Restoration and Demobilization                         | 1.37/1.472/7     | 16.53/15.472/14 | 0.88/0.79/56     | 0.74/0.674/5    |
| Conservation Strategy                                       | 0.45/0.294/5     | 4.20/3.144/4    | 0.36/0.282/3     | 0.31/0.241/8    |
### Table 4.4-5. Sacramento River East Levee Improvements Area Construction Emissions (Unmitigated/Mitigated)

<table>
<thead>
<tr>
<th>Construction Phase</th>
<th>Pollutants (lb/day)(^1)</th>
<th>ROG</th>
<th>NO(_x)</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMAQMD Threshold</td>
<td>—</td>
<td></td>
<td>85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Emissions (tons)(^3)</td>
<td>—</td>
<td>28.63/25.843.69</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Allowable Emissions (tons)(^2)</td>
<td>—</td>
<td>17.68</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Emissions To Be Mitigated (tons)</td>
<td>—</td>
<td>10.95/7.866.01</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Notes: lb/day = pounds per day; NO\(_x\) = oxides of nitrogen; PM\(_{10}\) = particulate matter with aerodynamic diameter less than 10 microns; PM\(_{2.5}\) = particulate matter with aerodynamic diameter less than 2.5 microns; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District

\(^1\) All emissions are shown in units of pounds per day unless noted otherwise.

\(^2\) Maximum daily NO\(_x\) and ROG emissions for construction of levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy activities in the Sacramento River East Levee Improvements area would occur in the 6th month of construction during season 1. Maximum daily PM\(_{10}\) and PM\(_{2.5}\) emissions would occur and during the 5th month of construction during season 2.

\(^3\) Maximum daily emissions throughout the entire construction period would occur during the 5th month of season 2, which are shown in the table above.

\(^4\) The encroachment removal and vegetation management components of Sacramento River East Levee Improvements area have been incorporated into the each of the subphases shown. Therefore, the maximum daily emissions listed accounts for all components of the Sacramento River East Levee Improvements area (i.e., levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy).

\(^5\) Total emissions shown would occur over a 2-year period. Year 2017 total NO\(_x\) emissions would be 14.87 and 13.17 tons per year without and with mitigation, respectively. Year 2018 total NO\(_x\) emissions would be 13.76 and 12.37 tons per year without and with mitigation, respectively.

\(^6\) Allowable emissions are estimated by multiplying the SMAQMD daily threshold of significance by the total number of works days.

Sources: Data modeled by AECOM in 2014 and 2015

---

### Pages 4.4-26 and 4.4-27–4.4-28

Responsibility for implementation and Significance after Mitigation under Mitigation Measure AIR-1a has been revised as follows:

**Responsibility:** Sacramento Area Flood Control Agency and Construction Contractors.

**Significance after Mitigation:** Implementation of Mitigation Measure AIR-1a would reduce any potential construction-related impact to a **less-than-significant** level because SMAQMD’s basic construction emission control practices would be implemented.

---

**SECTION 4.5 – BIOLOGICAL RESOURCES – FISHERIES**

**Page 4.5-17**

Two citations have been added to the following statement made in the second paragraph:

Central Valley steelhead would not typically occur in Arcade Creek, as this stream regularly lacks water quality conditions for spawning (SWRCB 2010, DWR 2008).
Page 4.5-18

The last sentence in the third paragraph under the heading “Sacramento River Winter-Run Chinook Salmon” has been revised as follows:

The Sacramento River channel is the main migration route for winter-run Chinook juveniles; however, the Sutter and Yolo Bypasses also provide significant outmigration passage and rearing habitat during higher flow events, though the proportion of juvenile winter-run Chinook salmon using the bypasses during these events is unknown.

Page 4.5-19

Two citations have been added to the following statement made in the fourth paragraph under the heading, “Central Valley Fall/Late Fall-Run Chinook Salmon”:

They are not expected to occur in Arcade Creek or other tributaries to NEMDC/Steelhead Creek lacking suitable water quality conditions for spawning and rearing (SWRCB 2010, DWR 2008).

Page 4.5-26

The following text has been added to the end of the first paragraph under the heading “Impact Analysis:”

Other direct impacts to special-status fishes may include temporary displacement of individual fish due to construction, stranding in borrow pits or other excavated areas prior to restoration, or alteration of essential behavior patterns. Impacts to non-special-status fish species would be similar to those for special-status fish species, but impacts to non-special-status species are typically considered less than significant because populations of these species are generally large and resilient, and potential population-level effects are unlikely.

Page 4.5-35

Text in the third bullet from the bottom of the page, under measure CM-32, has been deleted as follows:

- CM-32: Clean Construction Vehicles and Equipment Used Within the Stream Channel Before Arrival at the Project Construction Areas, and Inspect Vehicles/Equipment to Ensure They Are Free of Soil, Debris, and Nonnative Aquatic Species. Construction vehicles and equipment operated within the channel margins (high water line) shall be cleaned of mud and other debris with a scrub brush and dry, or pressure-washed with hot (>140 degrees Fahrenheit [°F]) water, before arrival at the project construction areas and prior to transporting the equipment to another stream or watershed. All equipment operated within the channel margins shall be carefully inspected for signs of aquatic invasive species, including mussels and plant materials, with special attention paid to shaded, sheltered, and protected areas which might contain standing water and areas that form ‘edges’ or ‘right angles,’ such as tracks, feet, and/or tires. If vehicles or equipment are found to be contaminated with non-native invasive species, vehicles and equipment shall be stored in a dry location for at least one week prior to transport to a different stream or watershed, or alternatively, will be pressure-washed with hot (>140°F) water after each use. All water shall be drained from watercraft, including motor cooling system and bilge, and allow to dry as thoroughly as possible prior to entering a new stream or watershed. Large vessels and barges transported via the stream channel shall be contracted from nearby locations or shall undergo similar hull-cleaning prior to use for the project. Watercraft transported from distant areas, including barges, shall not release bilge water into the project area, unless screened to prohibit fish, plant, or other animal transport.
In addition to the specific measures, the Conservation Strategy identifies several types of habitat improvements to be implemented. SAFCA shall implement improvements from the Conservation Strategy, including:

- To replace habitat loss due to tree removal required during levee improvements, native riparian trees shall be planted to fill gaps in the riparian woodland corridor in the Sacramento River East Levee area.
- To replace habitat loss following levee improvement construction and vegetation management tree removal, riparian trees and shrubs shall be planted on recontoured middle and upper bank slopes in natural soil, and low rock-lined benches with soil-filled trenches with native riparian trees, shrubs, and herbaceous species.
- To increase SRA habitat quality under low summer/fall river stage, tule and buttonbush would be planted along the shoreline.
- Following construction, native wetland vegetation (e.g., Santa Barbara sedge, Baltic rush) shall be planted along the banks of Arcade Creek, and two parallel rows of large riparian tree species (e.g., valley oak) shall be planted on both banks of the low-flow channel.
- To replace habitat loss due to high-hazard tree removal, native riparian trees shall be planted to fill existing gaps in the oak and riparian woodland corridor.
- To replace vegetation removed as part of the vegetation management element within the Beach Lake Levee, gaps within the riparian corridor shall be filled, or, in coordination with the SRCSD, an area within the nearby Upper Beach Lake Wildlife Area shall be identified where riparian vegetation could be planted to mitigate for hazard tree removal along the Beach Lake Levee (see Exhibit 3-26 in Chapter 3, “Project Description”).
- To minimize water quality impairment at and downstream of construction sites: a storm water pollution prevention plan shall be developed; construction related erosion shall be controlled; precautions shall be taken to minimize turbidity/siltation during construction and from construction equipment; precautions shall be taken to protect streams and other waters from construction pollutants, including the use of safer alternative products (such as biodegradable hydraulic fluids).

Impact BIO-F5 and the first paragraph of impact discussion have been modified as follows:

**IMPACT BIO-F5**

**Fish Entrapment at Floodplain Borrow Sites.** Implementation of levee improvements in the North Sacramento Streams Levee Improvements area and the NEMDC/Steelhead Creek CMP would include restoration of borrow site 3 and would alter floodplain habitat within the North Sacramento Streams Levee Improvements area, including construction of Borrow Site 2, which could entrap fishes. The NEMDC/Steelhead Creek CMP would remove entrapment and stranding potential, enhancing habitat for native and special-status fishes in the North Sacramento Streams Levee Improvements area, and would improve habitat for native fishes. Therefore, a long-term beneficial impact would occur in the North Sacramento Streams Levee Improvements area. In the short term, fish could become entrapped (stranded) if a borrow site is overtopped with flood water during construction (i.e., prior to restoration), potentially resulting in mortality due to predation or desiccation. This direct, short-term impact would be potentially significant. There are no proposed project elements in the Sacramento River East Levee Improvements Area or the American River and Beach Lake Levees High-Hazard Encroachment and Vegetation Removal area that would affect fish entrapment, thus there would be no impact.

Floodplains bordering NEMDC/Steelhead Creek contain existing depressions that may entrap juvenile fishes using floodplain rearing habitat as the water recedes. Additionally, the proposed project would add additional depressions at borrow sites within floodplain habitat in support of the levee improvement element. Borrow sites within the floodplain could have the potential to entrap fishes and could provide habitat preferred by nonnative
predatory fishes; deep off-channel pools may harbor nonnative predatory fish (e.g., bass) which, when reconnected to the main channel during high-flow events, could prey on native listed species, such as outmigrating Chinook salmon and steelhead. The proposed project would grade small drainage swales or remove high mounds between discontinuous depressions that would connect the depressions with the low-flow channel, enabling more complete drainage and escapement of fish as floodwaters recede. After construction is completed, borrow sites located on the waterside of levees or within a floodplain would be restored (e.g., filled with non-organic soil) to the extent necessary to eliminate the potential for water retention following flooding or high-flow events.

**Page 4.5-51**

The fourth paragraph under the heading “North Sacramento Streams Levee Improvements” has been modified as follows:

As part of the Conservation Strategy, approximately 500 acres of Dry and Robla Creeks and their adjacent floodplains and upland grasslands would be enhanced by grading and the creation of swales or filling of eroded potholes to drain depressions within the floodplain, which would enhance critical habitat for out-migrating Central Valley steelhead, EFH for out-migrating fall-run Chinook salmon, and spawning and rearing habitat for Sacramento splittail. Additionally, drainage and sheet flow across floodplains would be improved by removing various human-made linear berms/embankments, and by creating small drainage swales or filling limited areas at six existing isolated depression sites that represent potential fish entrapment sites on the east side floodplain bordering NEMDC/Steelhead Creek. Construction activities would occur primarily on floodplains, when fish would not be present. After construction is completed, borrow sites would be restored (e.g., filled with non-organic soil) to the extent necessary to eliminate the potential for water retention and fish stranding following flooding or high-flow events. Therefore, these proposed project elements would result in a long-term beneficial impact. If a borrow site is overtopped with flood water during construction (i.e., prior to restoration), fish could become stranded and die, resulting in a short-term potentially significant impact. Mitigation Measure BIO-F2 has been identified to address this impact.

**Page 4.5-52**

Mitigation Measure BIO-F2 has been added and reads as follows:

**Mitigation Measure: No mitigation is required.**

**Mitigation Measure BIO-F2: Develop and Implement an Approved Fish Rescue Plan to Capture and Relocate Stranded Fish**

To minimize fish mortality due to stranding, a fish rescue plan shall be prepared by SAFCA for approval by State and Federal fish agencies (i.e., CDFW, USFWS, and NMFS) and implemented during the period when borrow sites or other off-channel depressions contain water due to flooding or high-flow events. Development of the fish rescue plan shall include consideration of numerous sampling methods (i.e., seines, electrofishing, and traps) and events, as required by the fish agencies. Fish would be captured alive and transported to nearby suitable habitat for release. The fish rescue would occur under the direction of CDFW.

**Timing:** During construction.
Responsibility: Sacramento Area Flood Control Agency.

Significance after Mitigation: With implementation of Mitigation Measure BIO-F2, the potentially significant impact associated with stranding of special-status fish would be reduced to a less-than-significant level because measures would be implemented to avoid or minimize the loss of special-status fish.

SECTION 4.6 – BIOLOGICAL RESOURCES – TERRESTRIAL

Page 4.6-3

The following text has been added to the third paragraph under the heading “California Endangered Species Act:”

Take of State-listed rare plants that may occur as a result of the project may be permitted through an incidental take permit or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, Section 786.9 subdivision (b).

Page 4.6-4

The following text has been added to the two paragraphs under the heading “Section 1602 of the California Fish and Game Code:”

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by CDFW, or to affect riparian vegetation, or to use any material from the streambeds, without first notifying CDFW of such activity and obtaining a final agreement authorizing the activity.

“Stream” is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streamed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake designated by CDFW, or to affect riparian vegetation, or to use any material from the streambeds, without first notifying CDFW of such activity and obtaining a final agreement authorizing the activity.

The following text has been removed from the paragraph under the heading, “Porter-Cologne Water Quality Control Act”

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (California Water Code Section 13000 et seq.) requires that each of the State’s nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB’s jurisdiction includes Federally protected waters as well as areas that meet the definition of “waters of the State.” Waters of the State is defined as any surface water or groundwater, including saline waters, within the State’s boundaries. The
RWQCB has the discretion to take jurisdiction over areas not Federally regulated under Section 401, provided they meet the definition of waters of the State. Mitigation requiring no-net-loss of wetlands functions and values of waters of the State is typically required by the RWQCB. If the project study area supports aquatic features that do not qualify for Federal regulation under Section 401 of the CWA, such features may be subject to protection as waters of the State under the Porter-Cologne Act.

**Page 4.6-22**

In Table 4.6-3, the State Legal Status for California tiger salamander has been modified as follows:

<table>
<thead>
<tr>
<th>California tiger salamander</th>
<th>FT</th>
<th>ST</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ambystoma californiense</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Page 4.6-106**

A new table (Table 4.6-9) has been added:

| Table 4.6-9. Comparison of Acreages of Existing and Impacted Riparian Habitat and Woodland in the Arcade Creek and Sacramento River East Levee Study Areas¹ |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Arcade Creek    | Sacramento River East Levee | Arcade Creek | Sacramento River East Levee |
|                 | Existing | Impacted | Existing | Impacted | Existing | Impacted | Existing | Impacted |
| Landside² | Waterside³ | Landside² | Waterside³ | Landside² | Waterside³ | Landside² | Waterside³ |
| Riparian Habitat and Woodlands | 0.91 | 16.57 | 0.09 | 0.12 | 29.66 | 76.93 | 7.78 | 8.21 |
| Total | 17.48 | 0.21 | 106.59 | 15.99 |
| Percent Change | Landside = -9.9; Waterside = -0.7; Total = -1.2 | Landside = -26.2; Waterside = -10.7; Total = -15.0 |

Notes:

1. Study Area is the larger area that was surveyed for natural resources. The project footprint is a subset of the study area.
2. Majority of landside woodlands are valley oak woodland.
3. Majority of waterside woodlands are Fremont cottonwood forest.

Source: Compiled by AECOM in 2015

**Page 4.6-108**

The third bullet under Mitigation Measure BIO-1 has been modified as follows:

- **SSP-3: Conduct Preconstruction Special-Status Surveys during the Blooming Period within 25 Feet of Areas of Project Disturbance within 5 Days-Years of Ground-Disturbing Activities.**

Preconstruction special-status plant surveys shall be conducted by a qualified botanist in suitable habitat to determine the occurrence of special-status plant populations within 25 feet of areas of project disturbance. Surveys shall be conducted at an appropriate time of year during which the species are likely to be detected, generally during the blooming period. Surveys shall be conducted within 5 years prior to initial ground-disturbing activities.
Page 4.6-121

Mitigation Measure BIO-4b and 4c have been added. The paragraph preceding the mitigation measures has been edited as follows:

The quality of habitat potentially suitable for giant garter snake is better along NEDMC/Steelhead Creek north of Dry Creek, where aquatic habitat is more extensive, very little riparian vegetation is present, urban development is less extensive, and large areas of open grasslands are present landside of the levees. Giant garter snakes are known to occur in rice fields, associated canals, and managed marshes in the Natomas Basin. An occurrence was documented along Elkhorn Boulevard, approximately 0.7 mile northwest of Borrow Site 2, and the species occurs at the complex of TNBC reserves immediately west of NEMDC/Steelhead Creek, approximately 3.5 miles farther north (CDFW 2014). Based on habitat conditions and known occurrences of giant garter snake, there is potential for the species to occur, at least occasionally, in nearby portions of NEMDC/Steelhead Creek. Borrow Site 2 is located immediately east of NEMDC/Steelhead Creek and may support potentially suitable upland habitat for the species. If giant garter snakes are present during borrow activities, adverse effects could include disturbance, displacement, injury, or death of individuals. Therefore, this proposed project element would have a potentially significant impact. Mitigation Measures BIO-4a, BIO-4b, and BIO-4c, described below, have been identified to address this impact.

Mitigation Measure BIO-4a: Implement Conservation Strategy Measures to Avoid, Minimize, and Compensate for Effects to Giant Garter Snake.

Page 4.6-122

The last paragraph has been modified as follows:

If potentially occupied habitat for giant garter snake cannot be avoided during project construction, an appropriate and feasible mitigation plan to compensate for potential disturbance, displacement, injury, or death individuals shall be developed and provided to USFWS and, as necessary, CDFW for approval. Compensation for direct impacts may include preserving, enhancing, and/or creating giant garter snake habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with USFWS; ratios typically required by USFWS depend on the duration of the impact and may range from 1 to 3 acres of replacement habitat for every 1 acre of habitat affected. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, purchasing credits at a USFWS-approved mitigation bank approved by both USFWS and CDFW may be identified as appropriate mitigation.

Page 4.6-123

Mitigation Measure BIO-4b and 4c have been added. The new text is as follows:

Mitigation Measure BIO-4b: Implement Exclusionary Fencing at Borrow Site 2K.

At least 10 days prior to the commencement of ground disturbing activities and after May 1, exclusionary fencing will be erected around the perimeter of Borrow Site 2K. Prior to fencing installation, the fence line shall be mowed (with a minimum height of 6 inches) in order to conduct a surface survey of potential burrows. Fencing shall be installed with a minimum of 6 inches buried in the ground and a minimum of
Timing: Before and during construction.
Responsibility: Sacramento Area Flood Control Agency and Construction Contractor.

Mitigation Measure BIO-4c: Biological Monitoring at Borrow Site 2K.

A biological monitor shall be on-site during all ground-disturbing activities at Borrow Site 2K.

Timing: During construction.
Responsibility: Sacramento Area Flood Control Agency and Construction Contractor.

Significance after Mitigation: With implementation of Mitigation Measures BIO-4a, BIO-4b, and BIO-4c, the potentially significant impact associated with take and/or loss of habitat for giant garter snake would be reduced to a less-than-significant level because the proposed project would avoid, minimize, and, if necessary, provide compensation for loss of giant garter snake habitat as appropriate.

Page 4.6-140

The last bullet under Mitigation Measure BIO-7b has been modified as follows:

- CDFW shall be consulted regarding the woodland mitigation and potential adverse effects on Swainson’s hawk foraging opportunities. Through consultation, it may be determined that compensation is required to offset adverse effects of foraging habitat loss. If so, an appropriate and feasible mitigation plan will be developed and provided to CDFW, for approval. Compensation may include preserving and/or enhancing Swainson’s hawk foraging habitat at an on- or off-site location. Appropriate mitigation ratios would be determined in coordination with CDFW; ratios may vary (typically ranging from 0.5 to 1 acre of replacement habitat for every 1 acre of habitat lost), depending on the proximity of lost habitat to active nests and the habitat protection and management mechanisms. If habitat creation is proposed, the mitigation plan shall include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, participating in the Sacramento County Swainson’s Hawk Mitigation Program or purchasing credits at a CDFW-approved mitigation bank may be identified as appropriate mitigation.
Page 4.6-150

The first bullet under Mitigation Measure BIO-9 has been modified as follows:

- **BAT-1: Conduct Bat Surveys for Active Maternity Roosts for Trees With Suitable Roost Cavities or Dense Cover Designated for Removal.** If removal of trees with suitable roost cavities and/or dense cover must occur during the bat pupping season (April 1 through July 31), surveys for active maternity roosts shall be conducted by a qualified biologist in trees designated for removal. A habitat assessment and daylight survey of suitable trees and structures shall be conducted to determine if there is evidence of suitable roost cavities. These surveys shall be followed up with nighttime emergence surveys, conducted from dusk until dawn, to detect presence. The surveys shall be conducted from dusk until dark.

Page 4.6-154

A cross-reference to Table 4.6-9 has been added to the second full paragraph:

Implementing the vegetation management element would result in the removal of three hazard trees along the landside of the levee and the removal of four trees and one snag along Arcade Creek (on the waterside of the levee), between Marysville and Rio Linda Boulevards. The live trees are all nonnative species (Table 4.6-7) and are located outside of jurisdictional waters. However, because most of these trees are located on the waterside of the Arcade Creek levees, they are associated with valley oak woodland habitat, which is considered a sensitive habitat. The removal of these trees, including the snag, would result in a total loss of approximately 0.21 acre of canopy along Arcade Creek (Table 4.6-8), which represents a relatively small amount of loss of nonnative trees within associated valley oak woodland habitat, and does not represent a substantial adverse effect to any protected or otherwise sensitive habitat (Table 4.6-9). Therefore, these proposed project elements would have a less-than-significant impact.

Page 4.6-158

The third paragraph has been modified as follows:

Implementation of the vegetation management element is not anticipated to affect Federally jurisdictional waters and wetlands along the Sacramento River East Levee. However, it would result in the removal of a total of approximately 600 trees from Sacramento River East Levee (308 on the waterside and 288 on the landside) (Table 4.6-7). Most of the trees on the waterside are native, while most of the trees on the landside are nonnative; regardless, most are associated with Fremont cottonwood forest and valley oak woodland habitat, which are considered sensitive. The removal of these trees would result in a total loss of approximately 16.0415.99 acres of canopy along the Sacramento River East Levee (Table 4.6-8), which represents a substantial loss of tree canopy cover, especially relative to the overall landscape (Table 4.6-9). Implementation of the Conservation Strategy would occur along the waterside of the Sacramento River East Levee, at the erosion repair and bank stabilization sites, as well as other areas along the levee where additional riparian woodlands could be established. The Conservation Strategy would result in an overall improvement in habitat quality and the long-term effect on sensitive habitats, including wetlands, jurisdictional waters, and riparian habitat, in the Sacramento River East Levee Improvements area and is anticipated to be beneficial. However, it is not known if the amount would be adequate to offset impacts to these sensitive habitats; therefore, these proposed project elements would have a significant impact. Mitigation Measure BIO-10 has been identified to address this impact.
A new section has been added under the State Regulatory Setting as follows:

**Tribal Cultural Resources**

Although Assembly Bill 52 (AB 52), which was passed in 2014 and amends sections of CEQA relating to Native American cultural resources, does not apply to this proposed project because the Notice of Preparation for this project was issued prior to July 1, 2015 and the environmental analysis for this proposed project has included consideration of Tribal cultural resources. AB 52 establishes a new category, named *Tribal Cultural Resources*, and states that a project with an effect that may cause a substantial adverse change in the significance of a Tribal cultural resource may have a significant effect on the environment. AB 52 requires a lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the Tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the Tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. Tribal Cultural Resources are defined in California PRC Section 21074 as the following:

- (a)(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - Included or determined to be eligible for inclusion in the CRHR.
  - Included in a local register of historical resources as defined in Subdivision (k) of California PRC Section 5020.1.

- (a)(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Subdivision (c) of California PRC Section 5024.1 (CRHR eligibility criteria). In applying the criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

- (b) A cultural landscape that meets the criteria of Subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

- (c) A historical resource described in California PRC Section 21084.1, a unique archaeological resource as defined in Subdivision (g) of California PRC Section 21083.2, or a “non-unique archaeological resource” as defined in Subdivision (h) of California PRC Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of Subdivision (a).

Section 21084.3 has been added to the California PRC and states that “public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.”

The “Native American Heritage Commission” section title has been changed as follows:
Native American Heritage Commission and California Public Resources Codes Related to Human Burials

Page 4.7-3

Text has been deleted in the last paragraph as follows:

California PRC Sections 5097.91–5097.94 created the nine-member Native American Heritage Commission (NAHC). The NAHC identifies and catalogs places of special religious or social significance to Native Americans and known graves and cemeteries of Native Americans on private lands, and performs other duties regarding the preservation and accessibility of sacred sites and burials and the disposition of Native American human remains and burial items. Applies to the disposition of human remains encountered during work on the proposed project.

Pages 4.4

Text regarding the duties of the Native American Heritage Commission and California Public Resources Code as it relates to human burials has been added after the final paragraph on page 4.7-4, as follows:

The commission shall have the following powers and duties:

(a) To identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands. The identification and cataloguing of known graves and cemeteries shall be completed on or before January 1, 1984. The commission shall notify landowners on whose property such graves and cemeteries are determined to exist, and shall identify the Native American group most likely descended from those Native Americans who may be interred on the property.

(b) To make recommendations relative to Native American sacred places that are located on private lands, are inaccessible to Native Americans, and have cultural significance to Native Americans for acquisition by the state or other public agencies for the purpose of facilitating or assuring access thereto by Native Americans.

(c) To make recommendations to the Legislature relative to procedures that will voluntarily encourage private property owners to preserve and protect sacred places in a natural state and to allow appropriate access to Native American religionists for ceremonial or spiritual activities.

(d) To appoint necessary clerical staff.

(e) To accept grants or donations, real or in kind, to carry out the purposes of this chapter and the California Native American Graves Protection and Repatriation Act of 2001 (Chapter 5 (commencing with Section 8010) of Part 2 of Division 7 of the Health and Safety Code).

(f) To make recommendations to the Director of Parks and Recreation and the California Arts Council relative to the California State Indian Museum and other Indian matters touched upon by department programs.

(g) To bring an action to prevent severe and irreparable damage to, or assure appropriate access for Native Americans to, a Native American sanctified cemetery, place of worship, religious or
ceremonial site, or sacred shrine located on public property, pursuant to Section 5097.97. If the court finds that severe and irreparable damage will occur or that appropriate access will be denied, and appropriate mitigation measures are not available, it shall issue an injunction, unless it finds, on clear and convincing evidence, that the public interest and necessity require otherwise. The Attorney General shall represent the commission and the state in litigation concerning affairs of the commission, unless the Attorney General has determined to represent the agency against whom the commission’s action is directed, in which case the commission shall be authorized to employ other counsel. In an action to enforce this subdivision the commission shall introduce evidence showing that a cemetery, place, site, or shrine has been historically regarded as a sacred or sanctified place by Native American people and represents a place of unique historical and cultural significance to an Indian tribe or community.

(h) To request and utilize the advice and service of all federal, state, local, and regional agencies, including for purposes of carrying out the California Native American Graves Protection and Repatriation Act of 2001 (Chapter 5 [commencing with Section 8010] of Part 2 of Division 7 of the Health and Safety Code).

(i) To assist Native Americans in obtaining appropriate access to sacred places that are located on public lands for ceremonial or spiritual activities.

(j) To assist state agencies in any negotiations with agencies of the federal government for the protection of Native American sacred places that are located on federal lands.

(k) (1) To mediate, upon application of either of the parties, disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

(k) (2) The agreements shall provide protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction and provide for sensitive treatment and disposition of Native American burials, skeletal remains, and associated grave goods consistent with the planned use of, or the approved project on, the land.

(l) To assist interested landowners in developing agreements with appropriate Native American groups for treating or disposing, with appropriate dignity, of the human remains and any items associated with Native American burials.

(m) To provide each California Native American tribe, as defined in Section 21073, on or before July 1, 2016, with a list of all public agencies that may be a lead agency pursuant to Division 13 (commencing with Section 21000) within the geographic area with which the tribe is traditionally and culturally affiliated, the contact information of those public agencies, and information on how the tribe may request the public agency to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation pursuant to Section 21080.3.1.

(n) (1) To assume the powers and duties of the former Repatriation Oversight Commission and meet, when necessary and at least quarterly, to perform the following duties:
(A) Order the repatriation of human remains and cultural items in accordance with the act.

(B) Establish mediation procedures and, upon the application of the parties involved, mediate disputes among tribes and museums and agencies relating to the disposition of human remains and cultural items. The commission shall have the power of subpoena for purposes of discovery and may impose civil penalties against any agency or museum that intentionally or willfully fails to comply with the act. Members of the commission and commission staff shall receive training in mediation for purposes of this subparagraph. The commission may delegate its responsibility to mediate disputes to a certified mediator or commission staff.

(C) Establish and maintain an Internet Web site for communication among tribes and museums and agencies.

(D) Upon the request of tribes or museums and agencies, analyze and make decisions regarding providing financial assistance to aid in specific repatriation activities.

(E) Make recommendations to the Legislature to assist tribes in obtaining the dedication of appropriate state lands for the purposes of reinterment of human remains and cultural items.

(F) (i) Prepare and submit to the Legislature an annual report detailing commission activities, disbursement of funds, and dispute resolutions relating to the repatriation activities under the act.

(F) (ii) A report submitted to the Legislature pursuant to this subparagraph shall be submitted in compliance with Section 9795 of the Government Code.

(G) Refer any known noncompliance with the federal Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.) to the United States Attorney General and the Secretary of the Interior.

(H) Impose administrative civil penalties pursuant to Section 8029 of the Health and Safety Code against an agency or museum that is determined by the commission to have violated the act.

(I) Establish those rules and regulations the commission determines to be necessary for the administration of the act.

(2) For purposes of this subdivision, the following terms have the following meanings:

(A) “Act” means the California Native American Graves Protection and Repatriation Act (Chapter 5 (commencing with Section 8010) of Part 2 of Division 7 of the Health and Safety Code).

(B) “Tribe” means a “California Indian tribe” as that term is used in the act.

Regulatory Requirements Related to Human Remains

Guidelines for implementation of CEQA (CCR Section 15064.5[d] [e]) specifies the procedures that shall be implemented if Native American human remains are known to exist or if there is probable likelihood of their existence in a proposed project area (California PRC 5097.98); cites the prohibition on disinterring or otherwise...
disturbing human remains (California Health and Safety Code 7050.5); and specifies the procedures that shall be followed in the event of the accidental discovery or recognition of human remains during implementation of a project (California PRC 5097.98).

**California PRC Section 5097.98:**

Whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 (see below) of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. (b) Upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section, with the most likely descendants regarding their recommendations, if applicable. taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. (1) The descendants' preferences for treatment may include the following: (A) The nondestructive removal and analysis of human remains and items associated with Native American human remains. (B) Preservation of Native American human remains and associated items in place. (C) Relinquishment of Native American human remains and associated items to the descendants for treatment. (D) Other culturally appropriate treatment. (2) The parties may also mutually agree to extend discussions, taking into account the possibility that additional or multiple Native American human remains, as defined in this section, are located in the project area, providing a basis for additional treatment measures. (c) For the purposes of this section, “conferral” or “discuss and confer” means the meaningful and timely discussion and careful consideration of the views of each party, in a manner that is cognizant of all parties' cultural values, and where feasible, seeking agreement. Each party shall recognize the other's needs and concerns for confidentiality of information provided to the other. (d)(1) Human remains of a Native American may be an inhumation or cremation, and in any state of decomposition or skeletal completeness. (2) Any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. (e) Whenever the commission is unable to identify a descendant, or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. To protect these sites, the landowner shall do one or more of the following: (1) Record the site with the commission or the appropriate Information Center.
(2) Utilize an open-space or conservation zoning designation or easement. (3) Record a document with the county in which the property is located. The document shall be titled “Notice of Reinterment of Native American Remains” and shall include a legal description of the property, the name of the owner of the property, and the owner's acknowledged signature, in addition to any other information required by this section. The document shall be indexed as a notice under the name of the owner. (f) Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with the descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of the discovery may be ascertained from a review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to subdivision (e).

California Health and Safety Code Section 7050.5:

(a) Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the Public Resources Code. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the Public Resources Code or to any person authorized to implement Section 5097.98 of the Public Resources Code.

(b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

(c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Text has been added after the first paragraph of the “Native American Consultation” section as follows:

On January 9, 2015, SAFCA held a meeting with interested Native Americans, including representatives from UAIC, Shingle Springs Band of Miwok Indians, and Wilton Rancheria. Representatives from the UAIC stated that they would make their cultural resource database available for review by a SAFCA representative. On January 20, 2015, Denise Jurich, RPA (GEI Consultants, Inc.) followed up with UAIC and requested access to the UAIC database. At the same meeting Shingle Springs Band of Miwok Indians and Wilton Rancheria
representatives stated that they would provide a sensitivity assessment. At the conclusion of the site visit on March 4, 2015, Mr. Dutschke stated he would review his GIS database for cultural resources in the project Area of Potential Effects (APE). UAIC subsequently provided USACE and SAFCA with a sensitivity map of the project area which illustrated general areas that the Tribe feels is sensitive for Native American resources. SAFCA has not received any specific information regarding Native American cultural resources from Shingle Springs Band of Miwok Indians, Wilton Rancheria, or the Ione Band of Miwok Indians. On July 23, 2015, Mr. Hutchason contacted SAFCA’s environmental consultant by email and requested further consultation under Section 106 of the NHPA for the North Sacramento Streams component of the proposed project. USACE responded to Mr. Hutchason on July 28, 2015, and provided the project APE map and Section 106 consultation letter.

For the North Sacramento Streams component of the project, USACE sent letters to tribes identified by the NAHC June 24, 2015, providing a map of the APE, description of the project, requesting to initiate consultation under Section 106 with Tribes, and requesting information on cultural resources of importance to Tribes. To date, three responses have been received by USACE. Mr. Hutchason, Executive Director of the Environmental Resources Department at the Wilton Rancheria, responded by email on July 29, 2015 and thanked USACE for providing the consultation letter and APE map and indicated that he will review the information and respond at a later time with possible dates to meet. Mr. Guerrero of the UAIC responded by email on August 10, 2015 indicating that UAIC would like a monitor present during all of the geotechnical [geoarchaeological] work and that there are some Pleistocene soils/sand bars and dunes in the APE that are of concern to UAIC. Kara Perry and Cynthia Franco of Shingle Springs Band of Miwok Indians responded, indicating an interest in the North Sacramento Streams project area.

On October 14, 2015, USACE sent a letter to all Native American contacts for the North Sacramento Streams project area that indicated that geoarchaeological trenching was being planned within the project’s APE. The proposed geoarchaeological trenching plan document was attached to each letter and the letter solicited comments and questions about the proposed trenching plan. To date no additional responses have been received by USACE and only UAIC has specifically requested to conduct Native American monitoring during trenching activities. On behalf of SAFCA, GEI Consultants, Inc. has requested that UAIC provide a Native American monitor to observe the geoarchaeological trenching. On December 2, 2015, USACE sent an email to Kara Perry and Cynthia Franco of Shingle Springs Band of Miwok Indians and to Antonio Ruiz and Steven Hutchason of Wilton Rancheria with an attached map illustrating revised geoarchaeological trench locations (some trench locations were revised slightly due to access restrictions).

On August 28, 2015, SAFCA conducted a field review of the Sacramento River East Levee project footprint with Representatives of UAIC, USACE, and SAFCA’s environmental consultant’s archaeologists. SAFCA conducted a follow-up field review of selected portions of the Sacramento River East Levee project footprint with Representatives of UAIC and SAFCA’s environmental consultant’s archaeologists on October 1, 2015.

On September 22, 2015, the NAHC sent SAFCA’s environmental consultant an updated list of Native American contacts for the Sacramento River East Levee component of the proposed project and also the updated results of a search of their Sacred Lands File. The NAHC indicated that no Sacred sites were identified as a result of their Sacred Lands File search. On October 23, 2015, USACE sent Section 106 consultation letters to Native American listed on the NAHC contact list for the Sacramento River East Levee component of the proposed project. To date, USACE has not received any responses to this letter.
On April 14, 2016, USACE sent a letter to all Native American contacts for the Sacramento River East Levee project area that indicated that a pedestrian archaeological survey of the APE would be conducted on the week of April 25, 2016.

**Page 4.7-16**

A new section has been added after “Field Surveys” as follows:

**Geoarchaeological Investigations in the North Sacramento Streams Project Area**

**Prefield Sensitivity Assessment**

On June 1, 2015, Far Western Anthropological Research Group (FWARG) completed a sensitivity assessment of buried prehistoric site potential for the North Sacramento Streams Levee Improvement APE. The main factors used to assess the potential for buried sites are: (1) age of surface landforms, and (2) the distance to a viable water source, or the position historical stream channels in this case. Soil and geological maps indicate the project area is underlain by alluvial landforms, but the majority of these formed during the Pleistocene and, therefore, pre-date the arrival of people to the region. Because of this, prehistoric sites can and do occur at the surface of these older landforms, but cannot be buried within them. In contrast, younger Holocene-age landforms only occur along the lower portions of the streams, which include Arcade and Dry Creeks.

Based on this study, the potential for buried sites appears to be low or lowest in more than 90 percent of the project APE, which corresponds closely with the areas of Pleistocene-age landforms. About 8 percent of the project APE is considered to have a moderate potential for buried sites, but less than 1 percent of the project APE is modeled as having a high or highest potential for buried sites, which are restricted to the lower portions of Arcade and Dry creeks. Within the area of direct impact, the area of ground disturbance, only two areas are identified as having a moderate potential for buried sites. The rest of the project area has a low potential for buried sites. USACE is requiring subsurface trenching to confirm the geoarchaeological findings as part of the Section 106 identification process.

**Geoarchaeological Test Excavations**

In September 2015, AECOM prepared a Geoarchaeological Testing Proposal for the North Sacramento Streams Project area based on the sensitivity analysis conducted by FWARG (described above). In addition to the findings of the sensitivity analysis, the testing proposal also took into consideration proposed project work, utility locations, property access, and regulatory restrictions on ground-disturbing work on levees and certain biologically sensitive areas. The testing proposal identified 18 locations where mechanical trenching would be conducted in order to better establish a subsurface context for the project area and to identify any subsurface archaeological deposits, if present.

On December 16 through December 19, 2015, GEI Consultants, Inc. in association with AECOM, under the direction of AECOM geoarchaeologist Jay Rehor, RPA, conducted geoarchaeological mechanical trenching at 13 locations in the North Sacramento Streams APE. Trenches were excavated in each of levee improvement project components areas including three trenches in the 2K Borrow site, two trenches along the NEMDC, four trenches along Arcade Creek, and four trenches in the Roble Creek Mitigation site area. The trenching operation was monitored by the UAIC. Trenches were excavated by a backhoe under the supervision of the geoarchaeologist and
each trench was approximately 3 feet wide, 12 feet long, and of variable depth depending on findings and soil conditions. Samples from each trench were passed through a 1/4-inch wire mesh sieve. Below is a summary of the trenching findings in each project component area:

- Two of the three trenches excavated in the 2K Borrow site extended 6 feet below the surface and the remaining trench was excavated to 2 feet below the surface. Excavation was terminated at each of these trenches when a very hard Pleistocene age soil was encountered which is too old to contain archaeological material. No archaeological material was identified.

- The four trenches excavated in the Robla Creek site mitigation area extended 12 below the surface and were terminated because this depth exceeded potential project disturbance depths and no archaeological materials were identified.

- Three of the four trenches along Arcade Creek reached a depth of 11 feet below the surface and the remaining trench along Arcade Creek reached a depth of 6.5 feet where hard Pleistocene soils were encountered. No archaeological material was identified in these trenches.

- The two trenches excavated along the NEMDC were excavated to a depth of 10 feet below surface. Pleistocene soils were encountered at a depth of approximately 2 feet below surface in these trenches and no cultural material was identified.

In summary, the geoarchaeological trenching conducted in the North Sacramento Streams Project area resulted in the identification of no archaeological materials. The identification of fairly shallow older Pleistocene soils in most areas confirmed the findings of geoarchaeological sensitivity analysis of generally low sensitivity for buried archaeological deposits in the project APE.

**Page 4.7-17**

Text has been changed in the third and fourth paragraphs as follows:

Although there are no surface indications that prehistoric archaeological sites 34-000055/CA-SAC-28, 34-000057/CA-SAC-30, 34-000069/CA-SAC-42, P-34-000070/CA-SAC-43, and 34-000071/CA-SAC-44 exist, there is the possibility that intact cultural deposits are buried underneath the existing levee. In addition, during a tour of the area with Native American representatives, it became apparent that this area is very sensitive for Native American resources, including the possibility of human burials. Also, because of their potential to address important research issues about subsistence, settlement, trade, and other topics, prehistoric archaeological sites 34-000055/CA-SAC-28, 34-000057/CA-SAC-30, 34-000069/CA-SAC-42, and 34-000071/CA-SAC-44 may be eligible under Criterion AD of the NRHP and Criterion 4 of the CRHR.

Resource P-34-619/SAC-505-H has high potential to contain intact historic-period deposits as evidenced from the dense quantity of 19th century artifacts exposed in the cut bank. Deposits associated with a 19th century community refuse dump may address important research questions about consumerism, refuse disposal, as well as globalization in early Sacramento and would therefore be eligible under Criterion AD of the NRHP and Criterion 4 of the CRHR.
Text has been changed in the final two paragraphs as follows:

Although there are no surface indications that prehistoric archaeological sites P-34-219/CA-SAC-192, P-34-4051, and P-34-67/CA-SAC-40 exist, there is the possibility that intact cultural deposits are buried underneath the existing levee. Because of their potential to address important research issues about subsistence, settlement, trade, and other topics, prehistoric archaeological sites P-34-219/CA-SAC-192, P-34-4051, and P-34-67/CA-SAC-40 may be eligible under Criterion AD of the NRHP and Criterion 4 of the CRHR.

Resource P-34-749/CA-SAC-574H is an historic-era trash scatter of bottle glass, ink bottles, condiment jars, brick fragments, and pieces of rusted metal. The site has the potential to contain intact historic-period deposits as evidenced from the dense quantity of 19th century artifacts exposed in the cut bank. Deposits associated with a 19th century community may address important research questions about consumerism, refuse disposal, as well as globalization in early Sacramento and would therefore be eligible under Criterion AD of the NRHP and Criterion 4 of the CRHR.

Mitigation Measure CR-1 has been modified as follows:

Mitigation Measure CR-1: Conduct Landscape Inventory, Prepare Cultural Landscape Report, and Implement Treatment Measures.

Prior to the removal of any Victory Trees along SR 160, SAFCA shall conduct a cultural landscape inventory, prepare a cultural landscape report, and implement the recommended treatment measures. The inventory shall identify which of the trees along the tree row are original and will identify treatment measures for the retention and for mitigating the effects of the historic landscape features. The cultural landscape inventory shall include an inventory of traditional cultural landscapes including any Native American plant gathering areas and other areas of Native American traditional use. The report shall summarize traditional Native American ecological knowledge of the project area based on information obtained from culturally affiliated Native Americans. The inventory and report shall be prepared by an historical landscape architect and other qualified cultural resources professionals. To identify which of the trees along the tree row are original and to recommend treatment measures for the retention and for mitigating the effects of the historic landscape features.

Mitigation Measure 2a has been modified as follows:

Mitigation Measure 2a: Conduct Archaeological Monitoring during Ground Disturbance within 100 feet of Known Archaeological Resources and Prepare and Implement a Monitoring Plan.

- SAFCA shall retain the services of a professional archaeologist to prepare and implement a monitoring plan. The archaeologist and SAFCA shall seek the input of Native American Tribes that are traditionally and culturally affiliated with the geographic area. The plan shall contain, at a minimum, the following elements:
  - background context;
- relevant project components that may impact anticipated archaeological or other cultural resources;  
  definition of the construction footprint, including the use of a buffer around the construction footprint;  
- archaeological sensitivity of the construction footprint;  
- archaeological monitor qualifications;  
- monitoring procedures;  
- the activities to be monitored;  
- chain of command;  
- procedures for discoveries during construction ground-disturbing activities;  
- procedures for discovery of human remains;  
- laboratory and analysis methodologies;  
- daily monitoring documentation requirements; and  
- final monitoring report requirements.

- SAFCA shall retain the services of a professional prehistoric archaeologist and a culturally-affiliated Native American monitor during on-site earthwork within 100 feet of the recorded site boundaries of P-34-219/CA-SAC-192, P-34-66/CA-SAC-39, 34-000069/CA-SAC-42, 34-000057/CA-SAC-30, and 34-000070/CA-SAC-43. In addition, a professional historical archaeologist shall monitor ground-disturbing activities adjacent to and within the site boundary of P-34-749/SAC-574H and P-34-858/SAC-657H.

- SAFCA shall retain the services of culturally affiliated Native American monitors during on-site earthwork (including archaeological testing) within known sensitive cultural resource areas and within the boundaries of any identified Tribal Cultural Resources.

If cultural materials (e.g., unusual amounts of shell, animal bone, historic-era glass, metal, or ceramics, human remains) are encountered during project-related construction ground-disturbing activities, SAFCA, in consultation with the qualified archaeologist, shall develop additional appropriate protection measures. If the cultural material is Native American in origin, SAFCA shall seek the input of Native American Tribes that are traditionally and culturally affiliated with the geographic area. Measures shall comply with State CEQA Guidelines CCR Section 15126.4 if the resource is an historic resource of an archaeological nature and/or with CEQA Section 21083.2 if the resource is a unique archaeological resource. Additional protection measures may include, but are not necessarily limited to, additional documentary research, use of noninvasive investigation methods, subsurface testing, excavation, and preservation in-place.

If the discovery could potentially be human remains, work shall stop immediately and the appropriate procedures described in California Health and Safety Code Section 7050 et seq. and California Public Resources Code Section 5097.9 et seq. shall be implemented. Protection measures may include, but are not necessarily limited to, redesign of the project to avoid archaeological resources, capping the site with a layer of fill, excavation and removal of the burial under the direction of the Most Likely Descendant (MLD) a qualified archaeologist, reburial of the discovery according to the wishes of the designated Most Likely Descendant (MLD), preservation in place, or other protection measures that are mutually acceptable to the SAFCA and to the MLD Native American representative/s.

Project personnel shall not collect archaeological/cultural resource material found on the project site.

Native American representative/s shall be consulted regarding the need for culturally-appropriate treatment, additional excavation and/or further laboratory analysis and provided with draft and final hard copies and digital
copies of any reports documenting inadvertent discovery of cultural resources on site and shall be consulted regarding the need for additional excavation and further laboratory analysis.

**Timing:** Before and during construction ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

Page 4.7-34

Mitigation Measure CR-2b has been modified as follows:

**Mitigation Measure 2b: Avoid Archaeological Sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H and other Culturally Sensitive Areas.**

- SAFCA shall locate the approximately 5-acre Woodlake planting site and all associated staging areas in a location that is at least 100 feet away from the recorded boundaries of sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H.
- SAFCA shall use temporary fencing around the recorded boundaries of sites P-34-66/CA-SAC-39 and P-34-858/CA-SAC-657H to avoid encroaching on the archaeological sites during project-related activities.
- SAFCA shall consider project design alternatives, construction method alternatives and use of noninvasive investigation methods to avoid any identified significant cultural resources and identified sensitive areas if feasible.

**Timing:** Before and during construction ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

Page 4.7-34

Impact CR-3 has been revised as follows:

**Damage to or Destruction of Previously Undiscovered Archaeological Sites Cultural Resources.** It is possible that previously unknown archaeological cultural resource sites, including archaeological sites and Tribal Cultural Resources, could be unearthed and damaged or destroyed during excavation activities. Therefore, this impact would be potentially significant for the North Sacramento Streams Levee Improvements, Sacramento River East Levee Improvements, American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal, NEMDC/Steelhead Creek CMP areas.

Page 4.7-35

Mitigation Measure CR-3 has been revised as follows:

**Mitigation Measure CR-3: Implement Procedures for Inadvertent Discovery of Cultural Resources.**

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

SAFCA and their primary contractor(s) for engineering design and construction shall ensure that the following measures are implemented to reduce the potential for previously undiscovered cultural resources to be encountered and damaged during ground-disturbing activities:

- Before the commencement of ground-disturbing activities, a qualified professional archaeologist and a tribal monitor or representative shall give a presentation to all construction personnel regarding the likelihood and type of resources that might be found during ground-disturbing operations associated with the individual flood control projects, and measures that shall be taken in the event that potential archaeological or historical resources are found. The presentation shall include providing all construction personnel with standard operating procedures and points of contact in the event of a discovery of cultural material during ground-disturbing activities. Consulting culturally affiliated Native American Tribes shall be provided with project schedule information and points of contact in the event of a discovery of cultural material.

- If unrecorded cultural resources (e.g., shell, animal bone, bottle glass, ceramics, structure/building remains) are encountered during the site survey or during ground-disturbing activity, all ground-disturbing activities shall be restricted within a 100-foot radius of the find or a distance determined by a qualified professional archaeologist in consultation with a tribal representative to be appropriate based on the potential for disturbance of additional cultural resource materials. A qualified archaeologist, in consultation with a monitor or representative from a culturally affiliated Native American Tribe, shall identify the materials, determine their potential to meet the definition of a unique archaeological resource or a historical resource and formulate appropriate measures for their treatment, which shall be implemented by SAFCA. Potential treatment methods for significant and potentially significant resources may include, but would not be limited to, no action (i.e., resources determined not to be significant), avoidance of the resource through changes in construction methods or project design, implementation of protection and management measures, alternative mitigation, and/or implementation of a program of testing and data recovery, and use of noninvasive investigation methods in accordance with applicable Federal and State requirements.

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

SAFCA shall retain the services of a professional archaeologist to perform monitoring during on-site earthwork, with appropriate actions if potential cultural resources are discovered, as described below.

- If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, human remains, bottle glass, ceramics, building remains) is made at any other time during project-related
construction activities, SAFCA, in consultation with the qualified archaeologist, shall develop additional appropriate protection measures. If the cultural material is Native American in origin, SAFCA shall seek the input of Native American tribes that are traditionally and culturally affiliated with the geographic area. Measures shall comply with State CEQA Guidelines CCR Section 15126.4 if the resource is an historic resource of an archaeological nature and/or with CEQA Section 21083.2 if the resource is a unique archaeological resource. Additional protection measures may include, but are not necessarily limited to, additional documentary research, subsurface testing, excavation, and preservation in place.

If the discovery could potentially be human remains, work shall stop and the appropriate procedures described in California Health and Safety Code Section 7050 et seq. and California Public Resources Code Section 5907.9 et seq. shall be implemented. Protection measures may include, but are not necessarily limited to, redesign of the project to avoid archaeological resources, capping the site with a layer of fill, excavation, removal of the burial under the direction of a qualified archaeologist, reburial of the discovery according to the wishes of the designated MLD, preservation in place, or other protection measures that are mutually acceptable to SAFCA and to the Native American representative(s).

Native American representative/s shall be provided with hard copies and digital copies of any reports documenting inadvertent discovery of cultural resources on site and shall be consulted regarding the need for additional excavation and further laboratory analysis.

A new mitigation measure has been added to address potentially significant impacts resulting from North Sacramento Streams Levee Improvements under Impact CR-3, as follows:

Mitigation Measure CR-6: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas during Ground-Disturbing Activities

If the results of the inventory of cultural resources, including the results of Native American consultation, indicates that portions of or all of the project area is sensitive for the presence of buried or otherwise obscured or unidentified cultural resources or Tribal Cultural Resources (including Native American burials), a Native American and archaeological monitoring plan shall be developed and implemented in consultation with Culturally Affiliated Tribes. The monitoring plan shall specify under what conditions monitoring will be conducted, the methods of monitoring, the conditions under which ground-disturbing activities may be stopped or slowed, the conditions under which ground-disturbing work may be resumed, the roles and authority of monitors, communication protocols, and reporting requirements. Archaeological monitoring shall be conducted by or under the supervision of an archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards for Archaeology. Native American monitoring shall be conducted by one or more Monitors or Representatives of a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the project.

Timing: During-ground-disturbing activities.

Responsibility: Sacramento Area Flood Control Agency.
The Significance after Mitigation text for Impact CR-3 has been modified as follows:

**Significance after Mitigation:** Implementing Mitigation Measures CR-3 and CR-6 would reduce the potential for a significant impact resulting from inadvertent damage to or destruction of presently undocumented cultural resources to a **less-than-significant** level because it requires implementation of monitoring procedures and requires that if cultural materials (including human remains) are discovered during project-related construction activities, disturbances in the area of the find must be halted and appropriate treatment and protection measures must be implemented, all in consultation with a professional archaeologist and in accordance with State CEQA Guidelines CCR Section 15126.4 if the resource is a historic resource of an archaeological nature and/or with CEQA Section 21083.2 if the resource is a unique archaeological resource. If the discovery could potentially be human remains, compliance with California Health and Safety Code Section 7050 et seq. and California PRC Section 5097.9 et seq. would be required.

A new mitigation measure has been added to address potentially significant impacts resulting from Sacramento River East Levee Improvements under Impact CR-3, as follows:

**Mitigation Measure CR-5: Implement Procedures for Inventory and Evaluation of Archaeological Resources, Implement Feasible Avoidance or Treatment Measures**

SAFCA shall inventory and evaluate archaeological resources in the project area. At a minimum, the inventory shall include records searches at the Information Center of the California Historical Resources Information System (already completed but updates should be conducted if the project footprint changes) additional Native American consultation and other ethnographic research; NAHC Sacred Lands File (already completed but updates should be conducted if the project footprint changes or if there is a delay of more than 1 year in project implementation); a pedestrian archaeological survey of undeveloped and unpaved areas; and subsurface archaeological investigations if needed to identify buried archaeological deposits. Additional non-invasive methods may also be warranted and should be determined in consultation with all consulting parties. Resource recording procedures shall be implemented consistent with DPR 523 forms requirements and reporting requirements and shall be done in consultation with affected interested Native Americans (for Tribal Cultural Resources) or with the MLD if one is already designated.

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

Following completion of the cultural resources inventory, an inventory report shall be prepared by qualified cultural resources specialists that describes the cultural setting of the program area; the methods used in the investigation; all identified cultural resources, including archaeological sites, Tribal Cultural Resources and Traditional Cultural Properties, and cultural landscapes; and recommendations for further investigations, avoidance or other management actions. Each cultural resource identified in the component program area shall be evaluated for eligibility for listing on the CRHR and NRHP. Tribal Cultural Resources shall be evaluated in consultation with culturally affiliated Tribes and the views of consulting Tribes shall be included in the report. The cultural resources inventory report shall meet the
If ground-disturbance would be required in the vicinity of a known archaeological resource, a qualified professional archaeologist in consultation with culturally affiliated Native Americans shall establish the boundaries of the resource before the commencement of any ground-disturbance. If feasible, the project activities shall be designed to prevent disturbance of the resource. If, in the judgment of the archaeologist and Tribal representative, project activities could disturb the resource, the archaeologist in consultation with Tribal representatives and other qualified professionals shall prepare and implement a research design and treatment plan for archaeological resources and, before any construction-related ground-disturbance begins in the vicinity of the resource, shall carry out a testing program which may include noninvasive methods, as appropriate, based on the plan to determine whether the resource may meet the definition of a unique archaeological resource or an historical resource. If the construction activity is part of a Federal undertaking, all actions shall be conducted in compliance with Section 106 of the NHPA as well as State laws.

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

Avoidance and preservation-in-place is the preferred manner of mitigating impacts to a cultural resources and may be accomplished by several means, including planning construction to avoid archaeological sites; incorporation of sites within parks, greenspace, or other open space; covering archaeological sites; deeding a site into a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources will be reviewed by SAFCA, culturally affiliated Native American Tribes, and other appropriate agencies in light of factors such as costs, logistics, technological feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the program area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources, or modification or realignment to avoid highly significant features within a cultural resource. Culturally affiliated Native American Tribes shall be invited to review and comment on these analyses and shall have the opportunity to meet with SAFCA and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

SAFCA shall ensure that required protection actions are implemented before construction begins at the site. If artifacts are recovered from significant resources, their disposition shall be determined in consultation with Native Americans and consulting State and Federal agencies. The results of the identification, evaluation, and/or data recovery program shall be presented in a professional report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the appropriate repositories.
Timing: Prior to construction activities.

Responsibility: Sacramento Area Flood Control Agency.

Page 4.7-48 – 4.7-49

Mitigation Measure CR-6 has been added to address potentially significant impacts resulting from Sacramento River East Levee Improvements under Impact CR-3, as follows:

Mitigation Measure CR-6: Develop and Implement a Native American and Archaeological Monitoring Plan and Conduct Archaeological and Native American Monitoring of Sensitive Areas during Ground-Disturbing Activities.

Timing: Prior to and during ground-disturbing activities.

Responsibility: Sacramento Area Flood Control Agency.

Page 4.7-49 – 4.7-50

A new mitigation measure has been added to address potentially significant impacts resulting from Sacramento River East Levee Improvements under Impact CR-3, as follows:

Mitigation Measure CR-7: Implement Procedures for Inventory and Evaluation of Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects.

California Native American Tribes that are traditionally and culturally affiliated with the geographic area in which a program component is located may have expertise concerning their Tribal Cultural Resources (California PRC Section 21080.3.1) and shall continue to be consulted concerning the proposed project. Tribal Cultural Resources that may be impacted, and measures to avoid or minimize impacts. If SAFCA determines that the project may cause a substantial adverse change to a Tribal Cultural Resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation measures that, if feasible, that may be considered to avoid or minimize significant adverse impacts:

5. Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

6. Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
   d) Protecting the cultural character and integrity of the resource.
   e) Protecting the traditional use of the resource.
   f) Protecting the confidentiality of the resource.
7. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.

8. Protecting the resource.

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

Any information, including, but not limited to, the location, description, and use of the Tribal Cultural Resources, that is submitted by a California Native American Tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the Tribe that provided the information. If the lead agency publishes any information submitted by a California Native American Tribe during the consultation or environmental review process, that information shall be published in a confidential report or maintained in a confidential section of the administrative record unless the Tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. The confidential information, may, however, be exchanged between public agencies that have lawful jurisdiction over the proposed project.

SAFCA shall inventory and evaluate Tribal Cultural Resources in the project area. At a minimum, the inventory shall include additional Native American consultation and other ethnographic research focused on the identification of such resources; NAHC Sacred Lands File (already completed but updates should be conducted if the project footprint changes or if there is a delay of more than 1 year in project implementation); and a Native American pedestrian survey (conducted by cultural affiliated Native Americans). Locations identified by culturally affiliated Native Americans as Tribal Cultural Resources shall be considered to be Tribal Cultural Resources which are potentially significant resources under CEQA.

All identified Tribal Cultural Resources shall be recorded on DPR 523 forms, and the location of each Tribal Cultural Resource shall be recorded using a Global Positioning System device, both in consultation with the Tribe affiliated with that resource. Noninvasive investigation methods may be used to further delineate such resources.

Following completion of the Tribal Cultural Resources inventory, a confidential inventory report shall be prepared by qualified cultural resources specialists in cooperation with Native Americans that identified any Tribal Cultural Resources. This report may be incorporated into the Cultural Resources Inventory Report (CR-5) or may be a separate report if the consulting Native American request separation of the reports for consideration of confidentiality. The report shall include recommendations for further investigations, avoidance, treatment, mitigation or other management actions which may also include a long term operations and maintenance plan.
Each Tribal Cultural Resource identified in the project area shall be evaluated for eligibility for listing on the CRHR. Tribal Cultural Resources shall be evaluated in consultation with culturally affiliated Tribes and the views of consulting Tribes shall be included in the report.

If ground-disturbance would be required in the vicinity of a known Tribal Cultural Resource that was found to be eligible for the CRHR, culturally affiliated Native Americans shall establish the boundaries of the resource before the commencement of any ground-disturbance. If feasible, the project activities shall be designed to prevent disturbance of the resource. If, in the judgment of the Tribal representative, project activities could disturb the resource, SAFCA in consultation with Tribal representatives and other qualified professionals shall prepare and implement a treatment plan for Tribal Cultural Resources.

If the resource is determined to be ineligible for listing on the CRHR no further mitigation shall be required.

Recommendations for avoidance of Tribal Cultural resources will be reviewed by SAFCA, culturally affiliated Native American Tribes, and other appropriate agencies in light of factors such as costs, logistics, technological feasibility, design, technology, and social, cultural, and environmental considerations and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the program area to avoid Tribal Cultural Resources, modification of the design to eliminate or reduce impacts to Tribal Cultural Resources, or modification or realignment to avoid highly significant features within a Tribal Cultural resource. Culturally affiliated Native American Tribes shall be invited to review and comment on these analyses and shall have the opportunity to meet with SAFCA and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

SAFCA shall ensure that required protection actions are implemented before ground-disturbance begins at the site. If artifacts are recovered from significant resources, their disposition shall be determined in consultation with Native Americans and consulting State and Federal agencies. The results of the identification, evaluation, and treatment or avoidance shall be presented in a professional report that details all methods and findings and evaluates the nature and significance of the resources.

The confidential nature of the location, nature, qualities, use, function, and character of Tribal Cultural Resources shall be respected. These aspects of Tribal Cultural Resources shall not be included in public documents or in confidential cultural resources inventory reports without the express written permission of the culturally affiliated Native American tribe that provided such information. In order to appropriately protect, avoid or otherwise treat identified Tribal Cultural Resources, certain aspects of these resources, such as location and boundaries, may be provided to project design and planning personnel on a need-to-know basis and the locations and boundaries shall be designated on project construction plans generically as an “Environmentally Sensitive Area”.

**Timing:** Prior to ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.
Page 4.7-50

Text in the last paragraph of page 4.7-50 has been revised as follows:

**Significance after Mitigation:** Implementing Mitigation Measures CR-3, CR-5, CR-6, and CR-7 CR-3 would reduce the potential for a significant impact resulting from inadvertent damage or destruction of presently undocumented cultural resources to a less-than-significant level because it requires if cultural materials resources to be inventoried and evaluated, for a monitoring plan to be prepared and implemented, and for Tribal Cultural Resources to be inventoried and evaluated (including human remains) and avoided if feasible. If cultural resources are identified or discovered during project-related construction activities, disturbances in the area of the find must be halted and appropriate treatment and protection measures must be implemented, all in consultation with a professional archaeologist and in accordance with State CEQA Guidelines CCR Section 15126.4 if the resource is an historic resource of an archaeological nature and/or with CEQA Section 21083.2 if the resource is a unique archaeological resource. If the discovery could potentially be human remains, compliance with California Health and Safety Code Section 7050 et seq. and California PRC Section 5097.9 et seq. would be required.

Page 4.7-36

Text in the first paragraph of page 4.7-47 has been revised as follows:

Levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy activities would include substantial ground disturbance, and would include excavation, soil removal, trenching, construction of earthen berms, levee crown degradation and reconstruction for cutoff wall installation, and grading. For the same reasons described above in the North Sacramento Streams Levee Improvements area, these proposed project elements would have a potentially significant impact. Mitigation Measures CR-3, CR-5, CR-6, and CR-7 described below, has been identified to address this impact.

Page 4.7-38

Mitigation Measure CR-4a has been added and Mitigation Measure CR-4 has been renumbered as CR-4b. The paragraph preceding and the new mitigation measure read as follows:

The project vicinity is known to have contained documented significant prehistoric archaeological sites, including sites with human burials. Based on the intensity of documented prehistoric use, known early Native American occupation of the project study area, and the presence of human remains in previously identified sites in the project vicinity, it is possible that Native American human remains could be encountered during construction associated with levee reconstruction, encroachment removal, vegetation management, and Conservation Strategy activities in the North Sacramento Streams Levee Improvements area. Although no human remains were identified during subsurface exploration, it is possible that presently unknown human remains could be encountered during earthmoving activities. Therefore, these project elements would have a potentially significant impact. Mitigation Measures CR-4a and CR-4b, described below, have been identified to address this impact.

**North Sacramento Streams Levee Improvements**

A new mitigation measure, Mitigation Measure CR-4a, has been added to address potentially significant impacts resulting from North Sacramento Streams Levee Improvements and Mitigation Measure CR-4 (as it appeared in
the DEIR) has been renamed to Mitigation Measure CR-4b and text has been revised, under Impact CR-4, as follows:

Mitigation Measures CR-4a and CR-4b, described below, has have been identified to address this impact.

Mitigation Measure CR-4a: Prepare and Implement a Native American Burial Discovery and Treatment Plan.

SAFCA shall retain the services of a professional archaeologist to prepare a Native American Burial Discovery and Treatment Plan (Burial Plan) prior to commencement of ground-disturbing project-related activities at the project locations addressed by the environmental impact report. The Burial Plan shall be prepared and implemented to effectively, appropriately, and respectfully implement the requirements of the California Native American Historic Resources Protection Act and its implementing regulations (California Public Resources Code Section 5097) which establish procedures for the culturally-appropriate and dignified treatment of human remains of Native American origin and associated grave items in California on non-Federal land.

The purpose of the Burial Plan is to specify appropriate and respectful procedures and guidelines to be followed upon discovery of Native American burials, burial objects, burial materials, objects of cultural patrimony, and sacred objects that may be encountered during project construction and project-related ground-disturbing activities under the jurisdiction of SAFCA.

Although SAFCA shall be responsible for the preparation and implementation of the Burial Plan, the contents of the plan shall be prepared in cooperation and consultation with affected interested Native Americans or with the MLD if one is already designated.

USACE, Sacramento District, as the Federal agency responsible for compliance with Section 106 of the NHPA, shall be invited to review and comment upon the Burial Plan prior to its finalization to ensure that no provisions of the Burial Plan are in conflict with the regulations implementing the NHPA or its implementing regulations (36 CFR Part 800 and 33 CFR Part 325 Appendix C).

The Burial Plan will also be consistent with the guidance offered by the Advisory Council on Historic Preservation’s March 31, 2015, letter in the Feather River West Levee Project matter.

The implementation of the Burial Plan, should Native American human remains and associated grave items and materials be discovered, shall be accomplished in cooperation and consultation between SAFCA and the MLD who will be identified by the California NAHC.

The Burial Plan shall contain, at a minimum, the following elements:

- definitions of burial, burial associated, burial objects and materials, and other key terms used in the Burial Plan;
- conditions under which ground-disturbing activities shall be halted and conditions under which ground-disturbing work may resume;
- procedures for notification of Native Americans and agencies in the event of a discovery of objects, materials, or locations addressed by the Burial Plan;
• procedures for avoidance and preservation when determined to be feasible;

• monitoring requirements;

• procedures for archaeological exploration and delineation of the subject area including both horizontal and vertical dimensions;

• requirements for respectful behavior in the immediate vicinity of a burial or sacred location and identification of prohibited actions and behaviors at locations where Native American burial remains are visible, and the process for determining the geographic extend of prohibited actions;

• procedures for the respectful recovery of burials and associated items and materials;

• procedures for respectful temporary storage of burials and associated items and materials until the MLD can determine the appropriate final disposition of the items;

• qualifications of individuals who may excavate or otherwise treat Native American burials and associated items and materials;

• roles, responsibilities, and authority of key participants;

• procedures and timeframe for reinterment (under direction of the MLD) and development of long term operation, maintenance and monitoring protocols to protect burials and reburial areas;

• procedures for dispute resolution; and

• requirements for documentation, reporting, and work logs.

Timing: Before construction or other ground-disturbing activities including archeological and other testing.

Responsibility: Sacramento Area Flood Control Agency.

Mitigation Measure CR-4b: Implement Procedures for Inadvertent Discovery of Human Remains.

In accordance with the California Health and Safety Code, if human remains are discovered on non-Federal land during ground-disturbing activities, SAFCA shall immediately halt potentially damaging excavation in the area of the burial and notify the Coroner in the county of which the discovery was made and retain the services of a professional archaeologist and consult with affected interested Native Americans or with the MLD if one is already designated to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050.5[c]). California PRC Section 5097.98 (d) states that human remains of a Native American may be an inhumation or cremation, and be in any state of decomposition or skeletal completeness. Further, any items associated with the human remains that are placed or buried with the Native American human
remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. After the Coroner’s findings have been made, the archaeologist and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains. The responsibilities of SAFCA for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

- Upon the discovery of potential Native American remains, SAFCA shall require that all construction and all other ground-disturbing activities must immediately stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including preservation-in-place, nondestructive removal and analysis, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. SAFCA and the MLD may also:

3. Record the site with the NAHC or the appropriate Information Center.

4. Record a document with the county in which the property is located.

- SAFCA or SAFCA’s authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. SAFCA or SAFCA’s authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to the agency. SAFCA shall implement measures for the protection of the burial remains. Ground-disturbing activities in the vicinity of the burials shall not resume until the mitigation is completed.

**Timing:** During ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

- In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, SAFCA shall immediately halt potentially damaging excavation in the area of the burial and notify the Sacramento County Coroner 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 (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). After the coroner’s findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD) shall determine the ultimate treatment and disposition of the remains. The responsibilities of SAFCA for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.
Upon the discovery of Native American remains, SAFCA shall require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. The following is a list of site protection measures that SAFCA shall employ:

1. Record the site with the NAHC or the appropriate Information Center.

2. Record a document with the county in which the property is located.

SAFCA or SAFCA’s authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. SAFCA or SAFCA’s authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to SAFCA. SAFCA shall implement mitigation for the protection of the burial remains. Construction work in the vicinity of the burials shall not resume until the mitigation is completed.

**Timing:** During construction activities.

**Responsibility:** Sacramento Area Flood Control Agency.

The Significance after Mitigation under Mitigation Measure CR-4a and b has been revised as follows:

**Significance after Mitigation:** Implementation of Mitigation Measures CR-4a and CR-4b would reduce the potential for a significant impact from damage to or destruction of presently unknown human remains to a less-than-significant level, because they would require preparation of a Burial Discovery and Treatment Plan and would require compliance with the procedures in the California Health and Safety Code outlined above. These procedures are specifically designed to reduce the adverse effect of project implementation related to human remains by requiring that the human remains are treated in an appropriate and respectful manner and in accordance with applicable laws and regulations.

The proposed mitigation for impacts related to the Sacramento River East Levee Improvements under Impact CR-4 has been revised as follows:

**Sacramento River East Levee Improvements**

The project vicinity is known to have contained documented significant prehistoric archaeological sites, including sites with human burials. It is possible that Native American human remains could be encountered during construction associated with encroachment removal, vegetation management, and Conservation Strategy activities. Although no human remains were identified during subsurface exploration, it is possible that presently unknown human remains could be encountered during earthmoving activities. Therefore, these proposed project
elements would have a potentially significant impact. Mitigation Measures CR-4a and 4b, described below, have been identified to address this impact.

**Mitigation Measure: Implement Mitigation Measure CR-4a: Prepare and Implement a Native American Burial Discovery and Treatment Plan.**

**Timing:** Before construction or other ground-disturbing activities including archeological and other testing.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure: Implement Mitigation Measure CR-4b (Implement Procedures for Inadvertent Discovery of Human Remains).**

**Timing:** During ground-disturbing construction activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measures CR-4a and 4b would reduce the potential for a significant impact from damage to or destruction of presently unknown human remains to a less-than-significant level, because they would require preparation of a Burial Discovery and Treatment Plan and it would require compliance with the procedures in the California Health and Safety Code outlined above. These procedures are specifically designed to reduce the adverse effect of project implementation related to human remains by requiring that the human remains are treated in an appropriate and respectful manner and in accordance with applicable laws and regulations.

The proposed mitigation for impacts related to the American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal under Impact CR-4 has been revised as follows:

**American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal**

The American River and Beach Lake Levees High-Hazard Levee Encroachment and Vegetation Removal areas are known to have contained documented significant prehistoric archaeological sites, including sites with human burials. It is possible that Native American human remains could be encountered during construction associated with encroachment removal, vegetation management, and Conservation Strategy, and activities. Although no human remains were identified during subsurface exploration, it is possible that presently unknown human remains could be encountered during earthmoving activities. Therefore, these proposed project elements would have a potentially significant impact. Mitigation Measures CR-4a and CR-4b, described below, have been identified to address this impact.

**Mitigation Measure: Implement Mitigation Measure CR-4a: Prepare and Implement a Native American Burial Discovery and Treatment Plan.**

**Timing:** Before construction or other ground-disturbing activities including archeological and other testing.

**Responsibility:** Sacramento Area Flood Control Agency.
Mitigation Measure: Implement Mitigation Measure CR-4b (Implement Procedures for Inadvertent Discovery of Human Remains).

**Timing:** During construction ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measures CR-4a and CR-4b would reduce the potential for a significant impact from damage to or destruction of presently unknown human remains to a less-than-significant level, because they would require preparation of a Burial Discovery and Treatment Plan and it would require compliance with the procedures in the California Health and Safety Code outlined above. These procedures are specifically designed to reduce the adverse effect of project implementation related to human remains by requiring that the human remains are treated in an appropriate and respectful manner and in accordance with applicable laws and regulations.

The proposed mitigation for impacts related to the Natomas East Main Drainage Canal/Steelhead Creek Corridor Management Plan under Impact CR-4 has been revised as follows:

**Natomas East Main Drainage Canal/Steelhead Creek Corridor Management Plan**

The project vicinity is known to have contained documented significant prehistoric archaeological sites, including sites with human burials. Based on the intensity of documented prehistoric use, known early Native American occupation of the project study area, and the presence of human remains in previously identified sites in the project vicinity, it is possible that Native American human remains could be encountered during construction associated with NEMDC/Steelhead Creek CMP activities. Although no human remains were identified during subsurface exploration, it is possible that presently unknown human remains could be encountered during earthmoving activities. Therefore, these project elements would have a potentially significant impact. Mitigation Measures CR-4a and CR-4b, described below, have been identified to address this impact.

**Mitigation Measure: Implement Mitigation Measure CR-4a: Prepare and Implement a Native American Burial Discovery and Treatment Plan.**

**Timing:** Before construction or other ground-disturbing activities including archaeological and other testing.

**Responsibility:** Sacramento Area Flood Control Agency.

**Mitigation Measure: Implement Mitigation Measure CR-4b (Implement Procedures for Inadvertent Discovery of Human Remains).**

**Timing:** During construction ground-disturbing activities.

**Responsibility:** Sacramento Area Flood Control Agency.

**Significance after Mitigation:** Implementation of Mitigation Measures CR-4a and CR-4b would reduce the potential for a significant impact from damage to or destruction of presently unknown human remains to a less-than-significant level, because they would require preparation of a Burial Discovery and Treatment Plan and it would require compliance with the procedures in the California Health and Safety Code outlined above. These
procedures are specifically designed to reduce the adverse effect of project implementation related to human remains by requiring that the human remains are treated in an appropriate and respectful manner and in accordance with applicable laws and regulations.

Page 4.7-41

The fourth and fifth paragraphs under “Residual Significant Impacts” have been revised as follows:

With implementation of Mitigation Measure CR-3, CR-5, CR-6, and CR-7, impacts related to previously unrecorded archaeological resources would be reduced to a less-than-significant level. Therefore, no residual significant impacts would occur.

With implementation of Mitigation Measures CR-4a and CR-4b, impacts related to previously undocumented human remains would be reduced to a less-than-significant level. Therefore, no residual significant impacts would occur.

SECTION 4.9 – GEOMORPHOLOGY

Page 4.9-15

The bullet for CM-6 has been modified as follows:

- **CM-6: Limit Rock Riprap for Erosion Protection.** The amount of rock riprap and other materials used for bank protection shall be commensurate limited to the minimum amount needed for erosion protection and establishment of planting benches.

SECTION 4.10 – GREENHOUSE GAS EMISSIONS

Page 4.10-11

The second bullet in the second bulleted list has been modified as follows:

- the annual operational emissions of a land use development project exceed 1,100 MT CO₂e/yr or 900 MT CO₂e/yr (SMAQMD 2014); or

SECTION 4.15 – NOISE

Page 4.15-45

The following text has been added to the second-to-last bullet under Mitigation Measure NOI-2:

- Place vibration monitoring equipment at the property line adjacent to large equipment and, with owner approval, at the back of the residential structures adjacent to the large equipment. Record measurements daily.
SECTION 4.17 – TRANSPORTATION AND TRAFFIC

Page 4.17-6

A paragraph has been added following the second paragraph under the heading, “Roadways:”

In addition to haul routes, construction would affect Norwood Avenue and Rio Linda Boulevard where these roadways cross Arcade Creek.

Page 4.17-16

Text has been added to the second paragraph under the heading, “Analysis Methodology” as follows:

The proposed project would consist of constructing levee improvements, as well as activities associated with encroachment removal, vegetation management, the Conservation Strategy, and the NEMDC/Steelhead Creek CMP (North Sacramento Streams Levee Improvements area only), throughout the Sacramento area. Because of the earthwork involved and the need for material deliveries, construction would intermittently generate substantial volumes of traffic. Once the construction is completed, maintenance needs would be similar to current conditions. The proposed project would not introduce any new land uses or activities to the area that would generate long-term increases in traffic volumes; therefore, the following discussion considers only the impacts of construction-related activities under the proposed project. Consideration of potential traffic increases and construction related delays is limited to those increases caused by temporary and short-term construction activities for improvements under the proposed project. The key effects were identified and evaluated based on the environmental characteristics of the project study area and the magnitude, intensity, and duration of activities related to project construction.

Page 4.17-21

Impact TR-1 and the second paragraph of impact discussion have been modified as follows:

| IMPACT  | Increase in Traffic Volumes or Decrease in Capacity along Designated Roadways in the Project Study Area. Project-related construction traffic generated during activities associated with levee improvements, encroachment removal, and vegetation management would increase the traffic volumes above the applicable thresholds on the surrounding roadway network. Therefore, this impact would be potentially significant throughout the project study area. |

As stated above, a proposed project would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, and would in turn result in a significant impact related to traffic, if it would result in 50 or more new truck trips during the a.m. peak-hour or the p.m. peak-hour. A PCE value of 2.0 was applied to the construction equipment truck trip generation estimates as recommended by the Highway Capacity Manual 2000 (Transportation Research Board 2000). Therefore, the proposed project would cause a substantial increase in traffic in relation to the existing traffic load and capacity of the street system, and result in a significant impact related to traffic, if it would result in 100 or more new vehicle trips during the a.m. or p.m. peak hours. Construction of the proposed project would also require temporary lane closures, with up to half of the available roadway being closed at one time. Because these short-term, partial closures would temporarily reduce the capacity of the roadway, a temporary partial roadway closure is considered to represent a significant impact.
The paragraph immediately preceding Mitigation Measure TR-1 has been modified as follows:

Construction trucks that would be used for activities associated with levee reconstruction, encroachment removal, and vegetation management would result in approximately 551 truck trips per day both directions (1,102 trips per day both directions, assuming a PCE value of 2.0) to import or remove the required materials. Additionally, construction activities for levee reconstruction would require a maximum of 175 construction workers during any given day. Thus, commuting by construction workers is estimated result in approximately 350 total daily trips (assuming two trips per day by each worker, one trip inbound to the North Sacramento Streams Levee Improvements area in the morning and one trip outbound at the end of the day) to area roadways such as East Levee Road north of Main Street, and the bridge segment of West El Camino Road. As shown in Table 4.17-4, in total, activities associated with levee reconstruction, encroachment removal, and vegetation management (during the peak construction month during which most phases overlap) may add as many as an estimated 1,451 daily two-way trips to East Levee Road north of Main Street, and the bridge segment of West El Camino Road. As a result, the total estimated increase in traffic volumes along El Camino Avenue and East Levee Road would be an estimated 285 vehicles per hour. This level of traffic activity would degrade traffic operations along El Camino Avenue and East Levee Road. Furthermore, during construction of the slurry wall along the levee crown of Arcade Creek South Levee Reach B, partial closure of Norwood Avenue at its bridge over Arcade Creek would be required. One direction of traffic would be blocked during this partial closure, requiring two-way traffic to take turns. During construction of the slurry wall along the levee crown of Arcade Creek North Levee Reach B, partial closure of Rio Linda boulevard at its bridge over Arcade Creek would be required; however, Rio Linda Boulevard is a four-lane road, and two-way traffic flow would be retained, with temporary reduction to one lane in each direction. Therefore, this project element would have a potentially significant impact. Mitigation Measure TR-1, described below, has been identified to address this impact.

Table 4.17-4 has been modified as follows:
Table 4.17-4. Existing and Plus Project – North Sacramento Streams Levee Improvements Area Vehicular Traffic

<table>
<thead>
<tr>
<th>Roadway</th>
<th>From</th>
<th>To</th>
<th>Classification</th>
<th>Existing Peak Volumes/Hour</th>
<th>LOS</th>
<th>Trucks/Hour</th>
<th>Workers/Hour</th>
<th>Total Construction Vehicles/Hour (PCE)</th>
<th>V/C</th>
<th>Impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Camino Avenue</td>
<td>Western Avenue</td>
<td>Colfax Street</td>
<td>Arterial</td>
<td>1,612</td>
<td>D</td>
<td>55</td>
<td>175</td>
<td>285</td>
<td>0.18</td>
<td>Yes</td>
</tr>
<tr>
<td>East Levee Road</td>
<td>Sotnip Road</td>
<td>Sorento Road</td>
<td>Local</td>
<td>261</td>
<td>C</td>
<td>55</td>
<td>175</td>
<td>285</td>
<td>1.09</td>
<td>Yes</td>
</tr>
<tr>
<td>Norwood Avenue</td>
<td>Lindley Drive</td>
<td>Fairbanks Avenue</td>
<td>Arterial</td>
<td>1,087</td>
<td>C</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Rio Linda Boulevard</td>
<td>Arcade Boulevard</td>
<td>Rivera Drive</td>
<td>Collector</td>
<td>1,249</td>
<td>C</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Notes: LOS = Level of Service; PCE = Passenger Car Equivalent; V/C = Volume-to-Capacity Ratio
Data presented in **bold** font indicates that a significant impact would occur.
Sources: URS Corporation 2014, City of Sacramento 2005, City of Sacramento 2015, data modeled by AECOM in 2014
The Significance after Mitigation for Mitigation Measure TR-1 has been revised as follows:

**Significance after Mitigation:** Implementing Mitigation Measure TR-1 would reduce the potentially significant impact associated with increased traffic volumes and temporarily reduced capacity from project-related construction to a less-than-significant level because SAFCA would provide measures to reduce traffic congestion on affected roadways, as necessary.

Impact TR-2 has been modified as follows:

| IMPACT TR-2 | Potential for Increased Emergency Response Times or Inadequate Emergency Access. Project-related activities associated with levee reconstruction, encroachment removal, and vegetation management would temporarily increase construction traffic levels and/or reduce roadway capacity, resulting in traffic delays that could substantially increase emergency response times or reduce emergency vehicle access. Therefore, this impact would be potentially significant throughout the project study area. |

The third paragraph under the heading “North Sacramento Streams Levee Improvements” has been modified as follows:

Emergency access to roadways in the North Sacramento Streams Levee Improvements area could be reduced by reconstruction of levees, as well as activities associated with encroachment removal and vegetation management. Construction and construction-related traffic could delay or temporarily obstruct the movement of emergency vehicles. Therefore, these proposed project elements would have a potentially significant impact. Mitigation Measures TR-1 and TR-2, described below, have been identified to address this impact.

**CHAPTER 10 – REFERENCES**


**APPENDIX C – AIR QUALITY AND GREENHOUSE GAS MODELING AND ASSUMPTIONS**

Appendix C has been modified to reflect modeling changes required based on the response to comment A3-1 from SMAQMD.
This page intentionally left blank.
5 REFERENCES

Section 1, “Introduction”

No citations for this section.

Section 2, “Summary of the Project Description”

No citations for this section.

Section 3, “Responses to Comments on the DEIR”


USACE. See U.S. Army Corps of Engineers.


Section 4, “Corrections and Revisions to the DEIR”

No citations for this section.
6 REPORT PREPARERS

This FEIR was prepared by GEI at the direction of SAFCA, with assistance from AECOM and Stillwater Sciences.

The following is a list of the individuals who prepared the FEIR, provided important background materials, provided project description engineering clarifications, or participated in preparing the FEIR.

6.1 SACRAMENTO AREA FLOOD CONTROL AGENCY

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pete Ghelfi, P.E.</td>
<td>Director of Engineering, Project Manager</td>
<td>28 years</td>
</tr>
<tr>
<td>Peter Buck</td>
<td>Natural Resource Supervisor</td>
<td>26 years</td>
</tr>
<tr>
<td>Timothy Washburn, J.D.</td>
<td>Director of Planning</td>
<td>25 years</td>
</tr>
</tbody>
</table>

6.2 GEI CONSULTANTS, INC.

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualifications and Experience</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Francine Dunn</td>
<td>B.A., Environmental Studies; 30 years experience</td>
<td>Principal-in-Charge, EIR Project Manager, and CEQA Reviewer</td>
</tr>
<tr>
<td>Drew Sutton, AICP</td>
<td>M.A., City and Regional Planning; B.A., Geosciences; 15 years experience</td>
<td>EIR Coordinator, Responses to Comments, Project Description, Introduction, Responses to Comments</td>
</tr>
<tr>
<td>Sarah Bennett</td>
<td>M.S., Soils and Biogeochemistry; B.S., Botany and Plant Pathology; 10 years experience</td>
<td>Responses to Comments</td>
</tr>
<tr>
<td>Wendy Copeland</td>
<td>M.S., Plant Pathology; B.S., Plant Science; 14 years experience</td>
<td>Responses to Comments</td>
</tr>
<tr>
<td>Kelly Holland</td>
<td>M.S., Environmental Science; B.A., Environmental Studies; 19 years experience</td>
<td>Biological Resources – Terrestrial (Wildlife)</td>
</tr>
<tr>
<td>Vance Howard</td>
<td>B.S., Environmental Horticulture and Urban Forestry; 17 years experience</td>
<td>Conservation Strategy</td>
</tr>
<tr>
<td>Denise Jurich, RPA</td>
<td>M.A., Anthropology; B.A., Anthropology; 18 years experience</td>
<td>Cultural Resources (Archaeology)</td>
</tr>
<tr>
<td>Barry Scott, RPA</td>
<td>M.S., Anthropology; B.A., Anthropology; 27 years experience</td>
<td>Responses to Comments, Cultural Resources (Archaeology, Senior Reviewer)</td>
</tr>
<tr>
<td>Charisse Case</td>
<td>17 years experience</td>
<td>Document Production</td>
</tr>
<tr>
<td>Katelynn Poulos</td>
<td>13 years experience</td>
<td>Document Production</td>
</tr>
</tbody>
</table>
### 6.3 AECOM

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualifications and Experience</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Lu</td>
<td>B.S., Environmental Resources; 10 years experience</td>
<td>Air Quality and Greenhouse Gas Emissions</td>
</tr>
<tr>
<td>Brian Perry</td>
<td>30 years experience</td>
<td>Graphic Designer</td>
</tr>
<tr>
<td>Angela Schwartz</td>
<td>25 years experience</td>
<td>Document Production</td>
</tr>
</tbody>
</table>

### 6.4 STILLWATER SCIENCES

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualifications</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.J. Keith</td>
<td>M.A., Ecology and Systematic Biology; B.S., Environmental, Population, and Organismal Biology; 23 years experience</td>
<td>Biological Resources – Fisheries</td>
</tr>
</tbody>
</table>

### 6.5 MBK ENGINEERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualifications</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ric Reinhardt, P.E.</td>
<td>M.S., Civil Engineering; B.S., Civil Engineering; 15 years experience</td>
<td>Responses to Comments – Encroachments</td>
</tr>
<tr>
<td>Claire Marie Turner</td>
<td>B.S., Marine Biology; B.S., Biology; 8 years experience</td>
<td>Responses to Comments – Vegetation and Encroachments</td>
</tr>
</tbody>
</table>

### 6.6 URS CORPORATION (NOW AECOM)

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualifications</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ken Myers, P.E.</td>
<td>B.S., Civil Engineering; 36 years experience</td>
<td>Project Manager for levee evaluations, alternatives analysis and design</td>
</tr>
<tr>
<td>Joe Barnes, P.E.</td>
<td>B.S., Civil Engineering; 45 years experience</td>
<td>Alternative Levee Repair Methods, Preliminary Civil Design, and Construction Planning</td>
</tr>
</tbody>
</table>
APPENDIX A

Sacramento River East Levee Improvement Project Alternative Evaluation – Summary Memorandum
Memo

To: Pete Ghelfi (SAFCA) and Ric Reinhardt (MBK)
From: Alberto Pujol and Dan Wanket (GEI)
CC: Barbara Gualco, Graham Bradner (GEI), Mark Stanley (HDR)
Date: October 27, 2015
Re: Sacramento River East Levee Improvement Project (SRELIP) Alternatives Evaluation - Summary Memorandum
GEI Project No. 1328580

The purpose of this Summary Memorandum is to present an overview of the process that has been followed to identify Sacramento River East Levee deficiencies, identify and evaluate alternative remedial measures, and recommend remedial measures for implementation.

1. Background and Purpose

1.1 Introduction and Project Purpose

After examining the cause of more than 30 levee breaches in the Central Valley of California in 1997 and the levee breaches during the Katrina event in New Orleans, a new urban levee standard was established by the U.S. Army Corps of Engineers (USACE). This new standard requires that underseepage deep under existing levees be addressed. Consequently, the USACE has undertaken the American River Watershed Common Features General Reevaluation Report (GRR) to evaluate what work needs to be done to Sacramento’s flood control system to bring the levees into compliance with the new standard and to further reduce flood risk to the most at-risk urban area in the country.

The GRR will be completed and sent by the Administration to Congress for authorization in 2016. However, historically, Congress has taken several years to authorize projects. Waiting to reduce flood risk to the most vulnerable areas, including the levees along the Sacramento River, is not acceptable. Therefore, the Sacramento Area Flood Control Agency (SAFCA) has decided to take advantage of a provision in Federal law that allows for early implementation of a Federal project by non-Federal cost-sharing partners and construct the portions of the USACE GRR project that will provide the most immediate flood risk reduction to the public.

The State of California has agreed to provide the majority of the funding for this early implementation project on the condition that the USACE agrees to credit the work towards the non-Federal share of the USACE GRR project. Therefore, the early implementation project must meet the USACE and State requirements.

SAFCA and its consultant team have decided to set the scope of the early implementation to include the work required to obtain 1-percent-annual-chance of exceedance (100-year) flood protection accreditation from the Federal Emergency Management Agency (FEMA) and to achieve compliance of the levee system with the California Department of Water Resources (DWR) Urban Levee Design Criteria (ULDC) for 200-year level of protection. Accordingly, the goal of the Sacramento River East Levee Improvement Project (SRELIP) is to obtain FEMA accreditation for the SREL and to evaluate where the levee is deficient in accordance with the ULDC. Since along this reach of the Sacramento...
River the difference between the 100-year (for FEMA) and 200-year (for ULDC) water surface elevations is typically only on the order of 1 foot, the levee is being evaluated using the 200-year water surface elevations which also meet FEMA criteria.

1.2 Project Constraints

Constraints that may affect the project objectives are as follows:

- The primary objective is that the project must achieve acceptance by the USACE, the State of California Department of Water Resources (DWR) and other agencies with jurisdiction, primarily including FEMA and Central Valley Flood Protection Board.

- The project must be economically feasible

- The project must consider and minimize temporary construction impacts

- The project must consider environmental constraints and minimize environmental impacts as practicable

- The project must consider real estate and encroachment constraints and minimize property (right-of-way) impacts as practicable

1.3 Previous Geotechnical Studies

There have been numerous geotechnical studies of the SREL system over the last 50 years. The most recent and pertinent reports are described below.

- DWR recently completed a screening-level feasibility study referred to as the Urban Levee Evaluations project, which addressed approximately 350 miles of levees in the Central Valley protecting populations of 10,000 people or more. DWR retained URS (now part of AECOM) to conduct analyses of the Sacramento River Study Area, which includes the SREL study area. The evaluations were performed using a 200-year water surface developed by URS, and represent screening-level analyses and cost estimates of conceptual remedial alternatives. The screening-level analyses results do not constitute a final opinion about the condition of a levee reach or sub-reach relative to either FEMA accreditation or ULDC. The evaluation included collection of historical information, exploration and testing, and geotechnical analyses. The work is documented in a Phase 1 Geotechnical Data Report dated November 2008, Supplemental Geotechnical Data Report dated September 2011, Geotechnical Evaluation Report Volume 1, Existing Conditions dated July 2014, and Geotechnical Evaluation Report Volume 2, Remedial Alternatives dated January 2015.

- The USACE prepared the General Reevaluation Report (GRR) for the American River Common Features Project, which also includes the SREL study area. A Geotechnical Office Report was prepared as a supplemental report to the Geotechnical Appendix of the GRR. The Geotechnical Office Report presents the results of geotechnical analyses and feasibility level geotechnical recommendations to address levee height, geometry, erosion, access, vegetation, seepage, and slope stability deficiencies within the GRR study area. The Geotechnical Office Report included review of available geology, geomorphology, and geotechnical information, past performance and flood control system construction history/improvements, and identification of levee performance deficiencies through geotechnical analysis and engineering judgment. USACE’s work is summarized in the Geotechnical Office Report,
SAFCA retained Kleinfelder to perform an initial evaluation of the Sacramento River East Levee (SREL) south of the confluence with the American River and other levees that protect Sacramento (excluding Natomas) for potential FEMA accreditation. Kleinfelder identified those segments of levee it could certify as being in compliance with FEMA geotechnical criteria for embankment and foundation stability for FEMA’s 100-year flood event (FEMA Certifiable Reaches). Kleinfelder also identified a number of reaches that potentially may not meet FEMA geotechnical criteria and need further investigations and more detailed evaluations. This work was summarized in a Geotechnical Data Report dated June 2013 and a Problem Identification Report dated August 2013, and is summarized in Table 1. Kleinfelder also analyzed the SREL system using the DWR criteria for a 0.5-percent annual chance of exceedance (200-year) flood event and Hydraulic Top of Levee water surface elevation, as outlined in the ULDC. The results of Kleinfelder’s additional analysis are documented in the ULDC Geotechnical Results Summary dated March 2014. In this report, Kleinfelder concluded that the reaches that met criteria at the 100-year water surface elevations also met ULDC at the 200-year and Hydraulic Top of Levee water surface elevations.

As shown on Table 1, of the 14.6 miles of SREL south of the confluence with the American River, Kleinfelder identified 6.5 miles of levee meeting FEMA geotechnical criteria and 8.1 miles of levee judged as being potentially deficient with respect to embankment and/or foundation seepage and stability requirements. Levee segments identified by Kleinfelder as meeting and not meeting geotechnical criteria are shown on Figure 1. The 8.1 miles of potentially deficient levee, located south of R Street and north of the East Bay Municipal Utility District Freeport facility, constitute the study area for the additional, more detailed, geotechnical evaluations summarized in this memorandum.

### 1.4 SRELIP Project Scope

SAFCA retained the team formed by GEI Consultants, Inc. and HDR Engineering, Inc. (Design Team) to conduct further evaluation of the 8.1 miles of the SREL identified by Kleinfelder as potentially not meeting FEMA’s geotechnical criteria for embankment and foundation stability. The Design Team is evaluating the existing levee and developing remedial designs to meet FEMA geotechnical criteria for the 100-year flood event and achieve compliance with the ULDC. In summary this work involves:

- Conducting additional subsurface investigations and more detailed engineering evaluations of the potentially deficient levee reaches.
- Identifying and evaluating potential remedial alternatives for the levee reaches that are confirmed to be deficient.
- Supporting SAFCA in the development of a Locally Preferred Plan encompassing the selected levee improvements for those levee reaches.
- Preparing designs of the improvements to meet FEMA and ULDC criteria.
1.5 **Role of USACE and DWR**

Since SAFCA is planning an early implementation of the Federal project, the levee improvements to a Federal Project Levee, such as the SREL, require approval from the USACE and Central Valley Flood Protection Board. Separately, as a funding agency, DWR also has approval authority over the design of the project. Since the levee improvements are advanced work towards a Federal Project, there are additional criteria that must be met to make sure that work is creditable.

1.6 **Geotechnical Design Criteria**

The geotechnical design criteria adopted for this project follow FEMA guidelines, USACE criteria, and DWR’s ULDC. If it is determined that a levee reach does not meet foundation and embankment stability criteria for the FEMA 100-year water surface, remedial measures will be designed to meet both USACE criteria and ULDC. If portions of the levees are found to meet FEMA (100-year) criteria but not the 200-year criteria, remedial measures will be evaluated to meet DWR ULDC criteria. Geotechnical design criteria utilized by the Design Team for the SREL is described in the *Geotechnical Design Criteria and Technical Approach Memorandum*, Revision 2 dated October 2015.

1.7 **Relationship Between the SREL Project and USACE General Reevaluation Report**

The USACE is preparing the GRR for the American River Watershed Common Features Project. The GRR is a Federal interest effort in evaluating alternatives to reduce flood risk in the Sacramento region, which includes the Sacramento River (including SAFCA’s SREL study area) and American River Watersheds, and most of the developed portions of the City of Sacramento, the Natomas basin, and portions of Sacramento and Sutter Counties. The GRR study area also includes other flood control facilities, including the levees within the study area, Fremont and Sacramento Weirs, and the Sacramento and Yolo Bypasses.

As discussed in Section 1.1, the purpose of SAFCA’s SRELIP is to implement portions of the USACE GRR project ahead of the USACE to provide immediate flood risk reduction. This work will increase the levee’s performance by developing and implementing remedial designs that meet FEMA criteria for the 100-year base flood event, and conform with the ULDC. It is anticipated that this work will be completed over the next 3 to 5 years with a combination of state and local funding. SAFCA is also pursuing higher levels of flood protection that exceed the State’s ULDC minimum requirement. The primary vehicle to accomplish this is the GRR and the State of California’s Central Valley Flood Protection Plan. Accordingly, SAFCA’s SREL project will address the most pressing seepage, slope stability, erosion protection, and high-hazard vegetation and encroachment issues along critical locations of the levee in advance of the implementation of the USACE project.

Proposed improvements to the SREL as part of the USACE American River Watershed Common Features Project may include, but are not limited to, actions that improve the resiliency and robustness of the levee system such as improving geotechnical stability, freeboard or reducing the susceptibility of the levee to erosion. Levee improvements implemented as part of the USACE project would be in addition to what is implemented by SAFCA as part of the SRELIP. The USACE will not begin design of the project until the GRR is completed and authorized by Congress and funding for project implementation has been appropriated.
2. Summary of Identified Deficiencies

Geotechnical evaluations of the 8.1 miles of potentially deficient levee along the SREL were performed to refine or confirm those reaches of levee in the study area that have deficiencies that require remediation. The evaluations included the following:

- Review of Previous Levee Modifications
- Review of Past Levee Performance During High-Water Events
- Evaluation of Levee Surface Conditions
- Assessment of Subsurface Conditions
- Geotechnical Analyses

A summary of the evaluations performed by the Design Team is provided below. Details are presented in the *Embankment & Foundation Stability Memorandum* dated October 2015.

2.1 Review of Previous Levee Modifications

Review of available information on previous levee modifications was performed. As-built documentation for previous levee remediation projects was obtained from USACE, DWR, and SAFCA. Previous levee modifications in the study reach over the past approximate 40 years include:

- Re-alignment of an approximate 1,500-foot long portion of the levee near Sutterville Road.
- Installation of shallow cutoff walls by the Corps in the early 1990’s along significant portions of the levee in the study area.
- Installation of deep-mixing-method (DMM) cutoff walls between 2003 and 2006 in two locations in the Pocket and one location in the Little Pocket.
- Installation of a seepage berm and relief wells at Pioneer Reservoir.
- Installation of relief wells at Sump 132.

The above-listed levee modifications and improvements were incorporated into the Design Team’s geotechnical analyses as existing conditions.

2.2 Review of Levee Past Performance

A review of levee performance records was performed to identify reaches of levee that are more prone to heavy seepage and seepage-related problems during actual high-water events. The past performance records are based on observations recorded by levee maintenance personnel, levee inspectors, and private citizens. Past performance can be a useful indicator of future performance, assuming levee conditions do not significantly deteriorate (through mechanisms such as rodent activity, damage from seepage, human action, or waterside erosion), and can also indicate areas along the levee system that may be most prone to deteriorating conditions. Thus, the past performance records provide valuable data helpful in identifying levee reaches where future problems are more likely to occur and assessing the need for remediation.
Performance records reviewed included available levee inspection records, historic documents and reports, USACE and DWR records, media reports, and personal accounts from adjacent residents and individuals involved in levee monitoring. Based on review of the available levee performance records, the project area has experienced numerous seepage and erosion issues, with limited deep-seated slope stability problems. Reports of past performance issues are notably more frequent within the southern portion of the project area, in the Pocket and Little Pocket neighborhoods, than within the northern project area.

2.3 Evaluation of Surface Conditions

Surface conditions in the project area were reviewed and evaluated including the following:

- Levee construction materials and methodologies.
- Review of site topography, including the levee structure, waterside berm, and landforms landward of the levee for approximately 2,000 feet.
- Review of surficial mapping, including existing structures, roads, parks, and other infrastructure and features.
- Review of geologic and geomorphic studies.

2.4 Assessment of Levee Subsurface Conditions

Assessment of levee subsurface conditions began with review of existing geotechnical explorations within the study area. The Design Team reviewed 349 existing geotechnical explorations performed within the study area between 1962 and 2013 by DWR, USACE, and several geotechnical consultants. Review of the existing subsurface data revealed gaps in the existing data, including large distances between explorations, insufficient data at critical locations along the landside levee toe, or insufficient explorations at depth to fully characterize key soil strata.

The Design Team added 159 explorations to address the identified gaps in the existing data and support identification and design of remedial measures. The added explorations consisted of 63 geotechnical borings, 84 cone penetration tests (CPTs), 3 borings with piezometers, and 9 test pits. Laboratory testing was performed on samples taken from the explorations to classify soils and support development of soil properties for seepage and stability analyses.

The levee typically consists of 15 to 20 feet of levee fill, primarily sandy soils with occasional layers of silt or clay. The upper foundation layer under the levee is formed by silt or clay and silty sand. Below the upper foundation layer is a sand and gravel aquifer, and below the aquifer is a lower foundation silt or clay. The upper foundation silt or clay soils were found to range from less than 5 feet to more than 50 feet in thickness. The aquifer thickness varied widely but was found to exceed 120 feet in some locations.

2.5 Geotechnical Analyses of Existing Conditions

The levee system was subdivided into “reaches”, which are characterized as having reasonably consistent geotechnical characteristics. The levee within the study area was divided for analysis into 27 reaches (numbered Reach 1 through Reach 27), based on interpreted stratigraphy, geology, geomorphology, soil properties, and limits of previous remediation. Geotechnical analyses were performed for the reaches using a total of 46 cross sections, with each reach analyzed by at least one cross section, and some reaches having multiple cross sections to address particular nuances along the
system. Once stratigraphy and soil properties were assigned with associated cross sections, seepage and stability analyses were performed.

Control of seepage beneath the embankment (underseepage) and through the embankment (through seepage) is critical to the performance of the levee. Excess pore pressures due to seepage can result in sand boils, loss of soil due to internal erosion, embankment instability, and foundation instability. Seepage analyses were performed using SEEP/W, a two-dimensional finite element modeling computer program, developed by GEO-SLOPE International, Ltd.

Stability analyses were generally performed on the same analysis cross sections evaluated for seepage. The load cases typically considered for stability evaluation were “rapid drawdown” conditions for the waterside slope and “steady-state seepage” conditions for the landside slope. Stability analyses were performed using SLOPE/W, a slope stability analysis software program also developed by GEO-SLOPE International, Ltd.

### 2.6 Identified Levee Geotechnical Deficiencies

Based on the results of the subsurface investigation, evaluations and geotechnical analyses described above, it was concluded that seepage under and through the existing levee is the primary cause for high exit gradients and low slope stability factors of safety in reaches that do not meet FEMA or ULDC criteria. Approximately 5.6 miles of the 8.1 miles of levee evaluated require remediation to address seepage and/or stability concerns, while 2.5 miles of levee do not require remediation to address geotechnical deficiencies. Table 2 presents a summary of levee reaches evaluated and the identified geotechnical deficiencies for those reaches that require remediation.

### 3. Levee Remediation Measures Evaluated

The Design Team conducted an evaluation to identify potential remedial measures that could be implemented to address geotechnical deficiencies in the study area. The evaluation included an initial identification and review of potential remedial measures, evaluation of the performance of remedial measures implemented for levee projects in the Sacramento Valley, and an Alternatives Identification workshop with SAFCA and the Design Team. The workshop was held on October 30, 2013 and focused on seepage remediation measures since seepage is considered the primary geotechnical deficiency in the levee system based on past performance and site conditions. An initial understanding of advantages and disadvantages of the alternatives was discussed in the workshop. Factors such as cost, schedule, property impacts and constraints, environmental impacts, impacts on existing infrastructure, geotechnical considerations, hydraulic considerations, environmental permitting issues, levee safety regulatory issues, temporary construction impacts, and operational and maintenance considerations were considered during the workshop to evaluate alternatives.

### 3.1 Remedial Measures Carried Forward

Based on the conceptual evaluations, and comments obtained during the Alternatives Identification workshop, the following remedial alternatives were selected to carry forward for analysis in the evaluation of remedial measures for those levee reaches that were determined to require remediation. The relative advantages and disadvantages listed for each alternative were evaluated in selecting the recommended remedial measures described in Section 4 below. Typical conceptual details for each alternative are shown in Figures 2 through 6.
Conventional slurry trench cutoff wall

Cutoff walls provide a vertical low-permeability barrier to seepage flows (Figure 2). The most common cutoff walls constructed in the Central Valley, including along the SREL, is the conventional slurry trench cutoff wall. Slurry trench cutoff walls are typically installed by excavating a 3-foot-wide trench along the length of the levee, either at the crest or at the waterside toe, and backfilling it with a fluid mixture of excavated soil and bentonite. Excavation is performed with a long-reach excavator, and the backfill materials are mixed near the trench. The trench is stabilized with bentonite slurry between excavation and backfill. The practical reach of the long-reach excavators is about 85 feet below ground surface.

The depth of temporary levee degrade and requirements for temporary staging areas are important considerations for cutoff wall construction. During construction of the shallow cutoff walls in the Pocket in the early 1990s, the pressure of the slurry in the excavated trench caused cracking of the levee and foundation (hypothesized to result from hydraulic fracturing of the foundation) and loss of slurry to the river and/or backyards of adjacent homes at five separate locations. Repair of these failures involved the excavation of the entire levee within the cracked reach, reinforcement of the foundation, and reconstruction of the levee. After those experiences, the USACE began to require a temporary levee degrade of half the height of the levee to minimize the potential for hydraulically fracturing the levee when there is an open trench filled with fluid. With subsequent successful experience in the installation of conventional slurry trench cutoff walls, the minimum temporary levee degrade required by the USACE has been reduced to one-third of the levee height to mitigate the potential for hydraulic fracturing. This levee degrade also provides a sufficient working platform for the large equipment needed for cutoff wall construction.

Staging areas for bulk material silos, bentonite hydration facilities, and mixing facilities are also required for cutoff wall construction. These facilities need to be located near the landside or riverside toe of slope (if a riverside bench is present) and staged no further than about 2,000 feet apart, which is the maximum distance to pump slurry to the excavation or equipment.

- Advantages:
  - Low cost cutoff wall alternative
  - Passive seepage reduction; addresses both underseepage and through-seepage
  - No operation and maintenance requirements
  - Lower gradients and reduced seepage volume on landside of levee
  - No permanent impacts to adjacent property owners

- Disadvantages:
  - Limited to approximately 85 feet deep
  - Need to degrade at least the upper one-third of levee
  - Need for additional temporary right-of-way for slurry mixing ponds, temporary stockpiles, etc.
  - Overhead needs to be cleared of vegetation for long-stick excavator

Deep Mixing Method (DMM) cutoff walls

DMM cutoff walls are constructed by mixing soil in-place with a bentonite and cement slurry using mixing augers (Figure 3). In the DMM method, the wall is constructed in panels, with no open trench. DMM walls can generally be constructed deeper than conventional trench slurry walls, with
depths of at least 135 feet being attainable. Recently soil-bentonite (without cement) DMM walls have been constructed in the Sacramento area but are not yet widely accepted due to the observed settlement behavior of the mixed wall material immediately following mixing. As a result of problems with soil-bentonite DMM walls, the USACE is currently requiring cement be added to the mix.

For DMM cutoff walls, hydraulic fracturing is typically not a concern, so the amount of levee degrade required is governed by the required working platform width. DMM cutoff walls require a working platform with a width of at least 35 feet, which typically results in a levee degrade of at least three feet. Staging area requirements for a DMM cutoff wall would be somewhat less than that required for conventional slurry trench cutoff wall since DMM construction requires less extensive bentonite hydration and conveyance facilities.

Installation of DMM walls uses specialized crane-mounted triple augers, with height greater than the depth of the wall. All overhead vegetation needs to be removed to enable unobstructed passage of the crane-mounted equipment. Panel construction is slow. Maintaining verticality of the augers at depth is a major concern that affects continuity of the wall. Accordingly, quality control measures are more involved than for conventional slurry trench cutoff walls. The need for specialized equipment, slow productivity, and difficult quality control all contribute to an installation cost that typically is 2-3 times the cost of a conventional cutoff wall. As a result, DMM walls are usually only employed at locations where the required wall depth exceeds the capability of conventional slurry trench cutoff wall construction.

- **Advantages:**
  - Maximum wall depth up to about 135 feet
  - Passive seepage reduction; addresses both underseepage and through-seepage
  - No operation and maintenance requirements
  - Lower gradients and reduced seepage volume on landside of levee
  - No permanent impacts to adjacent property owners
  - Requires less degrade than conventional slurry trench method

- **Disadvantages:**
  - Two to three times the cost of conventional slurry trench cutoff wall
  - Use of high crane needs clearing all vegetation above the working platform
  - Need to degrade the levee at least three feet
  - Slow installation
  - Wall continuity is a quality concern
  - Need for additional temporary right-of-way for grout and slurry mixing plant, temporary stockpiles, etc
  - The addition of cement makes the repair less resilient to damage from deformation in an earthquake.

**Relief wells**

Pressure relief wells work by capturing underseepage flows from within the aquifer and transmitting them to a conveyance system, typically an open ditch or pipeline located near the landside toe of the levee. By providing a filtered exit for the pressurized seepage within the aquifer, the relief well
system provides an exit path for seepage flows that may otherwise emerge in an uncontrolled manner on the landside ground surface (Figure 4). Relief wells are installed along the landside levee toe or adjacent street using techniques typically used for drilling water wells. To install a relief well a drill rig is used to bore a hole into the ground to the required depth of the well, the well casing and well screen sections are then installed, and the well is developed by pumping water from the well to clean out the bentonite drilling fluid and to consolidate the well’s filter pack. Water discharging from the well needs to be conveyed to a drainage pipeline or a collection ditch, which in turn drains laterally to a pump station or other discharge facility.

- Advantages:
  - Typically lower cost than cutoff walls (unless new pump station is required)
  - Passive seepage pressure reduction; addresses only underseepage
  - Can be used for deep aquifers where cutoff walls cannot be constructed economically

- Disadvantages:
  - Right-of-way required on the landside of the levee for wells and discharge collection and conveyance system
  - Relief wells tend to reduce in effectiveness over time, requiring maintenance of wells and collection system, including periodic rehabilitation and replacement
  - Needs pump stations to return collected flows to the river during high stages
  - Need to evaluate relief well discharge water quality for potential contaminants
  - Applicable only to conditions where the aquifer is overlain by a low permeability strata – not effective in areas where the aquifer is unconfined
  - Not effective for reduction of through-seepage
  - Lower level of reliability than other remediation measures due to the need for an “actively” functioning water removal system as opposed to the passive nature of slurry walls and seepage berms.

**Stability berms**

A stability berm is a prism of compacted soil placed on the slope of a levee to act as a buttress to increase stability factors of safety (Figure 5). When placed on the landside slope, a filter/drain zone can be incorporated into the stability berm to capture seepage that would otherwise exit on the unprotected slope, potentially eroding embankment material. Stability berms can be used to address through-seepage or through-seepage-driven landside slope stability problems. Stability berms are not appropriate for remediating excessive uplift gradients associated with underseepage, because the high gradients simply shift landward to the toe of the stability berm. However, drained stability berms do provide a measure of protection for shallow, unconfined seepage from the foundation by provided a controlled, filtered exit point for subsurface seepage.

Typical stability berms are about 10 feet high and about 10 to 25 feet wide, and generally require additional right-of-way landward of the existing levee to accommodate the berm footprint. Alternatively, an “inset” stability berm could be constructed within the existing levee in areas where the existing levee is very wide and access along the landside levee toe is severely constrained. The inset stability berm would be constructed by excavating the landside levee slope, constructing the filter/drain zone, then rebuilding the levee slope to approximately the original grade with compacted fill (Figure 6).
• Advantages:
  o Passive through-seepage mitigation
  o Generally less expensive than cutoff walls
  o Also increases landside slope stability

• Disadvantages:
  o Not effective for reduction of confined underseepage
  o Permanent right-of-way may be needed along landside levee toe
  o Filter design and construction critical to performance

Toe drains

The primary purpose of a toe drain is to capture through-levee seepage before it exits the lower embankment and control and filter the discharge in such a way as to reduce velocity and soil-carrying capacity of the discharge. A toe drain would typically be used when through-seepage or through-seepage-driven landside slope stability is problematic. Toe drains would be constructed by excavating into the levee prism and constructing a filtered drain within the downstream toe of the levee embankment.

• Advantages:
  o Passive seepage reduction
  o Less expensive than cutoff wall

• Disadvantages:
  o Not effective for reduction of underseepage
  o Permanent right-of-way may be needed along landside levee toe
  o Filter design and construction critical to performance

Seepage berm

The primary purpose of a seepage berm is to (1) increase vertical effective stresses to counteract uplift pressures near the landside levee toe and (2) increase seepage path lengths so that high seepage gradients are reduced and shifted farther away from the levee toe.

Seepage berms are generally designed to be on the order of 100 to 300 feet wide (minimum 4 times the levee height), measured from the levee toe with thicknesses varying from about 5 feet at the levee toe to about 3 feet at the berm toe. Most of the areas landward of the SREL are heavily developed. Therefore, this alternative is not feasible except possibly in limited locations along the northern end of the study area.

• Advantages:
  o Passive seepage mitigation
  o Construction less expensive than a deep DMM cutoff wall
  o Minimal operation and maintenance costs (i.e. vegetation maintenance)

• Disadvantages:
  o Seepage berm width is typically at least four times the levee height, so there are significant ROW requirements and resulting impacts to adjacent development.
3.2 Remedial Measures Not Carried Forward

The following potential remedial measures were reviewed and discussed during the workshop and were not carried forward for alternatives evaluation at this time:

- Pervious toe trenches - due to lack of subsurface visibility at the discharge location to confirm performance and current difficulty of gaining regulatory acceptance.

- Sheet pile cutoff walls – due to high cost and difficulty of gaining regulatory acceptance, specifically from the USACE Sacramento District.

- Alternative trenching machine ("chainsaw") cutoff wall method such as DeWind or the Trench Remving and Deep wall method (TRD) – these cutoff wall methods have not been used in the Central Valley and are currently not accepted for use by the USACE Sacramento District.

4. Recommended Levee Remediation Measures

In support of developing the recommended levee remediation measures, an alternatives evaluation was conducted of potential suitable levee repairs to address geotechnical deficiencies, and geotechnical analyses were repeated incorporating the recommended remedial alternative as needed. These evaluations and recommended remedial measures are summarized below.

4.1 Alternatives Evaluation

An alternatives evaluation was conducted to assess the most appropriate remedial measure for each reach needing remediation. The potential remedial measures that could be feasibly implemented as possible mitigation for identified levee deficiencies were screened against the identified constraints in assessing which levee rehabilitation measure would be recommended for implementation. Feasible remedial alternatives were identified for each reach of levee requiring remediation and were ranked according to the following factors (or criteria) for selecting the preferred remedial measures:

- Performance: Ranking was based upon how well the proposed measure addresses the identified problems and, if there are multiple potential measures, upon how the proposed measures compare in terms of their robustness and redundancy.

- Ease of Implementation: Ranking was based upon how readily the measure could be implemented.

- Comparative Cost: Comparative costs were developed for each alternative and then ranked from lowest to highest.

- Minimize Environmental Impacts: Ranking focused on the degree to which the proposed remedial measure may impact the surrounding environment from a ground disturbance perspective, including whether construction would enlarge the project footprint or impact sensitive habitat.

- Minimize Impacts to Residents: Ranking focused on the degree to which the proposed remedial measure could impact nearby residences and the community, including expanding the footprint onto adjacent parcels, disrupting necessary access across or adjacent to the
The levee, disrupting current public access to trails on or along the levee, and need for construction access through adjacent neighborhoods.

- Maximize Flexibility to Changing Criteria: Ranking was based upon how easily the remedial measure could be augmented or expanded to address potential future changes in design criteria.

- Regulatory Acceptance: Ranking reflected the design team’s assessment of regulatory agency acceptance of the remedial measure to address the identified deficiency.

Details of the alternatives evaluations and ranking for each reach are provided in the Alternatives Evaluation Memorandum dated October 2015. The geotechnical evaluations for remediated conditions are presented in the Embankment & Foundation Stability Memorandum dated October 2015. A summary of the recommended remedial measures based on the alternatives evaluation is provided in Section 4.3 below.

**4.2 Geotechnical Evaluation of Remediated Conditions**

Geotechnical analyses of levee remediated conditions were performed at analysis sections which either did not meet criteria or had past seepage or stability performance issues. The remediated conditions analyses approach and design criteria followed the same approach used for the existing conditions analyses described above. Remediated condition models were based on existing conditions models, but with the proposed remediations in place. Remediated conditions were analyzed with a design 200-year water surface elevation that was slightly higher (0.5 to 1.0 foot) than the existing conditions 200-year water surface elevation to provide an additional measure of robustness in consideration of hydrologic uncertainties and the potential for climate change.

**4.3 Recommended Levee Remediation Measures**

Table 3 summarizes the recommended levee remediation measures based on the alternatives evaluations and remediated conditions analyses described above. The extent of recommended remediation measures is shown in plan-view on Figures 7 through 10.

In general, the recommended levee remediation measures rely heavily on (1) drained stability berms to address through-seepage deficiencies, and (2) conventional slurry trench cutoff walls to address underseepage deficiencies. These remediation measures are recommended because of locally available expertise, cost considerations, reliability, minimal property impacts, and lack of maintenance requirements. Alternative remedial measures were determined to be more appropriate in the following locations:

- North of Highway 50 – additional relief wells have been included to supplement existing relief wells around Pioneer Reservoir.

- Central Little Pocket – a DMM cutoff wall has been recommended at a location where the required cutoff depth exceeds the capacity of conventional slurry trench equipment.

- Pocket – relief wells have been recommended at three locations where a thick aquifer and availability of adjacent pump stations make relief wells a practical alternative that is more cost effective than a DMM cutoff wall.
5. Riverbank Erosion Repairs

An evaluation of existing riverbank erosion sites and erosion potential was performed by MBK Engineers in collaboration with Kleinfelder and is summarized in a report entitled SAFCA Levee Certification Erosion Report dated January 2014. The evaluation considered historical performance, hydraulic analysis of the 100-year flood event, geometric criteria, geotechnical soil conditions, and field observations. As part of this work, a boat survey was conducted of the east (left) bank of the Sacramento River extending from the confluence of the American River to Freeport. In summary, one erosion site was recommended for immediate repair prior to FEMA accreditation, eight erosion sites were recommended for corrective action within a three-year time window of accreditation, and 11 sites were identified as requiring regular monitoring before and after a high-water event but not requiring immediate attention. SAFCA’s intent is to include in the SRELIP the repair of the nine sites that have been identified to need work over the relative short term. The locations of these nine erosion sites are shown on Figures 7 through 10. The 11 monitoring sites will be monitored and addressed by the levee maintaining agencies (LMAs) as needed as part of ongoing routine maintenance actions.

The nature of erosion at the sites requiring repair appears to range from shallow, wave-generated erosion to deeper toe scour erosion. Consequently two erosion repair concepts are recommended to address the two primary erosion mechanisms: 1) wave erosion; 2) toe scour. Both concepts include resistive measures to address wave erosion. The repair approach incorporates bioengineered features to add habitat value to the repairs and aims to preserve important riparian habitat and berm width where practical. The conceptual design is illustrated on Figure 11.

To provide resistance to wave erosion, reconstruction of the riverbank will incorporate a rock berm at mean summer water elevation to buffer the impacts of wave wash and to provide geotechnical stability for the upper bank. Soil fill will be installed above the rock bench to re-establish the riverbank. The soil fill slope will be re-vegetated with a variety of native woody and herbaceous plants for future cover and terrestrial/aquatic habitat as well as erosion protection (i.e, to attenuate wave action, reduce flow velocity, and stabilize the soil. In stream woody material will be incorporated at and below mean summer water elevation to develop aquatic habitat, with the intent to provide hydraulic variability and cover from predators for listed anadromous fish species. Wetland terraces will be included on the waterside of the rock bench where possible to allow for tule planting, which is intended to provide wave attenuation and shallow water refugia habitat for fish. For those sites that also require toe scour mitigation, the portion of bank below water will be reconstructed with rip rap.

6. Next Steps

The design process for the recommended Sacramento River East Levee Improvement Program (SRELIP) remediation measures is currently at approximately 30 percent completion. Over the next 10 to 12 months SAFCA’s consultant team will work closely with the Central Valley Flood Protection Board and Department of Water Resources (DWR) staff to flesh out the details of the design in a manner that is consistent with the state’s Urban Levee Design Criteria. This effort will enable SAFCA to enter into an agreement with the DWR to implement the SRELIP with the state contributing up to 70 percent of the project cost. The agreement will stipulate that the state’s contributions are contingent on receiving USACE’s permission to implement the SRELIP and USACE’s agreement to credit state and local expenditures on the project toward the non-federal cost of the American River Common Features Project. These determinations will be made when the project design is 90 percent complete and will require USACE to conclude that the design is consistent with applicable USACE levee design criteria.
Tables:
Table 1 – Summary of Findings from Kleinfeld Problem Identification Report
Table 2 – Sacramento River East Levee - Identified Geotechnical Deficiencies
Table 3 – Sacramento River East Levee - Recommended Remedial Measures

Figures:
Figure 1 – Sacramento River East Levee Overview
Figure 2 – Soil – Bentonite Cutoff Wall Conventional Slurry Trench Method
Figure 3 – Soil-Cement-Bentonite Cutoff Wall Deep Mixing Method
Figure 4 – Relief Well and Piezometer Details
Figure 5 – Drained Stability Berm
Figure 6 – Inset Drained Stability Berm
Figure 7 – Proposed Remediation Plan, Sheet 1 of 4
Figure 8 – Proposed Remediation Plan, Sheet 2 of 4
Figure 9 – Proposed Remediation Plan, Sheet 3 of 4
Figure 10 – Proposed Remediation Plan, Sheet 4 of 4
Figure 11 – Erosion Repair Concepts
### Table 1. SAFCR - Sacramento River East levee Improvement Project - Kleinfelder Problem Identification Report Deficiencies

<table>
<thead>
<tr>
<th>Stations</th>
<th>Meets Criteria</th>
<th>Does Not Meet Criteria</th>
<th>Potential Deficiencies (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000+00 - 1040+00</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1040+00 - 1080+00</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1080+00 - 1125+75</td>
<td></td>
<td>X</td>
<td>Through seepage, underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1125+75 - 1150+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1150+00 - 1185+00</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1185+00 - 1206+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5</td>
</tr>
<tr>
<td>1206+00 - 1244+00</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1244+00 - 1261+75</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1261+75 - 1285+75</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1285+75 - 1317+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1317+00 - 1407+50</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1407+50 - 1418+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1418+00 - 1424+50</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1424+50 - 1490+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1490+00 - 1540+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients landward of the levee toe above 0.5</td>
</tr>
<tr>
<td>1540+00 - 1570+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1570+00 - 1600+00</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1600+00 - 1640+00</td>
<td></td>
<td>X</td>
<td>Underseepage exit gradients above 0.5 and FOS &lt; 1.4</td>
</tr>
<tr>
<td>1640+00 - 1710+29</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1710+29 - 1730+00</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1730+00 - 1770+00</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

(1) Potential deficiencies identified in PIR based on minimum criteria per USACE EM-1110-2-1913
<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location</th>
<th>Identified Geotechnical Deficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1080+00</td>
<td>1085+00</td>
<td>500</td>
<td>By I-5 boat structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Meets FEMA and ULDC criteria.</td>
</tr>
<tr>
<td>2</td>
<td>1085+00</td>
<td>1090+50</td>
<td>550</td>
<td>Dirt lot with old wagons on display</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Does not meet ULDC criteria for seepage. Levee may experience shallow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&quot;leaker&quot; underseepage in erodible material.</td>
</tr>
<tr>
<td>3</td>
<td>1090+50</td>
<td>1094+50</td>
<td>400</td>
<td>PG&amp;E haz waste remediated site</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Meets FEMA and ULDC criteria.</td>
</tr>
<tr>
<td>4</td>
<td>1094+50</td>
<td>1096+75</td>
<td>225</td>
<td>Pioneer Reservoir chemical feed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>facility</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Does not meet FEMA or ULDC criteria for seepage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Does not meet ULDC criteria for seepage.</td>
</tr>
<tr>
<td>5</td>
<td>1102+00</td>
<td>1104+00</td>
<td>200</td>
<td>Parking lot under US 50 Pioneer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bridge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Meets FEMA and ULDC criteria.</td>
</tr>
<tr>
<td>6</td>
<td>1110+00</td>
<td>1117+00</td>
<td>700</td>
<td>Chevron and Union 76 tank farms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Meets FEMA and ULDC criteria.</td>
</tr>
<tr>
<td>7</td>
<td>1119+80</td>
<td>1125+50</td>
<td>570</td>
<td>Miller Park</td>
</tr>
<tr>
<td></td>
<td>1125+50</td>
<td>1150+00</td>
<td>2,450</td>
<td>Meets FEMA and ULDC criteria.</td>
</tr>
</tbody>
</table>

Certifiable Reach (Kleinfelder 2013 PIR)

| 8       | 1185+00  | 1199+00     | 1,400    | Along I-5 to where railroad veers off |
|         |          |             |          | Meets FEMA and ULDC criteria.       |
| 9       | 1199+00  | 1206+00     | 700      | Just south of railroad overlap over  |
|         |          |             |          | I5                                    |
|         |          |             |          | Does not meet FEMA or ULDC criteria for seepage. |

Certifiable Reach (Kleinfelder 2013 PIR)

| 10      | 1244+00  | 1248+25     | 425      | Captain’s Table                      |
|         |          |             |          | Meets FEMA and ULDC criteria.        |
| 11      | 1248+25  | 1249+40     | 115      | Just south of Westin’s swimming pool  |
|         |          |             |          | Meets FEMA and ULDC criteria.        |
|         | 1249+40  | 1252+50     | 310      | Just south of Westin’s swimming pool  |
|         |          |             |          | Does not meet ULDC criteria for seepage. |
|         |          |             |          | Does not meet FEMA or ULDC criteria for waterside rapid drawdown stability. |
|         | 1252+50  | 1261+75     | 925      | Little Pocket                         |
|         |          |             |          | Meets FEMA and ULDC criteria.        |

Certifiable Reach (Kleinfelder 2013 PIR)

| 12      | 1285+75  | 1291+50     | 575      | Little Pocket                         |
|         |          |             |          | Does not meet FEMA or ULDC criteria for seepage. |
| 13      | 1291+50  | 1294+60     | 310      | Little Pocket                         |
|         | 1294+60  | 1310+00     | 1,540    | Does not meet ULDC criteria for seepage. |
|         |          | 1336+00     | 2,600    | Along I-5 btw Little Pocket and       |
|         |          |             |          | Pocket                                |
|         |          | 1336+00     |          | Meets FEMA and ULDC criteria.         |
| 15      | 1336+00  | 1341+00     | 500      | Pocket                                |
|         |          |             |          | Meets FEMA and ULDC criteria.         |
| 16      | 1341+00  | 1367+00     | 2,600    | Pocket                                |
|         | 1367+00  | 1373+00     | 600      | Meets FEMA and ULDC criteria.         |
| 17      | 1373+00  | 1376+00     | 300      | Pocket                                |
|         | 1376+00  | 1391+50     | 1,550    | Meets FEMA and ULDC criteria.         |
| 18      | 1391+50  | 1407+50     | 1,600    | Pocket                                |
|         | 1407+50  | 1414+50     | 700      | Past performance indicates seepage issues following the USACE cutoff wall installation. |
|         | 1414+50  | 1418+00     | 350      | Past performance indicates seepage issues following the USACE cutoff wall installation. |
|         | 1418+00  | 1424+50     | 1,950    | Pocket - just downstream of USACE     |
|         |          | 1444+00     |          | 2006 deep wall                        |
|         | 1444+00  | 1444+00     | 3,250    | Pocket                                |
| 21      | 1476+50  | 1505+00     | 2,850    | Past performance indicates seepage issues following the USACE cutoff wall installation. |
|         | 1505+00  | 1517+00     | 1,200    | Meets FEMA and ULDC criteria.         |
| 22      | 1517+00  | 1530+30     | 1,330    | North of Sump 132                     |
|         |          |            |          | Does not meet FEMA or ULDC criteria for seepage. |
|         |          | 1530+30     |          | North of Sump 132                     |
|         | 1530+30  | 1533+30     | 300      | Sump 132                              |
|         | 1533+30  | 1534+40     | 110      | South of Sump 132                     |
|         | 1534+40  | 1550+00     | 1,560    | South of Sump 132                     |
| 24      | 1550+00  | 1554+50     | 450      | Pocket                                |
|         |          |             |          | Does not meet ULDC criteria for seepage. |
| 25      | 1554+50  | 1570+00     | 1,550    | Pocket                                |
|         |          |             |          | Past performance indicates seepage issues following the USACE cutoff wall installation. |
| 26      | 1570+00  | 1600+00     | 4,000    | Pocket                                |

Certifiable Reach (Kleinfelder 2013 PIR)

| 27      | 1600+00  | 1640+00     | 4,000    | Pocket                                |
|         |          |             |          | Does not meet ULDC criteria for seepage. |
|         |          |             |          | Does not meet FEMA or ULDC criteria for landside stability. |
|         |          |             |          | Past performance indicates seepage issues following the USACE cutoff wall installation. |

Note: Erosion sites and penetrations & encroachments are not included in the table.
<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location Description</th>
<th>Description of Preferred Seepage/Stability Remediation Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1080+00</td>
<td>500</td>
<td>By I-5 boat structure</td>
<td>No work</td>
</tr>
<tr>
<td>2</td>
<td>1085+00</td>
<td>550</td>
<td>Dirt lot with old wagons on display</td>
<td>Drained stability berm or landslide fill (high ground)</td>
</tr>
<tr>
<td>3</td>
<td>1090+50</td>
<td>400</td>
<td>PG&amp;E haz waste remediated site</td>
<td>No work</td>
</tr>
<tr>
<td>4</td>
<td>1094+50</td>
<td>225</td>
<td>Pioneer Reservoir chemical feed facility</td>
<td>Install four additional relief wells, connect to existing discharge system</td>
</tr>
<tr>
<td></td>
<td>1096+75</td>
<td>525</td>
<td></td>
<td>Raise existing soil berm by about two feet and build drained berm on landside slope</td>
</tr>
<tr>
<td>5</td>
<td>1102+00</td>
<td>200</td>
<td>Parking lot under US 50 Pioneer Bridge</td>
<td>No work</td>
</tr>
<tr>
<td>6</td>
<td>1104+00</td>
<td>600</td>
<td>Chevron tank farm</td>
<td>Drained stability berm</td>
</tr>
<tr>
<td>7</td>
<td>1110+00</td>
<td>280</td>
<td>Chevron and Union 76 tank farms</td>
<td>Conventional cutoff wall to El. = 0 ft (40 ft below crest)</td>
</tr>
<tr>
<td></td>
<td>1117+00</td>
<td>70</td>
<td></td>
<td>(Overlap stability berm 100’ to Sta 1116+00)</td>
</tr>
<tr>
<td>8</td>
<td>1119+80</td>
<td>570</td>
<td>Miller Park</td>
<td>Conventional cutoff wall to El. = 0 ft (40 ft below crest)</td>
</tr>
<tr>
<td>9</td>
<td>1125+50</td>
<td>2,450</td>
<td></td>
<td>No work</td>
</tr>
</tbody>
</table>

Certifiable Reach (Kleinfelder 2013 PIR)

<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location Description</th>
<th>Description of Preferred Seepage/Stability Remediation Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1185+00</td>
<td>1,400</td>
<td>Along I-5 to where railroad veers off</td>
<td>No work</td>
</tr>
<tr>
<td>9</td>
<td>1206+00</td>
<td>700</td>
<td>Just south of railroad overpass over IS</td>
<td>Conventional cutoff wall to El. = -30 to -35 ft (about 75 to 80 ft below crest)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Overlap 175’ to Sta 1207+75)</td>
</tr>
</tbody>
</table>

Certifiable Reach (Kleinfelder 2013 PIR)

<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location Description</th>
<th>Description of Preferred Seepage/Stability Remediation Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1244+00</td>
<td>425</td>
<td>Captain’s Table</td>
<td>No work</td>
</tr>
<tr>
<td>11</td>
<td>1248+25</td>
<td>115</td>
<td>Just south of Westin’s swimming pool</td>
<td>No work</td>
</tr>
<tr>
<td></td>
<td>1249+40</td>
<td>310</td>
<td>Just south of Westin’s swimming pool</td>
<td>Drained stability berm (extending 90 ft south of wall) and toe drain (south of berm)</td>
</tr>
<tr>
<td></td>
<td>1252+50</td>
<td>925</td>
<td>Little Pocket</td>
<td>No work</td>
</tr>
</tbody>
</table>

Certifiable Reach (Kleinfelder 2013 PIR)

<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location Description</th>
<th>Description of Preferred Seepage/Stability Remediation Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1285+75</td>
<td>575</td>
<td>Little Pocket</td>
<td>Deep cutoff wall (DMM) to El. = -95 to -65 ft (about 135 to 105 ft below crest)</td>
</tr>
<tr>
<td></td>
<td>1291+50</td>
<td>310</td>
<td></td>
<td>(Overlap 75’ to Sta 1285+00)</td>
</tr>
<tr>
<td>13</td>
<td>1294+60</td>
<td>1,540</td>
<td>Little Pocket</td>
<td>Deep cutoff wall (DMM) to El. = -65 ft (about 105 ft below crest)</td>
</tr>
<tr>
<td></td>
<td>1310+00</td>
<td>2,600</td>
<td></td>
<td>Conventional cutoff wall to El. = -15 to -25 ft (about 55 to 65 ft below crest)</td>
</tr>
<tr>
<td>14</td>
<td>1336+00</td>
<td>500</td>
<td>Pocket</td>
<td>No work</td>
</tr>
<tr>
<td>15</td>
<td>1367+00</td>
<td>600</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -25 ft to -30 ft (about 65 to 70 ft below crest)</td>
</tr>
<tr>
<td>16</td>
<td>1373+00</td>
<td>300</td>
<td>Pocket</td>
<td>No work</td>
</tr>
<tr>
<td>17</td>
<td>1381+50</td>
<td>1,600</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -10 ft (about 50 ft below crest)</td>
</tr>
<tr>
<td>18</td>
<td>1407+50</td>
<td>700</td>
<td>Pocket - USACE 2006 deep well</td>
<td>No work - Monitor existing piezometers</td>
</tr>
<tr>
<td>19</td>
<td>1414+50</td>
<td>350</td>
<td>Pocket - USACE 2006 deep wall</td>
<td>No work</td>
</tr>
</tbody>
</table>

Certifiable Reach (Kleinfelder 2013 PIR)

<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location Description</th>
<th>Description of Preferred Seepage/Stability Remediation Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>1442+50</td>
<td>1,950</td>
<td>Pocket - just downstream of USACE 2006 deep wall</td>
<td>Relief wells (22) at 100 ft spacing (overlap 50 feet to Sta 1424+00 and 100 feet to Sta 1445+00)</td>
</tr>
<tr>
<td></td>
<td>1444+00</td>
<td>3,250</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -5 to -45 ft (about 40 to 80 ft below crest)</td>
</tr>
<tr>
<td>21</td>
<td>1505+00</td>
<td>2,850</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -45 to -15 ft (about 80 to 50 ft below crest)</td>
</tr>
<tr>
<td></td>
<td>1505+00</td>
<td>1,200</td>
<td></td>
<td>No work</td>
</tr>
<tr>
<td>22</td>
<td>1517+00</td>
<td>1,330</td>
<td>North of Sump 132</td>
<td>Relief wells (14) at 100 ft spacing</td>
</tr>
<tr>
<td>23</td>
<td>1530+30</td>
<td>300</td>
<td>Sump 132</td>
<td>No work</td>
</tr>
<tr>
<td></td>
<td>1533+30</td>
<td>110</td>
<td>South of Sump 132</td>
<td>Drained stability berm between Sta 1533+30 and 1536+30</td>
</tr>
<tr>
<td>24</td>
<td>1534+40</td>
<td>1,560</td>
<td>South of Sump 132</td>
<td>Relief wells (16) at 100 ft spacing; drained berm between Sta 1533+30 and 1536+30</td>
</tr>
<tr>
<td>25</td>
<td>1554+50</td>
<td>450</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -20 ft (about 55 ft below crest)</td>
</tr>
<tr>
<td>26</td>
<td>1554+50</td>
<td>1,550</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -30 to -5 ft (about 65 to 40 ft below crest)</td>
</tr>
</tbody>
</table>

Certifiable Reach (Kleinfelder 2013 PIR)

<table>
<thead>
<tr>
<th>Reach #</th>
<th>Stations</th>
<th>Length (ft)</th>
<th>Location Description</th>
<th>Description of Preferred Seepage/Stability Remediation Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>1640+00</td>
<td>4,000</td>
<td>Pocket</td>
<td>Conventional cutoff wall to El. = -20 ft (about 55 ft below crest)</td>
</tr>
</tbody>
</table>

Note: Erosion sites and penetrations & encroachments are not included in the table.
Levee Meets Seepage and Stability Criteria for FEMA 100-Year Level of Protection (based on Kleinfelder PIR)

Levee Does Not Meet Seepage and Stability Criteria for FEMA 100-Year Level of Protection (based on Kleinfelder PIR)

Stationing Alignment

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sacramento River East Levee Improvement Project
Sacramento, CA
Sacramento Area Flood Control Agency

OCTOBER 2015 FIGURE 1
Proposed Remediation to Meet DWR ULDC 200-Year Flood Criteria

- Berms
- Cutoff Wall - Conventional Slurry Trench (CST)
- Cutoff Wall - Deep Mixing Method (DMM)
- Relief Wells
- Erosion Repair

NOTE: Areas of "No Work" meet DWR ULDC 200-Year flood criteria
Proposed Remediation to Meet DWR ULDC 200-Year Flood Criteria

- Berm
- Cutoff Wall - Conventional Slurry Trench (CST)
- Cutoff Wall - Deep Mixing Method (DMM)
- Relief Wells
- Erosion Repair

NOTE: Areas of "No Work" meet DWR ULDC 200-Year flood criteria
Proposed Remediation to Meet DWR ULDC 200-Year Flood Criteria

- **Berm**
- **Cutoff Wall - Conventional Slurry Trench (CST)**
- **Cutoff Wall - Deep Mixing Method (DMM)**
- **Relief Wells**
- **Erosion Repair**

**NOTE:** Areas of "No Work" meet DWR ULDC 200-Year flood criteria.
Proposed Remediation to Meet DWR ULDC 200-Year Flood Criteria

- Berm
- Cutoff Wall - Conventional Slurry Trench (CST)
- Cutoff Wall - Deep Mixing Method (DMM)
- Relief Wells
- Erosion Repair

NOTE: Areas of "No Work" meet DWR ULDC 200-Year flood criteria

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Sacramento River East Levee Improvement Project
Sacramento, CA
Sacramento Area Flood Control Agency

PROPOSED REMEDIATION PLAN
SHEET 4 OF 4
SEGMENT D

OCTOBER 2015  FIGURE 10