

APPENDIX E

Cultural Resources

E1 Programmatic Agreement

**PROGRAMMATIC AGREEMENT
AMONG THE U.S. ARMY CORPS OF ENGINEERS,
THE SACRAMENTO AREA FLOOD CONTROL AGENCY, AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER**

**REGARDING THE ISSUANCE OF PERMISSION UNDER THE AUTHORITY OF SECTION 408 OF THE
RIVERS AND HARBORS ACT OF 1899 AND SECTION 404 OF THE CLEAN WATER ACT
FOR THE NATOMAS LEVEE IMPROVEMENT PROGRAM, LANDSIDE IMPROVEMENTS PROJECT**

WHEREAS, the U.S. Army Corps of Engineers, Sacramento District (Corps) proposes to review an application that seeks permission for alteration of flood control structures under the authority of Section 408 of the Rivers and Harbors Act and to issue one or more permits to discharge fill to the waters of the United States under the authority of Section 404 of the Clean Water Act to the Sacramento Area Flood Control Agency (SAFCA) for the Natomas Levee Improvement Program Landside Improvements Project (Project); and

WHEREAS, The Corps has determined that the issuance of these permissions and permits constitute an undertaking per 36 CFR 800.16(y), which require compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended (16 U.S.C. 470f); and

WHEREAS the Project includes improvements to an extensive levee system surrounding the Natomas Basin and landscape and irrigation/drainage infrastructure modifications that will be implemented in three construction phases, currently scheduled for 2008, 2009, and 2010; and

WHEREAS, the Corps has determined that this undertaking will have an adverse effect on at least one Historic Property that has been determined eligible for inclusion in the National Register of Historic Places (NRHP), CA-SAC-485/H; and

WHEREAS, because of the complex and phased nature of the improvements, the Corps has not yet determined the exact area of potential effects (APE), nor has SAFCA acquired all of the rights-of-entry, easements and ownership interests that would allow a complete inventory and determination of effects on Historic Properties; and

WHEREAS, the Natomas Basin is sensitive for buried archaeological resources that cannot be accurately located prior to construction; and such buried sites may also be Historic Properties, and therefore SAFCA and the Corps need to document a framework for managing post-review discoveries per 36 CFR Section 800.13, including evaluation of those resources, assessment of effects, and resolution of potential adverse effects; and

WHEREAS, at such time as any unevaluated cultural resource may be discovered, it may require archaeological data recovery and/or other historic preservation activities, in compliance with Section 106 of the National Historic Preservation Act, concurrent with *active* construction; and

WHEREAS, the urgency of flood control improvements require a management framework for Historic Properties that will be implemented after the execution of this agreement in an expedited manner that thus departs from the process normally used under 36 CFR Section 800 et seq., yet still fulfills the requirements of Section 106 of the NHPA; and

WHEREAS, SAFCA has been invited to participate as a signatory to this Programmatic Agreement (PA) by the Corps and the California State Historic Preservation Officer (SHPO); and

WHEREAS, the Corps has consulted The Ione Band of Miwok Indians, the Shingle Springs Band of Miwok Indians and the United Auburn Indian Community, and they have been invited to concur in this PA; and

WHEREAS, the Corps shall make the terms and conditions of this PA as part of the conditions of any permissions and permits issued by the Corps for this project; and

WHEREAS, SAFCA has agreed to undertake responsibility for compliance with the NHPA on its own behalf, and on behalf of the Central Valley Flood Protection Board; and

WHEREAS, the Corps has consulted with the SHPO and the Advisory Council on Historic Preservation in accordance with regulations implementing Section 106 of the NHPA;

WHEREAS, the Council has been consulted and declined to participate in this agreement;

NOW, THEREFORE, the Corps, the SHPO, and SAFCA agree that the Project shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on Historic Properties.

The Corps shall ensure that the following stipulations of this PA are carried out.

STIPULATIONS

I. DEFINITIONS

The terms used in this Programmatic Agreement shall be as defined in regulations implementing Section 106 of the NHPA, and as follows:

“APE (Area of Potential Effect)” means any location at which any Project development activity will be constructed; and locations of any Project-related construction staging areas, borrow areas, and materials stockpile areas; and the locations of any other Project development activities. The APE shall be defined so as to include the maximum spatial dimensions of all Project-related construction and operations rights-of-way, easements, areas which potentially may be affected by Project activities, and other properties to which SAFCA has access, whether on a temporary or permanent basis, or ownership for Project development.

“Concurring parties” means their concurrence indicates that they are in agreement with the terms of the PA.

“Consulting parties” means the Corps, the SHPO, and SAFCA who are signatories to this PA. Only signatories have the authority to amend or terminate this PA.

“Cultural resources” means any property or location that was created, modified, or used by people at least 50 years in the past. Cultural resources include but are not limited to Historic Properties and traditional cultural properties/places (i.e., NRHP listed or eligible properties as defined at 36 CFR Part 60).

“Historic Property” means a cultural resource that has been determined eligible for or is listed on the NRHP (i.e., NRHP listed or eligible properties as defined at 36 CFR Part 60), either by formal nomination

and listing or by concurrence between federal agencies and the SHPO.

“Historic preservation” means any activity conducted in accordance with the NHPA and its implementing regulations to, among other things, inventory, evaluate, manage, or treat cultural resources such as buildings, structures, sites, districts, and objects eligible for, or that may be determined eligible for, listing in the NRHP according to eligibility criteria at 36 CFR Part 60.

“Project development activities” means any physical action related to the Project that has the potential to damage or otherwise alter those characteristics of Historic Properties that would make them eligible for listing in the NRHP.

II. STANDARDS

(A.) Professional Qualifications. All technical work required for historic preservation activities implemented pursuant to this Programmatic Agreement shall be carried out by or under the direct supervision of a person or persons meeting at a minimum the *Secretary of Interior’s Professional Qualifications Standards* for archaeology or history, as appropriate (48 FR 44739). “Technical work” here means all efforts to inventory, evaluate, and perform subsequent treatment such as data recovery excavation or recordation that is required under this Programmatic Agreement. This stipulation shall not be construed to limit peer review, guidance, or editing of documents by SAFCA or SAFCA’s consultants.

(B.) Historic Preservation Standards. Historic preservation activities carried out pursuant to this Programmatic Agreement shall meet the *Secretary of Interior’s Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as standards and guidelines for historic preservation activities established by the SHPO. The Corps shall ensure that all reports prepared pursuant to this Programmatic Agreement will be provided to the consulting parties and shall ensure that all such reports meet published standards of the California Office of Historic Preservation, specifically, *Preservation Planning Bulletin* Number 4(a), “Archaeological Resources Management Reports (ARMR): Recommended Contents and Format” (December 1989).

III. PROJECT DESCRIPTION

(A) PROJECT Description. A description of the Project is found in the Final Environmental Impact Report (November 2007). A summary of the Project’s description in the environmental impact report is provided as **Attachment A** and is made a part of this Programmatic Agreement.

(B) Existing Conditions. An archival search and archaeological survey have been completed for all areas of the APE as currently defined to which SAFCA currently has access, and which currently are not covered by paving, built environment features, or agricultural crops. A report of the results of archival research and archaeological survey, “Cultural Resources Inventory Reports, Part 1 – Natomas Levee Improvement Program Landside Improvements Project, Sacramento and Sutter Counties, California” (October 2007) is made **Attachment B** to this Programmatic Agreement.

A number of prehistoric sites are known to be present along the banks of the Sacramento River. However, archaeological survey of the area is of limited value because the alluvial depositional environment may obscure and bury sites, leaving no surface manifestation of those archaeological resources. For most of the length of the Project, levees have been built on the riverbanks. These levees are one focus of the Project’s activity, and occupy a substantial portion of the Project’s APE. Furthermore, it has not been established

whether certain known sites in proximity to the Project's development activities extend under the existing levees. The existing levees both obscure ground surfaces and prevent subsurface archaeological testing within their footprints. Because of these conditions, a full assessment of archaeological sites that may be present in the APE cannot be made in advance of construction. There is no definitive information, even for sites known to be in Project's proximity, of site boundaries relative to the APE, or of the significance or integrity of any portions of such sites that may be within the APE. For these reasons, even though archaeological deposits may extend into the APE, and even though some of these deposits may qualify as Historic Properties, it is impossible to develop meaningful site-specific Historic Properties Treatment Plans (HPTP) prior to all construction, or to carry out all necessary data recovery in advance of the Corps' approvals, permitting and construction.

For these reasons, unforeseen discoveries shall be treated pursuant to the provisions of 36 CFR 800.13 (Post-review discoveries).

(C) Project Phasing and Potential Changes to the APE: Because the improvements will occur in three phases (anticipated to be 2008, 2009, and 2010), it will be necessary to define the APE for each phase. The APE for each phase shall be submitted with the cultural resources inventory reports, and shall be consulted upon as part of that document, pursuant to **Stipulation IV**, below.

After the initial concurrence, changes to the APE may be necessary as SAFCA refines its phased Project plans. In particular, the ability of SAFCA to obtain access permissions of private landowners, determination of borrow sites and ongoing negotiations with resource agencies regarding species mitigation requirements may affect final Project's design, and may expand the current APE in some areas. Any changes to the APE shall be made in accordance with subsections D and E (below) of this Stipulation III. The SHPO, Corps, and SAFCA shall consult and reach concurrence in any changes to the APE. The final APE shall account for all Project development activities for the as-built Project. SAFCA shall notify the Corps of any change in the APE and the Corps shall determine the potential for Project development activities in a revised APE to affect cultural resources, through cultural resources inventory and testing as needed.

- (1) If there is the potential that cultural resources exist in the revised APE, SAFCA shall submit to the Corps:
 - (a) a map of the revised APE; and
 - (b) a description of Project development activities to take place in the revised APE; and
 - (c) a description of the inventory, nature, location, and known or potential significance of cultural resources in the revised APE; and
 - (d) a description of any archaeologically sensitive areas in the revised APE that require monitoring by an archaeologist, and Native American monitor as appropriate; and
 - (e) a plan for managing cultural resources in a manner that either avoids Project-related effects to cultural resources, or which mitigates any adverse effects, and which provides for the management of unforeseen cultural resources discoveries.
- (2) If no cultural resources are identified within a revised APE, SAFCA shall document such a determination, provide documentation to the Corps and keep such documentation on file at its principal offices.

After the Corps and SAFCA agree to a revised APE and if such a change has the potential to have an effect on cultural resources, the Corps shall submit the documentation to the SHPO for their review. The SHPO

shall have 30 calendar days from the date of receipt of the notice of a revision to the APE to review and to provide in writing either concurrence with or objection to the definition of the revised APE, and any proposed historic preservation activities. Should the SHPO not respond in writing within 30 calendar days, the Corps and SAFCA shall proceed as though the SHPO has concurred in the revised APE, and the proposed historic preservation activities, if any

Should the SHPO object to the definition of the revised APE or proposed historic preservation activities, the Corps, SAFCA, and the SHPO shall consult for a period not to exceed 15 calendar days following the date of the receipt of the SHPO's written objection in an effort to come to agreement on the issues to which the SHPO has objected. Should the SHPO, the Corps, and SAFCA be unable to agree on the issues to which the SHPO has objected, the consulting parties to this Programmatic Agreement shall proceed in accordance with **Stipulation VIII (Resolving Objections)**, below.

(D) Scope of Identification Efforts in the APE: Inventories of Historic Properties within the established or revised APE shall be completed in accordance with **Stipulation IV (Inventory of Historic Properties)** of this Programmatic Agreement. Treatment of any adverse effects to Historic Properties within the established or revised APE shall be completed in accordance with **Stipulation V (Treatment of Effects)** of this Programmatic Agreement.

(E) Scope of the APE: For purposes of this Programmatic Agreement, a revised APE shall be defined to meet, at a minimum, the following criteria:

(1) The APE for any segment of the Natomas levees that are being improved as part of the Project and shall include the levee segment and a corridor extending not less than 75 feet from the land side toe of the levee segment. The APE also shall include:

- The extent of all Project construction and excavation activity required to construct flood control facilities and to modify irrigation and drainage infrastructure,
- The additional right-of-way/easements obtained by SAFCA as part of the Project's features,
- All areas used for excavation of borrow material and habitat creation, and
- All construction staging areas.

(2) The APE for Project activities shall include the direct footprint of the activity and a reasonable buffer determined by consultation between SAFCA and the Corps, according to the nature of the activity, SAFCA's ownership interest or easement, and the probability that ground-disturbing work may extend beyond the footprint of planned improvements and activities.

(3) The APE for any other type of Project development activities shall be defined by the Corps in consultation with the consulting parties.

IV. INVENTORY OF HISTORIC PROPERTIES

(A) Identification Efforts to Date and Further Work Required: An inventory of Historic Properties within the APE has been initiated consistent with the *Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-44740). The SAFCA shall submit a completed inventory and evaluation for each phase of Project work (2008, 2009, 2010) to the Corps. Such inventory shall be deemed complete by the Corps when the SHPO concurs in the NRHP eligibility recommendation for all cultural resources within the APE for that phase.

Areas of Archaeological Sensitivity: Areas of archaeological sensitivity will be monitored in accordance with HPTPs.

(C) Changes in the APE: If areas are added to the Project development activities subsequent to the SHPO concurrence on the map of the APE for a specific phase, SAFCA shall complete an inventory of Historic Properties within the expanded APE. Such inventory shall be undertaken and completed consistent with the *Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716–44740). Such inventory shall be deemed completed by the Corps at such time as the SHPO concurs in the NRHP eligibility of all cultural resources within the established and revised APE for the Project, pursuant to this Stipulation IV.

V. TREATMENT OF EFFECTS

(A) Historic Property Treatment Plans: If Historic Properties are identified in cultural resources inventories that would be adversely affected by the Project, SAFCA shall prepare a Historic Properties Treatment Plan (HPTP) for review and written approval by the Corps and the SHPO for those specific properties. An HPTP applicable to every Historic Property that may sustain adverse effects by the Project shall be prepared, including for those Historic Properties found during construction. An HPTP may address individual or multiple Historic Properties. An HPTP shall stipulate those actions SAFCA shall take to resolve the adverse effects of the Project on Historic Properties. SAFCA shall ensure that all provisions of an HPTP are carried out in a timely manner. Any changes to an HPTP shall be reviewed and approved by the Corps. Copies of all reports pertaining to the treatment of Historic Properties shall be submitted to the consulting parties to this Programmatic Agreement. Reports and other data pertaining to the inventory of, and treatment of effects on, Historic Properties may be distributed to concurring parties to this Programmatic Agreement and to other members of the public consistent with **Stipulation VII (Confidentiality)** of this Programmatic Agreement. Individual HPTPs may be submitted simultaneously with the cultural resources inventory report for specific Project phases. If HPTPs are submitted simultaneously with an inventory report for a Project phase or with an addendum to such report for an expanded APE or Project description, the Corps and SHPO review period for such HPTP shall run concurrently with the review period for the inventory report.

Review Schedule: The SHPO and the Corps shall have 30 calendar days to review and comment upon in writing any HPTP submitted by SAFCA. The SHPO and the Corps shall indicate in their review that they find the HPTP either acceptable or not. In the event that comments are not made by the SHPO within 30 calendar days, the Corps shall assume the SHPO has accepted the HPTP as submitted. In the event the Corps and/or the SHPO provide written comment within the 30-day period, either SAFCA shall accept the comments and revise the HPTP accordingly, or SAFCA and the Corps may object to some or all comments. Comments from the Corps or the SHPO that are not acceptable to SAFCA shall be resolved by consultation among the Corps, the SHPO, and SAFCA for a period of not more than 15 calendar days. Should the Corps, the SHPO, and SAFCA be unable to resolve any dispute regarding the Corps or the SHPO comments, the consulting parties shall proceed in accordance with **Stipulation VIII (Resolving Objections)** of this Programmatic Agreement.

The Corps shall submit to the SHPO for review and comment any amendment, addendum, revision or other change to an HPTP. SAFCA shall proceed to make changes to an HPTP as per the procedure and schedule for the review and approval of an original HPTP. If a Historic Property is discovered within an expanded APE subsequent to an initial inventory effort for a phase, and the Corps and SAFCA agree that

the Project may adversely affect the property, SAFCA shall submit an addendum to the HPTP or a new HPTP. The review schedule for this submittal follows the provisions of Stipulation V.

(B) Commencement of Construction and Project Work: Project development activities may commence within the APE after a Historic Properties inventory has been completed (per **Stipulations III and IV**, above), and prior to treatment of adverse effects on Historic Properties within the APE provided that:

- (1) A plan to respond to inadvertent archaeological discoveries is prepared by SAFCA and approved by the Corps prior to the commencement of Project activities anywhere in the APE for that phase of the Project; and
- (2) Project development activities do not encroach within 30 meters (100 ft) of the known boundaries of any Historic Property as determined from archaeological site record forms, other documentation, or as otherwise defined in consultation with the SHPO; and
- (3) An archaeological monitor is present during any Project activities that are anticipated to extend either vertically or horizontally into any areas designated to be archaeologically sensitive by SAFCA in consultation with the Corps.

(C) Final Report Documenting Implementation of the Historic Properties Treatment Plan(s): Within one year after the completion of all work performed as part of the Project SAFCA shall submit to the Corps and SHPO a final report documenting the results of all work prepared under the HPTPs. This report shall be submitted to the Corps and SHPO for review and comments, which SAFCA shall incorporate.

VI. NATIVE AMERICAN AND OTHER PUBLIC CONSULTATION AND PUBLIC NOTICE

Members of the interested public shall be invited to consult regarding this Programmatic Agreement. Within 30 calendar days of the signing date of this Programmatic Agreement, the Corps, the SHPO, and SAFCA shall consult to compile a list of members of the interested public who shall be provided notice of this Programmatic Agreement. The opinions of local Native Americans with cultural ties to the APE and the opinions of other members of the public shall be taken into account by the consulting parties for historic preservation actions taken in accordance with this Programmatic Agreement. Native Americans and other members of the public may be invited to concur in this Programmatic Agreement. Native American monitor(s) shall be invited to assist SAFCA in the treatment of any Native American human remains and items associated with Native American burials discovered during the Project in accordance with California Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5(b) and 7050.5(c).

VII. CONFIDENTIALITY

Confidentiality regarding the nature and location of the archaeological sites and any other cultural resources discussed in this Programmatic Agreement shall be maintained on a "need-to know" basis limited to appropriate personnel and agents of SAFCA, the Corps, and the SHPO involved in planning, reviewing and implementing this Programmatic Agreement consistent with Section 304 of the NHPA.

VIII. RESOLVING OBJECTIONS

(A.) Should any party to this Programmatic Agreement object to any action proposed or carried out

pursuant to this Programmatic Agreement, the Corps shall consult with the objecting party(ies) for a period of time not to exceed *30 calendar days* to resolve the objection. If the Corps determines that the objection cannot be resolved, the Corps shall forward all documentation relevant to the dispute to the Council. Within 30 calendar days after receipt of all pertinent documentation, the Council shall either:

- (1) Provide the Corps with recommendations, which the Corps shall take into account in reaching a final decision regarding the objection; or
- (2) Notify the Corps that the Council will comment in accordance with the requirements of Section 106 of the NHPA, and proceed to comment. Any Council comment provided in response shall be taken into account by the Corps, pursuant to the requirements of Section 106 of the NHPA.
- (3) Should the Council not exercise one of the above options within 30 days after receipt of all pertinent documentation, the Corps may assume the Council's concurrence in its proposed response to the objection.
- (4) The Corps shall take into account any Council recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; the Corps' responsibility to carry out all actions under this Programmatic Agreement that are not the subjects of the objection shall remain unchanged.

(B.) At any time during implementation of the measures stipulated in this Programmatic Agreement should an objection pertaining to the Programmatic Agreement be raised by a member of the public, the Corps or SAFCA shall notify the consulting parties to the Programmatic Agreement and take the objection into account, consulting with the objector and, should the objector so request, with any of the consulting parties to this Programmatic Agreement to address the objection.

IX. AMENDMENTS

Any consulting party to this Programmatic Agreement may propose that the Programmatic Agreement be amended, whereupon the Corps shall consult with the other consulting parties to this Programmatic Agreement to consider such amendment. Any amendment shall be executed by the consulting parties in the same manner as the original Programmatic Agreement.

If the Project has not been completed within five years of the date of the execution of this Programmatic Agreement, the consulting parties shall consult on a date not less than 90 days prior to the fifth anniversary of this Programmatic Agreement to either amend this Programmatic Agreement and acknowledge its continued applicability for the undertaking for a designated period of time, or terminate this Programmatic Agreement and proceed to again consult regarding the undertaking in accordance with regulations implementing Section 106 of the NHPA.

All attachments to this Programmatic Agreement, and other instruments prepared pursuant to this agreement such as, but not limited to, the Project's description, initial cultural resource inventory report and maps of the APE, HPTPs, and monitoring and discovery plans may be amended without requiring amendment of this Programmatic Agreement. Such amendments will be consulted on by the concurring parties and shall be final when agreement is reached by the parties.

X. FAILURE TO CARRY OUT THE TERMS OF THE AGREEMENT

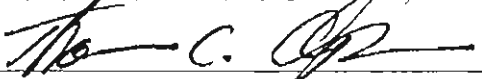
Should the Corps fail to ensure that the terms of this Programmatic Agreement are carried out, the Corps shall notify the parties to this Programmatic Agreement and again consult with the SHPO and the Council in accordance with regulations implementing Section 106 of the NHPA. The Corps shall not take any action or make any irreversible decision that would affect an Historic Property, preclude historic preservation alternatives, or foreclose any opportunities for the Council to comment on the undertaking prior to completion of the process for considering and resolving effects on Historic Properties provided in this document.

XI. SCOPE OF THE PROGRAMMATIC AGREEMENT

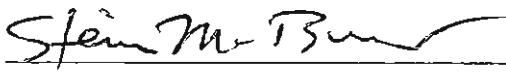
Execution of this Programmatic Agreement by the Corps, the SHPO, and SAFCA, and implementation of its terms, evidence that Corps has afforded the Council an opportunity to comment on the undertaking for SAFCA Natomas Levee Improvement Program Landside Improvements Project, pursuant to 16 U.S.C. 470f, and that the Corps has taken into account the effects of the undertaking on Historic Properties. This Programmatic Agreement is limited in scope to the undertaking defined herein and is entered into solely for that purpose.

CONSULTING PARTIES:

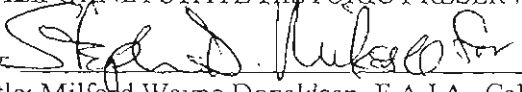
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT

By:  Date: 10 Apr 08
Title: COL Thomas Chapman, District Engineer, Sacramento District, U.S. Army Corps of Engineers

SACRAMENTO AREA FLOOD CONTROL AGENCY

By:  Date: 4/11/08
Title: Stein M. Buer, Executive Director, Sacramento Area Flood Control Agency

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By:  Date: 5/1/08
Title: Milford Wayne Donaldson, F.A.I.A., California State Historic Preservation Officer

CONCUR:

CENTRAL VALLEY FLOOD PROTECTION BOARD

By: Jay S. Punia Date: 6/23/08
Title: Jay S. Punia, Executive Officer, Central Valley Flood Protection Board

By: JAY S. PUNIA Date: 6/23/08
Title: Executive Officer, CVFIPB

Attachment A: Project Description Summary

Attachment B: "Cultural Resources Inventory Reports, Part 1 – Natomas Levee Improvement Program
Landside Improvements Project, Sacramento and Sutter Counties, California"
(report).

E2 Correspondence Regarding Cultural Resources

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 7, 2007

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, Ca 95814

RE: Natomas Levee Improvement Project

Dear Ms. Pilas-Treadway:

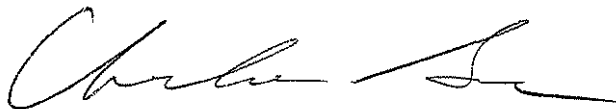
EDAW is conducting cultural resources studies for the above-referenced project located generally north of the City of Sacramento, in Sacramento and Sutter counties, and located on the Grays Bend, Taylor Monument, Verona, Rio Linda, Pleasant Grove, Sacramento East, and Sacramento West USGS quadrangle maps. Background research and field studies conducted for this project will identify cultural resources that may be impacted by proposed levee improvements throughout the American River basin. This letter is intended to initiate part of the consultation process that will eventually be required under Section 106 National Historic Preservation Act.

I am pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. I am interested in any contemporary Native American values that may be present near or within the project area and would like to request a search of the NAHC Sacred Land files.

Please send via mail or facsimile (916-414-5850) a listing of local Native American representatives at your earliest convenience, so that I may contact appropriate individuals and account for their potential concerns in the planning process.

If you have any questions or comments feel free to contact me at my office. I can be reached by email at charlane.gross@edaw.com, or by phone at 916-414-5800. I look forward to hearing from you soon.

Sincerely,



Charlane Gross, M.A., R.P.A.
Senior Archaeologist

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5380



June 19, 2007

Charlene Gross
EDAW Inc.
2011 J Street
Sacramento, CA 95814

Sent Via Fax: 916-414-5850
Of Pages: 3

RE: Natomas Levee Improvement project, Sacramento and Sutter Counties

Dear Ms. Gross:

The Native American Heritage Commission has reviewed the Sacred Lands File and found several burial/recorded sites in/near the project area. The location of sites is confidential.

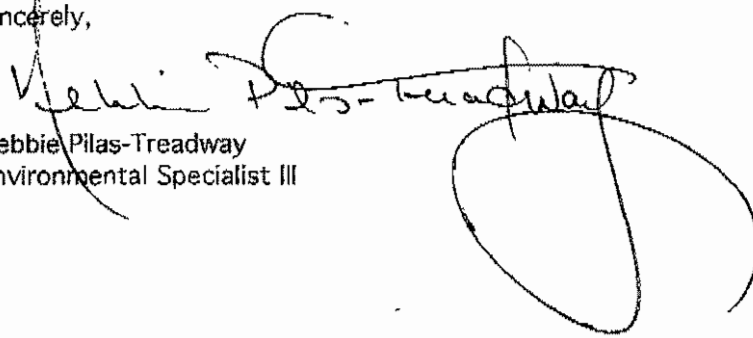
I recommend that you contact the North Central Information Center, Ca State University, Sacramento, 6000 J Street, Adams Building, Suite 103, Sacramento, CA 916-278-6217 for sites in Sacramento County and Northeast Information Center, Ca State University, Chico, Building 25, Suite 204, Chico, CA 95929, 530-898-4413 for Sutter County, for further information of recorded sites located in/near the APE.

I have enclosed a list of Native Americans individuals/organizations contacts may have knowledge of additional cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. These lists should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. A minimum of two weeks must be allowed for responses after notification.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

If you have any questions or need additional information, please contact me.

Sincerely,


Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
Sacramento and Sutter Counties
June 19, 2007

✓ = CALL
✓ = CALL W/MESSAGE
✓ = CALL SPOKE W/INDIVIDUAL
(SEE CALL LOG RECORD)

✓
Rose Enos
15310 Bancroft Road
Auburn, CA 95603
(530) 878-2378
Maidu
Washoe

Shingle Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340
Shingle, CA 95682
nfonseca@ssband.org
(530) 676-8010
(530) 676-8033 Fax
Miwok
Maidu

✓
Enterprise Rancheria of Maidu Indians
Frank Watson, Vice Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965
eranch@cncnet.com
(530) 532-9214
(530) 532-1768 FAX
Maidu

Strawberry Valley Rancheria
Calvine Rose, Chairperson
PO Box 667
Marysville, CA 95901
Maidu No #
Miwok

✓
Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965
eranch@cncnet.com
(530) 532-9214
(530) 532-1768 FAX
Maidu

Strawberry Valley Rancheria
Robert Kerfoot
PO Box 667
Marysville, CA 95901
Maidu No #
Miwok

✓
Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340
Shingle, CA 95682
jmurray@ssband.org
(530) 676-8010
(530) 676-8033 Fax
Miwok
Maidu

✓
United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
575 Menlo Drive, Suite 2
Rocklin, CA 95765
916 663-3720
916 663-3727 - Fax
Maidu
Miwok

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Natomas Levee Improvement project, Sacramento and Sutter Counties.

Native American Contacts
Sacramento and Sutter Counties
June 19, 2007

United Auburn Indian Community of the Auburn
Tribal Preservation Committee
575 Menlo Drive, Suite 2 Maidu
Rocklin , CA 95765 Miwok
916 663-3720
916 663-3727 - Fax

This list is current only as of the date of this document.

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

United Auburn Indian Community of the Auburn
Tribal Preservation Committee
575 Menlo Drive, Suite 2
Rocklin, CA 95765

Subject: Natomas Levee Improvement Project(s)

To Whom It May Concern:

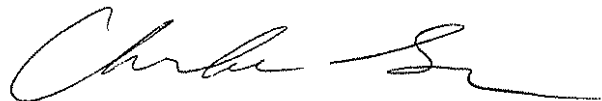
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In order to incorporate your concerns and/or input in any forthcoming reports, we would appreciate receiving your comments by July 10th.

If you have questions, please contact me at (916) 414-5800.

Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
575 Menlo Drive, Suite 2
Rocklin, CA 95765

Subject: Natomas Levee Improvement Project(s)

Dear Ms. Tavares:

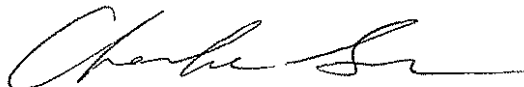
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EDAW inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Strawberry Valley Rancheria
Robert Kerfoot
P.O. Box 667
Marysville, CA 95901

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Kerfoot:

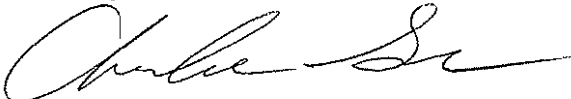
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Senior Archaeologist

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916 414.5850 www.edaw.com

June 21, 2007

Strawberry Valley Rancheria
Calvine Rose, Chairperson
P.O. Box 667
Marysville, CA 95901

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Rose:


EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916 414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Single Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340
Shingle Springs, CA 95682

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Fonseca:

EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

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Senior Archaeologist

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340
Shingle Springs, CA 95682

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Murray:

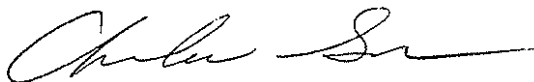
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Senior Archaeologist

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Subject: Natomas Levee Improvement Project(s)

Dear Ms. Nelson:


EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

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Senior Archaeologist

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916 414.5850 www.edaw.com

June 21, 2007

Enterprise Rancheria of Maidu Indians
Frank Watson, Vice Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Watson:

EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

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EDAW Inc
2022 J Street, Sacramento, California 95814
T 916 414.5800 F 916.414 5850 www.edaw.com

June 21, 2007

Rose Enos
15310 Bancroft Road
Auburn, CA 95603

Subject: Natomas Levee Improvement Project(s)

Dear Ms. Enos:

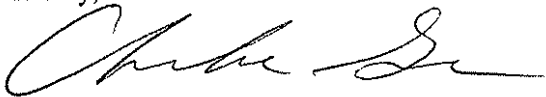
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Senior Archaeologist

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Telephone Contact Report**CONFIDENTIAL**

Call Participants:

LBM - ROSIE ENOS

Title:

? - M ADU / WASHOE
CONTACT

Initiated By: LBM

Organization:

(SEE ABOVE)

Phone Number: 530 - 878 - 2378

Location:

EDAW SAC

Subject:

SAFCA, NATIMAS C.C. LEVINE

Date/Time:

7-9-07 12:30

Discussion
Item(s):

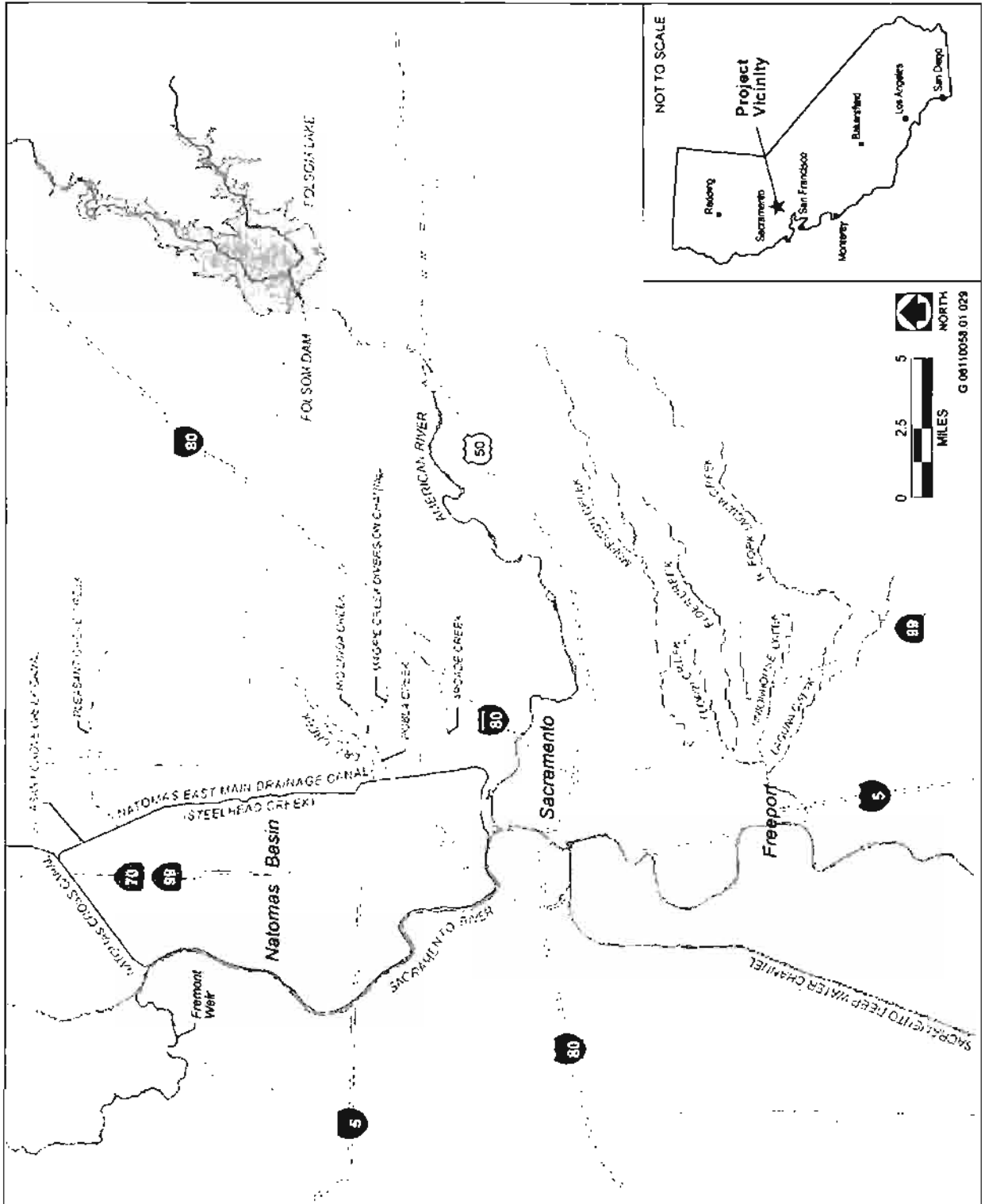
- CONCERN IS BURIAL SITE AVOIDANCE
- WOULD LIKE ANY INFORMATION CONCERNING
ANY FURTHER WORK CONCERNING SUCH SITES

Action Item(s):

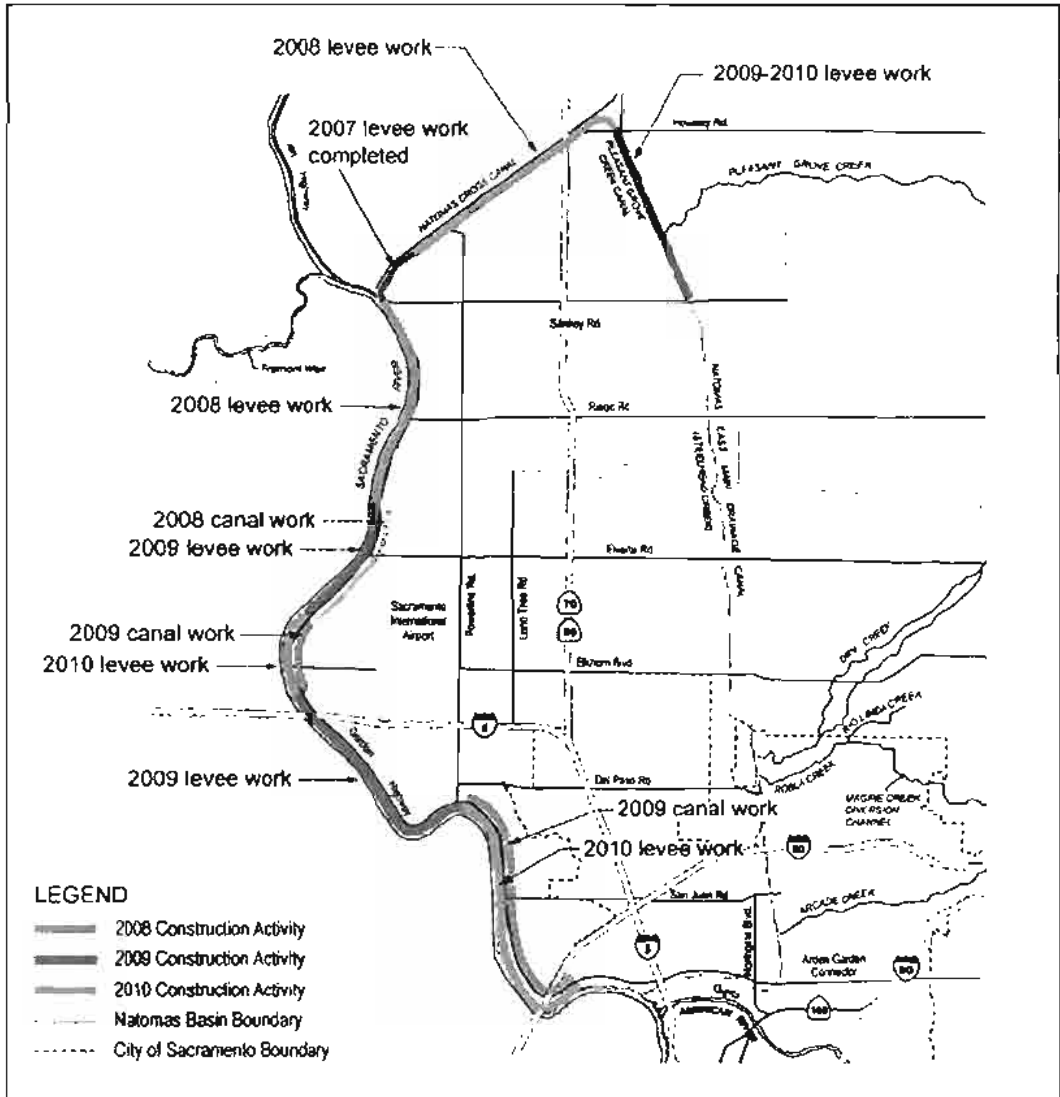
Distribution:

ENCLOSURE 4

**PROGRAMMATIC AGREEMENT
NATOMAS LEVEE IMPROVEMENT PROJECT**



Enclosure 1: Project Location



Enclosure 2: Project Construction by Phase

ENCLOSURE 3
PROJECT SUMMARY

ENCLOSURE 3

DESCRIPTION OF THE SACRAMENTO AREA FLOOD CONTROL AGENCY'S NATOMAS LEVEE IMPROVEMENT PROGRAM LANDSIDE IMPROVEMENTS PROJECT

PURPOSE AND NEED

PROJECT OVERVIEW

The Natomas Levee Improvement Program (NLIP) Landside Improvements Project proposed by the Sacramento Area Flood Control Agency (SAFCA) is intended to provide urgently needed flood control system improvements to the Natomas Basin in southern Sutter and northern Sacramento Counties, California (Exhibit 1). The project would improve the levee system that protects the 53,000-acre Natomas Basin, including a portion of the city of Sacramento. The Natomas Basin is bounded by leveed reaches of the Natomas Cross Canal (NCC) on the north, the Sacramento River on the west, the American River on the south, and the Pleasant Grove Creek Canal (PGCC) and Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek on the east (Exhibit 1).

SAFCA's intent is to provide the Natomas Basin with at least a 100-year level of flood protection by the end of 2010 and a "200-year" level of protection by the end of 2012. Achievement of these aims would significantly reduce the risk of an uncontrolled flood in the Natomas Basin that would result in a catastrophic loss of property (estimated at \$7 billion) and a prolonged interruption of commercial activity, including the operation of Sacramento International Airport (Airport) and closure of Interstate 5 (I-5) and State Route (SR) 99/70. Flooding is particularly hazardous in a heavily urbanized basin like Natomas because of the depths that floodwaters can reach—more than 10 feet in some areas.

DEFICIENCIES OF THE NATOMAS LEVEE SYSTEM AND PROPOSED REMEDIES

Approximately 26 miles of the NCC south levee, the Sacramento River east levee, and the PGCC west levee require one or more forms of remediation to address the potential for failure in a 100-year or "200-year" flood event, as follows:

- ▶ Inadequate freeboard—The NCC south levee and portions of the Sacramento River east levee must be raised to provide at least 3 feet of freeboard above the 100-year water surface elevation, and several reaches of the Sacramento River east levee must be raised to provide 3 feet of freeboard above the "200-year" design water surface elevation.
- ▶ Underseepage and through-seepage vulnerability—Most of these same reaches do not meet recently adopted federal criteria for safely containing underseepage and through-seepage when the water surface in the adjacent channel reaches the 100-year elevation or, in some cases, the "200-year" elevation.

Underseepage problems can occur where levees are constructed on low-permeability foundation soil (silt and clay) underlain by a layer of higher permeability (sand and gravel). Excessive underseepage makes the levee susceptible to failure during periods of high river stage. Under these conditions, seepage travels horizontally under the levee and then is forced vertically upward through the low-permeability foundation layer, often referred to as a "blanket." Failure of the blanket can occur either by uplift, a condition in which the blanket does not have enough weight to resist the confined pressure acting on the bottom of the blanket, or by piping (internal erosion) caused by water flowing under high vertical gradients through the erodible blanket and carrying fine soil particles out of the foundation materials. Through-seepage is seepage through a levee embankment that can occur during

periods of high river stage. Depending on the duration of high water and the permeability of embankment soil, seepage may exit the landside face of the levee. Seepage can also pass directly through pervious layers in the levee if such layers are present. Under these conditions, the stability of the landside levee slope may be reduced.

The project encompasses addressing freeboard deficiencies through levee raises; addressing seepage potential using a combination of seepage berms, cutoff walls, and relief wells; and acquiring additional right-of-way to construct the improvements and to prevent encroachment into the flood control system. In addition, the project has been designed to include an enlarged levee embankment (adjacent setback levee) along the land side of the existing Sacramento River east levee to preclude the need for substantial removal of vegetation and structural encroachments on the water side of this levee in compliance with U.S. Army Corps of Engineers (Corps) guidance. These improvements would include recontouring the levee slopes where necessary.

The following subsections summarize the methods to address freeboard deficiencies and seepage potential, which will be used in various combinations on the NCC south levee, Sacramento River east levee, and the PGCC west levee.

LEVEE RAISES

The freeboard increases would be accomplished through raises of the existing NCC south levee or through construction of the raised adjacent setback levee adjacent to the existing Sacramento River east levee:

- ▶ Raise of existing levee (NCC south levee). A full levee raise is required for the NCC south levee, consisting of an embankment raise from the landside or waterside toe (or both) upward to the increased levee crown elevation. This requires partially excavating the levee slope to provide a working platform for equipment, typically 10 feet wide, and rebuilding the levee to the appropriate elevation by benching the new embankment material into the existing embankment material.
- ▶ Adjacent setback levee (Sacramento River east levee). The levee raise of the Sacramento River east levee would be accomplished through the construction of an “adjacent setback levee” adjoining the Sacramento River east levee. The adjacent setback levee would be constructed with a crown elevation 3 feet above the “200-year” water surface profile. In the upper reaches, where the existing levee has freeboard deficiencies of as much as 3 feet, the crown of the adjacent setback levee would be higher than the existing levee and Garden Highway roadway. In the lower reaches, where the existing levee has sufficient freeboard, the adjacent setback levee would be the same height as the existing levee.

SEEPAGE BERMS

Seepage berms are wide embankments placed outward from the landside toe of the levee to lengthen the underseepage path, thereby lowering, to acceptable levels, the erosive potential of seepage passing through permeable layers under the levees. Seepage berms typically extend 100 to 400 feet from the levee. The berm thickness depends on the severity of the seepage pressure, but generally berms are 5 feet thick near the landside toe and taper to a thickness of 3 feet at the prescribed distance from the toe. A seepage collection ditch is often constructed at the landward toe of all seepage berms. Seepage berms are planned for construction along portions of the Sacramento River east levee and the PGCC west levee.

CUTOFF WALLS

Conventional slurry cutoff walls are typically constructed using an excavator with a long-stick boom capable of digging a trench to the maximum required depth. Bentonite slurry is pumped into the trench during trench excavation to prevent caving. The soil, cement, and bentonite are mixed to achieve the required cutoff wall strength and permeability, and the mixture is backfilled into the trench. Select fill is used to rebuild the levee. The NLIP includes construction of cutoff walls along portions of the NCC south levee and the Sacramento east levee. Cutoff wall construction may also be required in some areas along the PGCC west levee.

For the NCC south levee, preparation for construction of the cutoff wall would begin with using scrapers (or other suitable equipment, depending on the slope) to clear and grub/strip the surface to a depth of 2 inches to remove low-growing vegetation, loose stone, and surface soils. The aggregate base from the operating road also would be removed and stockpiled for later reuse. Waste material would be hauled to an off-site location.

Construction of the cutoff wall would include degrading the existing levee to a depth equal to one-half its total height (approximately 9 feet). A 70-foot-deep cutoff wall would be constructed for the total length of 23,150 lineal feet, with the method of installation at the contractor's discretion. Material degraded to support cutoff wall construction would be compacted at the landside toe of the levee to support raising portions of the NCC south levee. Unsuitable material generated from cutoff wall construction would be disposed of off-site. Equipment that would be used in phases of the cutoff wall construction includes excavators, scrapers, loaders, bulldozers, rollers, haul trucks, water trucks, hydroseeding trucks, pickup trucks, slurry pumps, and generators.

Work on the Sacramento River east levee includes construction of an adjacent levee with construction of a cutoff wall to occur in several reaches of the adjacent levee. Borrow material would be excavated from several locations in the project area and would be delivered to the levee construction sites by scrapers or haul trucks where it would be spread by motor graders and compacted by sheepfoot rollers to build the adjacent levee up to a height equal to about two-thirds of the height of the existing levee. This would create a working platform for cutoff wall installation using an excavator with a long-stick boom capable of digging a trench to a maximum depth of approximately 80 feet. Bentonite slurry would be pumped into the trench during excavation to prevent caving. The soil excavated from the trench would be mixed with bentonite and backfilled into the trench to create the cutoff wall.

RELIEF WELLS

Relief wells provide protection against levee underseepage by providing a path for underseepage to exit to the ground surface at the landside toe of the levee without creating sand boils or piping levee foundation materials. Relief wells are an option for addressing underseepage in reaches where continuous sand and gravel layers have been identified by the geotechnical analysis.

Relief wells are constructed near the levee landside toe to provide pressure relief beneath surficial fine-grained soils. The wells are constructed using soil boring equipment to bore a hole vertically through the fine-grained blanket layer and into the coarse-grained aquifer layer beneath. Pipe casings and filters are installed to allow the pressurized water to flow to the ground surface, thereby relieving the pressures beneath the clay blanket. Relief wells either may discharge onto open ground or may require conveyance to a stormwater drainage system or a pump station. Relief wells cause the least amount of construction disturbance but require routine maintenance of the wells themselves and the drainage and pumping facilities necessary to support them.

EXISTING PROJECT FACILITIES AND POTENTIAL BORROW SITES

All project construction activities would take place within the Natomas Basin, except for the development of a borrow site on Reclamation District (RD) 1001 land northeast of the basin (Exhibit 2). The following sections describe the existing flood control facilities, their general setting, and adjacent irrigation infrastructure and the potential borrow sources. These features, as well as the borrow locations, constitute the physical infrastructure and locations where the project may result in effects on historic properties.

FLOOD CONTROL AND IRRIGATION FACILITIES

NATOMAS CROSS CANAL SOUTH LEVEE

The NCC is a 5.3-mile-long channel that carries water from several tributary watersheds in western Placer County and eastern Sutter County to the Sacramento River. The NCC begins at the PGCC and East Side Canal and extends southwest to its confluence with the Sacramento River near the Sankey Road/Garden Highway

intersection. During periods of flooding, the Sutter Bypass, Sacramento River, and NCC all contribute to raised water elevations that can affect the NCC levees. For engineering purposes, the levee is divided into seven reaches. Much of the south levee contains an existing stability berm with an internal drainage system. An approximately 80- to 100-foot maintenance access area extends along the land side of the levee through most of the NCC's length.

Farms and rural residences are located on both sides of the NCC, with rice the primary crop under cultivation. The Lucich North and Frazer Habitat Preserves, maintained by The Natomas Basin Conservancy (TNBC), lie south of the NCC south levee from the eastern end of Reach 2 through the western end of Reach 6. A drainage canal, referred to as the Vestal Drain, runs parallel to the NCC south levee through much of Reach 2, approximately 100 feet from the landside levee toe. A private irrigation pump and irrigation canal are located at the landside levee toe in Reach 1. Natomas Central Mutual Water Company's (NMWC's) Bennett Pumping Plant and RD 1000's Pumping Plant No. 4 are located in Reach 2, and the NMWC Northern Pumping Plant is located in Reach 3. NMWC's North Main Canal runs parallel to the levee through Reaches 4 and 5, approximately 100 feet from the landside levee toe.

SACRAMENTO RIVER EAST LEVEE

An 18-mile-long section of the east levee of the Sacramento River protects the west side of the Natomas Basin between the NCC and the American River. For planning purposes, the levee is divided into 20 reaches. The Garden Highway is located on top of the levee crown within all 20 reaches. A drained, 10-foot-wide stability berm is present on the landside slope of the levee between the NCC and Powerline Road (Reaches 1–12). Cutoff walls were previously constructed through the levee in Reaches 12–20.

The land uses along the levee vary from north to south. Along the land side, Reaches 1–13 are bordered mainly by private agricultural lands containing a few rural residences, Airport bufferlands, and two farmed TNBC parcels. Teal Bend Golf Club is west of the Airport, adjacent to the levee along Reach 6. The parcels bordering Reaches 14–18 contain more residences, several rural estates, and three TNBC parcels. The land side of Reaches 19 and 20 is bordered by residential subdivisions, a business park, and City parklands.

Several irrigation canals, pipelines, wells, and pump stations exist along the Sacramento River east levee. The Elkhorn Canal and the Riverside Canal are key agricultural irrigation canals in the NMWC system. The Elkhorn Canal runs parallel to the Sacramento River east levee from the North Drainage Canal in Reach 4B through Reach 8 and into the start of Reach 9 (1,250 feet south of Elkhorn Boulevard). The Riverside Canal extends from just north of Reach 13 to the middle of Reach 19. Several lateral canals connect to the Elkhorn and Riverside Canals. These canals have earthen embankments with side slopes that are nearly vertical, requiring regular maintenance. Both canals are supplied by pumping plants on the Sacramento River.

In addition to the NMWC irrigation systems, there are several landowner-operated systems along the levee. These facilities are located primarily in Reaches 1–4A and 9–12, in areas not currently served by the NMWC systems. The areas are serviced by either well pumps on the land side or river pumps, which discharge into buried pipelines, small irrigation ditches, or directly onto fields. The distribution systems run along the landside toe of the levee to supply fields that slope away from the levee.

Several drainage pumping plants are operated by RD 1000 along the Sacramento River east levee. These facilities pump drain water from the main drainage canal system into the river. They include Pumping Plant No. 2, located in Reach 4B; Pumping Plant No. 5, located in Reach 10; Pumping Plant No. 3, located in Reach 13; and Pumping Plant No. 1, located in Reach 20A. Pumping Plant No. 2 was temporarily removed as part of an emergency levee repair in 2006 and would be replaced as an element of the project in 2009–2010. In addition to these RD 1000 pumping stations, the City of Sacramento operates the Willow Creek drainage pumping station which is located in Reach 19B.

PLEASANT GROVE CREEK CANAL WEST LEVEE

The PGCC west levee extends southerly from the east end of the NCC south levee to the north end of the NEMDC/Steelhead Creek levee near the Sankey Road crossing. The PGCC west levee protects the Natomas Basin from flood flows from Pleasant Grove Creek and other creeks in western Placer County, as well as from water that backs up in the NCC during high river stages in the Sacramento River. Natomas Road is located on top of the levee crown. No berms support this levee. A private canal extends parallel to the PGCC west levee for about 1,500 feet at the landside levee toe. Farms and scattered rural residences are located on the land side of the PGCC west levee, and a manufacturing facility and a railroad siding are located within several hundred feet of the levee, just south of Sankey Road.

BORROW SITES

Borrow sites are areas from which earthen materials would be removed for use in construction. The sites would be recontoured and developed as either managed marsh or grassland habitat following excavation for this use. Where borrow sites would be used over more than one construction season, the work would progress in cells that would be incrementally developed as habitat as the borrow activities are completed.

SAFCA has identified borrow sources for the project in 2008, 2009, and 2010 flood control and irrigation infrastructure improvements and redundant sources that may be pursued if negotiations regarding the preferred sources are unsuccessful or additional quantities are found to be needed during construction:

- ▶ Brookfield property (2008 preferred, 2009 preferred, 2010 preferred)
- ▶ Airport bufferlands north of the Airport complex (2008 preferred, 2009 preferred, 2010 potential)
- ▶ Fisherman's Lake area (2010 preferred) (no specific parcels identified for this borrow site)
- ▶ RD 1001 (2008 potential, 2009–2010 potential)

Except for the Fisherman's Lake area in the southern part of the Natomas Basin, these borrow areas are shown in Exhibit 3.

DESCRIPTION OF PROJECT ELEMENTS AND ACTIVITIES

The elements of the project are described in this section in four broad, overlapping categories:

- ▶ levee raising and seepage remediation,
- ▶ improvements to major irrigation and drainage infrastructure,
- ▶ habitat development and management, and
- ▶ additional actions to meet Federal Emergency Management Agency (FEMA) requirements: encroachment management and bridge crossing modifications.

Expanding the landside footprint of the Sacramento River east levee necessitates redesigning and relocating the irrigation and drainage infrastructure currently located along the landside toe of the levee. Relocation of other major and minor irrigation and drainage canals located near the NCC south levee and the PGCC west levee will be necessary with implementation of levee improvements. Modifications to the existing irrigation and drainage systems will include creation of a new canal designed to provide giant garter snake (GGS) habitat and improved stormwater drainage west of the Airport (GGS/Drainage Canal).

Site preparation would entail removing trees and other large vegetation from the construction area and stripping the top 6 inches of material from the landside slope of the existing levee, the footprint of the adjacent setback levee, the seepage berm areas, and the 50-foot-wide permanent maintenance access corridor. Large roots and

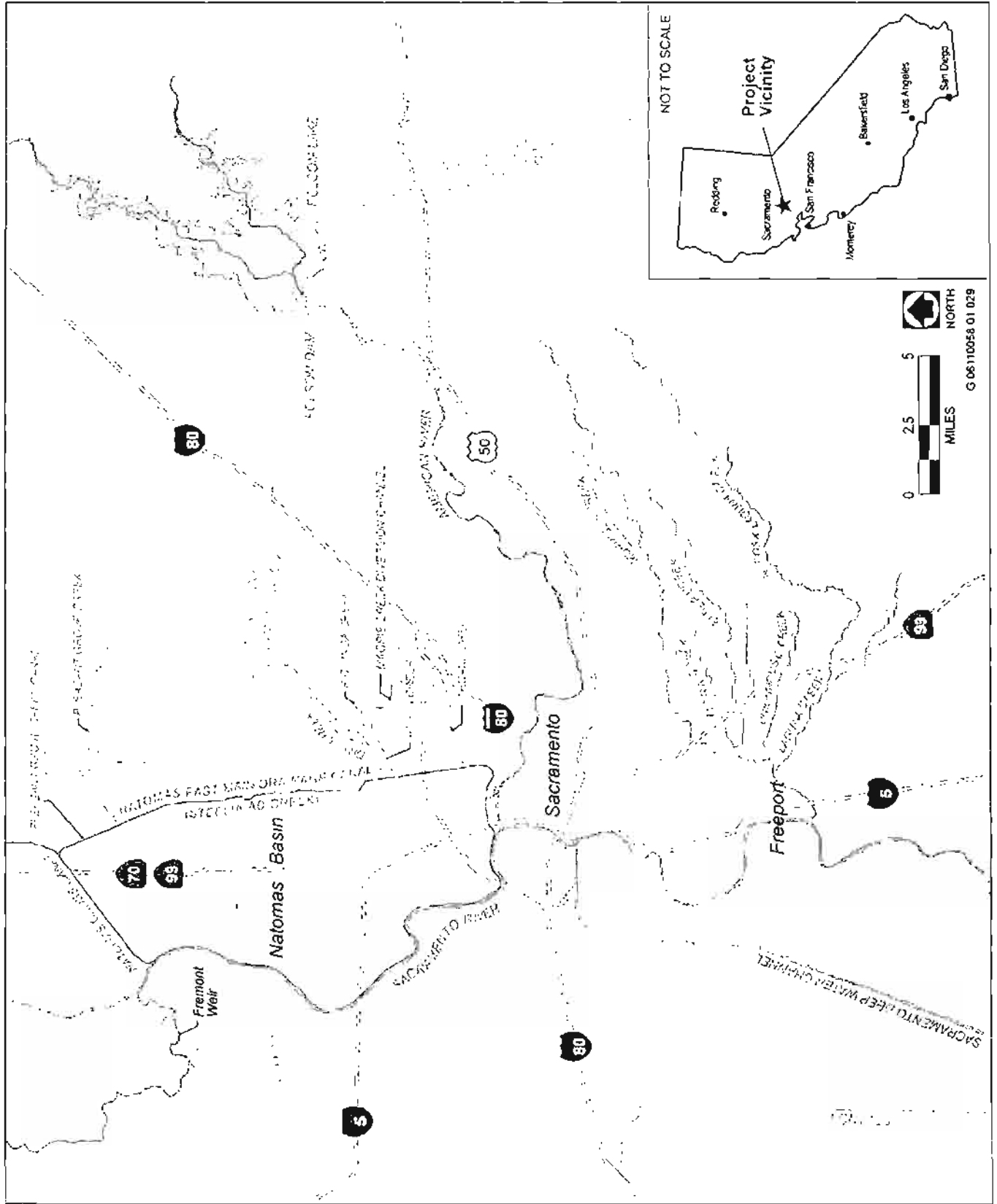
deleterious material) would then be grubbed from the working area. To the extent feasible, trees that must be removed from within the footprint of the adjacent setback levee or berms would be relocated outside of the footprint to new woodland planting areas, where a substantial number of new trees would also be planted. Excess earth materials (organic soils, roots, and grass from borrow areas and the adjacent levee foundation and excavated material) that does not meet levee embankment criteria) would be used in the reclamation of borrow areas or hauled off-site to landfills. Cleared vegetation (i.e., trees, brush) would be hauled off-site to landfills. After construction, the levee slopes and any previously vegetated areas disturbed during construction, including staging areas, would be seeded with a grass mix.

The major project elements and related activities are summarized in Table 1.

Project Element	Project Activity and Timing
2008 Construction	
Levee raising and seepage remediation: NCC south levee	Raise and realign the NCC south levee to provide additional freeboard and more stable waterside and landside slopes and to reduce the need for removal of waterside vegetation. (May 8–November 1, 2008) Construct a seepage cutoff wall through the levee crown in Reaches 3–7. (May 8–October 15, 2008)
Levee raising and seepage remediation: Sacramento River east levee (adjacent setback levee)	Construct a raised adjacent setback levee from the NCC to just south of the North Drainage Canal (Reaches 1–4B, except Stations 55+00 to 68+00 in Reach 2) with a 100-foot seepage berm in Reach 4A and a 300-foot seepage berm in Reach 4B. (May 1–November 1, 2008)
Improvements to major irrigation and drainage infrastructure	Construct a new canal designed to provide drainage and associated giant garter snake habitat (the GGS/Drainage Canal) between the North Drainage Canal and Elkhorn Reservoir. (May 1–November 1, 2008) Relocate the Elkhorn Canal (highline irrigation canal) between the North Drainage Canal and Elkhorn Reservoir in anticipation of the filling of the existing Elkhorn Canal at the toe of the Sacramento River east levee in late 2008 and in 2009. (May 1–November 1, 2008) Remove a deep culvert at the location of Pumping Plant No. 2. (May 1–November 1, 2008)
Habitat creation and management	Establish vegetative habitat features in the new GGS/Drainage Canal. (Fall 2008) Recontour and create managed marsh and grassland on lands used as borrow sources. (Fall 2008 or spring 2009) Establish grassland on the adjacent setback levee slopes and seepage berms. (August 1–December 31, 2008) Install woodland plantings to offset the loss of portions of tree groves in the landside levee footprint. (Fall 2008)
Right-of-way acquisition	Acquire right-of-way through fee title or easement interest within the footprint of the project features, at the borrow sites and along the flood control system. (Before construction)
2009–2010 Construction	
Levee raising and seepage remediation: Sacramento River east levee (adjacent setback levee)	Construct an adjacent setback levee along Stations 55+00 to 68+00 in Reach 2 and from just south of the North Drainage Canal to the American River north levee (Reaches 5A–20B), raised where needed to provide adequate freeboard, with seepage berms, relief wells, and cutoff walls for seepage remediation as required (specific seepage remediation measures are still under study). (May 1–November 1, 2009, and May 1–November 1, 2010)
Seepage remediation: PGCC west	Flatten waterside and landside slopes, and construct seepage berms along the PGCC west levee (specific berm widths and potential use of cutoff walls in some areas to be

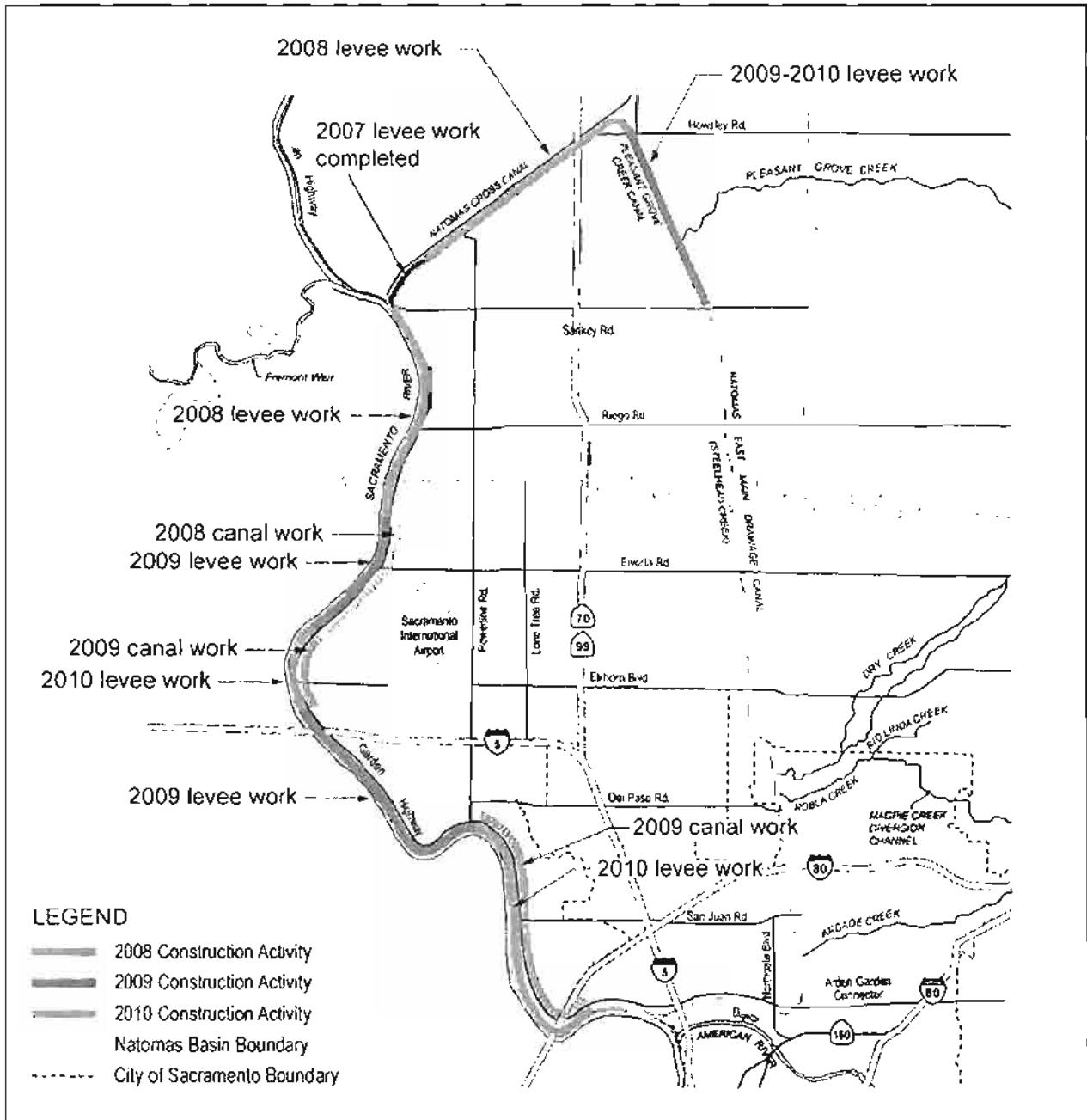
**Table 1
Summary of the Major Elements of the Project**

Project Element	Project Activity and Timing
levee	determined). (May 1–November 1, 2010)
Improvements to major irrigation and drainage infrastructure	<p>Construct the new GGS/Drainage Canal between Elkhorn Reservoir and the West Drainage Canal (specific alignment to be determined), and improve the West Drainage Canal to provide enhanced giant garter snake habitat. (May 1–November 1, 2009)</p> <p>Implement Airport West Ditch improvements in connection with construction of the GGS/Drainage Canal to allow the Airport to decommission the agricultural irrigation function of this facility and eliminate the hazards currently associated with it. The Airport stormwater detention function provided by this ditch would continue. The ditch would therefore be recontoured as a gently sloping swale to facilitate periodic maintenance such as mowing. (May 1–November 1, 2009)</p> <p>Relocate the Riverside Canal and the Elkhorn Canal downstream of Elkhorn Reservoir (specific alignments to be determined) and fill the existing canals. (May 1–November 1, 2009)</p> <p>Construct RD 1000 Pumping Plant No. 2. (April 1, 2009–September 1, 2010)</p>
Habitat creation and management	<p>Establish habitat enhancements in the new GGS/Drainage Canal and improved West Drainage Canal. (Fall 2009)</p> <p>Recontour and create marsh and managed grassland on lands used as borrow sources. (Fall or spring after borrow excavation in 2009 and 2010)</p> <p>Establish grassland on the adjacent setback levee slopes and seepage berms. (Fall after construction in 2009 and 2010)</p> <p>Install woodland plantings to offset the loss of portions of tree groves in the landside levee footprint (locations to be determined). (Fall 2009 and 2010)</p>
Additional actions to meet FEMA requirements: encroachment management on the Sacramento River east levee, and bridge crossing modifications at the NCC	<p>Remove encroachments from a portion of the water side and land side of the Sacramento River east levee as needed to ensure that the levee can be certified as meeting the minimum requirements of the NFIP and USACE design criteria (specific criteria still under discussion). (Timing to be determined)</p> <p>Modify the SR 99/70 crossing of the NCC as needed to meet FEMA requirements. (Timing to be determined)</p>
Right-of-way acquisition	Acquire right-of-way through fee title or easement interest within the footprint of the project features, at the borrow sites and along the flood control system. (Before construction)
<p>Notes: Airport = Sacramento International Airport; Elkhorn Canal = Elkhorn Main Irrigation Canal; FEMA = Federal Emergency Management Agency; GGS = Giant Garter Snake; NCC = Natomas Cross Canal; NFIP = National Flood Insurance Program; PGCC = Pleasant Grove Creek Canal; RD = Reclamation District; Riverside Canal = Riverside Main Irrigation Canal; SR = State Route; USACE = U.S. Army Corps of Engineers</p>	



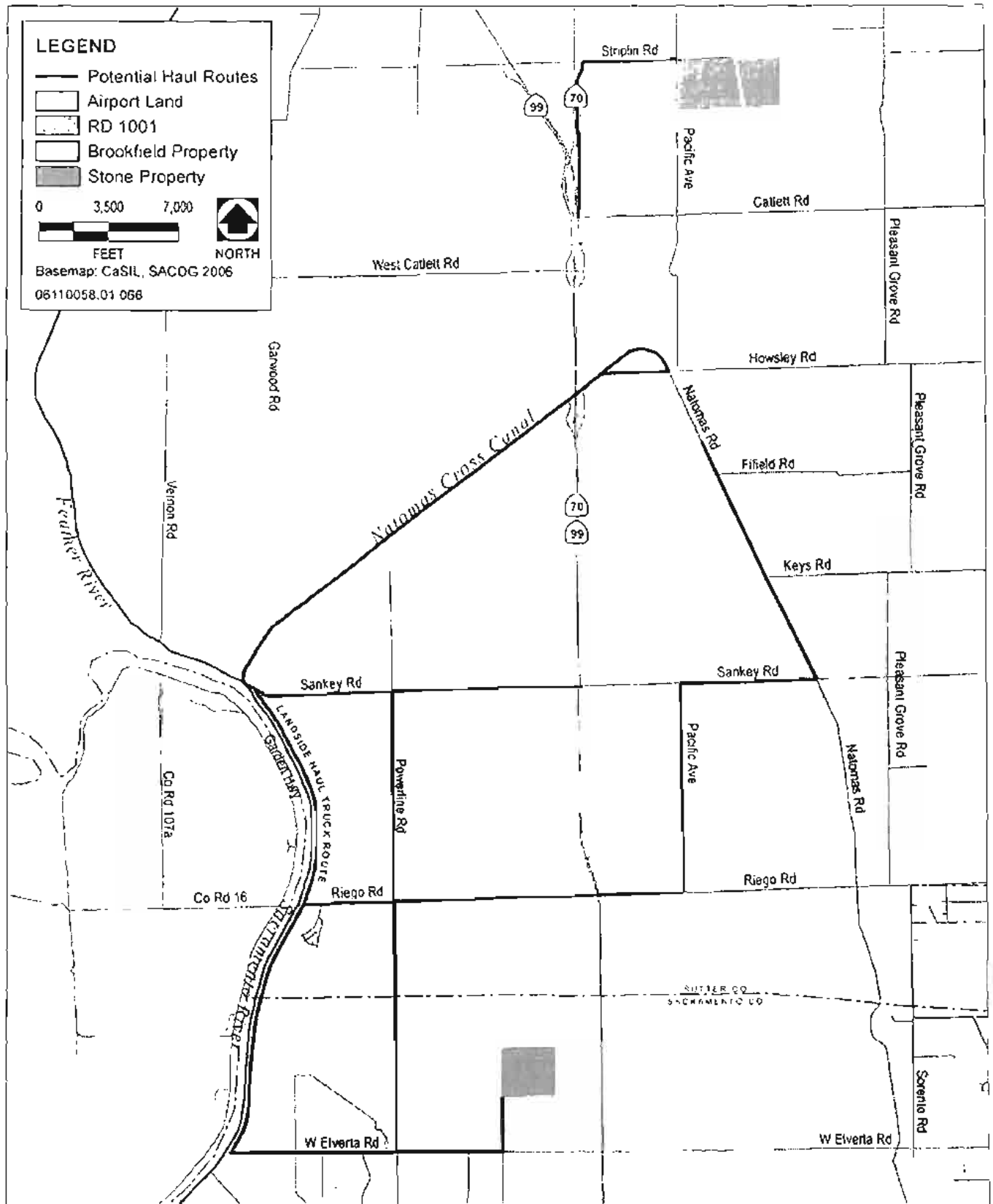
Project Location

Exhibit 1



Project Construction By Phase

Exhibit 2



Source: Mead & Hunt 2007, EDAW 2007

Anticipated Borrow Areas and Local Haul Routes

Exhibit 3

ENCLOSURE 4

**PROGRAMMATIC AGREEMENT
NATOMAS LEVEE IMPROVEMENT PROJECT**

**PROGRAMMATIC AGREEMENT
AMONG THE U.S. ARMY CORPS OF ENGINEERS,
THE SACRAMENTO AREA FLOOD CONTROL AGENCY, AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER**

REGARDING THE ISSUANCE OF PERMISSION UNDER THE AUTHORITY OF SECTION 408 OF THE RIVERS AND HARBORS ACT OF 1899 AND SECTION 404 OF THE CLEAN WATER ACT FOR THE NATOMAS LEVEE IMPROVEMENT PROGRAM, LANDSIDE IMPROVEMENTS PROJECT

WHEREAS, the U.S. Army Corps of Engineers, Sacramento District (Corps) proposes to review an application that seeks permission for alteration of flood control structures under the authority of Section 408 of the Rivers and Harbors Act and to issue one or more permits to discharge fill to the waters of the United States under the authority of Section 404 of the Clean Water Act to the Sacramento Area Flood Control Agency (SAFCA) for the Natomas Levee Improvement Program Landside Improvements Project (Project); and

WHEREAS, The Corps has determined that the issuance of these permissions and permits constitute an undertaking per 36 CFR 800.16(y), which require compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended (16 U.S.C. 470f); and

WHEREAS the Project includes improvements to an extensive levee system surrounding the Natomas Basin and landscape and irrigation/drainage infrastructure modifications that will be implemented in three construction phases, currently scheduled for 2008, 2009, and 2010; and

WHEREAS, the Corps has determined that this undertaking will have an adverse effect on at least one Historic Property that has been determined eligible for inclusion in the National Register of Historic Places (NRHP), CA-SAC-485/H; and

WHEREAS, because of the complex and phased nature of the improvements, the Corps has not yet determined the exact area of potential effects (APE), nor has SAFCA acquired all of the rights-of-entry, easements and ownership interests that would allow a complete inventory and determination of effects on Historic Properties; and

WHEREAS, the Natomas Basin is sensitive for buried archaeological resources that cannot be accurately located prior to construction; and such buried sites may also be Historic Properties, and therefore SAFCA and the Corps need to document a framework for managing post-review discoveries per 36 CFR Section 800.13, including evaluation of those resources, assessment of effects, and resolution of potential adverse effects; and

WHEREAS, at such time as any unevaluated cultural resource may be discovered, it may require archaeological data recovery and/or other historic preservation activities, in compliance with Section 106 of the National Historic Preservation Act, concurrent with *active* construction; and

WHEREAS, the urgency of flood control improvements require a management framework for Historic Properties that will be implemented after the execution of this agreement in an expedited manner that thus departs from the process normally used under 36 CFR Section 800 et seq., yet still fulfills the requirements of Section 106 of the NHPA; and

WHEREAS, SAFCA has been invited to participate as a signatory to this Programmatic Agreement (PA) by the Corps and the California State Historic Preservation Officer (SHPO); and

WHEREAS, the Corps has consulted The Ione Band of Miwok Indians, the Shingle Springs Band of Miwok Indians and the United Auburn Indian Community, and they have been invited to concur in this PA; and

WHEREAS, the Corps shall make the terms and conditions of this PA as part of the conditions of any permissions and permits issued by the Corps for this project; and

WHEREAS, The Central Valley Flood Protection Board has delegated all authority for SAFCA to comply with the terms of this agreement on its behalf; and

WHEREAS, the Corps has consulted with the SHPO and the Council in accordance with regulations implementing Section 106 of the NHPA;

WHEREAS, the Council has been consulted and declined to participate in this agreement;

NOW, THEREFORE, the Corps, the SHPO, and SAFCA agree that the Project shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on Historic Properties.

The Corps shall ensure that the following stipulations of this PA are carried out.

STIPULATIONS

I. DEFINITIONS

The terms used in this Programmatic Agreement shall be as defined in regulations implementing Section 106 of the NHPA, and as follows:

“APE (Area of Potential Effect)” means any location at which any Project development activity will be constructed; and locations of any Project-related construction staging areas, borrow areas, and materials stockpile areas; and the locations of any other Project development activities. The APE shall be defined so as to include the maximum spatial dimensions of all Project-related construction and operations rights-of-way, easements, areas which potentially may be affected by Project activities, and other properties to which SAFCA has access, whether on a temporary or permanent basis, or ownership for Project development.

“Concurring parties” means their concurrence indicates that they are in agreement with the terms of the PA.

“Consulting parties” means the Corps, the SHPO, and SAFCA who are signatories to this PA. Only signatories have the authority to amend or terminate this PA.

“Cultural resources” means any property or location that was created, modified, or used by people at least 50 years in the past. Cultural resources include but are not limited to Historic Properties and traditional cultural properties/places (i.e., NRHP listed or eligible properties as defined at 36 CFR Part 60).

“**Historic Property**” means a cultural resource that has been determined eligible for or is listed on the NRHP (i.e., NRHP listed or eligible properties as defined at 36 CFR Part 60), either by formal nomination and listing or by concurrence between federal agencies and the SHPO.

“**Historic preservation**” means any activity conducted in accordance with the NHPA and its implementing regulations to, among other things, inventory, evaluate, manage, or treat cultural resources such as buildings, structures, sites, districts, and objects eligible for, or that may be determined eligible for, listing in the NRHP according to eligibility criteria at 36 CFR Part 60.

“**Project development activities**” means any physical action related to the Project that has the potential to damage or otherwise alter those characteristics of Historic Properties that would make them eligible for listing in the NRHP.

II. STANDARDS

(A.) Professional Qualifications. All technical work required for historic preservation activities implemented pursuant to this Programmatic Agreement shall be carried out by or under the direct supervision of a person or persons meeting at a minimum the *Secretary of Interior’s Professional Qualifications Standards* for archaeology or history, as appropriate (48 FR 44739). “Technical work” here means all efforts to inventory, evaluate, and perform subsequent treatment such as data recovery excavation or recordation that is required under this Programmatic Agreement. This stipulation shall not be construed to limit peer review, guidance, or editing of documents by SAFCA or SAFCA’s consultants.

(B.) Historic Preservation Standards. Historic preservation activities carried out pursuant to this Programmatic Agreement shall meet the *Secretary of Interior’s Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as standards and guidelines for historic preservation activities established by the SHPO. The Corps shall ensure that all reports prepared pursuant to this Programmatic Agreement will be provided to the consulting parties and shall ensure that all such reports meet published standards of the California Office of Historic Preservation, specifically, *Preservation Planning Bulletin Number 4(a), “Archaeological Resources Management Reports (ARMR): Recommended Contents and Format”* (December 1989).

III. PROJECT DESCRIPTION

(A) PROJECT Description. A description of the Project is found in the Final Environmental Impact Report (November 2007). A summary of the Project’s description in the environmental impact report is provided as **Attachment A** and is made a part of this Programmatic Agreement.

(B) Existing Conditions. An archival search and archaeological survey have been completed for all areas of the APE as currently defined to which SAFCA currently has access, and which currently are not covered by paving, built environment features, or agricultural crops. A report of the results of archival research and archaeological survey, “Cultural Resources Inventory Reports, Part I – Natomas Levee Improvement Program Landside Improvements Project, Sacramento and Sutter Counties, California” (October 2007) is made **Attachment B** to this Programmatic Agreement.

A number of prehistoric sites are known to be present along the banks of the Sacramento River. However, archaeological survey of the area is of limited value because the alluvial depositional environment may

obscure and bury sites, leaving no surface manifestation of those archaeological resources. For most of the length of the Project, levees have been built on the riverbanks. These levees are one focus of the Project's activity, and occupy a substantial portion of the Project's APE. Furthermore, it has not been established whether certain known sites in proximity to the Project's development activities extend under the existing levees. The existing levees both obscure ground surfaces and prevent subsurface archaeological testing within their footprints. Because of these conditions, a full assessment of archaeological sites that may be present in the APE cannot be made in advance of construction. There is no definitive information, even for sites known to be in Project's proximity, of site boundaries relative to the APE, or of the significance or integrity of any portions of such sites that may be within the APE. For these reasons, even though archaeological deposits may extend into the APE, and even though some of these deposits may qualify as Historic Properties, it is impossible to develop meaningful site-specific Historic Properties Treatment Plans (HPTP) prior to all construction, or to carry out all necessary data recovery in advance of the Corps' approvals, permitting and construction.

For these reasons, unforeseen discoveries shall be treated pursuant to the provisions of 36 CFR 800.13 (Post-review discoveries).

(C) Project Phasing and Potential Changes to the APE: Because the improvements will occur in three phases (anticipated to be 2008, 2009, and 2010), it will be necessary to define the APE for each phase. The APE for each phase shall be submitted with the cultural resources inventory reports, and shall be consulted upon as part of that document, pursuant to **Stipulation IV**, below.

After the initial concurrence, changes to the APE may be necessary as SAFCA refines its phased Project plans. In particular, the ability of SAFCA to obtain access permissions of private landowners, determination of borrow sites and ongoing negotiations with resource agencies regarding species mitigation requirements may affect final Project's design, and may expand the current APE in some areas. Any changes to the APE shall be made in accordance with subsections D and E (below) of this Stipulation III. The SHPO, Corps, and SAFCA shall consult and reach concurrence in any changes to the APE. The final APE shall account for all Project development activities for the as-built Project. SAFCA shall notify the Corps of any change in the APE and the Corps shall determine the potential for Project development activities in a revised APE to affect cultural resources, through cultural resources inventory and testing as needed.

- (1) If there is the potential that cultural resources exist in the revised APE, SAFCA shall submit to the Corps:
 - (a) a map of the revised APE; and
 - (b) a description of Project development activities to take place in the revised APE; and
 - (c) a description of the inventory, nature, location, and known or potential significance of cultural resources in the revised APE; and
 - (d) a description of any archaeologically sensitive areas in the revised APE that require monitoring by an archaeologist, and Native American monitor as appropriate; and
 - (e) a plan for managing cultural resources in a manner that either avoids Project-related effects to cultural resources, or which mitigates any adverse effects, and which provides for the management of unforeseen cultural resources discoveries.
- (2) If no cultural resources are identified within a revised APE, SAFCA shall document such a determination, provide documentation to the Corps and keep such documentation on file at its

principal offices.

After the Corps and SAFCA agree to a revised APE and if such a change has the potential to have an effect on cultural resources, the Corps shall submit the documentation to the SHPO for their review. The SHPO shall have 30 calendar days from the date of receipt of the notice of a revision to the APE to review and to provide in writing either concurrence with or objection to the definition of the revised APE, and any proposed historic preservation activities. Should the SHPO not respond in writing within 30 calendar days, the Corps and SAFCA shall proceed as though the SHPO has concurred in the revised APE, and the proposed historic preservation activities, if any.

Should the SHPO object to the definition of the revised APE or proposed historic preservation activities, the Corps, SAFCA, and the SHPO shall consult for a period not to exceed 15 calendar days following the date of the receipt of the SHPO's written objection in an effort to come to agreement on the issues to which the SHPO has objected. Should the SHPO, the Corps, and SAFCA be unable to agree on the issues to which the SHPO has objected, the consulting parties to this Programmatic Agreement shall proceed in accordance with **Stipulation VIII (Resolving Objections)**, below.

(D) Scope of Identification Efforts in the APE: Inventories of Historic Properties within the established or revised APE shall be completed in accordance with **Stipulation IV (Inventory of Historic Properties)** of this Programmatic Agreement. Treatment of any adverse effects to Historic Properties within the established or revised APE shall be completed in accordance with **Stipulation V (Treatment of Effects)** of this Programmatic Agreement.

(E) Scope of the APE: For purposes of this Programmatic Agreement, a revised APE shall be defined to meet, at a minimum, the following criteria:

(1) The APE for any segment of the Natomas levees that are being improved as part of the Project and shall include the levee segment and a corridor extending not less than 75 feet from the land side toe of the levee segment. The APE also shall include:

- The extent of all Project construction and excavation activity required to construct flood control facilities and to modify irrigation and drainage infrastructure,
- The additional right-of-way/easements obtained by SAFCA as part of the Project's features,
- All areas used for excavation of borrow material and habitat creation, and
- All construction staging areas.

(2) The APE for Project activities shall include the direct footprint of the activity and a reasonable buffer determined by consultation between SAFCA and the Corps, according to the nature of the activity, SAFCA's ownership interest or easement, and the probability that ground-disturbing work may extend beyond the footprint of planned improvements and activities.

(3) The APE for any other type of Project development activities shall be defined by the Corps in consultation with the consulting parties.

IV. INVENTORY OF HISTORIC PROPERTIES

(A) Identification Efforts to Date and Further Work Required: An inventory of Historic Properties

within the APE has been initiated consistent with the *Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-44740). The SAFCA shall submit a completed inventory and evaluation for each phase of Project work (2008, 2009, 2010) to the Corps. Such inventory shall be deemed complete by the Corps when the SHPO concurs in the NRHP eligibility recommendation for all cultural resources within the APE for that phase.

Areas of Archaeological Sensitivity: Areas of archaeological sensitivity will be monitored in accordance with HPTPs.

(C) Changes in the APE: If areas are added to the Project development activities subsequent to the SHPO concurrence on the map of the APE for a specific phase, SAFCA shall complete an inventory of Historic Properties within the expanded APE. Such inventory shall be undertaken and completed consistent with the *Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-44740). Such inventory shall be deemed completed by the Corps at such time as the SHPO concurs in the NRHP eligibility of all cultural resources within the established and revised APE for the Project, pursuant to this Stipulation IV.

V. TREATMENT OF EFFECTS

(A) Historic Property Treatment Plans: If Historic Properties are identified in cultural resources inventories that would be adversely affected by the Project, SAFCA shall prepare a Historic Properties Treatment Plan (HPTP) for review and written approval by the Corps and the SHPO for those specific properties. An HPTP applicable to every Historic Property that may sustain adverse effects by the Project shall be prepared, including for those Historic Properties found during construction. An HPTP may address individual or multiple Historic Properties. An HPTP shall stipulate those actions SAFCA shall take to resolve the adverse effects of the Project on Historic Properties. SAFCA shall ensure that all provisions of an HPTP are carried out in a timely manner. Any changes to an HPTP shall be reviewed and approved by the Corps. Copies of all reports pertaining to the treatment of Historic Properties shall be submitted to the consulting parties to this Programmatic Agreement. Reports and other data pertaining to the inventory of, and treatment of effects on, Historic Properties may be distributed to concurring parties to this Programmatic Agreement and to other members of the public consistent with **Stipulation VII (Confidentiality)** of this Programmatic Agreement. Individual HPTPs may be submitted simultaneously with the cultural resources inventory report for specific Project phases. If HPTPs are submitted simultaneously with an inventory report for a Project phase or with an addendum to such report for an expanded APE or Project description, the Corps and SHPO review period for such HPTP shall run concurrently with the review period for the inventory report.

Review Schedule: The SHPO and the Corps shall have 30 calendar days to review and comment upon in writing any HPTP submitted by SAFCA. The SHPO and the Corps shall indicate in their review that they find the HPTP either acceptable or not. In the event that comments are not made by the SHPO within 30 calendar days, the Corps shall assume the SHPO has accepted the HPTP as submitted. In the event the Corps and/or the SHPO provide written comment within the 30-day period, either SAFCA shall accept the comments and revise the HPTP accordingly, or SAFCA and the Corps may object to some or all comments. Comments from the Corps or the SHPO that are not acceptable to SAFCA shall be resolved by consultation among the Corps, the SHPO, and SAFCA for a period of not more than 15 calendar days. Should the Corps, the SHPO, and SAFCA be unable to resolve any dispute regarding the Corps or the SHPO comments, the consulting parties shall proceed in accordance with **Stipulation VIII (Resolving**

Objections) of this Programmatic Agreement.

The Corps shall submit to the SHPO for review and comment any amendment, addendum, revision or other change to an HPTP. SAFCA shall proceed to make changes to an HPTP as per the procedure and schedule for the review and approval of an original HPTP. If a Historic Property is discovered within an expanded APE subsequent to an initial inventory effort for a phase, and the Corps and SAFCA agree that the Project may adversely affect the property, SAFCA shall submit an addendum to the HPTP or a new HPTP. The review schedule for this submittal follows the provisions of Stipulation V.

(B) Commencement of Construction and Project Work: Project development activities may commence within the APE after a Historic Properties inventory has been completed (per **Stipulations III and IV**, above), and prior to treatment of adverse effects on Historic Properties within the APE provided that:

(1) A plan to respond to inadvertent archaeological discoveries is prepared by SAFCA and approved by the Corps prior to the commencement of Project activities anywhere in the APE for that phase of the Project; and

(2) Project development activities do not encroach within 30 meters (100 ft) of the known boundaries of any Historic Property as determined from archaeological site record forms, other documentation, or as otherwise defined in consultation with the SHPO; and

(3) An archaeological monitor is present during any Project activities that are anticipated to extend either vertically or horizontally into any areas designated to be archaeologically sensitive by SAFCA in consultation with the Corps.

(C) Final Report Documenting Implementation of the Historic Properties Treatment Plan(s): Within one year after the completion of all work performed as part of the Project SAFCA shall submit to the Corps and SHPO a final report documenting the results of all work prepared under the HPTPs. This report shall be submitted to the Corps and SHPO for review and comments, which SAFCA shall incorporate.

VI. NATIVE AMERICAN AND OTHER PUBLIC CONSULTATION AND PUBLIC NOTICE

Members of the interested public shall be invited to consult regarding this Programmatic Agreement. Within 30 calendar days of the signing date of this Programmatic Agreement, the Corps, the SHPO, and SAFCA shall consult to compile a list of members of the interested public who shall be provided notice of this Programmatic Agreement. The opinions of local Native Americans with cultural ties to the APE and the opinions of other members of the public shall be taken into account by the consulting parties for historic preservation actions taken in accordance with this Programmatic Agreement. Native Americans and other members of the public may be invited to concur in this Programmatic Agreement. Native American monitor(s) shall be invited to assist SAFCA in the treatment of any Native American human remains and items associated with Native American burials discovered during the Project in accordance with California Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5(b) and 7050.5(c).

VII. CONFIDENTIALITY

Confidentiality regarding the nature and location of the archaeological sites and any other cultural

resources discussed in this Programmatic Agreement shall be maintained on a "need-to know" basis limited to appropriate personnel and agents of SAFCA, the Corps, and the SHPO involved in planning, reviewing and implementing this Programmatic Agreement consistent with Section 304 of the NHPA.

VIII. RESOLVING OBJECTIONS

(A.) Should any party to this Programmatic Agreement object to any action proposed or carried out pursuant to this Programmatic Agreement, the Corps shall consult with the objecting party(ies) for a period of time not to exceed *30 calendar days* to resolve the objection. If the Corps determines that the objection cannot be resolved, the Corps shall forward all documentation relevant to the dispute to the Council. Within 30 calendar days after receipt of all pertinent documentation, the Council shall either:

- (1) Provide the Corps with recommendations, which the Corps shall take into account in reaching a final decision regarding the objection; or
- (2) Notify the Corps that the Council will comment in accordance with the requirements of Section 106 of the NHPA, and proceed to comment. Any Council comment provided in response shall be taken into account by the Corps, pursuant to the requirements of Section 106 of the NHPA.
- (3) Should the Council not exercise one of the above options within 30 days after receipt of all pertinent documentation, the Corps may assume the Council's concurrence in its proposed response to the objection.
- (4) The Corps shall take into account any Council recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; the Corps' responsibility to carry out all actions under this Programmatic Agreement that are not the subjects of the objection shall remain unchanged.

(B.) At any time during implementation of the measures stipulated in this Programmatic Agreement should an objection pertaining to the Programmatic Agreement be raised by a member of the public, the Corps or SAFCA shall notify the consulting parties to the Programmatic Agreement and take the objection into account, consulting with the objector and, should the objector so request, with any of the consulting parties to this Programmatic Agreement to address the objection.

IX. AMENDMENTS

Any consulting party to this Programmatic Agreement may propose that the Programmatic Agreement be amended, whereupon the Corps shall consult with the other consulting parties to this Programmatic Agreement to consider such amendment. Any amendment shall be executed by the consulting parties in the same manner as the original Programmatic Agreement.

If the Project has not been completed within five years of the date of the execution of this Programmatic Agreement, the consulting parties shall consult on a date not less than 90 days prior to the fifth anniversary of this Programmatic Agreement to either amend this Programmatic Agreement and acknowledge its continued applicability for the undertaking for a designated period of time, or terminate this Programmatic Agreement and proceed to again consult regarding the undertaking in accordance with regulations implementing Section 106 of the NHPA.

All attachments to this Programmatic Agreement, and other instruments prepared pursuant to this agreement such as, but not limited to, the Project's description, initial cultural resource inventory report and maps of the APE, HPTPs, and monitoring and discovery plans may be amended without requiring amendment of this Programmatic Agreement. Such amendments will be consulted on by the concurring parties and shall be final when agreement is reached by the parties.

X. FAILURE TO CARRY OUT THE TERMS OF THE AGREEMENT

Should the Corps fail to ensure that the terms of this Programmatic Agreement are carried out, the Corps shall notify the parties to this Programmatic Agreement and again consult with the SHPO and the Council in accordance with regulations implementing Section 106 of the NHPA. The Corps shall not take any action or make any irreversible decision that would affect an Historic Property, preclude historic preservation alternatives, or foreclose any opportunities for the Council to comment on the undertaking prior to completion of the process for considering and resolving effects on Historic Properties provided in this document.

XI. SCOPE OF THE PROGRAMMATIC AGREEMENT

Execution of this Programmatic Agreement by the Corps, the SHPO, and SAFCA, and implementation of its terms, evidence that Corps has afforded the Council an opportunity to comment on the undertaking for SAFCA Natomas Levee Improvement Program Landside Improvements Project, pursuant to 16 U.S.C. 470f, and that the Corps has taken into account the effects of the undertaking on Historic Properties. This Programmatic Agreement is limited in scope to the undertaking defined herein and is entered into solely for that purpose.

CONSULTING PARTIES:

U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT

By: _____ Date: _____
Title: COL Thomas Chapman, District Engineer, Sacramento District, U.S. Army Corps of Engineers

SACRAMENTO AREA FLOOD CONTROL AGENCY

By: _____ Date: _____
Title: Stein M. Buer, Executive Director, Sacramento Area Flood Control Agency

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: _____
Title: Milford Wayne Donaldson, F.A.I.A., California State Historic Preservation Officer

CONCUR:

CENTRAL VALLEY FLOOD PROTECTION BOARD

By: _____ Date: _____

Title: Benjamin Carter, President, Central Valley Flood Protection Board

By: _____ Date:

Title:

Attachment A: Project Description Summary

Attachment B: "Cultural Resources Inventory Reports, Part I – Natomas Levee Improvement Program
Landside Improvements Project, Sacramento and Sutter Counties, California"
(report).

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ATTACHMENT A

Project Description Summary

ATTACHMENT A

DESCRIPTION OF THE SACRAMENTO AREA FLOOD CONTROL AGENCY'S NATOMAS LEVEE IMPROVEMENT PROGRAM LANDSIDE IMPROVEMENTS PROJECT

PURPOSE AND NEED

PROJECT OVERVIEW

The Natomas Levee Improvement Program (NLIP) Landside Improvements Project proposed by the Sacramento Area Flood Control Agency (SAFCA) is intended to provide urgently needed flood control system improvements to the Natomas Basin in southern Sutter and northern Sacramento Counties, California (Exhibit 1). The project would improve the levee system that protects the 53,000-acre Natomas Basin, including a portion of the city of Sacramento. The Natomas Basin is bounded by leveed reaches of the Natomas Cross Canal (NCC) on the north, the Sacramento River on the west, the American River on the south, and the Pleasant Grove Creek Canal (PGCC) and Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek on the east (Exhibit 1).

SAFCA's intent is to provide the Natomas Basin with at least a 100-year level of flood protection by the end of 2010 and a "200-year" level of protection by the end of 2012. Achievement of these aims would significantly reduce the risk of an uncontrolled flood in the Natomas Basin that would result in a catastrophic loss of property (estimated at \$7 billion) and a prolonged interruption of commercial activity, including the operation of Sacramento International Airport (Airport) and closure of Interstate 5 (I-5) and State Route (SR) 99/70. Flooding is particularly hazardous in a heavily urbanized basin like Natomas because of the depths that floodwaters can reach—more than 10 feet in some areas.

DEFICIENCIES OF THE NATOMAS LEVEE SYSTEM AND PROPOSED REMEDIES

Approximately 26 miles of the NCC south levee, the Sacramento River east levee, and the PGCC west levee require one or more forms of remediation to address the potential for failure in a 100-year or "200-year" flood event, as follows:

- ▶ Inadequate freeboard—The NCC south levee and portions of the Sacramento River east levee must be raised to provide at least 3 feet of freeboard above the 100-year water surface elevation, and several reaches of the Sacramento River east levee must be raised to provide 3 feet of freeboard above the "200-year" design water surface elevation.
- ▶ Underseepage and through-seepage vulnerability—Most of these same reaches do not meet recently adopted federal criteria for safely containing underseepage and through-seepage when the water surface in the adjacent channel reaches the 100-year elevation or, in some cases, the "200-year" elevation.

Underseepage problems can occur where levees are constructed on low-permeability foundation soil (silt and clay) underlain by a layer of higher permeability (sand and gravel). Excessive underseepage makes the levee susceptible to failure during periods of high river stage. Under these conditions, seepage travels horizontally under the levee and then is forced vertically upward through the low-permeability foundation layer, often referred to as a "blanket." Failure of the blanket can occur either by uplift, a condition in which the blanket does not have enough weight to resist the confined pressure acting on the bottom of the blanket, or by piping (internal erosion) caused by water flowing under high vertical gradients through the erodible blanket and carrying fine soil particles out of the foundation materials. Through-seepage is seepage through a levee embankment that can occur during

periods of high river stage. Depending on the duration of high water and the permeability of embankment soil, seepage may exit the landside face of the levee. Seepage can also pass directly through pervious layers in the levee if such layers are present. Under these conditions, the stability of the landside levee slope may be reduced.

The project encompasses addressing freeboard deficiencies through levee raises; addressing seepage potential using a combination of seepage berms, cutoff walls, and relief wells; and acquiring additional right-of-way to construct the improvements and to prevent encroachment into the flood control system. In addition, the project has been designed to include an enlarged levee embankment (adjacent setback levee) along the land side of the existing Sacramento River east levee to preclude the need for substantial removal of vegetation and structural encroachments on the water side of this levee in compliance with U.S. Army Corps of Engineers (Corps) guidance. These improvements would include recontouring the levee slopes where necessary.

The following subsections summarize the methods to address freeboard deficiencies and seepage potential, which will be used in various combinations on the NCC south levee, Sacramento River east levee, and the PGCC west levee.

LEVEE RAISES

The freeboard increases would be accomplished through raises of the existing NCC south levee or through construction of the raised adjacent setback levee adjacent to the existing Sacramento River east levee:

- ▶ Raise of existing levee (NCC south levee). A full levee raise is required for the NCC south levee, consisting of an embankment raise from the landside or waterside toe (or both) upward to the increased levee crown elevation. This requires partially excavating the levee slope to provide a working platform for equipment, typically 10 feet wide, and rebuilding the levee to the appropriate elevation by benching the new embankment material into the existing embankment material.
- ▶ Adjacent setback levee (Sacramento River east levee). The levee raise of the Sacramento River east levee would be accomplished through the construction of an "adjacent setback levee" adjoining the Sacramento River east levee. The adjacent setback levee would be constructed with a crown elevation 3 feet above the "200-year" water surface profile. In the upper reaches, where the existing levee has freeboard deficiencies of as much as 3 feet, the crown of the adjacent setback levee would be higher than the existing levee and Garden Highway roadway. In the lower reaches, where the existing levee has sufficient freeboard, the adjacent setback levee would be the same height as the existing levee.

SEEPAGE BERMS

Seepage berms are wide embankments placed outward from the landside toe of the levee to lengthen the underseepage path, thereby lowering, to acceptable levels, the erosive potential of seepage passing through permeable layers under the levees. Seepage berms typically extend 100 to 400 feet from the levee. The berm thickness depends on the severity of the seepage pressure, but generally berms are 5 feet thick near the landside toe and taper to a thickness of 3 feet at the prescribed distance from the toe. A seepage collection ditch is often constructed at the landward toe of all seepage berms. Seepage berms are planned for construction along portions of the Sacramento River east levee and the PGCC west levee.

CUTOFF WALLS

Conventional slurry cutoff walls are typically constructed using an excavator with a long-stick boom capable of digging a trench to the maximum required depth. Bentonite slurry is pumped into the trench during trench excavation to prevent caving. The soil, cement, and bentonite are mixed to achieve the required cutoff wall strength and permeability, and the mixture is backfilled into the trench. Select fill is used to rebuild the levee. The NLIP includes construction of cutoff walls along portions of the NCC south levee and the Sacramento east levee. Cutoff wall construction may also be required in some areas along the PGCC west levee.

For the NCC south levee, preparation for construction of the cutoff wall would begin with using scrapers (or other suitable equipment, depending on the slope) to clear and grub/strip the surface to a depth of 2 inches to remove low-growing vegetation, loose stone, and surface soils. The aggregate base from the operating road also would be removed and stockpiled for later reuse. Waste material would be hauled to an off-site location.

Construction of the cutoff wall would include degrading the existing levee to a depth equal to one-half its total height (approximately 9 feet). A 70-foot-deep cutoff wall would be constructed for the total length of 23,150 lineal feet, with the method of installation at the contractor's discretion. Material degraded to support cutoff wall construction would be compacted at the landside toe of the levee to support raising portions of the NCC south levee. Unsuitable material generated from cutoff wall construction would be disposed of off-site. Equipment that would be used in phases of the cutoff wall construction includes excavators, scrapers, loaders, bulldozers, rollers, haul trucks, water trucks, hydroseeding trucks, pickup trucks, slurry pumps, and generators.

Work on the Sacramento River east levee includes construction of an adjacent levee with construction of a cutoff wall to occur in several reaches of the adjacent levee. Borrow material would be excavated from several locations in the project area and would be delivered to the levee construction sites by scrapers or haul trucks where it would be spread by motor graders and compacted by sheepsfoot rollers to build the adjacent levee up to a height equal to about two-thirds of the height of the existing levee. This would create a working platform for cutoff wall installation using an excavator with a long-stick boom capable of digging a trench to a maximum depth of approximately 80 feet. Bentonite slurry would be pumped into the trench during excavation to prevent caving. The soil excavated from the trench would be mixed with bentonite and backfilled into the trench to create the cutoff wall.

RELIEF WELLS

Relief wells provide protection against levee underseepage by providing a path for underseepage to exit to the ground surface at the landside toe of the levee without creating sand boils or piping levee foundation materials. Relief wells are an option for addressing underseepage in reaches where continuous sand and gravel layers have been identified by the geotechnical analysis.

Relief wells are constructed near the levee landside toe to provide pressure relief beneath surficial fine-grained soils. The wells are constructed using soil boring equipment to bore a hole vertically through the fine-grained blanket layer and into the coarse-grained aquifer layer beneath. Pipe casings and filters are installed to allow the pressurized water to flow to the ground surface, thereby relieving the pressures beneath the clay blanket. Relief wells either may discharge onto open ground or may require conveyance to a stormwater drainage system or a pump station. Relief wells cause the least amount of construction disturbance but require routine maintenance of the wells themselves and the drainage and pumping facilities necessary to support them.

EXISTING PROJECT FACILITIES AND POTENTIAL BORROW SITES

All project construction activities would take place within the Natomas Basin, except for the development of a borrow site on Reclamation District (RD) 1001 land northeast of the basin (Exhibit 2). The following sections describe the existing flood control facilities, their general setting, and adjacent irrigation infrastructure and the potential borrow sources. These features, as well as the borrow locations, constitute the physical infrastructure and locations where the project may result in effects on historic properties.

FLOOD CONTROL AND IRRIGATION FACILITIES

NATOMAS CROSS CANAL SOUTH LEVEE

The NCC is a 5.3-mile-long channel that carries water from several tributary watersheds in western Placer County and eastern Sutter County to the Sacramento River. The NCC begins at the PGCC and East Side Canal and extends southwest to its confluence with the Sacramento River near the Sankey Road/Garden Highway

intersection. During periods of flooding, the Sutter Bypass, Sacramento River, and NCC all contribute to raised water elevations that can affect the NCC levees. For engineering purposes, the levee is divided into seven reaches. Much of the south levee contains an existing stability berm with an internal drainage system. An approximately 80- to 100-foot maintenance access area extends along the land side of the levee through most of the NCC's length.

Farms and rural residences are located on both sides of the NCC, with rice the primary crop under cultivation. The Lucich North and Frazer Habitat Preserves, maintained by The Natomas Basin Conservancy (TNBC), lie south of the NCC south levee from the eastern end of Reach 2 through the western end of Reach 6. A drainage canal, referred to as the Vestal Drain, runs parallel to the NCC south levee through much of Reach 2, approximately 100 feet from the landside levee toe. A private irrigation pump and irrigation canal are located at the landside levee toe in Reach 1. Natomas Central Mutual Water Company's (NMWC's) Bennett Pumping Plant and RD 1000's Pumping Plant No. 4 are located in Reach 2, and the NMWC Northern Pumping Plant is located in Reach 3. NMWC's North Main Canal runs parallel to the levee through Reaches 4 and 5, approximately 100 feet from the landside levee toe.

SACRAMENTO RIVER EAST LEVEE

An 18-mile-long section of the east levee of the Sacramento River protects the west side of the Natomas Basin between the NCC and the American River. For planning purposes, the levee is divided into 20 reaches. The Garden Highway is located on top of the levee crown within all 20 reaches. A drained, 10-foot-wide stability berm is present on the landside slope of the levee between the NCC and Powerline Road (Reaches 1–12). Cutoff walls were previously constructed through the levee in Reaches 12–20.

The land uses along the levee vary from north to south. Along the land side, Reaches 1–13 are bordered mainly by private agricultural lands containing a few rural residences, Airport bufferlands, and two farmed TNBC parcels. Teal Bend Golf Club is west of the Airport, adjacent to the levee along Reach 6. The parcels bordering Reaches 14–18 contain more residences, several rural estates, and three TNBC parcels. The land side of Reaches 19 and 20 is bordered by residential subdivisions, a business park, and City parklands.

Several irrigation canals, pipelines, wells, and pump stations exist along the Sacramento River east levee. The Elkhorn Canal and the Riverside Canal are key agricultural irrigation canals in the NMWC system. The Elkhorn Canal runs parallel to the Sacramento River east levee from the North Drainage Canal in Reach 4B through Reach 8 and into the start of Reach 9 (1,250 feet south of Elkhorn Boulevard). The Riverside Canal extends from just north of Reach 13 to the middle of Reach 19. Several lateral canals connect to the Elkhorn and Riverside Canals. These canals have earthen embankments with side slopes that are nearly vertical, requiring regular maintenance. Both canals are supplied by pumping plants on the Sacramento River.

In addition to the NMWC irrigation systems, there are several landowner-operated systems along the levee. These facilities are located primarily in Reaches 1–4A and 9–12, in areas not currently served by the NMWC systems. The areas are serviced by either well pumps on the land side or river pumps, which discharge into buried pipelines, small irrigation ditches, or directly onto fields. The distribution systems run along the landside toe of the levee to supply fields that slope away from the levee.

Several drainage pumping plants are operated by RD 1000 along the Sacramento River east levee. These facilities pump drain water from the main drainage canal system into the river. They include Pumping Plant No. 2, located in Reach 4B; Pumping Plant No. 5, located in Reach 10; Pumping Plant No. 3, located in Reach 13; and Pumping Plant No. 1, located in Reach 20A. Pumping Plant No. 2 was temporarily removed as part of an emergency levee repair in 2006 and would be replaced as an element of the project in 2009–2010. In addition to these RD 1000 pumping stations, the City of Sacramento operates the Willow Creek drainage pumping station which is located in Reach 19B.

PLEASANT GROVE CREEK CANAL WEST LEVEE

The PGCC west levee extends southerly from the east end of the NCC south levee to the north end of the NEMDC/Steelhead Creek levee near the Sankey Road crossing. The PGCC west levee protects the Natomas Basin from flood flows from Pleasant Grove Creek and other creeks in western Placer County, as well as from water that backs up in the NCC during high river stages in the Sacramento River. Natomas Road is located on top of the levee crown. No berms support this levee. A private canal extends parallel to the PGCC west levee for about 1,500 feet at the landside levee toe. Farms and scattered rural residences are located on the land side of the PGCC west levee, and a manufacturing facility and a railroad siding are located within several hundred feet of the levee, just south of Sankey Road.

BORROW SITES

Borrow sites are areas from which earthen materials would be removed for use in construction. The sites would be recontoured and developed as either managed marsh or grassland habitat following excavation for this use. Where borrow sites would be used over more than one construction season, the work would progress in cells that would be incrementally developed as habitat as the borrow activities are completed.

SAFCA has identified borrow sources for the project in 2008, 2009, and 2010 flood control and irrigation infrastructure improvements and redundant sources that may be pursued if negotiations regarding the preferred sources are unsuccessful or additional quantities are found to be needed during construction:

- ▶ Brookfield property (2008 preferred, 2009 preferred, 2010 preferred)
- ▶ Airport bufferlands north of the Airport complex (2008 preferred, 2009 preferred, 2010 potential)
- ▶ Fisherman's Lake area (2010 preferred) (no specific parcels identified for this borrow site)
- ▶ RD 1001 (2008 potential, 2009–2010 potential)

Except for the Fisherman's Lake area in the southern part of the Natomas Basin, these borrow areas are shown in Exhibit 3.

DESCRIPTION OF PROJECT ELEMENTS AND ACTIVITIES

The elements of the project are described in this section in four broad, overlapping categories:

- ▶ levee raising and seepage remediation,
- ▶ improvements to major irrigation and drainage infrastructure,
- ▶ habitat development and management, and
- ▶ additional actions to meet Federal Emergency Management Agency (FEMA) requirements: encroachment management and bridge crossing modifications.

Expanding the landside footprint of the Sacramento River east levee necessitates redesigning and relocating the irrigation and drainage infrastructure currently located along the landside toe of the levee. Relocation of other major and minor irrigation and drainage canals located near the NCC south levee and the PGCC west levee will be necessary with implementation of levee improvements. Modifications to the existing irrigation and drainage systems will include creation of a new canal designed to provide giant garter snake (GGS) habitat and improved stormwater drainage west of the Airport (GGS/Drainage Canal).

Site preparation would entail removing trees and other large vegetation from the construction area and stripping the top 6 inches of material from the landside slope of the existing levee, the footprint of the adjacent setback levee, the seepage berm areas, and the 50-foot-wide permanent maintenance access corridor. Large roots and

deleterious material would then be grubbed from the working area. To the extent feasible, trees that must be removed from within the footprint of the adjacent setback levee or berms would be relocated outside of the footprint to new woodland planting areas, where a substantial number of new trees would also be planted. Excess earth materials (organic soils, roots, and grass from borrow areas and the adjacent levee foundation and excavated material that does not meet levee embankment criteria) would be used in the reclamation of borrow areas or hauled off-site to landfills. Cleared vegetation (i.e., trees, brush) would be hauled off-site to landfills. After construction, the levee slopes and any previously vegetated areas disturbed during construction, including staging areas, would be seeded with a grass mix.

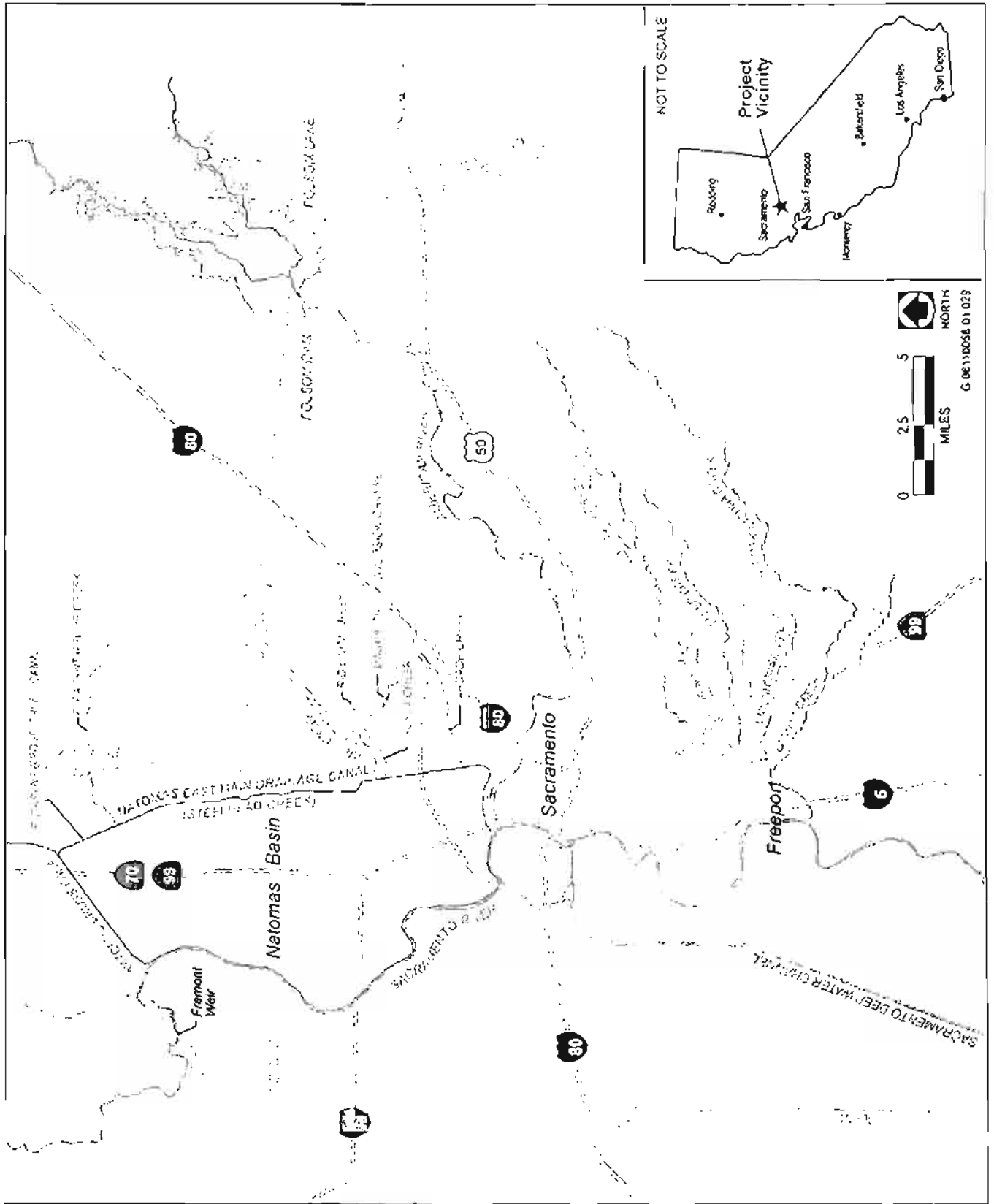
The major project elements and related activities are summarized in Table 1.

Table 1 Summary of the Major Elements of the Project	
Project Element	Project Activity and Timing
2008 Construction	
Levee raising and seepage remediation: NCC south levee	Raise and realign the NCC south levee to provide additional freeboard and more stable waterside and landside slopes and to reduce the need for removal of waterside vegetation. (May 8–November 1, 2008) Construct a seepage cutoff wall through the levee crown in Reaches 3–7. (May 8–October 15, 2008)
Levee raising and seepage remediation: Sacramento River east levee (adjacent setback levee)	Construct a raised adjacent setback levee from the NCC to just south of the North Drainage Canal (Reaches 1–4B, except Stations 55+00 to 68+00 in Reach 2) with a 100-foot seepage berm in Reach 4A and a 300-foot seepage berm in Reach 4B. (May 1–November 1, 2008)
Improvements to major irrigation and drainage infrastructure	Construct a new canal designed to provide drainage and associated giant garter snake habitat (the GGS/Drainage Canal) between the North Drainage Canal and Elkhorn Reservoir. (May 1–November 1, 2008) Relocate the Elkhorn Canal (highline irrigation canal) between the North Drainage Canal and Elkhorn Reservoir in anticipation of the filling of the existing Elkhorn Canal at the toe of the Sacramento River east levee in late 2008 and in 2009. (May 1–November 1, 2008) Remove a deep culvert at the location of Pumping Plant No. 2. (May 1–November 1, 2008)
Habitat creation and management	Establish vegetative habitat features in the new GGS/Drainage Canal. (Fall 2008) Recontour and create managed marsh and grassland on lands used as borrow sources. (Fall 2008 or spring 2009) Establish grassland on the adjacent setback levee slopes and seepage berms. (August 1–December 31, 2008) Install woodland plantings to offset the loss of portions of tree groves in the landside levee footprint. (Fall 2008)
Right-of-way acquisition	Acquire right-of-way through fee title or easement interest within the footprint of the project features, at the borrow sites and along the flood control system. (Before construction)
2009–2010 Construction	
Levee raising and seepage remediation: Sacramento River east levee (adjacent setback levee)	Construct an adjacent setback levee along Stations 55+00 to 68+00 in Reach 2 and from just south of the North Drainage Canal to the American River north levee (Reaches 5A–20B), raised where needed to provide adequate freeboard, with seepage berms, relief wells, and cutoff walls for seepage remediation as required (specific seepage remediation measures are still under study). (May 1–November 1, 2009, and May 1–November 1, 2010)
Seepage remediation: PGCC west	Flatten waterside and landside slopes, and construct seepage berms along the PGCC west levee (specific berm widths and potential use of cutoff walls in some areas to be

**Table 1
Summary of the Major Elements of the Project**

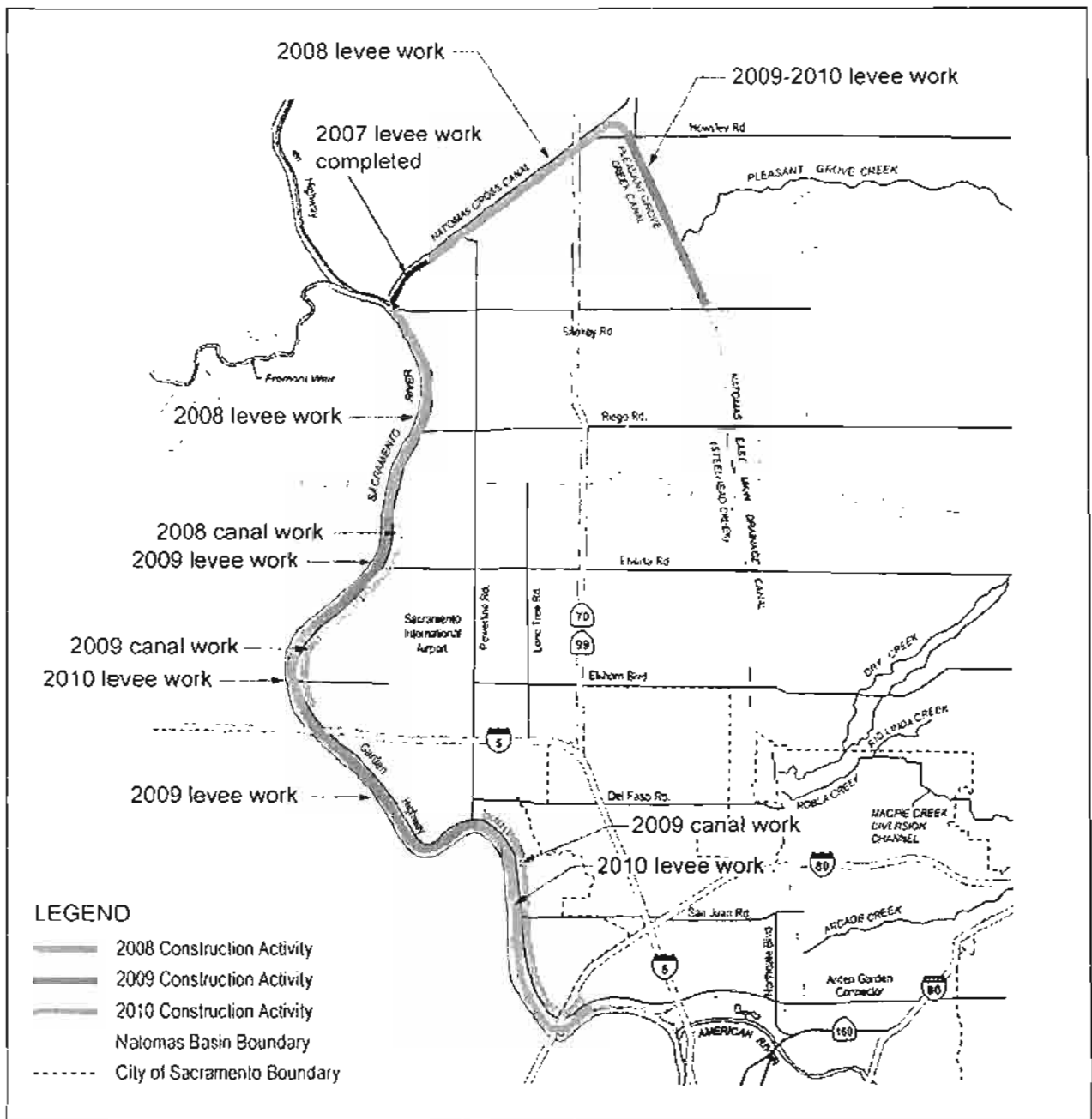
Project Element	Project Activity and Timing
Levee	determined). (May 1–November 1, 2010)
Improvements to major irrigation and drainage infrastructure	<p>Construct the new GGS/Drainage Canal between Elkhorn Reservoir and the West Drainage Canal (specific alignment to be determined), and improve the West Drainage Canal to provide enhanced giant garter snake habitat. (May 1–November 1, 2009)</p> <p>Implement Airport West Ditch improvements in connection with construction of the GGS/Drainage Canal to allow the Airport to decommission the agricultural irrigation function of this facility and eliminate the hazards currently associated with it. The Airport stormwater detention function provided by this ditch would continue. The ditch would therefore be recontoured as a gently sloping swale to facilitate periodic maintenance such as mowing. (May 1–November 1, 2009)</p> <p>Relocate the Riverside Canal and the Elkhorn Canal downstream of Elkhorn Reservoir (specific alignments to be determined) and fill the existing canals. (May 1–November 1, 2009)</p> <p>Construct RD 1000 Pumping Plant No. 2. (April 1, 2009–September 1, 2010)</p>
Habitat creation and management	<p>Establish habitat enhancements in the new GGS/Drainage Canal and improved West Drainage Canal. (Fall 2009)</p> <p>Recontour and create marsh and managed grassland on lands used as borrow sources. (Fall or spring after borrow excavation in 2009 and 2010)</p> <p>Establish grassland on the adjacent setback levee slopes and seepage berms. (Fall after construction in 2009 and 2010)</p> <p>Install woodland plantings to offset the loss of portions of tree groves in the landside levee footprint (locations to be determined). (Fall 2009 and 2010)</p>
Additional actions to meet FEMA requirements: encroachment management on the Sacramento River east levee, and bridge crossing modifications at the NCC	<p>Remove encroachments from a portion of the water side and land side of the Sacramento River east levee as needed to ensure that the levee can be certified as meeting the minimum requirements of the NFIP and USACE design criteria (specific criteria still under discussion). (Timing to be determined)</p> <p>Modify the SR 99/70 crossing of the NCC as needed to meet FEMA requirements. (Timing to be determined)</p>
Right-of-way acquisition	Acquire right-of-way through fee title or easement interest within the footprint of the project features, at the borrow sites and along the flood control system. (Before construction)

Notes: Airport = Sacramento International Airport; Elkhorn Canal = Elkhorn Main Irrigation Canal; FEMA = Federal Emergency Management Agency; GGS = Giant Garter Snake; NCC = Natomas Cross Canal; NFIP = National Flood Insurance Program; PGCC = Pleasant Grove Creek Canal; RD = Reclamation District; Riverside Canal = Riverside Main Irrigation Canal; SR = State Route; USACE = U.S. Army Corps of Engineers



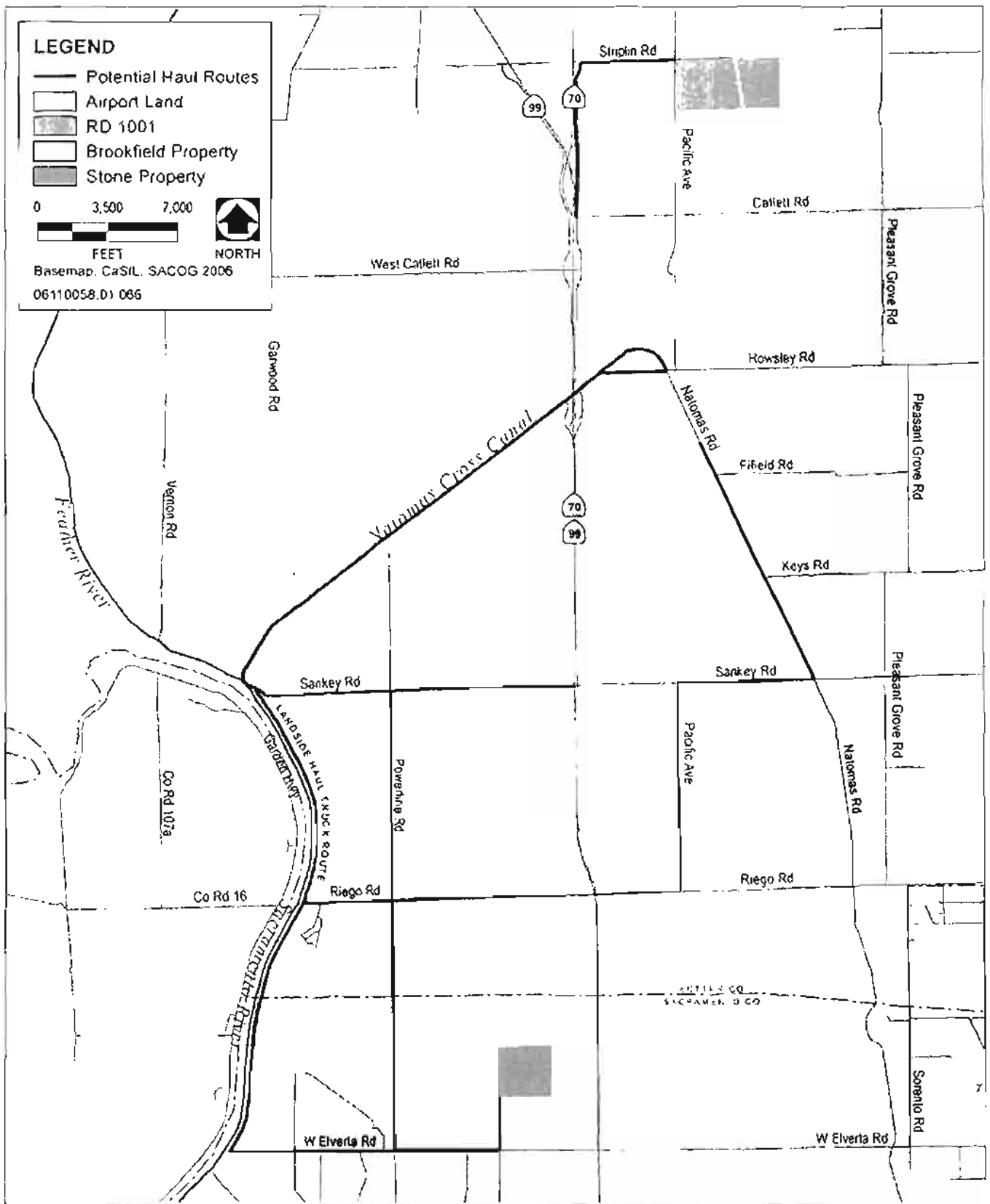
Project Location

Exhibit 1



Project Construction By Phase

Exhibit 2



Source: Mead & Hunt 2007. EDAW 2007

Anticipated Borrow Areas and Local Haul Routes

Exhibit 3

ATTACHMENT B

**Cultural Resources Inventory Reports, Part 1
Natomas Levee Improvement Program Landside Improvements Project
Sacramento and Sutter Counties, California**

Cultural Resources Inventory Reports, Part I
Natomas Levee Improvement Program
Landside Improvements Project
Sacramento and Sutter Counties, California



Prepared for:
U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, California 95814-2922

and

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

Prepared by:
EDAW
2022 J Street
Sacramento, CA 95811

Contact:
Charlane Gross, M.A., RPA
916/414-5800

October 2007

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
Airport	Sacramento International Airport
APE	area of potential effect
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cmbs	centimeters below surface
CRHR	California Register of Historical Resources
HPTP	historic property treatment plan
I-5	Interstate 5
I-80	Interstate 80
MLD	Most Likely Descendant
MOA	Memorandum of Agreement
NAHC	Native American Heritage Commission
NCC	Natomas Cross Canal
NCIC	North Central Information Center
NEIC	Northeast Information Center
NEMDC	Natomas East Main Drainage Canal
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLIP	Natomas Levee Improvement Program
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PGCC	Pleasant Grove Creek Canal
PRC	Public Resources Code
RD	Reclamation District
SAFCA	Sacramento Area Flood Control Agency
SHPO	State Historic Preservation Officer
SRFCP	Sacramento River Flood Control Project
STP	shovel test pit
The Reclamation Board	State of California Reclamation Board
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

INTRODUCTION

PURPOSE OF THIS REPORT

This report describes the work completed to date to identify cultural resources that have the potential to be affected by the Natomas Levee Improvement Program (NLIP) Landside Improvements Project, which is proposed for implementation by Sacramento Area Flood Control Agency (SAFCA). The proposed project consists of improvements to the levee system in the Natomas Basin and related landscape modifications and drainage and irrigation infrastructure improvements. This work will be completed in phases, starting in 2008 and continuing through 2010. As a local public agency in California, SAFCA must comply with the requirements of the California Environmental Quality Act (CEQA) regarding unique archaeological resources and historical resources as defined in Public Resources Code (PRC) Section 21083.2(g) and California Code of Regulations (CCR) Section 15064.5(a), respectively, and has prepared a draft environmental impact report that meets CEQA requirements. The project requires approvals from the U.S. Army Corps of Engineers (USACE), which must comply with the requirements of Section 106 of the National Historic Preservation Act (NHPA) for assessing impacts of projects on historic properties. Therefore, project implementation also must meet Section 106 requirements. This report provides preliminary information to support Section 106 compliance for the project.

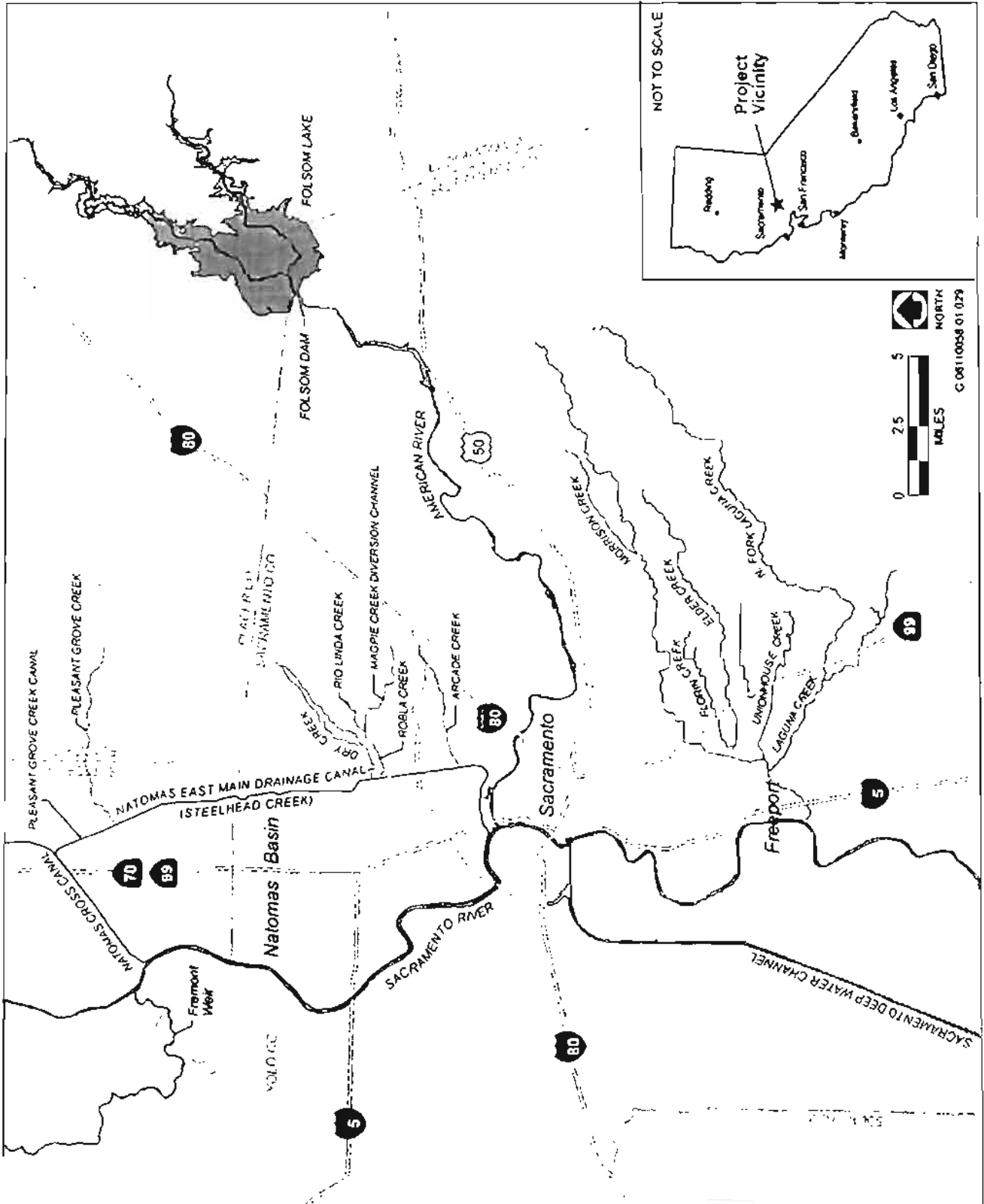
The report provides an overview of the proposed project; presents relevant setting information for the project area; and describes the following components of Section 106 compliance for the project:

- ▶ the regulatory context for cultural resources, including an existing programmatic agreement (PA) between USACE, the Bureau of Reclamation, the California State Office of Historic Preservation (SHPO), and the Advisory Council on Historic Preservation (ACHP) for projects that are a part of the federal American River Watershed Project. Additional signatories of the PA include the State of California Reclamation Board (The Reclamation Board) and SAFCA;
- ▶ the phased approach proposed for identification of cultural resources, pursuant to 36 Code of Federal Regulations (CFR) Section 800.4(b)(2);
- ▶ cultural resources identification efforts performed to date; and
- ▶ the scope of remaining identification and management efforts that will be undertaken.

PROJECT LOCATION AND GENERAL CHARACTERISTICS OF THE PROJECT AREA

The project area is located in Townships 9-11 North and Ranges 3-5 East, as depicted on the Sacramento East, Sacramento West, Gray's Bend, Taylor Monument, Verona, Pleasant Grove, and Rio Vista U.S. Geological Survey (USGS) 7.5' quadrangle maps. Elevations across the project area generally range from 20 feet to 40 feet (at the top of the levees) above mean sea level.

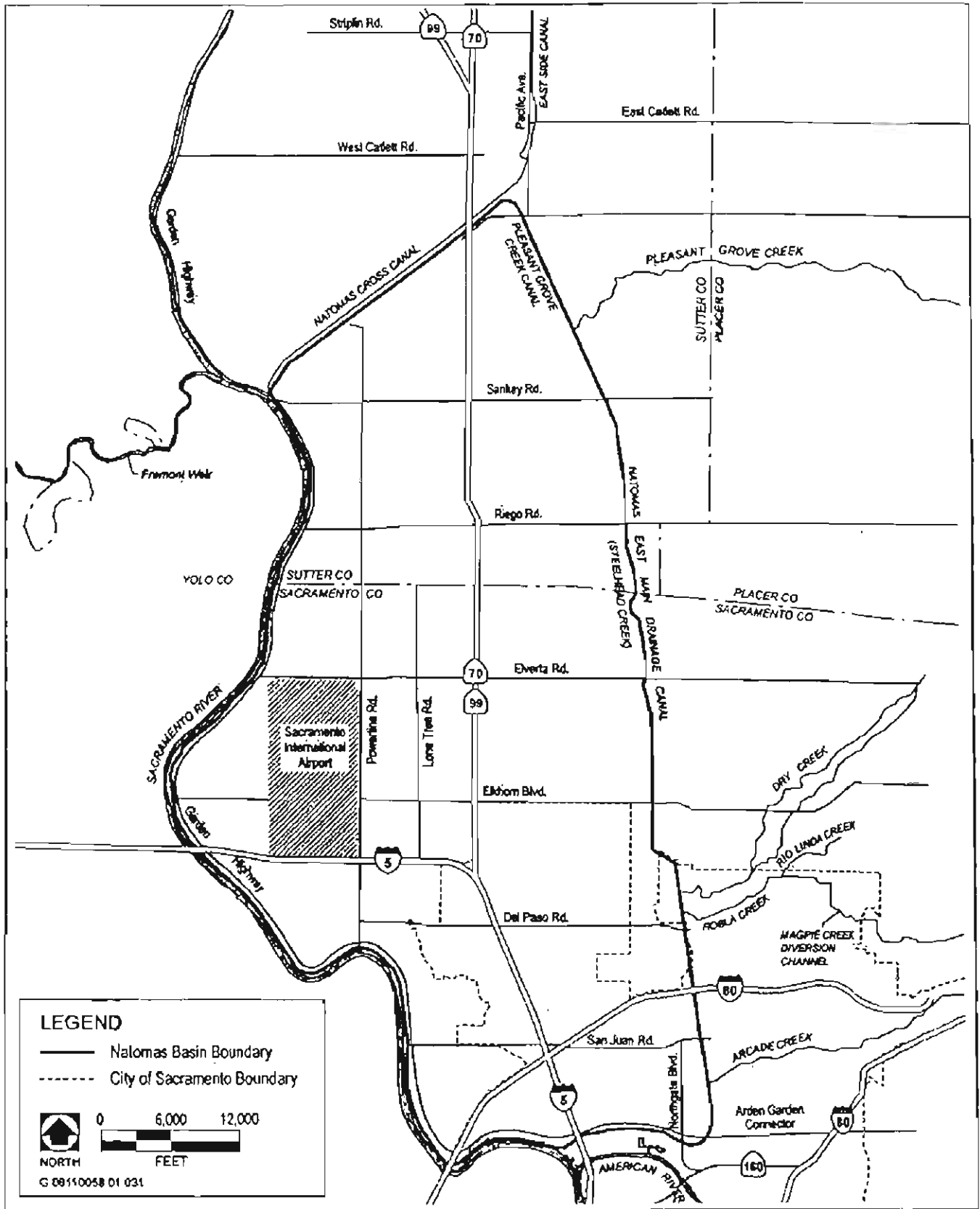
The project area is in the Natomas Basin in northern Sacramento and southern Sutter Counties, which is bounded by the Natomas Cross Canal (NCC) to the north, the Sacramento River to the west, the Sacramento and American rivers to the south, and the Pleasant Grove Creek Canal (PGCC) and the Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek to the east. The regional and local settings of the Landside Improvements Project are shown in Exhibits 1 and 2, respectively. Most of the project activities would take place in the western portion of the Natomas Basin and along the NCC and PGCC.



Source: CaSil, Adapted by EDAW in 2007

Regional Setting

Exhibit 1



Source: CaSII; SACOG 2007; Adapted by EDAW in 2007

Local Setting

Exhibit 2

The project area is mainly used for agriculture, although the southern portion of the area is urbanized and lies within the City of Sacramento. The dominant landscape features of most of the area are elements of Reclamation District (RD) 1000, which are described below.

PROJECT DESCRIPTION

The Landside Improvements Project and the NLIP as a whole are part of the American River Common Features program of improvements to the flood control system protecting the Sacramento area that was initiated as part of the American River Watershed Investigation following the record flood of 1986. The NLIP Landside Improvement Project will address deficiencies in the peripheral levee system of the 53,000-acre Natomas Basin, specifically the NCC south levee, the Sacramento River east levee, and the PGCC west levee. Subsequent phases of the NLIP will address the NEMDC west levee and American River north levee following completion of additional geotechnical and hydraulic investigations.

The overall objectives of SAFCA's flood control improvement program, including the NLIP, are to:

- (1) complete the projects necessary to provide 100-year flood protection for developed areas in Sacramento's major floodplains as quickly as possible,
- (2) provide urban-standard ("200-year") flood protection for developed areas in Sacramento's major floodplains over time, and
- (3) ensure that new development in the undeveloped areas of Sacramento's major floodplains does not substantially increase the expected damage of an uncontrolled flood.

The specific objectives of the proposed NLIP Landside Improvements Project are to:

- (1) provide at least 100-year flood protection as quickly as possible while laying the groundwork to achieve at least "200-year" flood protection over time,
- (2) use flood control projects in the vicinity of Sacramento International Airport (Airport) to facilitate changes in the management of Airport lands that reduce hazards to aviation safety, and
- (3) use flood control projects to enhance habitat values by increasing the extent and connectivity of the lands in Natomas being managed to provide habitat for giant garter snake, Swainson's hawk, and other special-status species.

To meet these project objectives, SAFCA proposes the following project activities:

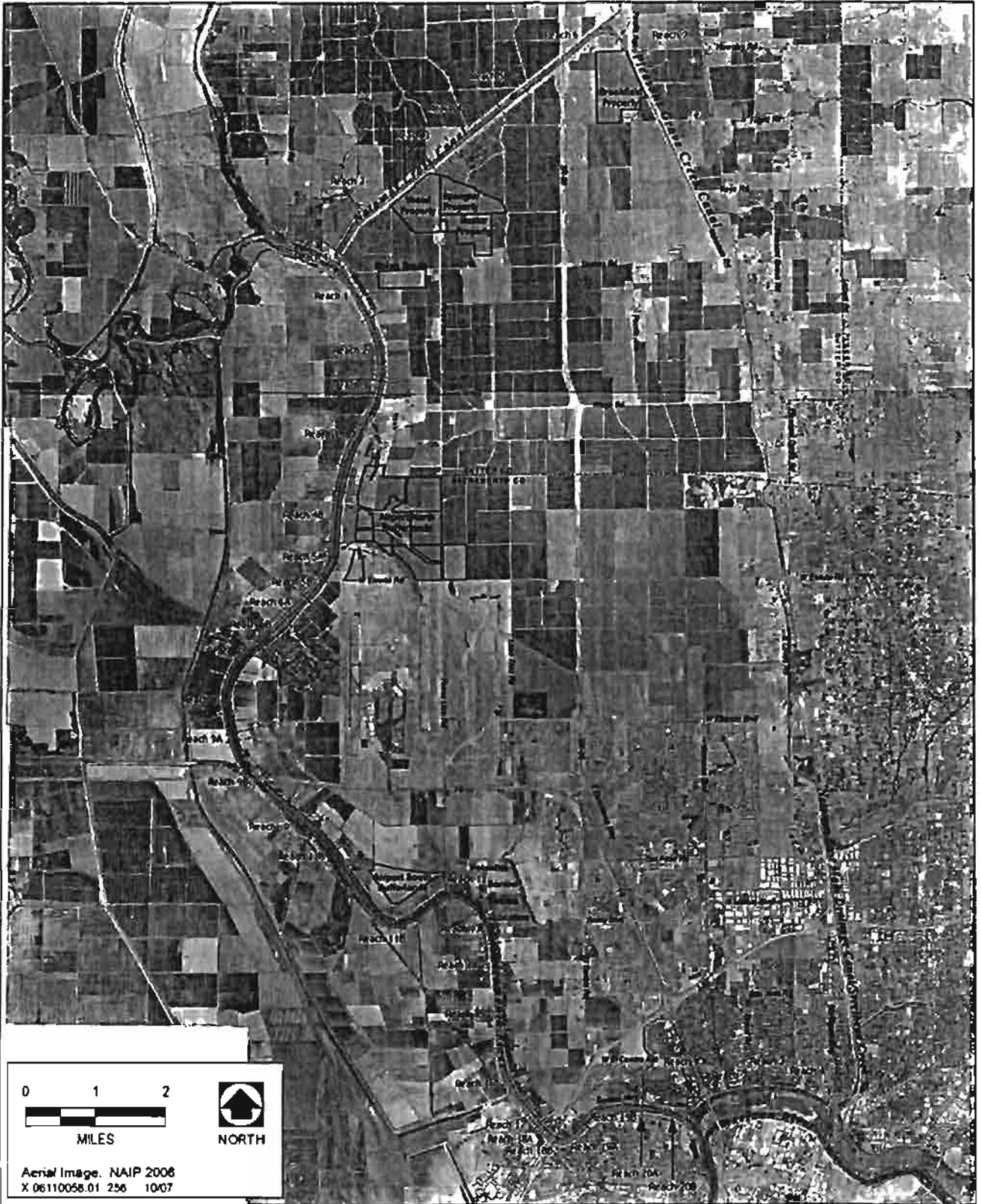
- ▶ 2008 construction
 - Along the 5.3-mile NCC south levee, raise the levee to provide additional freeboard; realign the levee to provide a more stable waterside slope and to reduce the need for removal of waterside vegetation, and construct a seepage cutoff wall in the eastern 4.3 miles (approximately) of the levee to reduce the risk of levee failure due to seepage and stability concerns.
 - Along the Sacramento River east levee, construct a raised adjacent setback levee from the NCC to 1,700 feet south of the North Drainage Canal with seepage berms, relief well, and cutoff walls where required to reduce seepage potential, and install woodland plantings.
 - Construct a new canal designed to provide drainage and associated giant garter snake habitat (referred to as the "GGS/Drainage Canal"), relocate the Elkhorn Canal between the North Drainage Canal and the

Elkhorn Reservoir settling basin ("Elkhorn Reservoir"), and remove a deep culvert from under the levee near the Pumping Plant No. 2 site.

- Recontour the land and create marsh and upland habitat at borrow locations.
- 2009 and 2010 construction
- Along the Sacramento River east levee south of the limits of the 2008 improvements, construct an adjacent setback levee (raised where needed to provide adequate freeboard) with seepage berms, relief wells, and cutoff walls as required, and install woodland plantings.
 - Along the PGCC west levee, widen the levee, flatten the waterside and landside slopes, and construct seepage berms.
 - Construct a new GGS/Drainage Canal between Elkhorn Reservoir and the West Drainage Canal, improve the West Drainage Canal, relocate the Riverside Canal and the Elkhorn Canal downstream of Elkhorn Reservoir, and reconstruct the Reclamation District 1000 Pumping Plant No. 2.
 - Recontour the land and create marsh and upland habitat at borrow locations.
 - Remove encroachments from the water side of the Sacramento River east levee as needed to ensure that the levee can be certified as meeting the minimum requirements of the National Flood Insurance Program and USACE design criteria, and address Federal Emergency Management Agency requirements for the State Route (SR) 99/70 bridge crossing of the NCC.

Project construction would include a range of soil-disturbing activities in a region that is highly sensitive for cultural resources, particularly prehistoric archaeological sites. Levee improvements would require the excavation of inspection and cutoff wall trenches and extensive soil stripping and grading in the footprint of the adjacent setback levee along the existing Sacramento River east levee and where 100- to 300-foot-wide seepage berms would be constructed along the Sacramento River east levee and the PGCC west levee. Borrow material would be obtained through shallow excavation of several hundred acres of land in the Natomas Basin and excavation of a site northeast of the basin. The new GGS/Drainage Canal would be excavated for approximately 8 miles through the western part of the basin. Project implementation also would alter structures and landscapes associated with Reclamation District (RD) 1000, a resource eligible for listing on the National Register of Historic Places (NRHP).

The approximately 1 million cubic yards of borrow material for the NCC south levee and PGCC west levee improvements would be obtained from land owned by RD 1001 northeast of the Natomas Basin. Approximately 4.4 million cubic yards of soil material would be needed for construction of the levee embankment, berms, and relocated canals along the Sacramento River east levee. About 600,000 cubic yards would be obtained through excavation of the new GGS/Drainage Canal between RD 1000's existing North Drainage Canal north of the Airport and its existing West Drainage Canal southwest of the Airport. SAFCA would obtain the balance of the fill material it needs for the improvements along the Sacramento River east levee from parcels in the Airport bufferlands, land planned for habitat development by The Natomas Basin Conservancy, and nearby privately owned agricultural land (Exhibit 3).



Source: Aerial by SACOG 2006, Prepared by EDAW In 2007

Potential Borrow Areas

Exhibit 3

BACKGROUND INFORMATION

REGULATORY SETTING

The project is subject to the provisions of CEQA, as well as Section 106 of the NHPA.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA includes provisions that specifically address the protection of cultural resources. CEQA requires consideration of impacts of a project on unique archaeological resources and historical resources. A unique archaeological resource, as defined in PRC Section 21083.2(g), is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

- (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

Section 15064.5(a) of the State CEQA Guidelines generally defines a historical resource as:

- (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (CRHR);
- (2) a resource included in a local register of historical resources or identified as significant in a historical resource survey; and
- (3) any other object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant, provided that the lead agency's determination is supported by substantial evidence.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR includes resources that are listed in or formally determined eligible for listing in the NRHP (see below), as well as some California State Landmarks and Points of Historical Interest (PRC Section 5024.1, 14 CCR Section 4850). Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (State CEQA Guidelines Section 15064.5[a][2]). The eligibility criteria for listing in the CRHR are similar to those for NRHP listing but focus on the importance of the resources to California history and heritage. A cultural resource may be eligible for listing in the CRHR if it:

- (1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (2) is associated with the lives of persons important in our past;

- (3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (4) has yielded, or may be likely to yield, information important in prehistory or history.

(See 14 CCR Section 4852.)

NATIVE AMERICAN HERITAGE COMMISSION

The Native American Heritage Commission (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.

NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the NHPA and its implementing regulations (36 CFR 800, as amended in 2004) require federal agencies to consider the potential effects of their proposed undertakings on historic properties. Historic properties are cultural resources that are listed on, or are eligible for listing on, the NRHP (36 CFR 800.16[1]). Undertakings include activities directly carried out, funded, or permitted by federal agencies. Federal agencies must also allow the Advisory Council on Historic Preservation (ACHP) to comment on the proposed undertaking and its potential effects on historic properties. Implementation of the proposed project would require permitting under Section 404 of the Clean Water Act and Section 408 approval from the USACE. Therefore, USACE compliance with Section 106 is required in relation to the proposed project.

SECTION 106 PROCESS

The implementing regulations for Section 106 of the NHPA require consultation with the State Historic Preservation Officer (SHPO), the ACHP, federally recognized Indian tribes and other Native Americans, and interested members of the public throughout the compliance process. The four principal steps are:

- ▶ Initiate the Section 106 process (36 CFR Section 800.3).
- ▶ Identify historic properties, resources eligible for inclusion in the NRHP (36 CFR Section 800.4).
- ▶ Assess the effects of the undertaking to on historic properties within the area of potential effect (APE) (36 CFR Section 800.5).
- ▶ Resolve adverse effects (36 CFR Section 800.6).

Adverse effects on historic properties are often resolved through preparation of a memorandum of agreement or PA developed in consultation between the federal agency, the SHPO, Indian tribes, and interested members of the public. The ACHP is also invited to participate. The agreement describes stipulations to mitigate adverse effects on historic properties.

NATIONAL REGISTER OF HISTORIC PLACES

The NRHP listing criteria are as follows (36 CFR Section 60.4):

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) that are associated with the lives of persons significant in our past; or
- (c) that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.

RURAL HISTORIC LANDSCAPES

The rural historic landscape is a category of resources that is evaluated under the Section 106 process. This resource category is relevant to this project because RD 1000, the local geographic setting of the proposed project, is eligible for NRHP listing as a Rural Historic Landscape District. National Register Bulletin 30 defines a rural historic landscape as a geographical area that historically has been used by people or shaped or modified by human activity, occupancy, or intervention and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features. Rural landscapes commonly reflect the day-to-day occupational activities of people engaged in traditional work such as mining, fishing, and various types of agriculture. Often, they have developed and evolved in response to both the forces of nature and the pragmatic need of people to make a living. Landscapes that are small and that have no buildings or structures, such as an experimental orchard, are classified as sites. Most, however, being extensive in acreage and containing a number of buildings, sites, and structures—such as a ranch or farming community—are classified as historic districts. Large acreage and a proportionately small number of buildings and structures differentiate rural historic landscapes from other kinds of historic properties.

National Register Bulletin 30 distinguishes rural historic landscapes from designed landscapes. Rural landscapes usually are not the work of a professional designer and have not been developed according to academic or professional design standards, theories, or philosophies of landscape architecture. These properties possess tangible features, called landscape characteristics, that have resulted from historic human use. In this way, they also differ from natural areas that embody important cultural values but have experienced little modification, such as sites having religious meaning for Native American groups.

EXISTING PROGRAMMATIC AGREEMENT

USACE, the SHPO, the Bureau of Reclamation, and the ACHP in 1991 executed a PA that governs the Section 106 process for implementation of the American River Watershed Project, including constructing levee, channel, and related flood control improvements in the Natomas Basin. The PA covers implementation of the specific elements of the proposed improvements that would involve the USACE as the federal lead agency. Additional signatories of the PA include The Reclamation Board and SAFCA.

The PA is relevant to the present study because it controls the Section 106 process for work within the American River Watershed Project, a flood control program that coincides in part with the proposed project. Furthermore, it acknowledges the following: “the Project may be modified based on public input, congressional authorization, and ongoing negotiations among the primary sponsors.” Portions of the proposed project that also coincide with the American River Watershed Project must satisfy the provisions of the PA.

The PA includes procedures for the treatment of indirect and direct impacts of the levee improvements associated with the American River Watershed Project. The executed PA specifies inventory and NRHP evaluation procedures for historic properties, as well as the process for development of Historic Property Treatment Plans (HPTPs). Additionally, the PA details report format and review, participation of interested parties, curation of

recovered materials, and professional qualifications. Mitigation measures may include archaeological documentation, architectural and engineering documentation, and historical documentation, following standards and guidelines promulgated by the Secretary of the Interior.

NATURAL SETTING

The geological information presented here is taken from SAFCA's Environmental Impact Report on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area (SAFCA 2007).

The project area lies in the Sacramento Valley portion of the Great Valley Geomorphic Province. The Great Valley is a large valley trending northwest-southeast that is bounded by the Sierra Nevada to the east and south, the Coast Ranges to the west, and the Klamath Mountains to the north. The Great Valley is drained by the Sacramento and San Joaquin Rivers, which join and flow out of the Great Valley province through San Francisco Bay. This geomorphic province is an asymmetric trough approximately 400 miles long and 50 miles wide that is characterized by a relatively flat alluvial plain made up of a deep sequence of sediment deposits from Jurassic to Recent age. The sediments in the Great Valley vary between 3 and 6 miles in thickness and were derived primarily from erosion of the Sierra Nevada to the east, with lesser material from the Coast Ranges to the west. The eastern edge of the Sacramento Valley is flanked by uplifted and tilted sedimentary strata that overlie rocks of the Foothills Metamorphic Belt and are in turn overlain on the west by younger alluvium.

The Sacramento Valley has been a depositional basin throughout most of the late Mesozoic and Cenozoic time. A vast accumulation of sediments was deposited during cyclic transgressions and regressions of a shallow sea that once inundated the valley. Overlying the thick sequence of sedimentary rock units that form the deeply buried bedrock units in the mid-basin areas of the valley are Late Pleistocene and Holocene (Recent) alluvial deposits, consisting of reworked fan and stream materials that were deposited by streams prior to the construction of the existing flood control systems. The youngest geomorphic features in the area are low floodplains, which are found primarily along the Sacramento and American Rivers. The natural floodplains of these rivers are very wide in this area because the land is relatively flat. These major drainage ways were originally confined within broad natural levees sloping away from the rivers or streams. The natural levees formed through the deposition of alluvium during periods of flooding. As flood waters lost energy, the coarser materials settled out nearest the rivers and streams, forming the natural levees and sand bars in the vicinity of the river channel. The finer material was carried in suspension farther from the rivers or streams, and settled out in quiet water areas such as swales, abandoned meander channels, and lakes. However, because the streams have meandered and reworked the previously deposited sediments, extreme variations in material types may be found over a limited distance or depth.

Flanking the Recent alluvial deposits are late Pleistocene alluvial fan and terrace deposits of the Modesto and Riverbank Formations (Helley and Harwood 1985). Stream terrace deposits, mapped as the Modesto Formation, are higher in elevation and older than floodplain sediments. Before the construction of the existing levees, these stream terraces were occasionally flooded, but only small amounts of sediment were deposited during flood events. The lower fan terraces of the Riverbank Formation are higher in elevation and older than stream terraces, and were only rarely flooded.

The Natomas Basin is situated within the climatic band classified as the Lower Sonoran Zone. The climatic pattern is characterized as Mediterranean, with cool, wet winters and hot, dry summers. Locally, this pattern consists of approximately 17 inches of annual rainfall, high summer temperatures, and low humidity. The dominant vegetative communities in this area are prairie grasslands and tule marshes, with some areas of riparian woodland. Valley oak (*Quercus lobata*), cottonwood (*Populus fremontii*), sycamore (*Platanus racemosa*), and willow trees (*Salix* spp.) once grew on the verge of streams and rivers. Tule marshes included stands of tules, cattails, sedges, rushes, and clumps of willow trees.

Faunal species that frequented the prehistoric prairie grasslands and tule marshes included mule deer (*Odocoileus hemionus*), tule elk (*Cervus elaphus*), antelope (*Antilocapra americana*), weasel (*Mustela frenata*), river otter (*Lutra canadensis*), raccoon (*Procyon lotor*), and beaver (*Castor canadensis*). Migratory waterfowl, such as geese (*Branta canadensis*) and swans (*Olor* sp.), passed through during winter, joining resident white pelicans (*Pelecanus erythrorhynchus*), great blue and black-crowned herons (*Ardea herodias*, *Nycticorax nycticorax*), ibis (*Plegadis guarauna*), cranes (*Grus canadensis*), cormorants (*Phalacrocorax* sp.), and eagles (*Haliaeetus leucocephalus*). Badgers (*Taxidea taxus*), coyotes (*Canis latrans*), skunks (*Mephitis mephitis*), jackrabbits (*Lepus californicus*), and cottontail rabbits (*Sylvilagus audubonii*) inhabited higher ground.

Within the waterways, chinook salmon (*Oncorhynchus tshawytscha*), rainbow trout (*Salmo gairdneri*), Pacific lamprey (*Lampetra tridentata*), and white sturgeon (*Acipenser transmontanus*) seasonally joined the other fish species indigenous to the area. Predators such as mountain lions (*Felis concolor*), grizzly bears (*Ursus americanus*), wolves (*Canis lupus*), kit fox (*Vulpes macrotis*), and bobcats (*Lynx rufus*) also roamed the area (Moratto 1984).

PREHISTORIC SETTING

PALEO-INDIAN AND LOWER ARCHAIC PERIODS

The earliest well-documented entry and spread of humans into California occurred at the beginning of the Paleo-Indian Period (10,000–6000 B.C.). Social units are thought to have been small and highly mobile. Known occupation sites have been identified within the contexts of ancient pluvial lake shores and coastlines, where characteristic hunting implements, such as fluted projectile points and chipped stone crescent forms, have been found. Prehistoric adaptations over the ensuing centuries have been identified in the archaeological record by numerous researchers working in the area since the early 1900s, as summarized by Fredrickson (1974) and Moratto (1984). Because of its plentiful resources and temperate climate, the Central Valley was well populated prehistorically and served as the location for some of the more substantial village sites known in California.

Beardsley (1948), Heizer and Fenenga (1939), and others conducted numerous studies that form the core of our early understanding of upper Central Valley archaeology. Little has been found archaeologically that dates to the Paleo-Indian or Lower Archaic (6000–3000 B.C.) time periods. However, archaeologists have recovered much data from sites occupied by the Middle Archaic period. The lack of discovery of sites from earlier periods may be the result of high sedimentation rates that have left the earliest sites deeply buried and inaccessible.

MIDDLE ARCHAIC, UPPER ARCHAIC, AND EMERGENT PERIODS

During the Middle Archaic Period (3000–1000 B.C.), the broad regional patterns of foraging subsistence strategies gave way to more intensive procurement practices. Subsistence economies were more diversified, possibly including the introduction of acorn processing technology. Human populations were growing and occupying more diverse settings. Permanent villages occupied year-round were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period (1000 B.C.–A.D. 500). Exchange systems become more complex and formalized. Evidence of regular, sustained trade between groups was seen for the first time.

Several technological and social changes characterized the Emergent Period (A.D. 500–1800). The bow and arrow were introduced, ultimately replacing the dart and atlatl. Territorial boundaries between groups became well established. It became increasingly common that distinctions in an individual's social status could be linked to acquired wealth. Exchange of goods between groups became more regularized with more goods, including raw materials, entering into the exchange networks. In the latter portion of this period (A.D. 1500–1800), exchange relations became highly regularized and sophisticated. The clamshell disk bead became a monetary unit for exchange, and increasing quantities of goods moved greater distances. Specialists arose to govern various aspects of production and exchange.

The Middle and Upper Archaic and Emergent Periods are further broken down under the Central California Taxonomic System. These three time periods are well represented in archaeological assemblages in the vicinity of the project area. The assemblages are discussed in detail in Bennyhoff and Fredrickson (1969) and Moratto (1984) and are summarized here.

The **Windmill Pattern** (3000–500 B.C.) of archaeological assemblages included an increased emphasis on acorn use and a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay artifacts (frequently used as a substitute for stone in the Central Valley), and worked shell and bone were hallmarks of Windmill culture. Widely ranging trade patterns brought goods in from the Coast Range and trans-Sierran sources as well as closer trading partners. Perforated charmstones were associated with some burials. Mano and metate and small mortars were used but were rare.

Distinctive burial practices (ventrally extended, oriented westward) identified with the Windmill Pattern also appeared in the Sierra Nevada foothills, indicating possible seasonal migration into the Sierra Nevada. The specific orientation of burials reinforces the idea that summers were spent in the Sierra Nevada and winters in the Central Valley. Men were generally buried in separate areas, in deeper graves, and with more artifacts than women, possibly indicating a higher social status. However, the rich offerings found with some women and children suggest that wealth also followed lineages or some sort of social patterns as well.

The **Berkeley Pattern** (200 B.C.–A.D. 700) represented a greater reliance on acorns as a food source than was seen previously. Distinctive stone and shell artifacts distinguished it from earlier or later cultural expressions, and may indicate the arrival and spread of ancestral Plains Miwok from the Bay Area region. Burials were predominantly placed in a tightly flexed position and frequently included red ochre. Minimally shaped mortar and pestle technology was much more prevalent than mano/metate. Nonstemmed projectile points become more common.

The **Augustine Pattern** (A.D. 700–1800) was marked by increasing populations resulting from more intensive food procurement strategies, and also by a marked change in burial practices and increased trade activities. Intensive fishing, hunting and gathering, complex exchange systems, and a wider variety in mortuary patterns were all hallmarks of this period. Mortars and pestles were more carefully shaped, and bow-and-arrow technology was present. Fishing implements became more common, trade increased, and cremation was used for some higher-status individuals. A well-developed ceramic industry has been noted at a site near Sloughhouse, east of Sacramento.

ETHNOGRAPHIC SETTING

The project area is situated within the lands traditionally occupied by the Nisenan, or Southern Maidu. The language of the Nisenan, which includes several dialects, is classified within the Maiduan family of the Penutian linguistic stock (Kroeber 1925). The western boundary of Nisenan territory was the western bank of the Sacramento River and the area between present-day Sacramento and Marysville. In the Sacramento Valley, the triblet, consisting of a primary village and a few satellite villages, served as the basic political unit (Moratto 1984). Valley Nisenan territory was divided into three triblet areas, each populated with several large villages (Wilson and Towne 1978), generally located on low, natural rises along streams and rivers or on slopes with a southern exposure. One important village, *Pusune*, near Discovery Park, appears to have been recorded as CA-SAC-26. Other villages—*Wollok*, *Leuchi*, *Wishuna*, *Totola*, and *Nawrean*—were located east of the confluence of the Feather and Sacramento Rivers, near the northwestern portion of the Natomas Basin.

Nisenan houses were domed structures covered with earth and tule or grass and measured 10–15 feet in diameter. Brush shelters were used in the summer and at temporary camps during food-gathering rounds. Larger villages often had semisubterranean dance houses that were covered in earth and tule or brush and had a central smoke hole at the top and an east-facing entrance, as well as smaller sweathouses. Another common village structure was a granary, which was used for storing acorns (Wilson and Towne 1978). Valley Nisenan people followed a

seasonal round of food gathering, as did most California Indians. The wide variety of food resources available was exploited year round, but hunting and gathering activities were at their most intense in late summer and early fall. Food staples included acorns, buckeyes, pine nuts, hazelnuts, various roots, seeds, mushrooms, greens, berries, and herbs. Game, roasted, baked, or dried, included mule deer, elk, antelope, black bear, beaver, squirrels, rabbits, fish, shellfish, and other small animals and insects (Wilson and Towne 1978). Seasonal harvests were carried out by families or the larger community, engendering social behavior such as sharing, trading, and conducting ceremonies.

Euro-American contact with the Nisenan began with infrequent excursions by Spanish explorers and Hudson Bay Company trappers traveling through the Sacramento and San Joaquin Valleys in the early 1800s. In general, Nisenan lifeways remained stable for centuries until the early to middle decades of the 19th century. With the coming of Russian trappers and Spanish missionaries, cultural patterns began to be disrupted as social structures were stressed. An estimated 75% of the Valley Nisenan population died in the malaria epidemic of 1833. With the influx of Europeans during the Gold Rush era, the population was further reduced as a result of disease and violent relations with the miners. However, today the Maidu are reinvesting in their traditional culture and, through newfound political, economic, and social influence, now constitute a growing and thriving native community in California.

HISTORIC SETTING

EARLY EXPLORATION

Although Russian trappers and traders associated with the Hudson's Bay Company likely traveled through Sacramento, Sutter, and Yuba Counties during earlier years, the first well-documented European exploration of the general region occurred in 1808, when Spanish explorer Gabriel Moraga led an expedition from Mission San Jose to the northern Sacramento Valley (Hoover, Rensch, and Rensch 1966). The earliest Euro-American settlement coincided with the establishment of land grants by the Mexican government in the 1840s. John A. Sutter obtained the first such grant in the region in 1841. Sutter's New Helvetia Rancho encompassed lands on the east bank of the Feather and Sacramento Rivers within the project area (Beck and Haase 1974).

MINING

Although there are no records of large-scale mining having been conducted in the project area or in the immediate vicinity, the industry had considerable indirect effects on historical developments in the region. The diggings and mines in the Sierra Nevada foothills dramatically increased economic activity in the region, leading to increased prosperity and the rise of larger and more numerous support industries, such as cattle ranches and farms. In addition, sediments washing into the Central Valley watercourses, including the Feather, Sacramento, and American Rivers, had a negative impact on water quality and on the scale and frequency of seasonal flooding.

Hydraulic mining, first conducted in Nevada in 1852, was the most cost-effective means of recovering placer gold from deeply buried gravels along and near river and stream channels. To access these deeply buried deposits, miners used streams of water under high pressure to wash away sediments and gravels. The sands and gravels were passed through sluices that separated out the placer gold. Silt and sand washed into nearby creeks, streams, and rivers, raising watercourse beds, clogging the channels, and generally polluting the waters. Between 1849 and 1909, 195 million cubic meters of mining debris entered the channels of the American River basin. The deposition of silt in the rivers resulted in the raising of the riverbeds and increased flooding. After 1861, catastrophic floods became more common, prompting the development of a levee system and beginning the process of land reclamation for agricultural purposes.

Construction of a railroad was a natural outgrowth of Sacramento's expansion and the need to deliver supplies to the California foothills. The railroad was completed by February 1856. The first rail line ran to the town of Folsom, where at least 21 different wagon trains then carted goods from the train to outlying areas as far away as Carson City, Nevada. The Central Pacific Railroad bought the Sacramento Valley Railroad in 1865 and added its

facilities to those already being built for the Transcontinental Railroad. The Central Pacific and its successor, the Southern Pacific Railroad, became the major industry in Sacramento after 1863. It is estimated that early in its history, the railroad employed 20–30% of salaried employees in Sacramento (Historic Environment Consultants 1998).

AGRICULTURE AND FLOOD CONTROL

GENERAL

Agriculture and ranching were the primary industries in the present-day Sacramento and Sutter County region during the historic period. Regional ranching originated on the New Helvetia rancho in the early 1840s. The Gold Rush precipitated growth in agriculture and ranching, as ranchers and farmers realized handsome returns from supplying food and other goods to miners. Frequent floods plagued the residents of the region, however, and posed a significant threat to the viability of agricultural interests and further settlement.

Initial efforts at flood control were usually uncoordinated and consisted of small levees and drains constructed by individual landowners. These features proved insufficient to protect cultivated land, and much of the project area flooded regularly (Dames & Moore 1994a). In 1861, the California Legislature created the State Board of Swampland Commissioners to reclaim swamp and overflow lands. The State Board of Swampland Commissioners established 32 districts that attempted to enclose large areas with natural levees. Lack of cooperation among the landowners in the districts led to chronic financial crises. When the legislature terminated the State Board of Swampland Commissioners in 1866, responsibility for swamp and overflow land fell to the individual counties. Many counties offered incentives to landowners for reclaiming agriculturally unproductive land. If a landowner could certify that he had spent at least \$2 per acre in reclamation, the county would refund the purchase price of the property to the owner. Speculators took advantage of this program and a period of opportunistic and often-irrational levee building followed (Thompson 1958).

In the early part of the 20th century, the state legislature established The Reclamation Board to exercise jurisdiction over reclamation districts and levee plans. That year, the state approved and began implementation of the Sacramento River Flood Control Project (SRFCP). The ambitious project included the construction of levees, weirs, and bypasses along the river to channel floodwaters away from population centers. Under the SRFCP, new reclamation districts were created, including RD 1000, consisting of approximately 55,000 acres in the Natomas Basin. RD 1000 was largely controlled by the Natomas Company, which had access to more money than any individual landowner. The Natomas Company was formed in 1851 in Sacramento County to supply water for placer mining and irrigation. It later became involved in dredging for gold and expanded its water supply business. The Natomas Company became involved in land reclamation in part as a rebuttal of criticism that farmland was being destroyed by the company's gold dredging activities (Dames & Moore 1994a).

RD 1000 RURAL HISTORIC LANDSCAPE DISTRICT

The infrastructure of RD 1000 (Exhibit 4) was completed in the 1920s. It includes levees, drainage canals, pumps, irrigation systems, agricultural fields, and roads, as well as remnant natural features. The originally constructed features included levees and exterior drainage canals, an interior drainage canal system, nine pumping plants, a series of levee and interior roads, and unpaved rights-of-way between the farm fields.

Previous efforts to document and mitigate impacts on elements of RD 1000 are relevant to the proposed project. The RD 1000 area has been identified as eligible for inclusion in the NRHP as a Rural Historic Landscape District. The evaluation process was conducted both to determine the NRHP eligibility of the district and to evaluate whether the district would be significantly affected by flood control projects planned and subsequently implemented by the USACE as part of the American River Watershed Project (Dames & Moore 1994a). The "determination of effects" statement concluded that the USACE projects would adversely affect both contributing

and noncontributing elements of the Rural Historic Landscape District by allowing for greater development to occur in the region. Mitigation measures were recommended and adopted. These consisted of Historic American Engineering Record documentation, which was prepared by Peak & Associates (1997); videotapes of historic properties; and a list of repositories where copies of the information would be made available to the public.

Dames & Moore determined that RD 1000 appears to be eligible for listing as a Rural Historic Landscape District at the state level of significance for the period from 1911 to 1939 under Criterion A. The area of significance was listed as reclamation and the historical context was listed as the flood control and reclamation of the Sacramento River basin within the SRFCP as an important part of the history of reclamation and flood control. The district retains much of its historic integrity, including location design, setting, materials, workmanship, feeling, and association. The contributing and noncontributing elements of the district were defined as part of this effort. Contributing elements were described as follows:

- ▶ **Drainage System:** East Levee, River Levee, Cross Canal Levee; Natomas East Main Drainage Canal; Cross Canal; Pleasant Grove Canal; Pumping Plants No. 1-A, 2, and 3; the canal connecting Pumping Plant No. 3 and the West Drainage Canal, North Drainage Canal, East Drainage Canal, West Drainage Canal, Natomas Main Drainage Canal, and the drainage ditches within the areas of contributing large-scale land patterns.
- ▶ **Road System:** Garden Highway from Orchard Lane north to the Cross Canal; East Levee/Natomas Road; Sankey Road; Riego Road; Elverta Road; Elkhorn Boulevard from Garden Highway to the western boundary of the Sacramento Airport; Del Paso Road from Powerline Road to its intersection with Interstate 5 (I-5); San Juan Road from Garden Highway to its intersection with I-5; Powerline Road; El Centro Road from north of Interstate 80 (I-80) to its intersection with Bayou Way; and the right-of-way roads within fields in the areas of contributing large scale land patterns.
- ▶ **Large-Scale Land Patterns:** Land area that consists of open fields formed by the intersection of the canals and roads in the area bounded as follows: west of the East Levee; west of Sorrento Road, north of Del Paso Road between the East Levee and I-5, west of I-5 from its intersection with Del Paso Road to its intersection with I-80; north of I-80 from its intersection with I-5 to the River Levee; east of the River Levee; and south of the Cross Canal Levee.

Noncontributing resources include parts of the drainage system (some pumping plants and associated branch canals); parts of the road system; some large-scale land patterns (the area bounded by Sorrento Road to the east levee, south of Del Paso Road between I-5 and the east levee, south of I-80, and the Airport); and some land uses, vegetation, boundary demarcations, buildings, and structures such as those more closely associated with agriculture than reclamation, municipal structures, commercial structures, and electric power lines.

STUDY METHODOLOGY

This section describes the methods used to date to identify cultural resources in the study area and to satisfy the relevant statutory and regulatory framework. The methodology is consistent with state and federal standards, was developed to meet the requirements of CEQA and NHPA Section 106, and is consistent with the PA. All study elements described in this section have been completed by archaeologists that meet the Secretary of the Department of the Interior's professional qualification standards.

The cultural resource inventory efforts will be completed in phases, as access to project lands is acquired. A phased identification process is specifically authorized at 36 CFR Section 8004.2(b)(2):

Where alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted, the agency official may use a phased process to conduct identification and evaluation efforts. The agency official may also defer final identification and evaluation of historic properties if it is specifically provided for in a memorandum of agreement executed pursuant to § 800.6, a programmatic agreement executed pursuant to § 800.14 (b), or the documents used by an agency official to comply with the National Environmental Policy Act pursuant to § 800.8. The process should establish the likely presence of historic properties within the area of potential effects for each alternative or inaccessible area through background research, consultation and an appropriate level of field investigation, taking into account the number of alternatives under consideration, the magnitude of the undertaking and its likely effects, and the views of the SHPO/THPO and any other consulting parties. As specific aspects or locations of an alternative are refined or access is gained, the agency official shall proceed with the identification and evaluation of historic properties in accordance with paragraphs (b)(1) and (c) of this section.

The following sections describe background research conducted to identify existing resources and sensitivity of resources, completed identification efforts, and future work required under the phased approach.

NATIVE AMERICAN CONTACT PROGRAM

EDAW sent a letter of inquiry to the NAHC on June 12, 2007, asking for information or concerns regarding the project area, as well as a list of individuals or organizations that might have information or concerns regarding the project area (Appendix A). On June 19, 2007, Debbie Pilas-Treadway of the NAHC responded and indicated that no known sites were found in the Sacred Lands File that were located within the project area or in the immediate vicinity. Ms. Pilas-Treadway also provided EDAW with a list of individuals who could be contacted concerning cultural resources in the project area. These individuals were sent contact letters on June 21, 2007, with information regarding the proposed project and a request for any information they might provide or concerns that they might have about the project. No written responses were received; therefore, follow-up phone calls were made on July 9, 2007. Only one individual, Rose Enos (referred to by the NAHC as "Miwok/Maidu"), answered. Ms. Enos expressed general concern regarding avoidance of burial sites and asked to be contacted if work is conducted on such sites. Messages were left for the remaining people on the contact list; however, no response from any of these individuals has been received. In addition, EDAW contacted Randy Yonemura of the Ione Band of the Miwok to request information on areas of concern. Mr. Yonemura led an EDAW archaeologist on a field visit of the project area and provided anecdotal information on areas of potential Native American burials.

INFORMATION CENTER RECORDS SEARCHES

Records searches were conducted in stages in 2006 and 2007 for different portions of the proposed project footprint. Most of the searches were conducted at the North Central Information Center (NCIC) of the California Historical Resources Information System, located at California State University, Sacramento. The NCIC records search covered portions of the project area in Sacramento County. Records searches were also conducted at the

Northeast Information Center (NEIC), which maintains cultural resource records for Sutter County. The searches at both facilities included, but were not necessarily restricted to, an examination of the following resources:

- ▶ The State Office of Historic Preservation's *Historic Property Directory and Determination of Eligibility* (2006)
- ▶ The National and California Registers of Historic Places (2006)
- ▶ *California Inventory of Historic Resources* (1976 and updates)
- ▶ *Historic Properties Directory* (2006)
- ▶ *California Historical Landmarks* (1996 and updates)
- ▶ *California Points of Historical Interest* (1992 and updates)
- ▶ *Caltrans Local Bridge Survey* (1987)
- ▶ Various historic maps

The NEIC and NCIC reported that several cultural resource inventories have been conducted within the project area. These are listed in Tables 1 and 2, respectively.

NEIC Report No.	Author(s)	Title	Date
1135	Bass, H. O.	<i>Department of Transportation Negative Archaeological Survey Report: State Route 99</i>	1983
7173	Cultural Resources Unlimited	<i>A Cultural Resources Study for Sutter Bay Project, Sutter County, California</i>	1992
7175	Cultural Resources Unlimited	<i>A Cultural Resources Study for Sutter Bay Project Highway 99/70 Interchange/Crossroad Improvements Sutter County, California</i>	1992
34698	Dames & Moore	<i>Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California</i>	1996
5777	Dames & Moore	<i>Historic Property Treatment Plan for Reclamation District 1000 Rural Historic Landscape District for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California</i>	1994a
4197	Dames & Moore	<i>Archaeological Inventory Report, Natomas Locality, Cultural Resources Inventory and Evaluation, American River Watershed Investigation, El Dorado, Placer, Sacramento, and Sutter Counties, California</i>	1994b
6892	Derr, E. H.	<i>American Basin Fish Screen and Habitat Improvement Project, Feasibility Study: Alternative 1C, 2C, 3, Sacramento and Sutter Counties, California</i>	2002
6944	Ebasco Environmental	<i>Cultural Resources Survey of the Sacramento Energy Project Sacramento County, California</i>	1992
5655	Egherman, R., and B. Hatoff	<i>Roseville Energy Facility Cultural Resources Appendix J-1 of Application for Certification</i>	2002
6945	Foster, J. W., and D. G. Foster	<i>An Archaeological Survey of the South Sutter Industrial Center Property, Sutter County, California</i>	1992
2987	Jensen, P.	<i>Historic Properties Survey Report for the Proposed Fifield Road at Pleasant Grove Creek Canal, Caltrans District 3, Sutter County, California</i>	1999
6893	Kaptain, N.	<i>Historic Property Survey Report for the State Route 99/Riego Road Interchange Project Sutter and Sacramento Counties</i>	2005
4658	Nelson, W. J., M. Carpenter, and K. L. Holanda	<i>Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project. Segment WPO4: Sacramento to Redding</i>	2000
3469A	Peak & Associates	<i>Historic American Engineering Record Reclamation District 1000 HAER No CA-187</i>	1997
1141	Wilson, K.L.	<i>Sacramento River Bank Protection Unit 34 Cultural Resources Survey Final Report</i>	1978

Note: NEIC = Northeast Information Center
Source: Data provided by the Northeast Information Center in 2007

Table 2 Previous Cultural Resources Surveys Conducted in the Project Area in Sacramento County			
NCIC Report No.	Author(s)	Title	Date
-	Banek, B.	<i>An Archaeological Reconnaissance of the South Natomas Area for the River Bank Holding Company, Sacramento County, California</i>	1982
4188	Billat, L. B.	<i>Nextel Communications Wireless Telecommunications Service Facility-- Sacramento County</i>	2001
-	Bouey, P. D.	<i>Cultural Resources Inventory and Evaluation: Sacramento River Bank Protection (Unit 44) Project</i>	1989
4206, part 1	Bouey, P. D., and R. Herbert	<i>Intensive Cultural Resources Survey and National Register Evaluation: Sacramento Urban Area Flood Control Project</i>	1990
6519	Bouey, P., J. Berg, J., and C. A. Hunter	<i>Cultural Resources Test Excavations, Sacramento Urban Area Flood Control Project, Sacramento County, California</i>	1991
4457	California Department of Transportation	<i>Negative Historic Property Survey Report for the Proposed Installation of Automatic Vehicle Census Systems on Interstate 80 East of the West El Camino Over-Crossing and on Highway 51 East of the "E" Street Ramps, Sacramento County, California</i>	2003
4194	Chavez, D., L. H. Shoup, C. Desgrandchamp, and W. G. Slater	<i>Cultural Resources Evaluations for the North Natomas Community Plan Study Area, Sacramento, California</i>	1984
4193	County of Sacramento Department of Environmental Review and Assessment	<i>Draft Environmental Impact Report for Teal Bend Golf Course Use Permit</i>	1995
4190	CRS Archaeological Consulting and Research Services	<i>Sacramento Metro Airport Airmail Facility--letter report</i>	1988
3409	Cultural Resources Unlimited	<i>A Cultural Resources Study for Sacramento Area Flood Control Agency Borrow Sites Project Sacramento County</i>	1993
4463	Cultural Resources Unlimited	<i>A Cultural Resources Survey and Archival Review for the Arden-Garden Connector Project Sacramento County, California</i>	1992
3469B	Dames & Moore	<i>Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California</i>	1996
4197	Dames & Moore	<i>Archaeological Inventory Report, Natomas Locality, Cultural Resources Inventory and Evaluation, American River Watershed Investigation, El Dorado, Placer, Sacramento, and Sutter Counties, California</i>	1994b
5777	Dames & Moore	<i>Historic Property Treatment Plan for Reclamation District 1000 Rural Historic Landscape District for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California</i>	1996
4195	Derr, E.	<i>Cultural Resources Report: North Natomas Comprehensive Drainage Plan; Levee Improvements, Canal Widening and Additional Pumping Capacity</i>	1997
4466	Derr, E.	<i>Historic Resource Evaluation Report for the Arden-Garden Connector Project CT-03-30274.B1 Sacramento County, California</i>	1983
6892	Derr, E. H.	<i>American Basin Fish Screen and Habitat Improvement Project, Feasibility Study: Alternative 1C, 2C, 3, Sacramento and Sutter Counties, California</i>	2002
6944	Ebasco Environmental	<i>Cultural Resources Survey of the Sacramento Energy Project Sacramento County, California</i>	1992

NCIC Report No.	Author(s)	Title	Date
5655	Egherman, R., and B. Hatoff	<i>Roseville Energy Facility Cultural Resources Appendix J-1 of Application for Certification</i>	2002
3489A	Far Western Anthropological Research Group	<i>Report on the First Phase of Archaeological Survey for the Proposed SMUD Gas Pipeline Between Winters and Sacramento Yolo and Sacramento Counties, California</i>	1993
3489B	Far Western Anthropological Research Group	<i>Addendum to the Report on the First Phase of Archaeological Survey for the Proposed SMUD Gas Pipeline Between Winters and Sacramento Yolo and Sacramento Counties, California</i>	1993
4206, part 2	Far Western Anthropological Research Group	<i>Intensive Cultural Resources Survey and National Register Evaluation: Sacramento Urban Area Flood Control Project—letter report to SHPO</i>	2005
–	Foster, J. W.	<i>A Cultural Resource Investigation of the Blue Oaks Skilled Nursing Facility Site Auburn, California</i>	1995
–	Glover, L. C., and P. D. Bouey	<i>Sacramento River Flood Control System Evaluation, Mid-Valley Area Cultural Resources Survey, Colusa, Sacramento, Sutter, Yolo, and Yuba Counties, California</i>	1990
4449	Herbert, R. F.	<i>Report on the National Register Eligibility of the Sacramento River Docks Building 37 McClellan Air Force Base, Sacramento, California</i>	1995
5803	Herbert, R. F.	<i>Report on the National Register Eligibility of the Sacramento River Dock Complex including Building 4635 (Dock) and Building 4637 (Warehouse) McClellan Air Force Base, Sacramento, California</i>	1995
4202	Humphreys, S., and L. McBride	<i>A Review of the Work Carried Out at Sacramento 16, the Bennett Mound</i>	1966
4178	Jones & Stokes	<i>Archaeological Survey Report for the North Natomas Drainage System's San Juan Pump Station</i>	1992
2956	Nadolski, J. A.	<i>Archaeological Survey Report for the Jibboom Street Bridge Project Sacramento, California</i>	2001
4435	Nadolski, J. A.	<i>Archaeological Investigations for the Sacramento-KOVR Diverse Lateral Overbuild in Sacramento and Yolo Counties</i>	2001
5810	PAR Environmental Services, Inc.	<i>Northgate Boulevard/Arden-Garden Intersection Cultural Resources Investigation, City of Sacramento, Sacramento County, California</i>	n.d.
4187	Pastron, A. G., and R. K. Brown	<i>Historical and Cultural Resource Assessment Proposed Telecommunications Facility Natomas Park, Site No. SA-750-01 2450 Del Paso Road, Sacramento County, California</i>	2001
173	Peak, A. S.	<i>American River Parkway An Archaeological Perspective</i>	1973
2764	Peak & Associates	<i>Historic Property Survey Report and Finding of No Adverse Effect for the Proposed American River Parkway Bike Trail Improvement Project, City and County of Sacramento, California</i>	2001
2765	Peak & Associates	<i>Archaeological Survey Report for the Proposed American River Parkway Bike Trail Improvement Project, City and County of Sacramento, California</i>	
3469A	Peak & Associates	<i>Historic American Engineering Record Reclamation District 1000 HAER No. CA-187</i>	1997
4173	Peak & Associates	<i>Report on the Archaeological Testing Within the Riverbend Classics Project Area, City of Sacramento, California</i>	1999
4181	Peak & Associates	<i>Cultural Resources Overview for the North Natomas Long-Term Planning Area, Sacramento County, California</i>	4181

NCIC Report No.	Author(s)	Title	Date
6830	Peak & Associates	<i>Determination of Eligibility and Effect for the Natomas Panhandle Annexation Project Area Sacramento County, California</i>	2005
4201	Peak, A. S., H. L. Crew, and R. Gerry	<i>The 1971 Archaeological Salvage of the Bennett Mound, CA-SAC-16, Sacramento, CA</i>	1984
4456	Richie, M.	<i>Finding of Effect for the Proposed Safety Improvements and Rehabilitation of the Jibboom Street Bridge on Jibboom Street, Bridge No. 24C-022, Sacramento, Sacramento County, California</i>	2001
-	Snyder, J.W.	<i>Historic Property Survey Report (Positive) for the Jibboom Street Bridge Safety Improvements and Rehabilitation Project Jibboom Street, Sacramento County, California</i>	2003
4441	Sonoma State Anthropological Studies Center	<i>Archaeological Surface Reconnaissance and Backhoe Testing for the South Natomas Projects (P92-122, P92-160) Sacramento County, California</i>	
3408	Theodoratus Cultural Research	<i>Discovery Park Construction Site Examination for Archaeological Resources in the Area of CA-Sac-26—letter report</i>	1981
4458	True, D. L.	<i>8-Acre Survey at 1801 Garden Highway, Sacramento, California</i>	1983
1141	Wilson, K. L.	<i>Sacramento River Bank Protection Unit 34 Cultural Resources Survey Final Report</i>	1978
Note: SHPD = State Historic Preservation Officer			
Source: North Central Information Center Record Search 2007			

Numerous archaeological investigations have covered portions of the Natomas Basin. These have generally focused on areas closest to the rivers and levees. There has been very little archaeological inventory of lands more than 100 feet from the levee toes, and ground surface visibility has frequently been poor even in surveyed areas.

The most comprehensive of these investigations were completed by Dames & Moore and Far Western. In 1994, Dames & Moore (1994b) conducted a broad survey in the Natomas Basin as part of the American River Watershed Investigation. Surveying of selected parcels along the Sacramento River resulted in the identification of 17 primarily historic sites. During the same effort, Dames & Moore visited an additional 10 previously identified cultural resources to update site records for those locations. At the same time, Dames & Moore (1994a) prepared a draft Historic Property Treatment Plan that explored the history and elements of RD 1000. In 1996, Dames & Moore completed its evaluation of RD 1000, concluding that it appeared to be eligible for listing on the NRHP under Criterion A at a state level of significance as an example of reclamation and flood control in the Sacramento River basin during the period 1911–1939. This report extensively documents both the contributing and noncontributing resources of RD 1000. Previously, in 1990, Far Western had conducted surveys of areas along the same route surveyed by Dames & Moore in 1994 (Dames & Moore 1994b), as well as of additional areas (Bouey and Herbert 1990). Far Western (Bouey, Berg, and Hunter 1991) followed up with limited test excavations of two sites that may be within or near the footprint of 2009–2010 project components (borrow areas) that have not yet been fully defined.

Numerous cultural resources were identified in the course of previous survey efforts, including ranches and farms; agricultural, transportation, and reclamation features; and debris scatters, as well as prehistoric occupation and burial sites consisting of mounds or the disturbed remnants of mounds (Tables 3 and 4).

EDAW FIELD SURVEYS

Fieldwork undertaken by EDAW in 2007 focused on the areas that would be affected by project construction in 2008: the NCC south levee, Sacramento River east levee Reaches 1–4B to Station 214+00, the proposed right-of-way of the relocated Elkhorn Canal and the new GGS/Drainage Canal, and potential borrow sites. EDAW conducted pedestrian surveys of those portions of these areas that were accessible; however, only a small proportion of the land area in the potential project footprint for 2008 was accessible to surveys, mainly because of the presence of crops. As access to the unsurveyed lands becomes available, pedestrian surveys will be completed in these areas.

In April/May 2007, an EDAW archaeologist examined the NCC south levee and adjacent lands within the existing maintenance right-of-way. In July/August 2007, a crew of EDAW archaeologists conducted field surveys in accessible parcels within Sacramento County–owned Airport bufferlands north of the Airport. On the Airport bufferlands, the surveys covered a 400-foot-wide strip east of the Sacramento River east levee and small portions of the proposed borrow sites in the Airport north bufferlands. Survey areas within 1,000 feet of the Sacramento River and the locations of prehistoric lakebeds were walked using transects 15 meters apart. Farther from the Sacramento River and prehistoric lakebeds, the transect interval was widened to 30 meters. The potential borrow sites were almost completely inaccessible because they contained rice crops. Exhibit 5 shows those portions of the project area that were surveyed by EDAW in 2007. Areas with poor ground surface visibility (i.e., less than 50%), would require subsequent survey at a time of year when ground surface visibility would be improved.

Two new historic sites, NLIP-1 and NLIP-2, were identified during the surveys adjacent to Garden Highway, and four groups of farm buildings, NLIP-3 through NLIP-6, were also identified and evaluated (Appendix B).

As mentioned above, Randy Yonemura of the Ione Band of the Miwok also showed an EDAW archaeologist the locations of subsurface cultural resources that have not been recorded in any of the previously prepared documentation filed with the NCIC and NEIC, which are known to him from anecdotal information.

IDENTIFIED CULTURAL RESOURCE SITES IN THE SUTTER COUNTY PORTION OF THE PROJECT AREA

Table 3 lists the known cultural resource sites in the Sutter County portion of the project area. Most of the listed sites are in areas proposed for 2009–2010 construction. The sites that may be affected by 2008 construction are shown with an asterisk. The sites listed in Table 3 are described below.

Trinomial*	P-No.†	Historic/ Prehistoric	Description	Date Recorded	Quadrangle	NRHP/CRHR Status If Known
CA-SUT-84H*	51-000084	Historic	Natomas Cross Canal/Pleasant Grove Creek Canal levees	1994	Pleasant Grove, Verona	Eligible
	51-000096H*	Historic	1950s-era ranch	2002	Taylor Monument	
NLIP-3*		Historic	Farm Complex	2007	Verona	Not eligible
NLIP-4*		Historic	Farm Complex	2007	Verona	Not eligible
NLIP-5*		Historic	Farm Complex	2007	Verona	Not eligible
NLIP-6*		Historic	Farm Complex	2007	Verona	Not eligible
Barney Mound*		Prehistoric	Intact occupation mound site	not	Verona	Potentially eligible

Notes:
 CRHR = California Register of Historic Resources; NRHP = National Register of Historic Places.
 * Sites that would be or may be affected by the 2008 construction elements are marked with an asterisk.
 Source: Data compiled by EDAW in 2007

CA-SUT-84H (P-51-000084)

This trinomial includes both the NCC south levee and the Pleasant Grove Creek Canal (PGCC) west levee, the northernmost contributing resources to RD 1000. The NCC levee measures approximately 25 feet wide at the top, 75 feet wide at the base, and 15 feet high. The top has been graded and graveled for vehicle traffic. The PGCC levee is smaller, measuring approximately 20 feet wide at the top, 60 feet wide at the base, and 10 feet high. There is also an associated retention basin, constructed of concrete and measuring 50 feet by 35 feet across and 15 feet deep. A concrete and steel pump foundation is located within the basin. Concrete footings running from a hole in the side of the basin to the top of the NCC levee indicate that a large pipe once connected the two features.

Archaeologists reported that the levee (unclear which one) was raised and strengthened twice, after flooding during 1938–1939 and after flooding in RD 1001 during 1955. RD 1000 modified the NCC south levee and its adjacent canals in 1987 and SAFCA modified them in 1996. SAFCA constructed a cutoff wall in the western portion of the NCC south levee in 2007.

P-51-000096H

Located on the Sacramento/Sutter county line and at the edge of a proposed borrow area, this resource consists of a historic ranch complex that includes two residences, four sheds or barns, and a trailer. The archaeological survey crew was not allowed on the property to record the structures in more detail.

NLIP-3, 7240 GARDEN HIGHWAY

The Sutter County Assessor's records currently list this property along the Sacramento River east levee south of Sankey Road as vacant. No construction date is on file for the buildings. The construction methods and materials appear to date to the early 20th century. This property appears to have always functioned as a residential and agricultural complex. The buildings are in good condition but lack the historic associations or architectural distinctions that would make them eligible for listing on the CRHR or NRHP.

NLIP-4, 11000 GARDEN HIGHWAY

This property is near the Sacramento River east levee north of Riego Road. The Sutter County Assessor's records list one of the two residences on the property as being constructed in 1957. The property has been in the Lauppe family since that time. The land, originally listed as Assessor's Parcel Number 35-020-15, was split into separate parcels several years ago as part of a lot-line adjustment. Because of the split, the 35-020-15 parcel number was retired, and additional parcel numbers (35-020-18, 35-020-19) were assigned.

Research did not reveal this property to be significantly associated with an important historic event, and the historic-era building located here is not known to be associated with an individual considered important in local history. The property itself has undergone regular periods of construction over the years, with new buildings added and older structures modified. The buildings lack the historic associations or architectural distinctions that would make them eligible for listing on the CRHR or NRHP.

NLIP-5, HOWSLEY ROAD AT THE NATOMAS CROSS CANAL

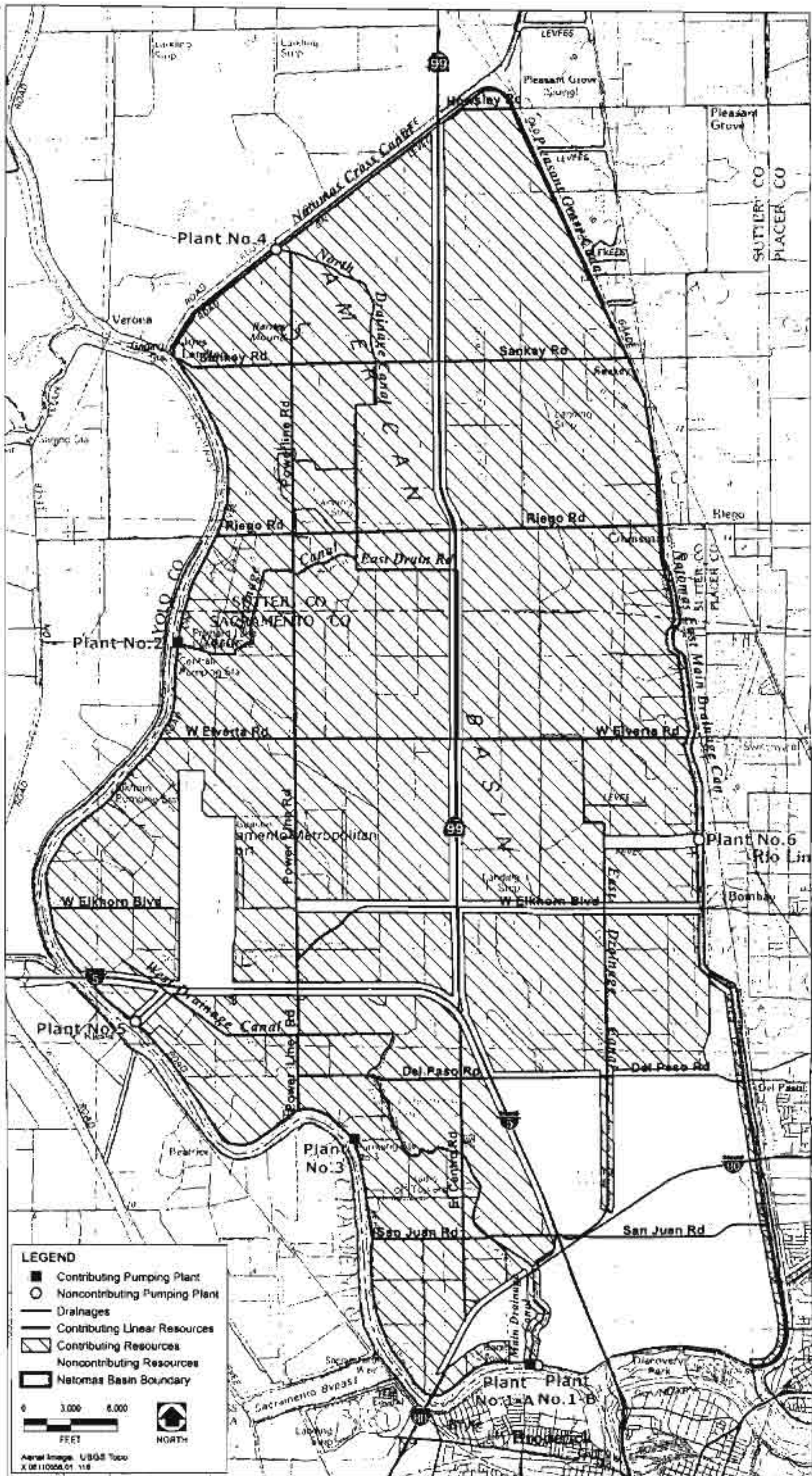
This small complex includes a mid-20th century residence and several turn-of-the-century horse stalls. The buildings are in good condition but lack the historic associations or architectural distinctions that would make them eligible for listing on the CRHR or NRHP.



Source: Aerial by SAOCC 2006, Prepared by EDAW in 2007

Survey Coverage Map

Exhibit 5



Contributing Features of the RD 1000 Rural Historic Landscape District

Source: James & Moore 1985

NLIP-6, HOWSLEY ROAD AT THE PLEASANT GROVE CREEK CANAL

This is a small residential complex dating to the mid-20th century. The buildings are in good condition but lack the historic associations or architectural distinctions that would make them eligible for listing on the CRHR or NRHP.

BARNEY MOUND

This is an unrecorded prehistoric occupation mound with a residence on top, located along Powerline Road north of Sankey Road. Although the site has not been recorded officially, it is well known in the region and, as an intact prehistoric mound site in an area where almost all such sites have been destroyed, is likely to be eligible for CRHR and NRHP listing.

IDENTIFIED CULTURAL RESOURCE SITES IN THE SACRAMENTO COUNTY PORTION OF THE PROJECT AREA

Table 4 lists the known cultural resource sites in the Sacramento County portion of the project area. This table does not include several known sites in the southeastern portion of the Natomas Basin (located mainly along the Natomas East Main Drainage Canal [NEMDC]/Steelhead Creek) because there are no proposed project elements in that part of the basin. Most of the listed sites are in areas proposed for 2009–2010 construction. The sites that may be affected by 2008 construction are shown with an asterisk, and those that may be affected by 2009–2010 construction are shown with a plus sign. The sites listed in Table 4 are described below.

Trinomial ^{a,b}	P-No. ^a	Historic/ Prehistoric	Description	Date Recorded	Quadrangle	NRHP/CRHR Status if Known
CA-Sac-15/H*	34-000042	Both	Occupation mound with historic debris	1934, 1990, 1993	Taylor Monument	
CA-Sac-16/H*	34-000043	Both	Occupation/burial mound with historic debris and foundations	1934, 1966, 1984, 1987, 1990, 1993	Taylor Monument	Potentially eligible
CA-Sac-17*	34-000044	Prehistoric	May have been destroyed	1934, 1990	Taylor Monument	
CA-Sac-18	34-000045	Prehistoric	Lithic scatter	1934, 1994	Taylor Monument	
CA-Sac-160/H*	34-000187	Both	Occupation/burial mound with historic farm	1947, 1949, 1994	Taylor Monument	
CA-Sac-164*	34-000191	Prehistoric	Occupation/burial site nominated to NRHP	1972, 1982, 1988, 1989, 1990, 1991, 2001–2007	Sacramento West	Eligible
CA-Sac-430H	34-000457	Historic	West drainage canal	1991, 1993, 1997	Taylor Monument	
CA-Sac-485/H**	34-000512	Both	Occupation mound and historic home site	1994	Taylor Monument	Potentially eligible
CA-Sac-486H	34-000513	Historic	Historic home site	1994	Taylor Monument	
CA-Sac-487H	34-000514	Historic	Historic debris and vegetation	1994	Taylor Monument	
CA-Sac-488H	34-000515	Historic	Historic debris and vegetation	1994	Taylor Monument	
CA-Sac-489H	34-000516	Historic	Historic debris and vegetation	1994	Taylor Monument	

Table 4 Cultural Resources in the Sacramento County Portion of the Project Area						
Trinomial ^{a,b}	P-No. ^a	Historic/ Prehistoric	Description	Date Recorded	Quadrangle	NRHP/CRHR Status If Known
CA-Sac-490H	34-000517	Historic	Historic debris and vegetation	1994	Taylor Monument	
CA-Sac-491H	34-000518	Historic	Historic debris and vegetation	1994	Taylor Monument	
CA-Sac-492H	34-000519	Historic	Historic well, pipes and vegetation	1994	Taylor Monument	
CA-Sac-493H	34-000520	Historic	Historic debris	1994	Taylor Monument	
CA-Sac-494H*	34-000521	Historic	Historic debris	1994	Taylor Monument	
CA-Sac-569H	34-000741	Historic	Paved road	1994, 1998	Taylor Monument, Rio Linda	
CA-Sac-836H*	34-001354	Historic	Farm complex	2005	Taylor Monument	Not eligible
	34-000883	Historic	Paved road	1998	Taylor Monument	
	34-000884	Historic	Paved road	1998	Taylor Monument	
	34-000886	Historic	Paved road	1998	Rio Linda, Taylor Monument	
	34-001552	Historic	House	2002	Taylor Monument	
	34-001557*	Historic	Pumping plant	2006	Taylor Monument	
	34-001558*	Historic	Pumping plant	2006	Taylor Monument	
	34-001559*	Historic	Pumping plant	2006	Taylor Monument	
NLIP-1*		Historic	Lean-to and shed	2007	Taylor Monument	Not eligible
NLIP-2*		Historic	Historic debris scatter	2007	Taylor Monument	Not eligible
Note:						
* Sites that would be or may be affected by the 2008 construction elements are marked with an asterisk.						
^b Sites that may be affected by 2009–2010 construction elements are marked with a plus sign.						
Source: Data provided by EDAW in 2007						

CA-SAC-15/H

This site, near the Sacramento River east levee south of I-5, consists of a prehistoric occupation midden mound with a concentration of debitage, flaked stone tools, shell artifacts, faunal remains, fire-cracked rock, and baked clay objects. The mound has been heavily affected by farming and ranching activities. There is a ranch complex including a bunkhouse, garden, shed, chicken coop, water tower, garage, and driveway on the mound; historic debris on the site includes glass and broken ceramic fragments. A limited auger testing program was carried out west of the mound along the Sacramento River east levee and found no cultural materials along that transect (Bouey and Herbert 1990), however the authors suggested that the site may have been mis-mapped.

CA-SAC-16/H (P-34-000043)

CA-Sac-16/H is south of the Airport on a property that would be a potential borrow source for the proposed project. This site has been variously called the Bennett Mound, Mound Ranch, Willey Mound, and S-16. It includes the remains of a prehistoric occupation mound, possibly the largest in the Sacramento Valley, but has been leveled in stages by agricultural activities. The site location corresponds to the ethnographic village of *Nawrean*. What remains today consists of dark midden soils in plowed fields with fragments of human remains, shell, fire-cracked rock, baked clay objects, groundstone, faunal bone, flaked stone artifacts, and debitage. A few historic artifacts, such as brick and ceramic fragments, are also present. Today, two separate loci have been identified and recorded as CA-Sac-16/H; the larger, Locus I, represents the approximate original location of the

mound. Locus II is an area of redeposited soil taken from the mound in the past. There is also a historic-era component of the site from the remnants of a slaughterhouse and brick factory present before the 1930s. Historic artifacts noted include bricks, sawed mammal bone, a filled-in privy, bottles, ceramic and metal fragments, and glass.

The site was originally described as very large, up to 7 acres in area, and 20 feet high. The earliest investigations were conducted in 1923 by Zallio, who excavated at the site a number of times and recovered projectile points, bone tools, *Haliotis* ornaments, and other artifacts (Bouey, Berg, and Hunter 1991). It was first formally recorded in 1934 by Heizer, who identified it as a large mound with stone artifacts and freshwater shell on the surface. Sacramento Junior College excavated pits and trenches up to 18 feet deep in 1936–1937. The main focus of this effort was on recovery of mortuary remains; however, considerable quantities of nonburial associated artifacts were also documented. More excavations were conducted by Sacramento State College in 1953 and by American River College between 1966 and 1971, and more artifacts and burials were salvaged by Peak, Crew, and Gerry (1984) when what was left of the mound was leveled. At that time, Peak, Crew, and Gerry estimated that as much as 13 feet of the mound might still be present below the plowed surface. As an interesting side note—and as an indication of the original CA-Sac-16/H mound's prominence—Peak, Crew, and Gerry mention that Heinrich Schliemann (an amateur archaeologist and later the discoverer of Troy) visited the site in 1851–1852.

More recently, Bouey and Herbert (1990) completed a surface survey and excavated two auger holes at the toe of the levee that forms the western boundary of the site; they reported evidence of subsurface cultural deposits, including shell midden. Larger-scale excavations (Bouey, Berg, and Hunter 1991), dug within 100 feet of the levee toe and the ramp leading up to Garden Highway, confirmed that midden deposits still exist; however, agricultural activity seems to have destroyed any stratigraphic integrity the deposits might have had that close to the levee. Testing farther from the levee toe was not undertaken.

The summary of the research done by 1991 (Bouey, Berg, and Hunter 1991) agreed with the conclusions of Derr (1983) that the site was a large, permanent habitation locus occupied from the Upper Archaic (ca. 1000 B.C.) to just after the beginning of European contact. Derr found that the upper 20–60 centimeters of soil (in the areas he examined near the levee) consisted of redistributed midden with artifacts and isolated human remains. What appears to be missing from any of these analyses is an attempt to define the original mound or to find intact elements of the site that may have been located beyond the original mound. If there are intact subsurface deposits associated with CA-Sac-16/H, then the site may be eligible for listing on the CRHR or NRHP because of the potential information contained in those deposits.

The earliest documentation, Heizer's site record form from 1934, does not give dimensions for the mound and does not contain specific enough information to provide for relocation of the original boundaries of the mound. It is presumed that the dispersed midden from the mound now covers a larger surface area than the mound used to occupy. However, it is unclear exactly how large an area that is because various investigations have reported Locus I (the larger site deposit) as measuring 110 meters by 185 meters (Bouey and Herbert 1990), 250 meters by 250 meters (Kauffman and Kauffman 1983), and 450 meters by 850 meters (Dames & Moore 1993). The Dames & Moore site record form appears to be the only one that maps out the secondary Locus II area, northeast of the main deposit and east of a drainage ditch (as of 1993).

CA-SAC-17 (P-34-000044)

This is the location of a mound site reported by Heizer in 1934 west of Fisherman's Lake; however, none of the mound remains. In 1990, Bouey and Herbert attempted to locate any cultural remains but could not find any evidence of cultural deposits on the surface or in auger holes. The site is near the Undercome Ranch.

CA-SAC-18 (P-34-000045)

This site, landward of the Sacramento River east levee north of San Juan Road, consists of a sparse scatter of basalt debitage, one cryptocrystalline biface fragment, a polished stone, and possible fire-cracked rock. It was originally described by Heizer as a mound 30 yards in diameter and 5 feet high; however, Heizer may have misinterpreted a natural rise in the landscape as a mound. CA-Sac-18 appears to be lacking the intensive cultural deposits that are the hallmark other nearby known mound sites (Dames & Moore 1994b).

CA-SAC-160/H (P-34-000187)

This is a multicomponent site near the Sacramento River east levee north of San Juan Road. It includes a prehistoric occupation mound with a farm complex situated on top. Excavations in the 1940s removed numerous burials and artifacts including groundstone, flaked stone tools, shell beads and ornaments, fire-cracked rock, baked clay objects, stone beads, faunal remains, bone awls, bird bone tubes and whistles, obsidian drills, quartz crystals, charmstones, and historic glass trade beads, as well as historic debris related to farming and occupation of the top of the mound.

CA-SAC-164 (P-34-000191)

CA-Sac-164 is a very large, deeply stratified prehistoric occupation and burial mound near Sand Cove Park on the Sacramento River that has been explored a number of times using archaeological techniques; however, in spite of these efforts, the true boundaries of the site remain unknown. The site includes shell midden with abundant cultural materials including fire-cracked rock, flaked and ground stone tools, charmstones, polished bone implements, debitage, quartz crystals, bone and shell beads, baked clay objects, and plentiful faunal remains. Large fire-cracked rock features and hearths have also been noted. Because of its significant scientific value and the integrity, CA-Sac-164 was nominated for NRHP listing in 2001.

The site was first recorded in 1951, after a newspaper article reported that human remains and stone tools were eroding out of the cutbank and into the Sacramento River. Observers who walked along the edge of the cutbank in summer and fall when the river was at its lowest noted that site deposits, interspersed with flood-deposited silt, extended at least 4 meters below the current-day surface. Excavations in the 1970s, 1980s, and 1990s confirmed the depth of intact and resource-bearing cultural strata at the site, at least along the river exposure. Work on the land side of the Sacramento River levee indicated that downward-trending cultural strata might be found there as well, beginning well over a meter below the ground surface, however the site's depth, extent, and boundaries have never been completely defined.

Annual river height fluctuation, wave action resulting from boat wakes, and looting combined to cause continual erosion and collapse of the cutbank. This resulted in artifacts and remains falling onto the beach area below, where they either washed into the river or collected by the public. To address this issue, a site stabilization program was implemented in 2005 that included placing dirt and plantings over the cutbank and creating a wave break near the river's edge of the site.

CA-SAC-430H (P-34-000457)

This feature is the West Drainage Canal, a relatively unmodified canal that originates at Fisherman's Lake and flows southeast to the East and Main Drainage Canals.

CA-SAC-485/H (P-34-000512)

This site, between the Sacramento River east levee and the proposed location of the relocated Elkhorn Canal, was once a prehistoric occupation and burial mound that has been leveled by agricultural activities and was documented by Dames & Moore in 1994. The remains of a historic-era homestead, consisting mainly of

ornamental vegetation, driveway, and historic debris, were noted on top of the prehistoric site. Dames & Moore archaeologists noted that the prehistoric component was large, measuring 220 meters by 160 meters with two depositional loci—a larger area near Garden Highway and a smaller deposit to the east. Prehistoric artifacts noted at the time included obsidian and basalt flakes and tools, shell beads and ornaments, faunal remains, groundstone fragments, charmstones, baked clay, imported exotic tool stone, and shell.

In August 2007, EDAW archaeologists undertook a limited shovel testing program at CA-Sac-485/H to determine whether there was an undisturbed subsurface deposit that could be affected by the proposed canal construction in the vicinity of this site (Exhibit 6). The August investigation began with a survey of the site area where a sparse assortment of artifacts was visible; because no concentrations of artifacts were identified on the surface, the Dames & Moore archaeological site map was used to guide the placement of shovel test pits (STPs). Brian Padilla, of the El Dorado Miwok, was present while the STPs were excavated.

During the course of excavations, archaeologists uncovered artifacts including obsidian and basalt flakes; clamshell disk beads; burned earth; faunal remains, including freshwater mussel shell; and fire-cracked rock. Human remains were uncovered in three of the STPs; the Sacramento County coroner and NAHC were contacted, excavation of each of those three STPs was halted immediately, and the remains were reburied where they were found. None appeared to be part of a larger, intact burial and all were found in the upper 50 centimeters of soil.

In general, site soils consisted of dry compact silts with a small sand and clay content; excavation and screening were difficult because the soils were very dry and hard. If artifacts were recovered, excavation generally proceeded to 100 centimeters below surface (cmbs); where no artifacts were found, excavations terminated around 80 cmbs. A deeply buried midden layer was identified in each of the four STPs (Nos. 4, 6, 21, and 24) closest to the levee, beginning anywhere from 55 cmbs to 80 cmbs. Excavation halted at approximately 100 cmbs in these STPs without reaching the bottom of the midden deposit; a split-spoon probe was used in STP No. 21 to find the bottom of the deposit, which was reached at approximately 160 cmbs. Although the northern and southern edges of the midden deposit were not located, the STP program was halted on the assumption that a more formal testing program, using a combination of test units and additional STPs, would be implemented as part of more detailed design of the proposed project. Based on the data collected during the brief testing at CA-Sac-485/H, it appears that significant intact prehistoric deposits may be found below capping soils at the site. If this is true, CA-Sac-485/H may be eligible for listing on the CRHR or NRHP for the site's data potential.

CA-SAC-486H (P-34-000513)

This site near the Sacramento River east levee below the North Drainage Canal consists of the remains of a historic-era homestead. The structure that once stood on the site has been demolished. Remnant landscape plantings and debris consisting of ceramic fragments, bottle glass, ceramic, bricks, mortar, and metal fragments were noted. The structures were visible in a 1937 aerial photograph and were depicted on the 1967 U.S. Geological Survey topographic quadrangle map. The archaeologists who identified the site in 1994 noted that some of the trees appeared to be less than 30 years old, although a fragment of amethyst glass (generally associated with the turn of the century) was noted.

CA-SAC-487H (P-34-000514)

Like CA-Sac-486H, this location near the Sacramento River east levee below the North Drainage Canal includes historic debris, such as concrete fragments, milled lumber, metal fence posts, wire, farm machinery parts, clear and green glass, window glass, and ornamental plantings, all of which indicate that a structure existed at the site at one point but has since been demolished. Also like the previous site, a structure was visible in this location in a 1937 aerial photograph; several structures were indicated on the 1950 and 1975 topographic quadrangle maps for the area.



Source: Aerial by SACOG 2006, Prepared by EDAW in 2007

CA-Sac-485/H Shovel Test Map

Exhibit 6

CA-SAC-488H (P-34-000515)

This is another site near the Sacramento River east levee below the North Drainage Canal where a structure appeared on a 1937 aerial photograph and 1950 topographic quadrangle map, although no building is on the site today. Historic debris, ornamental vegetation, and a fence line remain. The debris included various concrete fragments, corrugated metal, wire, culvert pipe, and a large section of iron pipe.

CA-SAC-489H (P-34-000516)

This is another site near the Sacramento River east levee below the North Drainage Canal where a structure appeared on a 1937 aerial photograph and 1950 topographic quadrangle map, although no building is on the site today. The associated debris includes a fenced-off well head, concrete fragments, lumber, window glass, wooden posts, galvanized pipes, old fencing overgrown by an oak tree, an enamelware bucket, tires, ceramic fragments, bottle glass, and a metal bucket. Ornamental landscaping plants were also noted.

CA-SAC-490H (P-34-000517)

This site, near the south end of Powerline Road, had three structures that appeared on a 1937 aerial photograph and 1950 topographic quadrangle map, although no building is on the site today. The historic debris is similar to the debris found at sites CA-Sac-486H through CA-Sac-489H, including concrete, brick, iron piping, a fence post, bottle glass, ceramic fragments, and galvanized metal pipe, as well as remnant ornamental vegetation.

CA-SAC-491H (P-34-000518)

This site, also near the south end of Powerline Road, was likely used in association with four structures that appeared on the 1950 topographic quadrangle map. The 1937 aerial photograph associated with other sites listed here includes coverage of this property, however, only trees are clearly visible in the photograph. The artifacts consist of a sparse scatter, including a wood fence, concrete fragments, bricks, and metal fence posts. Ornamental vegetation was noted nearby.

CA-SAC-492H (P-34-000519)

This site, near the south end of Powerline Road, consists of a concrete-capped well, associated water pipes, and remnant ornamental vegetation and fruit trees that were likely associated with a structure visible on the 1950 topographic quadrangle map of the area. A cluster of trees is visible in the 1937 aerial photograph, but no structures are clearly visible. The site is now used to keep honeybees.

CA-SAC-493H (P-34-000520)

The 1950 topographic quadrangle map and 1937 aerial photograph of the region indicate that there was once a large barn and associated structure at this location near the Sacramento River east levee south of I-5. Today, scattered historic debris—clear and colored glass, porcelain and earthenware, iron pipe, bone fragments, brick, and a white ceramic insulator—is all that remains.

CA-SAC-494H (P-34-000521)

This is another site, west of Fisherman's Lake, where a structure appeared on a 1937 aerial photograph and 1950 topographic quadrangle map, although no building is present today. Associated debris documented by an archaeological team in 1994 included concrete and brick fragments, an iron water pipe, white ceramic insulators, and clear bottle glass. In addition, the archaeologists noted abundant modern debris on the site, making it difficult to distinguish between modern and historic artifacts.

ADDITIONAL EFFORTS TO BE UNDERTAKEN

The project area, including portions of the area that may be within the footprint of 2008 construction elements, has not been completely surveyed to date. As shown in Table 5, several sites that are potentially eligible for CRHR or NRHP listing may be affected by the proposed project, and elements of RD 1000 would be modified. For sites that do not appear to be eligible for listing in the NRHP or on the CRHR, or that are eligible but that would not be affected by a proposed project, no further action would be recommended. A draft Research Design is being prepared to describe recommended efforts to define the sites listed in Table 5 to determine the potential for their avoidance, if possible; methods for testing to determine their eligibility for listing as necessary; and a plan for identifying potential cultural resources that are not known from the published records.

In addition, for each phase of the NLIP Levee Improvements Project, the following efforts will be conducted:

- ▶ completion of pedestrian surveys for the entire project footprint, once access is acquired;
- ▶ preparation of further Cultural Resources Inventory Reports with recommendations of eligibility, finding of effects, and recommended mitigation measures; and
- ▶ preparation of a Historic Property Treatment Plan for resources determined to be eligible or recommended as eligible for NRHP listing, in accordance with Stipulation 4 of the PA.

REFERENCES

- Beardsley, R. K. 1948. Cultural Sequences in Central California Archaeology. *American Antiquity* 14(1):1-28.
- Bock, W.A. and Y. D. Haasc. 1974. *Historical Atlas of California*. University of Oklahoma Press. Norman and London.
- Bennyhoff, J. A., and D. A. Fredrickson. 1969. A Proposed Integrative Taxonomic System for Central California Archaeology. *University of California, Archaeological Research Facility, Contributions* 52:15-24.
- Bouey, P. D., J. Berg, and C. A. Hunter. 1991. *Cultural Resources Test Excavations, Sacramento Urban Area Flood Control Project, Sacramento County, California*. Report on file, North Central Information Center, California State University, Sacramento, CA.
- Bouey, P. D., and R. Herbert. 1990. *Intensive Cultural Resources Survey and National Register Evaluation: Sacramento Urban Area Flood Control Project*. Report on file, North Central Information Center, California State University, Sacramento, CA.
- Dames & Moore. 1993. Department of Parks and Recreation Series 523 Site Record forms for CA-Sac-16H. On file, North Central Information Center, California State University, Sacramento, CA.
- . 1994a. *Historic Property Treatment Plan for Reclamation District 1000 Rural Historic Landscape District for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California*. Report on file, North Central Information Center, California State University, Sacramento, CA.
- . 1994b. *Archaeological Inventory Report, Natomas Locality, Cultural Resources Inventory and Evaluation, American River Watershed Investigation, El Dorado, Placer, Sacramento, and Sutter Counties, California*. Report on file, North Central Information Center, California State University, Sacramento, CA.
- . 1996. *Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California*. Report on file, North Central Information Center, California State University, Sacramento, CA.
- Derr, E. 1983. *Archaeological Investigations at CA-Sac-16: Interpretations of a Middle/Late Horizon Village in the Lower Sacramento Valley of California*. Master's thesis on file, California State University, Sacramento, CA.
- EDAW. 2006. *Draft Environmental Impact Report on Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area. Volume I: Programmatic Evaluation of the Proposed Funding Mechanisms*. Prepared for Sacramento Area Flood Control Agency.
- Fredrickson, D. A. 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1):41-54.
- Heizer, R. F., and F. Fenenga. 1939. Archaeological Horizons in Central California. *American Anthropologist* 41:378-399.
- Helley, E. J. and D. S. Harwood. 1985. *Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California*. U.S.G.S. MF-1790.

- Historic Environment Consultants. 1998. *Central Pacific/Southern Pacific Railyards: Historic Property Inventory and Evaluation Report*. Prepared for Union Pacific Railroad Company.
- Hoover, M. B., H. E. Rensch, and E. G. Rensch. 1966. *Historic Spots in California*. Third Edition. Revised by W. N. Abeloe. Stanford University Press. Stanford, CA.
- Kaptain, N. 2005. California Department of Parks and Recreation Series 523 Site Record forms for P-51-000115. Based on work performed for the Historical Resources Evaluation Report of the SR 99/Riego Road Interchange Project.
- Kauffman, E., and K. Kauffman. 1987. California Department of Parks and Recreation Series 523 Site Record forms for CA-Sac-16H. On file, North Central Information Center, California State University, Sacramento, CA.
- Kroeber, A. L. 1925. *Handbook of the Indians of California*. Reprinted in 1976 by Dover Publications. New York, NY.
- Moratto, M. J. 1984. *California Archaeology*. Academic Press. New York, NY.
- Peak & Associates. 1997. *Historic American Engineering Record Reclamation District 1000 HAER No. CA-187*. Prepared for Sacramento Area Flood Control Agency.
- Peak, A. S., H. L. Crew, and R. Gerry. 1984. *The 1971 Archaeological Salvage of the Bennett Mound, CA-SAC-16, Sacramento, CA*. Report on file, North Central Information Center, California State University, Sacramento, CA.
- Sacramento Area Flood Control Agency. 2007. *Environmental Impact Report on Programmatic Evaluation of Proposed Local Funding Mechanisms for Comprehensive Flood Control Improvements for the Sacramento Area*. Volume I: Programmatic Evaluation of Proposed Funding Mechanisms. Prepared by EDAW. Sacramento, CA.
- Thompson, J. 1958. *The Settlement and Geography of the Sacramento-San Joaquin Delta, California*. University Microfilms International. Ann Arbor, MI.
- Wilson, N. L., and A. H. Towne. 1978. Nisenan. R. F. Heizer (ed.), *Handbook of North American Indians, Vol. 8*. Smithsonian Institution Press. Washington, DC.

APPENDIX A

Project Correspondence

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 7, 2007

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, Ca 95814

RE: Natomas Levee Improvement Project

Dear Ms. Pilas-Treadway:

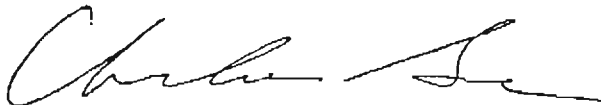
EDAW is conducting cultural resources studies for the above-referenced project located generally north of the City of Sacramento, in Sacramento and Sutter counties, and located on the Grays Bend, Taylor Monument, Verona, Rio Linda, Pleasant Grove, Sacramento East, and Sacramento West USGS quadrangle maps. Background research and field studies conducted for this project will identify cultural resources that may be impacted by proposed levee improvements throughout the American River basin. This letter is intended to initiate part of the consultation process that will eventually be required under Section 106 National Historic Preservation Act.

I am pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. I am interested in any contemporary Native American values that may be present near or within the project area and would like to request a search of the NAHC Sacred Land files.

Please send via mail or facsimile (916-414-5850) a listing of local Native American representatives at your earliest convenience, so that I may contact appropriate individuals and account for their potential concerns in the planning process.

If you have any questions or comments feel free to contact me at my office. I can be reached by email at charlane.gross@edaw.com, or by phone at 916-414-5800. I look forward to hearing from you soon.

Sincerely,



Charlane Gross, M.A., R.P.A.
Senior Archaeologist

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 887-5390



June 19, 2007

Charlene Gross
EDAW Inc.
2011 J Street
Sacramento, CA 95814

Sent Via Fax: 916-414-5850
Of Pages: 3

RE: Natomas Levee Improvement project, Sacramento and Sutter Counties

Dear Ms. Gross:

The Native American Heritage Commission has reviewed the Sacred Lands File and found several burial/recorded sites in/near the project area. The location of sites is confidential.

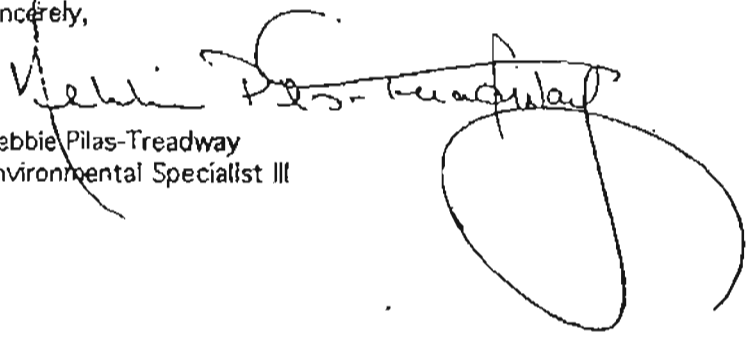
I recommend that you contact the North Central Information Center, Ca State University, Sacramento, 6000 J Street, Adams Building, Suite 103, Sacramento, CA 916-278-6217 for sites in Sacramento County and Northeast Information Center, Ca State University, Chico, Building 25, Suite 204, Chico, CA 95929, 530-898-4413 for Sutter County, for further information of recorded sites located in/near the APE.

I have enclosed a list of Native Americans individuals/organizations contacts may have knowledge of additional cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. These lists should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. A minimum of two weeks must be allowed for responses after notification.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

If you have any questions or need additional information, please contact me.

Sincerely,


Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
 Sacramento and Sutter Counties
 June 19, 2007

✓ = CALL
 ✓ = CALL W/MESSAGE
 ✓ = CALL STATE LI/INDIVIDUAL
 (SEE CALL LOG RECD)

✓
 Rose Enos
 15310 Bancroft Road Maidu
 Auburn, CA 95603 Washoe
 (530) 878-2378

Shingle Springs Band of Miwok Indians
 Nicholas Fonseca, Chairperson
 P.O. Box 1340 Maidu
 Shingle, CA 95682 Maidu
 nfonseca@ssband.org
 (530) 676-8010
 (530) 676-8033 Fax

✓
 Enterprise Rancheria of Maidu Indians
 Frank Watson, Vice Chairperson
 1940 Feather River Blvd., Suite B Maidu
 Oroville, CA 95965
 eranch@cncnet.com
 (530) 532-9214
 (530) 532-1768 FAX

Strawberry Valley Rancheria
 Calvin Rose, Chairperson
 PO Box 667 Maidu No #
 Marysville, CA 95901 Miwok

✓
 Enterprise Rancheria of Maidu Indians
 Glenda Nelson, Chairperson
 1940 Feather River Blvd., Suite B Maidu
 Oroville, CA 95965
 eranch@cncnet.com
 (530) 532-9214
 (530) 532-1768 FAX

Strawberry Valley Rancheria
 Robert Kerfoot
 PO Box 667 Maidu No #
 Marysville, CA 95901 Miwok

✓
 Shingle Springs Band of Miwok Indians
 Jeff Murray, Cultural Resources Manager
 P.O. Box 1340 Miwok
 Shingle, CA 95682 Maidu
 jmurray@ssband.org
 (530) 676-8010
 (530) 676-8033 Fax

✓
 United Auburn Indian Community of the Auburn
 Jessica Tavares, Chairperson
 575 Menlo Drive, Suite 2 Maidu
 Rocklin, CA 95765 Miwok
 916 663-3720
 916 663-3727 - Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Nimbus Levee Improvement project, Sacramento and Sutter Counties.

Native American Contacts
Sacramento and Sutter Counties
June 19, 2007

United Auburn Indian Community of the Auburn
Tribal Preservation Committee
575 Menlo Drive, Suite 2 Maidu
Rocklin , CA 95765 Miwok
916 663-3720
916 663-3727 - Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.96 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Natomas Levee Improvement project, Sacramento and Sutter Counties.

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

United Auburn Indian Community of the Auburn
Tribal Preservation Committee
575 Menlo Drive, Suite 2
Rocklin, CA 95765

Subject: Natomas Levee Improvement Project(s)

To Whom It May Concern:

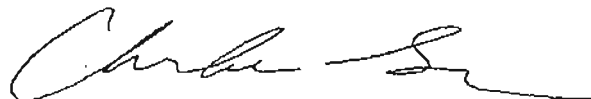
EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

We would appreciate your help in identifying any concerns you or your community may have regarding any cultural resources in the study area. Please return the enclosed response form. Returning this form does not imply that you approve or disapprove of the study, nor does it limit your opportunity to comment at a later time. Efforts to address your concerns will be included in the planning process.

In order to incorporate your concerns and/or input in any forthcoming reports; we would appreciate receiving your comments by July 10th.

If you have questions, please contact me at (916) 414-5800.

Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
575 Menlo Drive, Suite 2
Rocklin, CA 95765

Subject: Natomas Levee Improvement Project(s)

Dear Ms. Tavares:

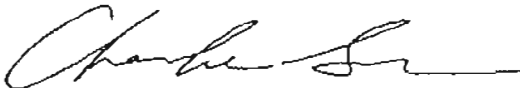
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Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Strawberry Valley Rancheria
Robert Kerfoot
P.O. Box 667
Marysville, CA 95901

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Kerfoot:

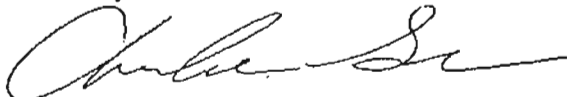
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Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Strawberry Valley Rancheria
Calvine Rose, Chairperson
P.O. Box 667
Marysville, CA 95901

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Rose:

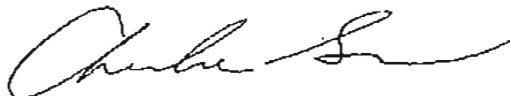
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If you have questions, please contact me at (916) 414-5800.

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Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Single Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340
Shingle Springs, CA 95682

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Fonseca:

EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

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Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340
Shingle Springs, CA 95682

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Murray:

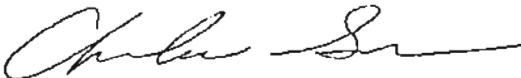
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Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2622 J Street, Sacramento, California 95814
T 916 414 5800 F 916 414 5850 www.edaw.com

June 21, 2007

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Subject: Natomas Levee Improvement Project(s)

Dear Ms. Nelson:

EDAW, Inc., an environmental firm, has been retained to complete an Environmental Impact Report (EIR) for various SAFCA (Sacramento Area Flood Control Agency) levee improvement projects throughout the American River Basin in both Sacramento and Sutter Counties (see attached map). There are few specific planned improvements as yet, but the projects may include levee strengthening or widening, excavation for slurry walls or canals, soil removal from various borrow sites throughout the basin, and similar types of projects. The work will be conducted over the next several years, but EDAW is collecting cultural resources information now to help guide planning decisions made for the individual elements of this much larger effort.

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If you have questions, please contact me at (916) 414-5800.

Sincerely,



Charlene Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASB

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Enterprise Rancheria of Maidu Indians
Frank Watson, Vice Chairperson
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Subject: Natomas Levee Improvement Project(s)

Dear Mr. Watson:

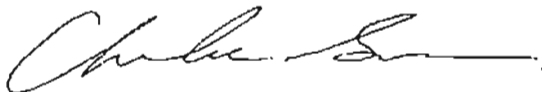
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Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

EDAW Inc
2022 J Street, Sacramento, California 95814
T 916.414.5800 F 916.414.5850 www.edaw.com

June 21, 2007

Rose Enos
15310 Bancroft Road
Auburn, CA 95603

Subject: Natomas Levee Improvement Project(s)

Dear Ms. Enos:

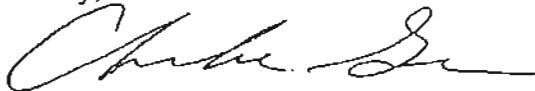
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If you have questions, please contact me at (916) 414-5800.

Sincerely,



Charlane Gross, M.A., RPA
Senior Archaeologist

Enclosures: Map, Response form, SASE

Telephone Contact Report **CONFIDENTIAL**

Call Participants: LBM - ROSIE ENOS Title: ? - A RIDG/WASHOE CONTACT
Initiated By: LBM Organization: (SEE ABOVE)
Phone Number: 530 - 878-2378 Location: (DAW SAC)
Subject: SAFCA, NADIMAS C.C. LEVRE Date/Time: 7-9-07 12:30

Discussion Item(s):

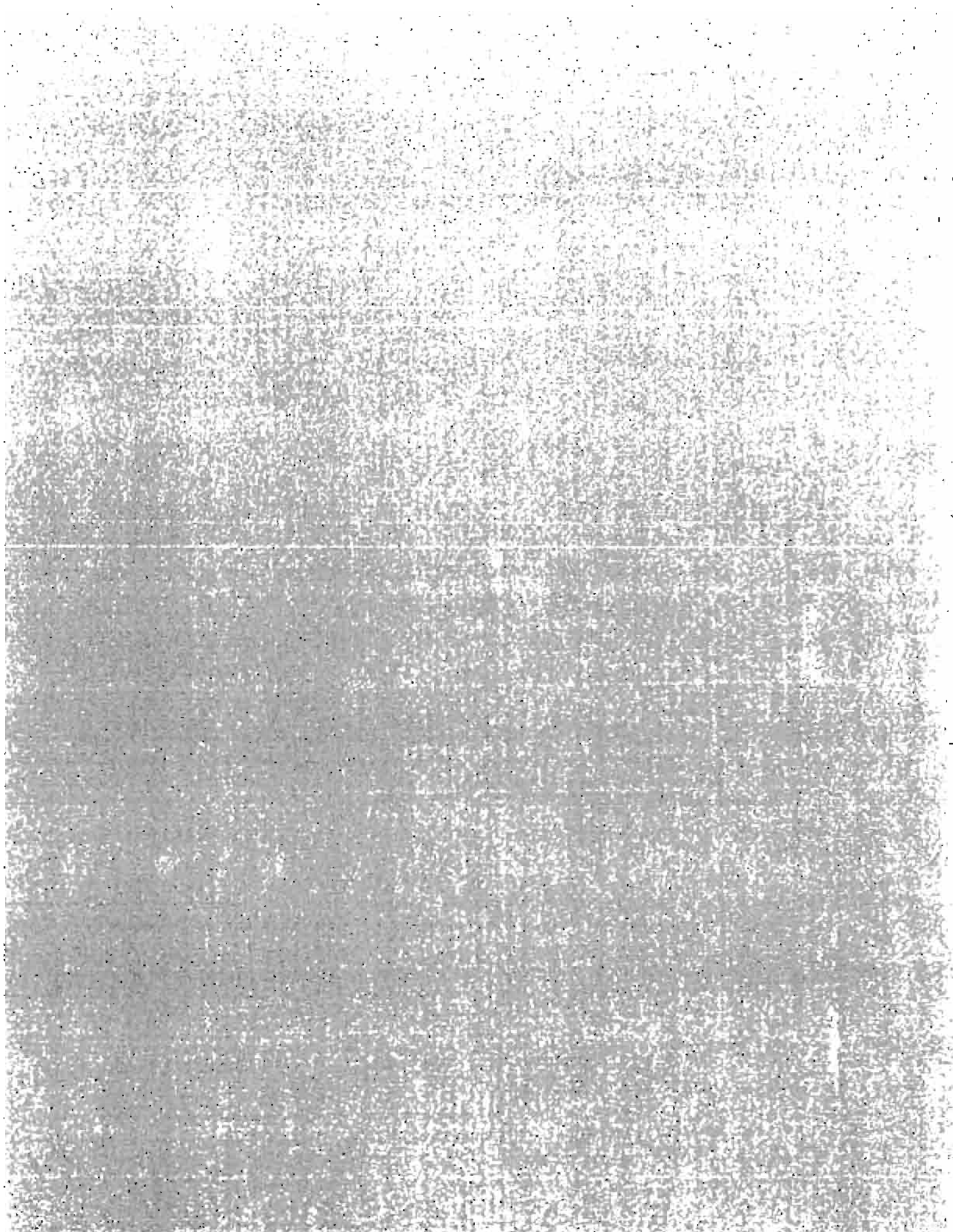
- CONCERN IS BURIAL SITE AVOIDANCE
- WOULD LIKE ANY INFORMATION CONCERNING ANY FURTHER WORK CONCERNING SUCH SITES

Action Item(s):

Distribution:

APPENDIX B

Department of Parks and Recreation Site Record Forms



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 2

*Resource Name or #: NLIP-1

P1. Other Identifier:

P2. Location: Not for Publication Unrestricted *a. County: Sutter
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad: Date:
Taylor Monument 7-31-07 T10N; R4E; NW¼ of NW¼ of Sec 6 ; Mount Diablo B.M.

c. Address: City: Zip:

d. UTM: Zone 10S ; 622214 mE 4289367 mN, 622229 mE 4289319 mN, 622244 mE 4289358 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

The lean-to structure, shed, associated debris and looter's pit are located approximately (?) feet east of Garden Highway, south of the intersection of Garden Highway Reigo Road.

P3a. Description: The dilapidated remains of a structure and shed include a rectangular wood frame "lean-to" style building with a corrugated metal roof, which stands on a concrete pad, and a smaller, square wooden shed. An assortment of debris litters the area between the two structures and includes: white earthenware, tires, window glass, clear and brown bottle glass, corrugated metal sheets, and rusted metal objects, milled lumber fragments, tires, window blind fragments, and pieces of dislodged mortar. Also, what appears to be a looter's pit is nearby with 1950's and 1960's era bottles, plastic, and a porcelain drawer pull within or near it. The site was found in a dense cluster of trees, poison oak and blackberry brambles; the numerous blackberry bushes and other groundcover obscure the availability of a full description of the structure. None of the site components appeared to be more than 40-50 years old. The Taylor Monument USGS quadrangle indicates two structures that match the site location, and both of these appear as a part of the 1980 photorevision of the 1967 original. This site does not appear to contain values that would make it eligible for listing on the CRHR or NRHP.

P3b. Resource Attributes:

AH2 (structure pad), AH15 (standing structure), AH4 (trash scatter)

P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo:
Remnants of structure-
facing north-northeast

P6. Date Constructed/Age and
Sources: Historic
 Prehistoric Both

P7. Owner and Address:

P8. Recorded by:
Charlane Gross
EDAW
2022 J Street
Sacramento, CA 95811

P9. Date Recorded:

7-31-07

P10. Survey Type:

Intensive

P11. Report Citation:

*Attachments: NONE

Building, Structure/Object Record

Milling Station Record

Other (List):

Location Map

Archaeological Record

Rock Art Record

Sketch Map

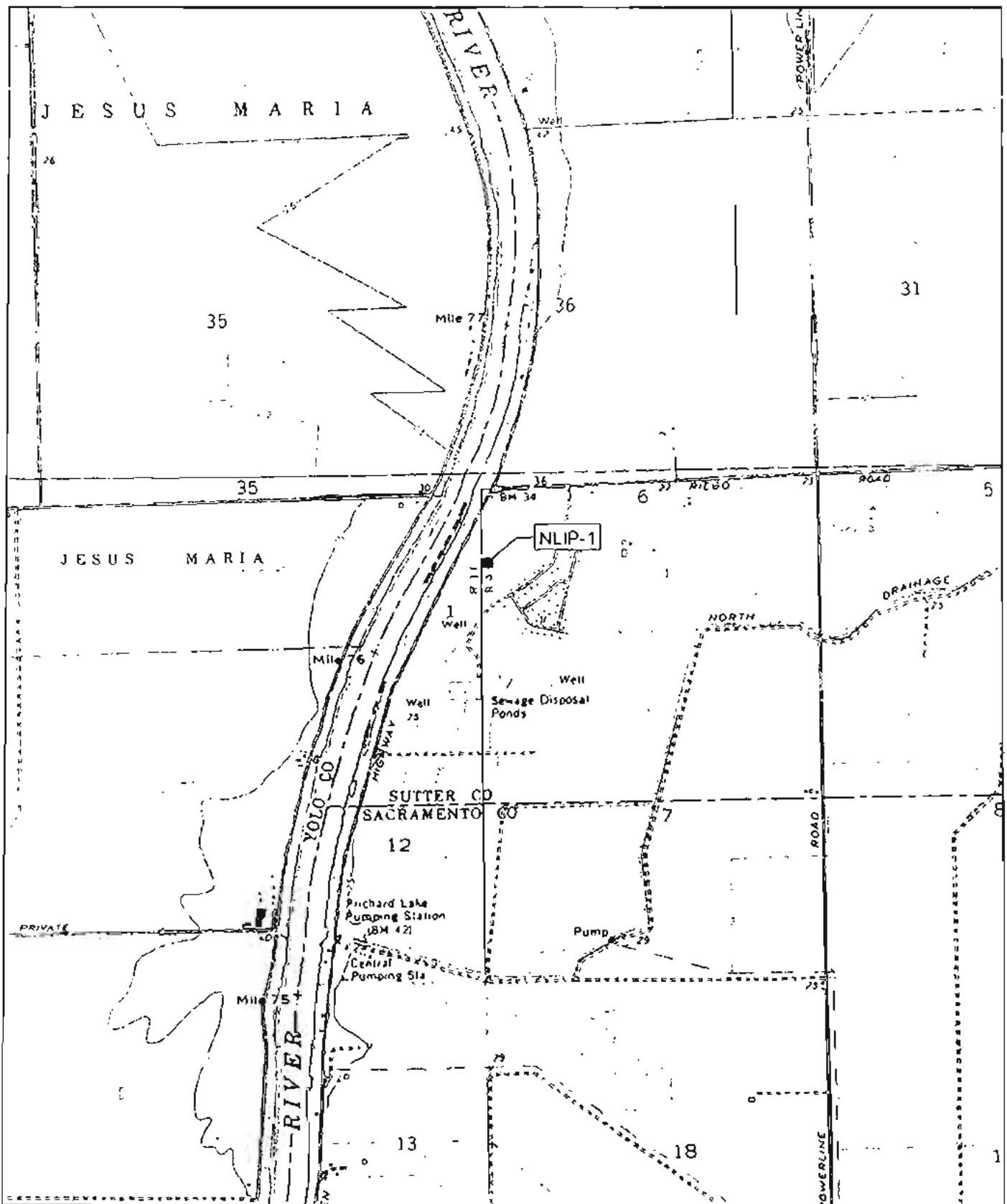
District Record

Artifact Record

Continuation Sheet

Linear Feature Record

Photograph Record



X06110058.01 189

Source: Taylor Monument Quad, 08-027-07

NLIP-1

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 2

*Resource Name or #: NLIP-2

P1. Other Identifier:

P2. Location: Not for Publication Unrestricted *a. County: Sacramento
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

b. USGS 7.5' Quad: Taylor Monument Date: 7-31-07 T10N; R4E; SW 1/4 of SW 1/4 of Sec 13 ; Mount Diablo B.M.

c. Address: City: Zip:

d. UTM: Zone 10S ; 621430 mE/ 4286256 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
East of the Garden Highway approximately (?) feet

P3a. Description: This site consisted of a small historic debris scatter noted in a dirt farm road east of the Sacramento River East Levee and a drainage ditch. There appeared to be a mix of modern debris and a fragment of amethyst glass. It is presumed that this deposit was relocated from one of the nearby farm sites. The mixture of historic and modern debris and the location in an area disturbed by levee, ditch, and road construction all indicate that this site does not retain sufficient integrity to make it eligible for listing on the CRHR or NRHP.

P3b. Resource Attributes:

AH4 (trash scatter)

P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5b. Description of Photo:

None available

P6. Date Constructed/Age and

Sources: Historic
 Prehistoric Both

P7. Owner and Address:

P8. Recorded by:

Charlane Gross
EDAW
2022 J Street
Sacramento, CA 95811

P9. Date Recorded:

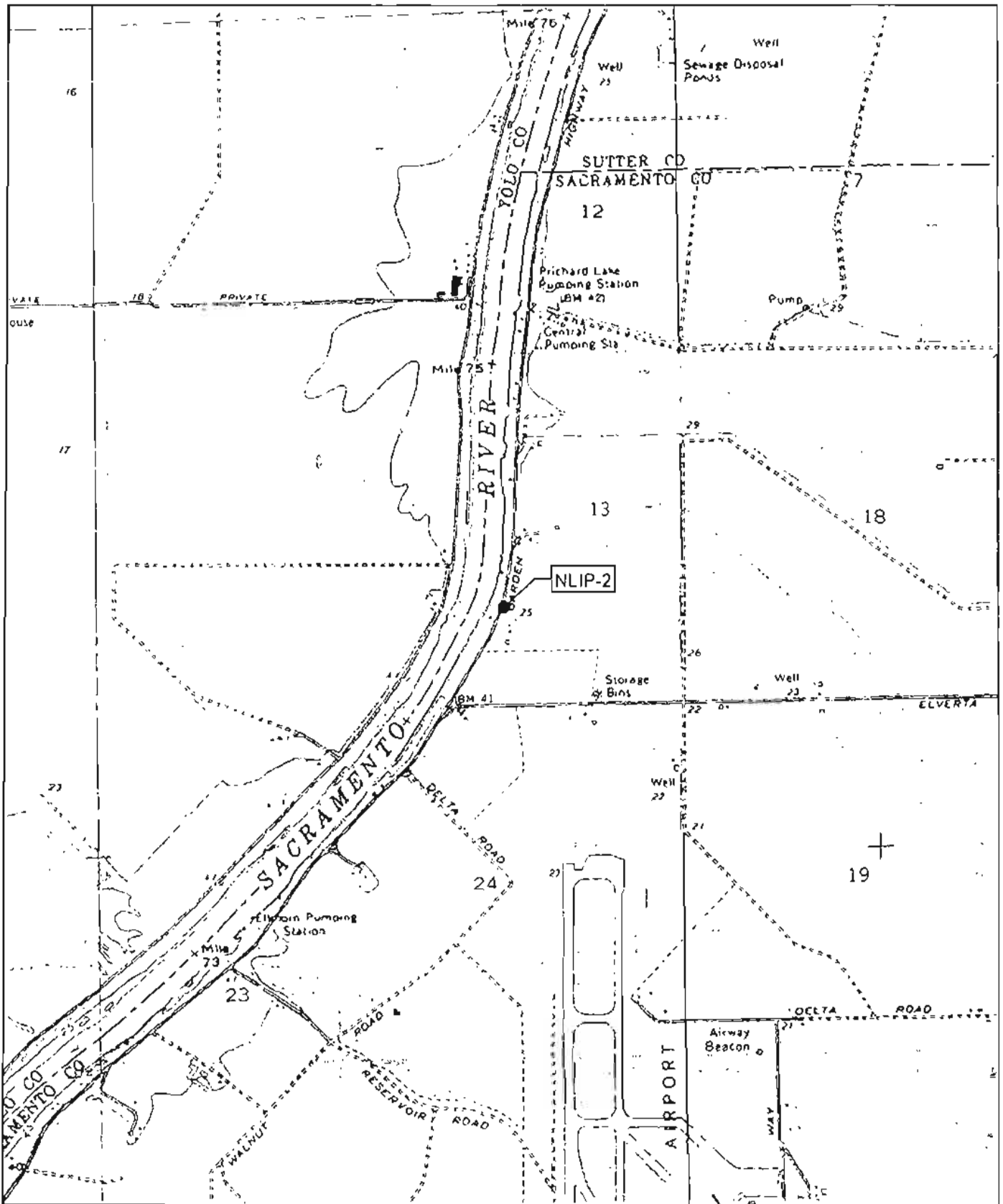
7-31-07

P10. Survey Type:

Intensive

P11. Report Citation:

*Attachments: NONE Location Map Sketch Map Continuation Sheet
 Building, Structure/Object Record Archaeological Record District Record Linear Feature Record
 Milling Station Record Rock Art Record Artifact Record Photograph Record
 Other (List):



X06110054.01 170

Source: Taylor Monument Quad, 08-027-07

NLIP-2

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code

Other Listings
 Review Code

Reviewer Date

Page 1 of 5

*Resource Name or #: NLIP-3 7240 Garden Highway

- P1. Other Identifier:
- *P2. Location: Not for Publication Unrestricted *a. County: Sutter
 and (P2b and P2c or P2d. Attach a Location Map as necessary)
- *b. USGS 7.5' Quad: Verona Date: 1967 T 11N ; R 3E ; % of % of Sec ; Mount Diablo B.M.
 c. Address: 7240 Garden Highway City: Nicolaus Zip: 95659
 d. UTM: Zone ; mE/ mN
 e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
 APN: 935-0020-011
- *P3a. Description: (Describe resource and major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
 Barn

Two-story, wood-frame building with a corrugated metal gable roof fitted with an outrigger on the northern façade. The exterior of this building features both vertical and board and batten siding. Two double-wide openings and a single-entry door are located on the northern elevation.

House 1

East of the barn is a small wood-frame house. (see Continuation).

- *P3b. Resource Attributes: (List attributes and codes)
 HP2 - House; HP4 - Barn, shed.
- *P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo:
 (View, date, accession #)
 Photo 19, Lkg East

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
 Ca. 1920

*P7. Owner and Address:
 William Cummings
 1625 Creekside Dr.
 Folsom, CA 95630

*P8. Recorded by:
 Tomas, A.
 EDAW, Inc.
 2022 J Street
 Sacramento, CA 95814

*P9. Date Recorded:
 8/6/07

*P10. Survey Type: (Describe)
 Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none".)

- *Attachments: NONE Location Map Sketch Map Continuation Sheet
 Building, Structure/Object Record Archaeological Record District Record Linear Feature Record
 Milling Station Record Rock Art Record Artifact Record Photograph Record
 Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 5

*Resource Name or #: NLIP-3 7240 Garden Highway

B1. Historic Name: Unknown

B2. Common Name: N/A

B3. Original Use: Agricultural Complex

B4. Present Use: Vacant

*B5. Architectural Style:

Vernacular

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed ca. 1920

*B7. Moved? No Yes Unknown Date:

Original Location:

*B8. Related Features:

Outbuildings: Sheds, Barn.

B9a. Architect: Unknown

B9b. Builder: Unknown

*B10. Significance: Theme Agricultural Architecture

Area Nicolaus, CA

Period of Significance N/A

Property Type Agricultural

Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

Sutter County Assessor's records currently list this property as vacant. No construction date is listed on file for the buildings; however the construction methods and materials appear to date to the early twentieth century.

The earliest known owners of this property were G.H. Lyail and Hardin et al. Currently, the property is owned by William C. Cummings (Verona Farming Partnership). Cummings received ownership of the parcel in October 2004, in a grant deed from Metro Air Park, LLC (Assessor document # 0029189). (see Continuation)

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Sutter County Assessor's records.

B13. Remarks:

*B14. Evaluator:

Tomes, A.

*Date of Evaluation:

8/7/07

(Sketch Map with north arrow required.)

*Recorded by: Tomes, A.

*Date: Continuation Update

Affiliation: EDAW, 2022 J Street, Sacramento, CA

P3a (Description) continued:

This building is partially obscured by tree cover, and was not completely visible during the field visit. The building appeared to be situated on a concrete foundation.

Shed 1

A wood-frame shed is located northeast of the house. This building features a saltbox roof with exposed rafter tails. Sash window openings (minus glazing) are located on the northern elevation. The east façade displays two single-entry doors.

House 2

This building is a single-story, wood-frame house with a corrugated metal roof and little eave overhang. The exterior of this building features shiplap siding. A boarded up window opening is present on the eastern façade. This building sits upon a concrete foundation.

House 3

This is a wood-frame building with a partially collapsing flat roof. A porch, supported by square wooden posts, is located on the western elevation. This building is partially concealed by tree cover, and was not completely visible during the field visit.

Shed 2

This small building is of wood construction and features a shed roof.

*Recorded by: Tomes, A.

*Date: Continuation Update

Affiliation: EDAW, 2022 J Street, Sacramento, CA

B10 (Significance) continued:

This property appears to have always functioned as a residential and agricultural complex. Research did not reveal the property to be significantly associated with an important historic event (CRHR Criterion 1). Little information was found on early owners of the property, George Lyall and James Hardin. Lyall was originally from Illinois, and settled in the Verona Township of Sutter County sometime between 1880 and 1900. Hardin was originally from Tennessee, and settled in the Nicolaus Township of Sutter County around the same time (Sutter County Census records). Neither the property nor known past owners are listed in the various secondary references reviewed during this study which chronicled significant properties and pioneers in Sutter County history.

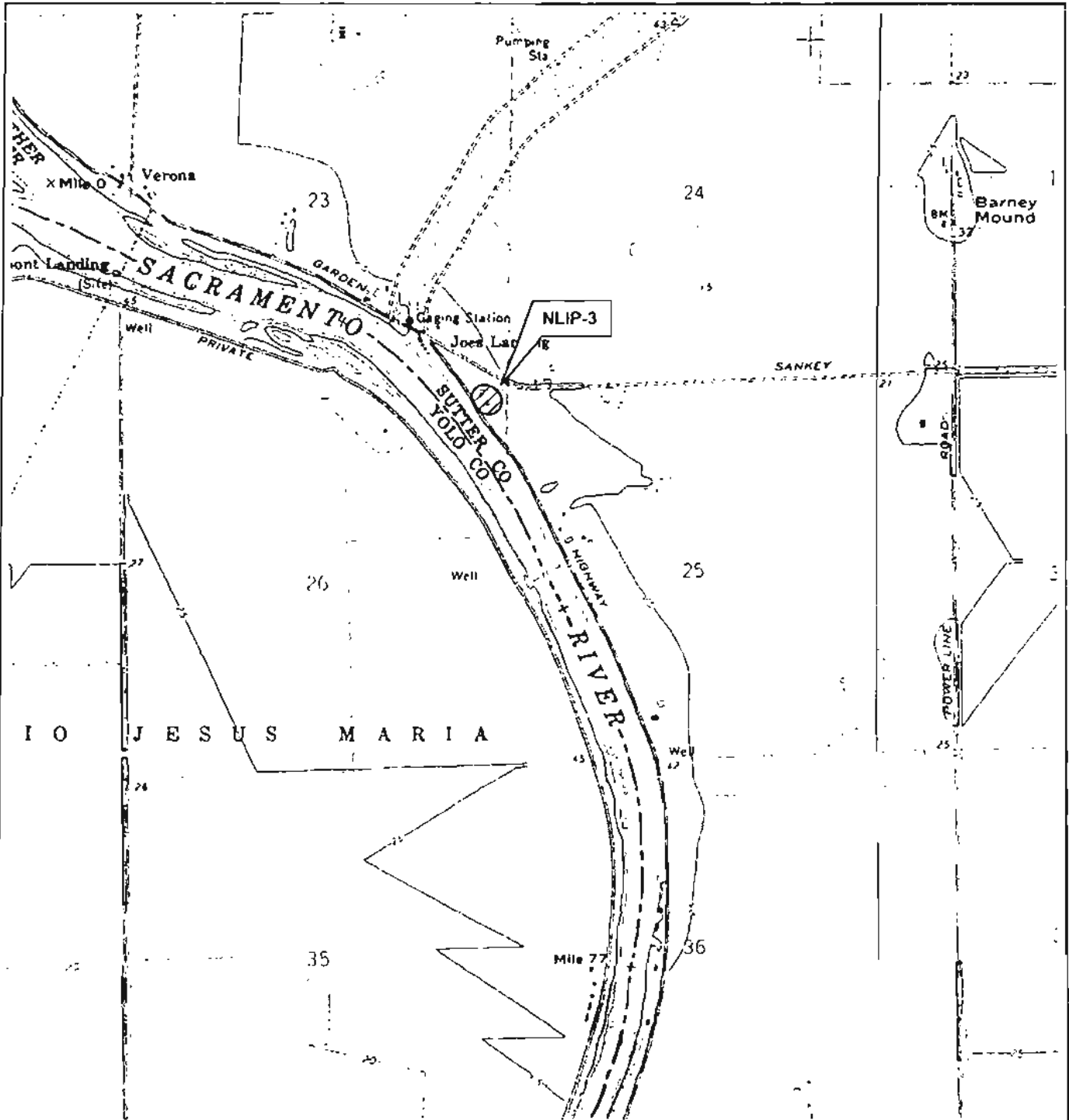
The buildings on this property do not appear to be significantly associated with an important individual(s) in local history (CRHR Criterion 2). Although the buildings appear to exhibit a good degree of integrity, they do not embody distinctive architectural characteristics, nor do they represent the work of a master (CRHR Criterion 3). While buildings and structures can sometimes provide important information on historic construction techniques and technologies, these types of buildings are well represented in both written and visual sources, and do not appear likely to yield important primary information (CRHR Criterion 4). These buildings do not appear to be eligible for listing on the CRHR.



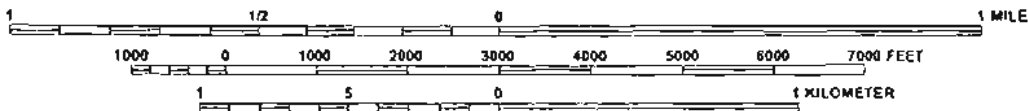
House East of Barn



Shed North of Barn



Source: USGS Verona Quad 1967 (photo revised 1978) - Contour Interval 5 Feet



State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code

Other Listings
 Review Code

Reviewer Date

Page 1 of 4

*Resource Name or #: NLIP-4 11100 Garden Highway

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted *a. County: Sutter
 and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Verona Date: 1967 T 11N ; R 3E ; 1/4 of 1/4 of Sec ; Mount Diablo B.M.

c. Address: 11100 Garden Highway City: Nicolaus Zip: 95837

d. UTM: Zone ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
 APN: 935-0020-015

*P3a. Description: (Describe resource and major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The historic-era residence on this property is a wood-frame building with a hipped roof and composition shingles. The exterior features stucco siding, and a combination of aluminum sliding and one-over-one sash windows. An enclosed porch is located on the southern façade. This building is situated on a gentle slope, and sits upon a concrete foundation.

*P3b. Resource Attributes: (List attributes and codes)

HP2 - House

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo:
 (View, date, accession #)
 Photo 8; Lkg NE

*P6. Date Constructed/Age and Sources: Historic Prehistoric Both

*P7. Owner and Address:
 Burton Lauppe
 11100 Garden Highway
 Sacramento, CA 95837

*P8. Recorded by:
 Tomes, A.
 EDAW, Inc.
 2022 J Street
 Sacramento, CA 95814

*P9. Date Recorded:
 8/7/07

*P10. Survey Type: (Describe)
 Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter

"none".)

*Attachments: NONE Location Map Sketch Map Continuation Sheet
 Building, Structure/Object Record Archaeological Record District Record Linear Feature Record
 Milling Station Record Rock Art Record Artifact Record Photograph Record
 Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*Resource Name or #: NLIP-4 11100 Garden Highway

B1. Historic Name: Unknown

B2. Common Name: N/A

B3. Original Use: Residence

B4. Present Use: Residence

*B5. Architectural Style:

Vernacular

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed 1957

*B7. Moved? No Yes Unknown Date:

Original Location:

*B8. Related Features:

Sheds

B9a. Architect:

B9b. Builder:

*B10. Significance: Theme Residential Architecture

Area Nicolaus

Period of Significance N/A

Property Type Residence

Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

This residential complex is mostly comprised of contemporary (post-1957) buildings. Sutter County Assessor records list one of the two residences on the property as being constructed in 1957. The property has been in the Lauppe family since this time. The parcel is currently owned by Alan Lauppe, who received the property from Burton and Kathryn Lauppe in December 2006 (Assessor document # 0030459). (see Continuation).

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Sutter County Assessor's records.

B13. Remarks:

*B14. Evaluator:

Tomes, A

*Date of Evaluation:

8/7/07

(Sketch Map with north arrow required.)

*Recorded by: Tomes, A.

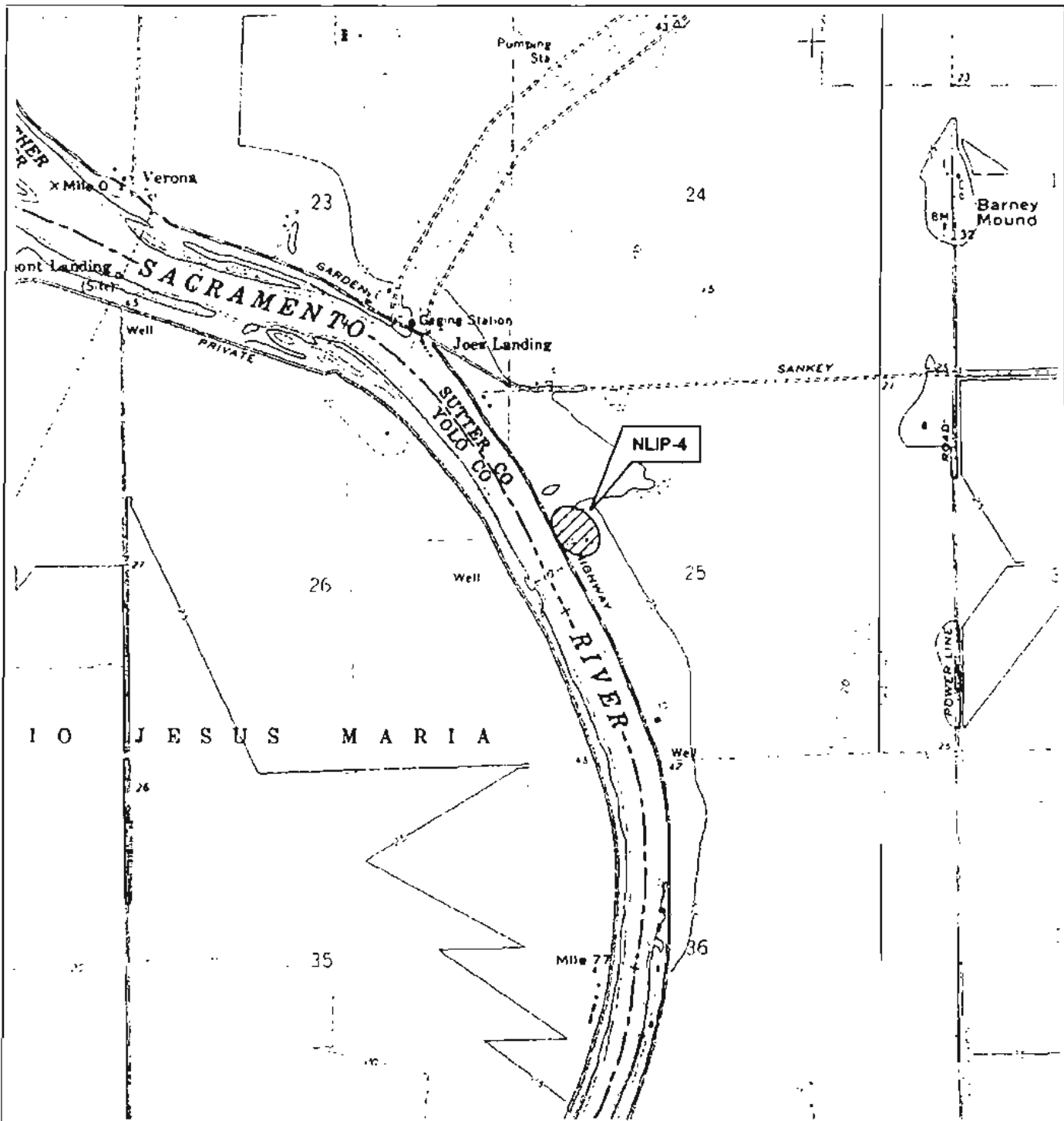
*Date: Continuation Update

Affiliation: EDAW, 2022 J Street, Sacramento, CA

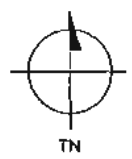
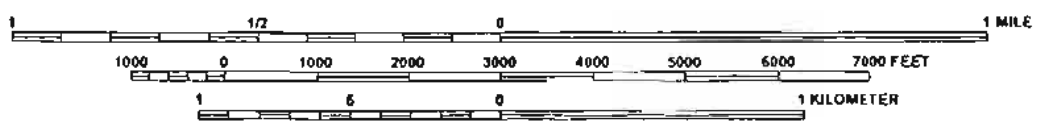
B10 (Significance) continued:

The land, originally listed as APN: 35-020-15, was split into separate parcels several years ago due to a lot line adjustment. Because of the split, the 35-020-15 parcel number was retired, and additional parcel numbers (35-020-18, 35-020-19) were assigned (Sutter County Assessor).

Research did not reveal this property to be significantly associated with an important historic event (CRHR Criterion 1). The historic-era building on this property is not known to be associated with an individual(s) considered important in local history (CRHR Criterion 2). The property itself has undergone regular intervals of construction over the years, with new buildings (e.g. garage-1987, second residence- 1977, and sheds) being built on the property. The historic-era residence maintains only a fair degree of integrity; the porch on the southern façade has been enclosed, and some of the windows have been replaced over the years. This simple vernacular building, in its current configuration, does not embody distinctive architectural characteristics, nor does it appear to be the work of a master (CRHR Criterion 3). This type of building is well represented locally and on a state-wide level, and therefore does not appear likely to yield important primary information (CRHR Criterion 4). This building does not appear eligible for CRHR listing.



Source: USGS Verona Quad 1967 (photo revised 1978) - Contour Interval 5 Feet



QUADRANGLE LOCATION

State of California — The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
 HRI #
 Trinomial
 NRHP Status Code

Other Listings
 Review Code

Reviewer

Date

Page 1 of 4

*Resource Name or #: NLIP-5 2434 Howsley Road

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted *a. County: Sutter
 and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Date: 1967 T ; R ; % of % of Sec ; Mount Diablo B.M.
 Verona City: Pleasant Grove Zip: 95668

c. Address: 2434 Howsley Road

d. UTM: Zone ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
 APN: 35-050-030

*P3a. Description: (Describe resource and major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The historic-era buildings on this property include a residence, and what appear to be stalls. The residence was constructed in 1952 (Sutter County Assessor's records). The two stalls, although not listed in the assessor's records, appear to predate the residence by approximately 10 – 15 years.

The residence on the property is partially obscured by tree cover, and was not completely visible during the field visit. What was visible showed a single-story residence with an overall L-shape plan, and cross-gable roof. A full-width porch is present on the southern façade. This building sits upon a concrete foundation. (see Continuation).

*P3b. Resource Attributes: (List attributes and codes)

HP2 – House; HP2 – Animal stall

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo:
 (View, date, accession #)
 Photo 13; Lkg North

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
 1952

*P7. Owner and Address:
 Warren Shelley
 2434 Howsley Road
 Pleasant Grove, CA 95668

*P8. Recorded by:
 Tomes, A.
 EDAW, Inc.
 2022 J Street
 Sacramento, CA 95814

*P9. Date Recorded:
 8/17/07

*P10. Survey Type: (Describe)
 Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none".)

*Attachments: NONE

Building, Structure/Object Record

Milling Station Record

Other (List):

Location Map

Archaeological Record

Rock Art Record

Sketch Map

District Record

Artifact Record

Continuation Sheet

Linear Feature Record

Photograph Record

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*Resource Name or #: NLIP-5 2434 Howsley Road

B1. Historic Name: Unknown

B2. Common Name: N/A

B3. Original Use: Ranch

B4. Present Use: Ranch

*B5. Architectural Style:

Vernacular

*B6. Construction History: (Construction date, alterations, and date of alterations)

Constructed in 1952.

*B7. Moved? No Yes Unknown Date:

Original Location:

*B8. Related Features:

Outbuildings: Sheds, stalls, trailers.

B9a. Architect: Unknown

B9b. Builder: Unknown

*B10. Significance: Theme Residential Architecture

Area Pleasant Grove, CA

Period of Significance N/A

Property Type Residence

Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)

The community of Pleasant Grove was established ca. 1867 at its present location. Originally known as Gouge Eye, the name was changed to Pleasant Grove Creek that same year when a post office was established. In 1875 the name was shortened to the present name Pleasant Grove.

Early buildings in the community included a saloon, hotel, boarding house, shoe shop, schoolhouse, and doctor's office. Approximately a dozen dwellings and two blacksmith shops were located in the immediate vicinity. The primary impetus to the economy was agriculture, with grain and livestock forming the principal crops. In later years rice also became an important crop. (see Continuation).

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Sutter County Assessor's Records.

Wagner, Phydalia. 1992. A Brief History of Pleasant Grove.

Thompson and West. 1879. History of Sutter County, CA.

B13. Remarks:

*B14. Evaluator:

Tomes, A.

*Date of Evaluation:

8/17/07

(Sketch Map with north arrow required.)

*Recorded by: Tomes, A.

*Date: Continuation Update

Affiliation: EDAW, 2022 J Street, Sacramento, CA

P3a (Description) continued:

The stalls on this property are of wood construction, and feature horizontal milled wood, and shed roofs covered with corrugated metal. Openings are located on the buildings northern facades. The buildings are in disrepair, and feature sway braces propped against the southern façade of the eastern-most stall. These stalls are situated upon earthen foundations. Other buildings on this property include modern trailers and metal-covered sheds.

B10 (Significance) continued:

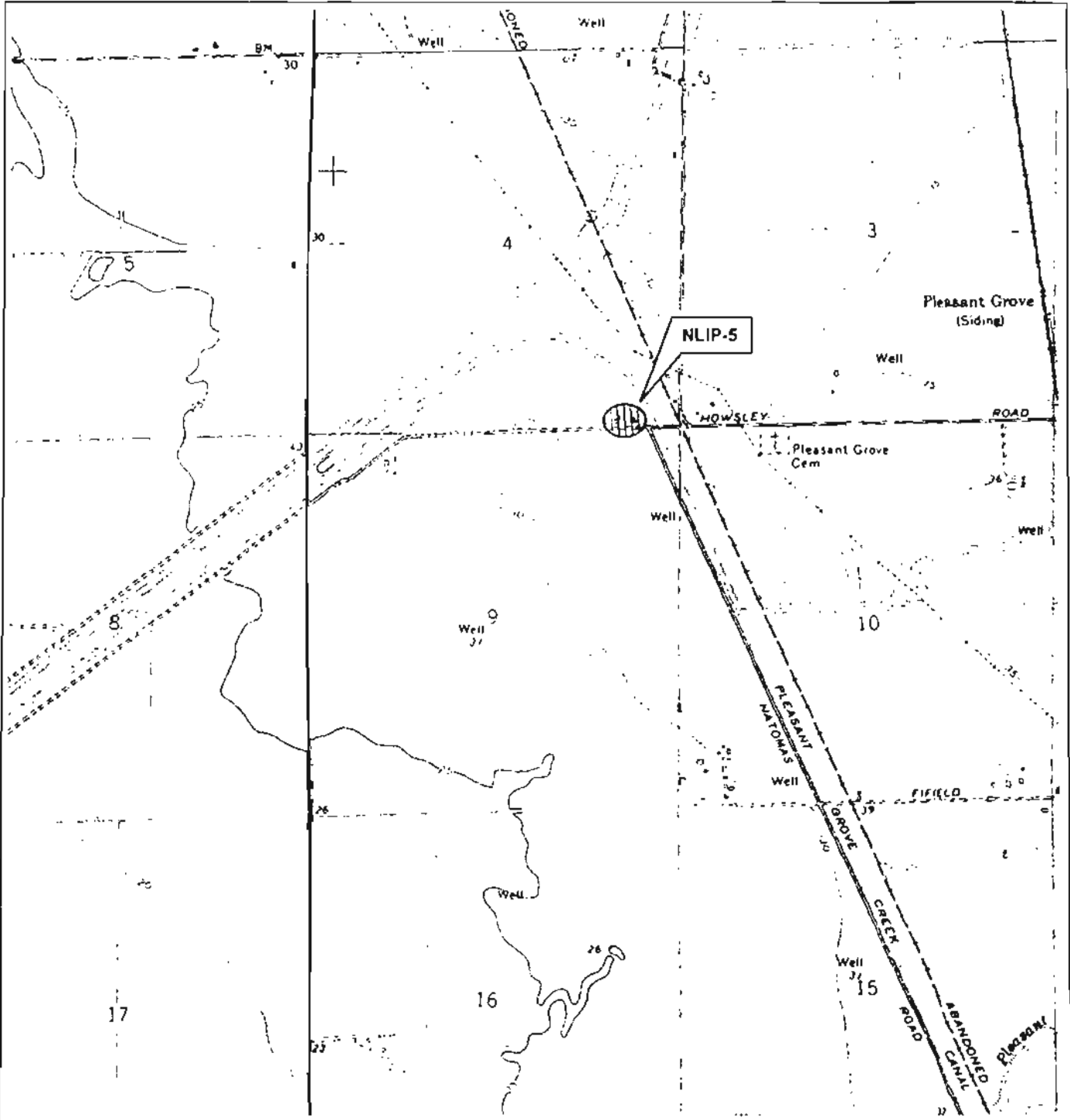
One of the largest early ranches in Pleasant Grove was the Spanish Ranch. It contained 2000 acres, and was owned by State Senator Frederick Cox of Sacramento County. The land was later leased by Reese D. Murphy who farmed it for several years (Wagner 1992). Over the years, the Spanish Ranch was broken up into smaller parcels, of which the subject property was part.

2434 Howsley Road (APN: 35-050-030)

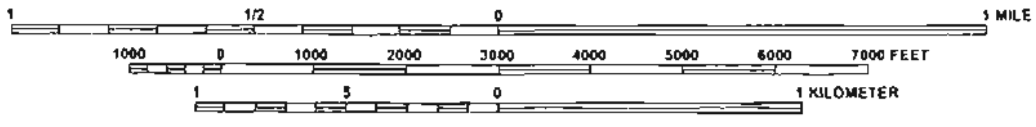
This property is zoned as an animal farm. The Sutter County Assessor's Office lists the residence on this property as having been built in 1952. The earliest known owners of the property were N.P. Rogers and an individual with the initials F.E.F. Today, the property is owned by Warren A. Shelley (Sutter County Assessor's records).

This property also appears to be a parcel which was originally part of the larger Spanish Ranch. This property has always functioned for agricultural (husbandry) purposes. Because none of the existing buildings appear to date to the property's earliest usage, research did not reveal the property, in its current configuration, to be significant within that theme (CRHR Criterion 1). This property is not associated with person(s) considered important in local or state history (CRHR Criterion 2). Little information was found on Nathaniel Rogers, other than that he was an early settler in Pleasant Grove. F.E.F. could possibly have been Eben Fifield, of which there is currently a road named near the project area. Fifield, born in Maine in 1834, came to California in 1859. He resided in Amador County for approximately nine years, then in San Joaquin County for approximately five years. He later settled in Sutter County (Thompson and West 1879). Although these individuals were early settlers in the community, none of the existing buildings on the subject property date to their ownership/occupation. None of the buildings, therefore, have an association to, or are eligible for CRHR listing due to an association with these individuals.

The subject buildings on this property retain a good degree of integrity, however, they do not display distinguishing architectural characteristics; nor do they appear to be the work of a master (CRHR Criterion 3). While buildings and structures can sometimes yield important information on historic construction techniques or technologies (CRHR Criterion 4), these types of buildings are well documented in both written and visual material, and do not appear to be sources of important primary information. These buildings do not appear to be CRHR eligible.



Source: USGS Verona Quad 1967 (photo revised 1978) - Contour Interval 5 Feet



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 4

*Resource Name or #: NLIP-6 2145 Howsley Road

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted *a. County: Sutter
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Vernona Date: 1967 T 11N ; R 4E ; 1/4 of 1/4 of Sec ; Mount Diablo B.M.

c. Address: 2145 Howsley Road City: Pleasant Grove Zip: 95668

d. UTM: Zone ; mE/ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN: 35-080-025

*P3a. Description: (Describe resource and major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This residential complex features a mix of contemporary and historic-era buildings. The southern-most residence on the property was constructed in 1957 (Sutter County Assessor's records). This residence is a single-story, wood-frame building with a cross-gable roof and moderate eave overhang. The roofing is composed of composite shingles. This building also features aluminum-sliding windows, and a single-entry door on the northern façade. This residence is situated upon a concrete slab foundation.

Southwest of the residence is a 3-car garage. (see Continuation).

*P3b. Resource Attributes: (List attributes and codes)

HP2 – House; HP4 – Detached Garage

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
Photo 2, Lkg SE

*P6. Date Constructed/Age and Sources: Historic
 Prehistoric Both
1957

*P7. Owner and Address:
Morrison 2000
3559 Howsley Road
Pleasant Grove, CA

*P8. Recorded by:
Tomes, A.
EDAW, Inc.
2022 J Street
Sacramento, CA 95814

*P9. Date Recorded:
8/15, 2007

*P10. Survey Type: (Describe)
Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter

"none".)

*Attachments: NONE

Building, Structure/Object Record

Milling Station Record

Other (List):

Location Map

Archaeological Record

Rock Art Record

Sketch Map

District Record

Artifact Record

Continuation Sheet

Linear Feature Record

Photograph Record

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*Resource Name or #: NLIP-6 2145 Howsley Road

- B1. Historic Name: Unknown
B2. Common Name: N/A
B3. Original Use: Homestead
B4. Present Use: Residential Complex
*B5. Architectural Style:
Vernacular
*B6. Construction History: (Construction date, alterations, and date of alterations)
Constructed in 1957.
*B7. Moved? No Yes Unknown Date: Original Location:
*B8. Related Features:
Outbuildings: Shed and garages.
B9a. Architect: Unknown B9b. Builder: Unknown
*B10. Significance: Theme Residential Architecture Area Pleasant Grove, CA

Period of Significance N/A Property Type Residence Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period and geographic scope. Also address integrity.)
The community of Pleasant Grove was established ca. 1867 at its present location. Originally known as Gouge Eye, the name was changed to Pleasant Grove Creek that same year when a post office was established. In 1875 the name was shortened to the present name Pleasant Grove.

Early buildings in the community included a saloon, hotel, boarding house, shoe shop, schoolhouse, and doctor's office. Approximately a dozen dwellings and two blacksmith shops were located in the immediate vicinity. The primary impetus to the economy was agriculture, with grain and livestock forming the principal crops. In later years rice also became an important crop. (see Continuation).

B11. Additional Resource Attributes: (List attributes and codes)

- *B12. References:
Sutter County Assessor's Records.
Thompson and West. 1879. History of Sutter County, CA.
Wagner, Phydalia. 1992. A Brief History of Pleasant Grove.

B13. Remarks:

- *B14. Evaluator:
Tomes, A.
*Date of Evaluation:
8/17/07

(Sketch Map with north arrow required.)

*Recorded by: Tomes, A.

*Date: Continuation Update

Affiliation: EDAW, 2022 J Street, Sacramento, CA

P3a (Description) continued:

This wood-frame, corrugated metal-covered building displays a salt-box shaped roof, and 3 bays on its northern façade. This building is contemporaneous with the residence. The other buildings on this property are contemporary and include: a large metal storage building, a second residence, and a second garage.

B10 (Significance) continued:

One of the largest early ranches in Pleasant Grove was the Spanish Ranch. It contained 2000 acres, and was owned by State Senator Frederick Cox of Sacramento County. The land was later leased by Reese D. Murphy who farmed it for several years (Wagner 1992). Over the years, the Spanish Ranch was broken up into smaller parcels, of which the subject property was part.

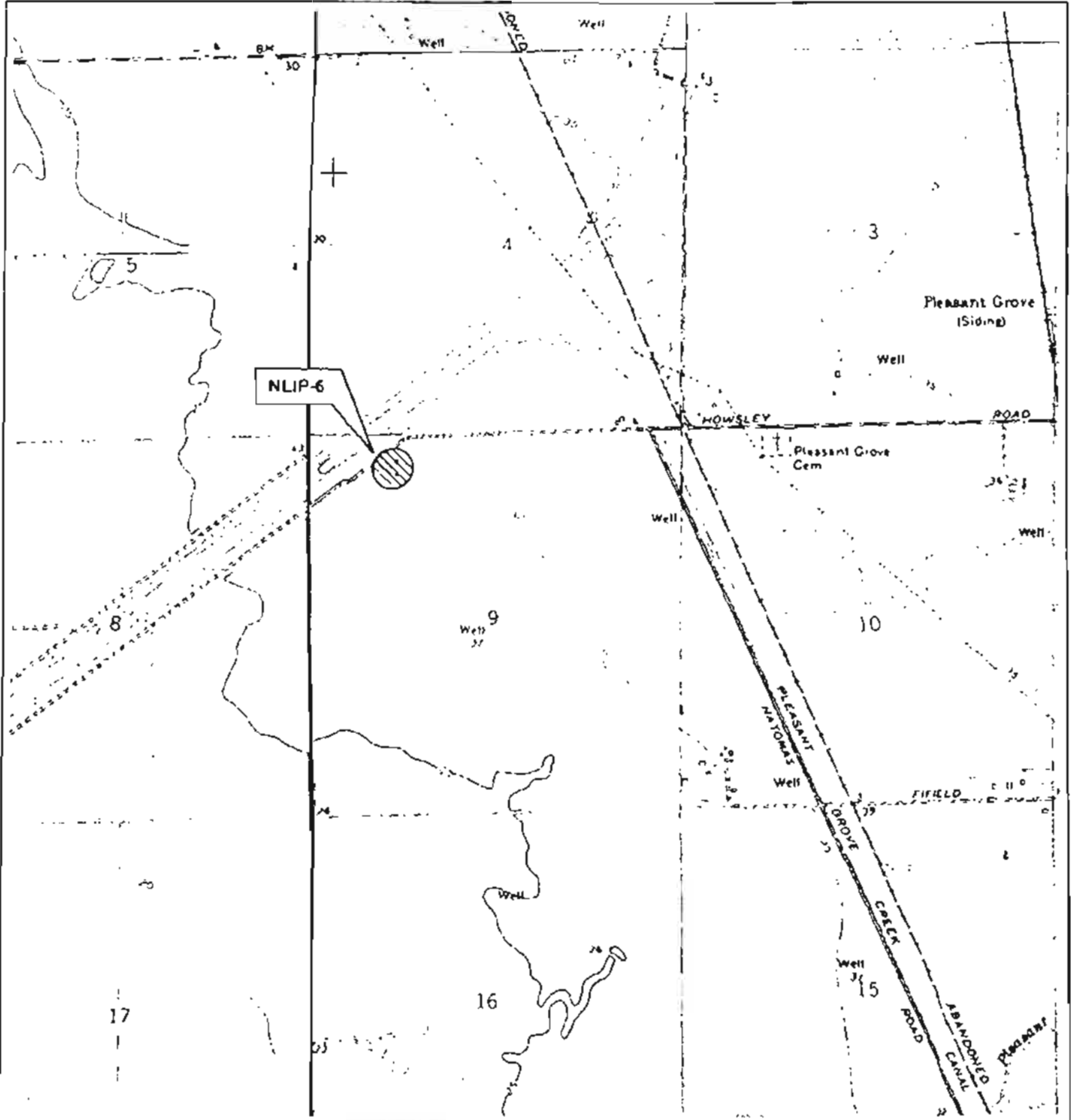
2145 Howsley Road (APN: 35-080-025)

This property, in its current configuration, has always functioned as a residential complex. Other parcel numbers for this property have included 35-080-002, and 35-080-023, both of which have been retired (Sutter County Assessor's records).

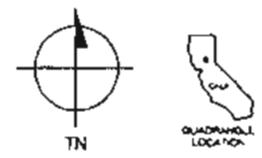
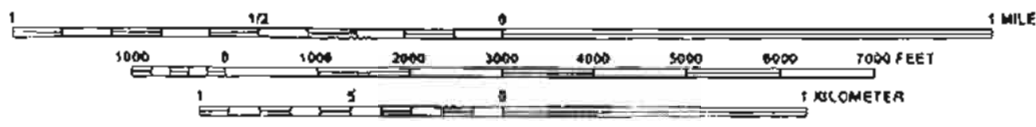
The property appears to have originally been part of the larger Spanish Ranch, which was later split into several smaller parcels. The earliest known occupants of this parcel were R. Murphy and M. Donaldson. Today the owner of the property is listed as Morrison 2000 (Sutter County Assessor's records).

Research did not reveal this property, in its current configuration, to be associated with an important historic trend or event (CRHR Criterion 1). This property is not known to be associated with an individual considered important in local or state history (CRHR Criterion 2). R. Murphy, born in Missouri in 1863, came to California with his mother in 1872. They settled in Nicolaus, and later purchased a ranch at Pleasant Grove. Mary Donaldson was the wife of Alex, a farmer and stock-raiser. Alex Donaldson came to Sutter County ca. 1861. He was in the mercantile business for a short time, before turning to agriculture. He married Mary Pierce on June 30, 1869 (Thompson and West 1879). Alex stops appearing in the Sutter County Census records in 1900, and is presumed to have died sometime between 1880 (last census he appears in) and 1900. The 1890 census was destroyed in a fire. Although these individuals were early settlers in the community, none of the existing buildings on the subject property dates to their ownership/occupation. None of the buildings, therefore, have an association to, or are eligible for CRHR listing due to an association with these individuals.

Although the buildings retain a good degree of integrity, they are vernacular in style to the 1950s, and do not display distinguishing architectural characteristics that make them notable examples of vernacular architecture. These buildings do not represent the work of a master (CRHR Criterion 3). While buildings and structures can sometimes yield important information on historic construction techniques or technologies (CRHR Criterion 4), these types of buildings are well documented in both written and visual material, and do not appear to be sources of important primary information. The buildings on this property do not appear to be eligible for listing on the CRHR.



Source: USGS Verona Quad 1967 (photo revised 1978) - Contour Interval 5 Feet





DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

Environmental Resources Branch

Mr. Milford Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, California 94296-0001

Dear Mr. Donaldson:

Pursuant to the provisions of Section 106 per 36 CFR Section 800.3(c)(3) the U.S. Army Corps of Engineers (Corps) is initiating consultation regarding the issuance of approvals and permits for the Natomas Levee Improvement Program Landside Improvements Project (NLIP.) This letter describes the project proposed by Sacramento Area Flood Control Agency (SAFCA), the NLIP, and the approach proposed by the Corps for satisfying Section 106 of the National Historic Preservation Act (NHPA) for this undertaking. The project is intended to provide urgently needed flood control system improvements and provide at least 100-year flood protection as quickly as possible to the Natomas Basin in southern Sutter and northern Sacramento Counties (Enclosure 1), while laying the groundwork to achieve at least urban-standard ("200-year") flood protection over time.

The project includes improving various portions of the Natomas Basin flood control system and making related landscape and irrigation/drainage infrastructure modifications in three phases in 2008, 2009, and 2010. Enclosure 2 shows the anticipated phases of construction along the levee system. Project activities are summarized as follows and more details are provided in Enclosure 3:

2008 construction

- Along the 5.3-mile Natomas Cross Canal (NCC) south levee, raise the levee to provide additional freeboard; realign the levee to provide a more stable waterside slope and to reduce the need for removal of waterside vegetation, and construct a seepage cutoff wall in the eastern 4.3 miles (approximately) of the levee to reduce the risk of levee failure due to seepage and stability concerns.
- Along the Sacramento River east levee, construct a raised adjacent setback levee from the NCC to about 3,100 feet south of the North Drainage Canal with seepage berms where required to reduce seepage potential, and install woodland plantings.
- Construct a new canal designed to provide drainage and associated giant garter snake habitat (referred to in this EIR as the "GGS/Drainage Canal"), relocate the Elkhorn Canal between the North Drainage Canal and the Elkhorn Reservoir settling basin ("Elkhorn Reservoir"), and remove a deep culvert from under the levee near the Reclamation District 1000 Pumping Plant No. 2 site.

- Re-contour the land and create marsh and upland habitat at borrow locations.

2009 and 2010 construction

Along the Sacramento River east levee south of the limits of the 2008 improvements, construct an adjacent setback levee (raised where needed to provide adequate freeboard) with seepage berms, relief wells, and cutoff walls as required, and install woodland plantings.

- Widen the levee and construct seepage berms along the Pleasant Grove Creek Canal west levee.
- Construct a new GGS/Drainage Canal between Elkhorn Reservoir and the West Drainage Canal, improve the West Drainage Canal, relocate the Riverside Canal and the Elkhorn Canal downstream of Elkhorn Reservoir, and reconstruct the Reclamation District 1000 Pumping Plant No. 2.

Re-contour the land and create marsh and upland habitat at borrow locations.

- Remove encroachments from the water side of the Sacramento River east levee as needed to ensure that the levee can be certified as meeting the minimum requirements of the National Flood Insurance Program and USACE design criteria, and address Federal Emergency Management Agency (FEMA) requirements for the State Route 99/70 bridge crossing of the NCC.

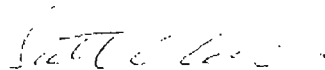
Through discussion with your office, we have determined that a Programmatic Agreement (PA) is the appropriate vehicle for satisfying Section 106. The nature of the undertaking, the cultural resources management efforts required, and the necessary federal authorizations and permits require a departure from the process for satisfying Section 106 described in 36 CFR Section 800 et. seq. The standard Section 106 process requires federal agencies to identify all historic properties, determine the effect of the undertaking on those resources, and complete dialogue with consulting parties before Section 106 is complete. For the following reasons, this procedure is not possible in this instance:

- The applicant requires both permission to alter federal flood control structures under Section 408 of the Rivers and Harbors Act (33 U.S. Code Section 408) and one or more individual permits to discharge fill to jurisdictional waters under Section 404 of the Clean Water Act (33 U.S. Code Section 1344). The Section 408 permission will be granted separately for each year of project construction, corresponding to the three years of project work (2008, 2009, and 2010) that collectively constitute the entire project.
- The undertaking will likely have an adverse effect on at least one historic property, CA-Sac-485/H. This adverse effect must be resolved via the Section 106 process, and the method of resolution should be documented in an agreement document.

- The Area of Potential Effect (APE) will consist of the work described in the Environmental Impact Report (EIR) on the Natomas Levee Improvement Program Landside Improvements Project. The exact APE for all phases of construction remains unclear.
- The applicant is in the process of acquiring rights-of-entry, easements, and ownership interests in the project footprint where effects on historic properties may occur. This phased access will require an ongoing effort to inventory historic properties in the APE, rather than a single inventory effort.
- The project includes landside improvements to the levee along the east bank of the Sacramento River, an area that is sensitive for buried archaeological sites. The method for dealing with unanticipated discoveries needs to be in an agreement document and described in detail in a manner that incorporates the framework provided in 36 CFR Section 800.13 *Post-review Discoveries*.
- The complexity and phased nature of the project dictates that ongoing consultation with federally recognized tribes and other Native American groups and individuals is the best method for incorporating their concerns and input.

The Corps proposes that SAFCA, the USACE, and the SHPO adopt a Programmatic Agreement (PA) providing for a phased identification of resources and assessment of effects. We have included a draft PA (Enclosure 4) for your consideration. Upon receipt of your concurrence, we will notify the Advisory Council on Historic Preservation (ACHP) pursuant to 36 CFR Section 800.14 et. seq. If the ACHP declines to participate, we will collaborate with your office to develop and finalize the management framework provided in the PA. If you have any questions or need any additional information, please do not hesitate to contact me so that we can remedy any information gaps. Comments or questions may be sent to Mr. Daniel A. Bell, U.S. Army Corps of Engineers, CESP-K-PD-RA, 1325 J Street, Sacramento, California 95814; email at daniel.a.bell@usace.army.mil; phone at (916) 557-6818, or fax at (916) 557-7856.

Sincerely,



Francis C. Piccola
Chief, Planning Division

Enclosures



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
1325 J STREET
SACRAMENTO, CALIFORNIA 95814

REPLY TO
ATTENTION OF

Environmental Resources Branch

FEB 1 - 2008

Ms. Jessica Taveres, Chairperson
United Auburn Indian Community of Auburn
575 Menlo Drive, Suite 2
Rocklin, California 95765

Dear Chairperson;

The U.S. Army Corps of Engineers (Corps), Sacramento District, is writing you in accordance with the National Historic Preservation Act, to inform you of the proposed Natomas Levee Improvement Program Landside Improvements Project (Project) located along the Sacramento River in Sutter and Sacramento Counties. The project requires that the Sacramento Area Flood Control Agency obtain permits from the U.S. Army Corps of Engineers, Sacramento District (Corps), and is therefore considered a federal undertaking pursuant to Section 106 of the National Historic Preservation Act (NHPA) and is subject to the requirements of Section 106 of the National Historic Preservation Act. We are also inviting you to participate as a concurring party in the development and execution of a Programmatic Agreement (PA). The Area of Potential Effects (APE) for the proposed project is shown on the enclosed topographic map (enclosure 1).

The proposed project is intended to provide urgently needed flood control system improvements and provide at least 100-year flood protection as quickly as possible to the Natomas Basin in southern Sutter and northern Sacramento Counties, while laying the groundwork to achieve at least urban-standard ("200-year") flood protection over time.

The proposed project includes improving various portions of the Natomas Basin flood control system and making related landscape and irrigation/drainage infrastructure modifications in three phases in 2008, 2009, and 2010. Enclosure 2 shows the anticipated phases of construction along the levee system. Project activities are summarized as follows:

2008 construction

- Along the 5.3-mile Natomas Cross Canal (NCC) south levee, raise the levee to provide additional freeboard; realign the levee to provide a more stable waterside slope and to reduce the need for removal of waterside vegetation, and construct a seepage cutoff wall in the eastern 4.3 miles (approximately) of the levee to reduce the risk of levee failure due to seepage and stability concerns.
- Along the Sacramento River east levee, construct a raised adjacent setback levee from the NCC to about 3,100 feet south of the North Drainage Canal with seepage berms where required to reduce seepage potential, and install woodland plantings.
- Construct a new canal designed to provide drainage and associated giant garter snake habitat (referred to in this EIR as the "GGs/Drainage Canal"), relocate the Elkhorn Canal between the North Drainage Canal and the Elkhorn Reservoir settling basin ("Elkhorn Reservoir"), and

remove a deep culvert from under the levee near the Reclamation District 1000 Pumping Plant No. 2 site.

- Recontour the land and create marsh and upland habitat at borrow locations.

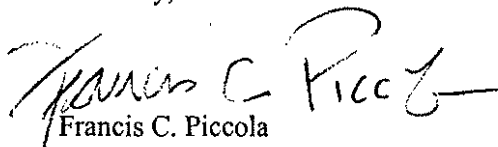
2009 and 2010 construction

- Along the Sacramento River east levee south of the limits of the 2008 improvements, construct an adjacent setback levee (raised where needed to provide adequate freeboard) with seepage berms, relief wells, and cutoff walls as required, and install woodland plantings.
- Widen the levee and construct seepage berms along the Pleasant Grove Creek Canal west levee.
- Construct a new GGS/Drainage Canal between Elkhorn Reservoir and the West Drainage Canal, improve the West Drainage Canal, relocate the Riverside Canal and the Elkhorn Canal downstream of Elkhorn Reservoir, and reconstruct the Reclamation District 1000 Pumping Plant No. 2.
- Recontour the land and create marsh and upland habitat at borrow locations.
- Remove encroachments from the water side of the Sacramento River east levee as needed to ensure that the levee can be certified as meeting the minimum requirements of the National Flood Insurance Program and USACE design criteria, and address Federal Emergency Management Agency (FEMA) requirements for the State Route 99/70 bridge crossing of the NCC.

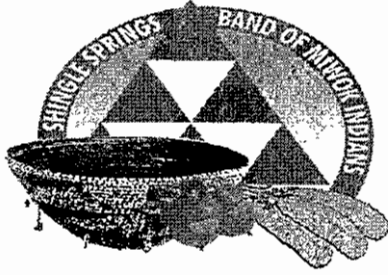
The level of effort towards identifying historic properties will be conducted pursuant to 36 CFR 800.4(b)(1) and will include an updated records and literature search, and field survey. We have developed a draft PA to take into account any adverse affects to historic properties as a result of project construction. A PA is a compliance document that specifies procedures that a Federal agency will follow on a project when all of the potential adverse effects are not known. PA's are negotiated and executed between the Federal agency, the State Historic Preservation Officer, and occasionally the Advisory Council on Historic Preservation. Stipulations in the draft PA have been included to take into account any issues or concerns that you may have regarding cultural resources and potential adverse effects on them. We are also requesting information regarding the presence of any traditional cultural properties, sacred sites, or other areas of cultural interest to the members of the Paskenta Band in the project area. A copy of the draft PA is provided for your review and comment (enclosure 3).

We request that you respond within 45 days of receipt of this letter. We would appreciate knowing if you wish to participate in consultation on the PA, and we welcome your comments and suggestions that you may have. Please direct any comments on the draft PA, cultural resources investigation, or any other aspect of our work on the Project to Mr. Daniel A. Bell, Archeologist, at (916) 557-6818, email: daniel.a.bell@usace.army.mil. Questions regarding the overall project may be directed to Mr. Daniel Tibbits, Project Manager, at (916) 557-7372, or email dan.p.tibbits@usace.army.mil. Your time and consideration are greatly appreciated.

Sincerely,


Francis C. Piccola
Chief, Planning Division

Enclosures



SHINGLE SPRINGS RANCHERIA

P.O. BOX 1340; SHINGLE SPRINGS, CA 95682
(530) 676-8010; FAX (530) 676-8033

May 8, 2008

Office of State Historic Preservation

1416 9th Street, Room 1442-7

Sacramento, CA 95814

Attn: Dwight Dutschke, Associate Park & Recreation Specialist, Project Review Unit

Email: ddutschke@parks.ca.gov

Fax: 916-653-9824

U.S. Army Corps of Engineers

Sacramento District

1325 J Street, Room 840

Sacramento, CA 95814

Attn: Col. Thomas C. Chapman, District Engineer

Email: lori.d.whitmer@usace.army.mil

Fax: 916-557-7859

Attn: Linda Brown

Sacramento Area Flood Control Agency [SAFCA]

1007 – 7th Street, 7th Floor

Sacramento, CA 95814

Attn: Stein M. Buer, Executive Director

John Bassett, Director of Engineering

Email: info@safca.org

Fax: 916-874-8289

Re: Draft Programmatic Agreement for the Natomas Levee Improvement Program; Notification of Ongoing Consultation Issues Arising from Ongoing Work at Site

Dear Mr. Dutschke, Col. Chapman, Ms. Brown, Mr. Buer, and Mr. Bassett:

The Shingle Springs Band of Miwok Indians [the Band], designated as the Most Likely Descendant [MLD] by the Native American Heritage Commission, takes this opportunity to provide preliminary comments on the proposed Programmatic Agreement and to request formal consultation before the Programmatic Agreement is finally negotiated, especially to include protocols for the respectful treatment and disposition of human remains, associated funerary objects, and other cultural items.

As a preliminary matter, we wish to advise the addressed agencies that by this letter the Band does not intend to imply that the agencies have not tried to contact the Band's prior representative for these matters, Mr. Jeff Murray. In order to avoid any further delays, the Band has identified John Tayaba, Tribal Vice Chair, to take all responsive actions with regard to our obligations as MLD. Please also understand that our comments are preliminary. The Band has asked our attorney, Brigit S. Barnes, to review the proposed Programmatic Agreement, relevant portions of the NLIP Landside Improvements EIR, and related federal reviews so as to advise Mr. Tayaba on these matters, as well as a pressing issue which must be addressed regardless of the status of negotiations on the Programmatic Agreement. We ask that copies of any and all correspondence to the Band be sent to Mrs. Barnes at Brigit S. Barnes & Associates, Inc., 3262 Penryn Road, Suite 200, Loomis, CA 95650; Telephone: (916) 660-9555; Fax: (916) 660-9554; Email: bsbarnes@landlawbybarnes.com.

Please also consider this letter to request that the Band be treated as a "consulting party" for the Programmatic Agreement, and for all future work along the Natomas River, pursuant to 36 CFR 800.3(f)(3).

1. Possible Disrespectful Treatment of Native American Remains During Sampling by EDAW On Site

The Band has been informed, and its preliminary investigation confirms, that while EDAW was conducting small-scale shovel testing along the eastern side of CA-Sac-485/H, a preliminarily identified burial site was rough-dug, thus resulting in potential damage to the human remains located within the pit. Based on what we have been informed of, the treatment of the site overall does not comport with state or federal law, and we request an immediate investigation into the manner of excavation used by EDAW at the site.

2. Comments to Draft Programmatic Agreement [PA]

General. Has the Advisory Council on Historic Preservations Been Invited to Participate? We request that the Council be involved or otherwise have an opportunity to comment if consultation with the Tribes is inadequate. We do not know whether any of the Tribes identified in the NLIP EIR have been given an ability to speak to the language of this PA, or been invited to be formal signatories to this PA. As the MLD, we request the right to be a formal signatory to this PA after negotiation.

I. DEFINITIONS

APE. The Native American community should be allowed to comment on the Area of Potential Effects [APE] before it is altered. We formally request that the PA definition notes that "the Tribes have been consulted about the nature and location of the APE and their concerns have been adequately considered", or some similar language.

Cultural Resources. It is appropriate to include traditional cultural places in this definition, but traditional cultural properties should be moved to the following definition.

“Historic Property” explicitly includes traditional cultural properties as properties of value to cultural groups that have been determined eligible for or are listed on the National Register of Historic Places.

II. STANDARDS

(A.) Professional Qualifications. Please include specific mention of an ethnographer for places of value to the Native American community. The perspective of the Tribes needs to be addressed by a professional who understands and communicates tribal interests, and whose values are not at odds with tribal values.

(B.) Historic Preservation Standards. Please include the following: “The Corps shall insure that the Tribes are provided with all draft reports prepared pursuant to this Programmatic Agreement, and that the Tribes will be offered the opportunity to review and comment on the reports. All comments by the Tribes shall be appropriately considered in the preparation of the final report.”

III. PROJECT DESCRIPTION

(C.) Project Phasing and Potential Changes to the APE. Please note our request under definition of the APE above, and include throughout this document as necessary.

IV. INVENTORY OF HISTORIC PROPERTIES

(C.) Changes to the APE. Please note our request under the definition of APE above.

V. TREATMENT OF EFFECTS

(A.) Historic Property Treatment Plans. The Tribes wish to be included in the review and comment of HPTPs that involve resources of value to the Native American community. The PA says that concurring parties may be distributed to the Tribes as concurring parties. We request that this word be changed to “shall”.

Review Schedule. The Tribes should be included in the 30-day review period.

(C.) Final Report. The Tribes should be offered the draft report and an opportunity to review and comment. A copy of the revised final report shall be provided to the Tribes.

VI. NATIVE AMERICANS AND OTHER PUBLIC CONSULTATION AND PUBLIC NOTICE

The Tribes are not members of the public for purposes of consultation, and should be afforded their full role as specified in the 2001 Final Rule of 36 CFR 800 and the intent within the 1999 revisions to Section 106 of the National Historic Preservation Act.

IX. AMENDMENTS

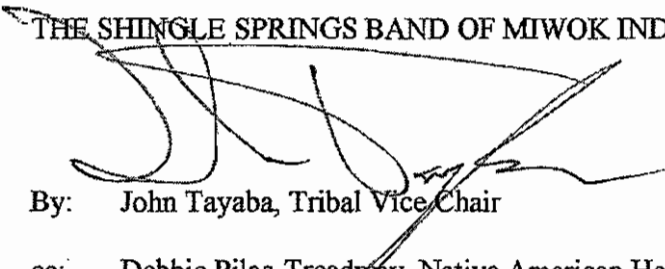
Please include the concurring parties at the table for amendments if the Project has not been completed within five years.

Concurring Parties Signature Page. The Tribes should be individually listed and afforded a place for signature on page 10 of 10.

We hope that receipt of this letter will result in a consultation to resolve many of our questions regarding the treatment of historic and culturally significant finds along the Natomas River.

Sincerely,

~~THE SHINGLE SPRINGS BAND OF MIWOK INDIANS~~



By: John Tayaba, Tribal Vice Chair

cc: Debbie Pilas-Treadway, Native American Heritage Commission



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2822

REPLY TO
ATTENTION OF

Executive Office

JUN 11 2008

Mr. John Tayaba, Tribal Vice Chair
Shingle Springs Rancheria
Post Office Box 1340
Shingle Springs, California 95682

Dear Vice Chair Tayaba:

I am responding to your May 8, 2008, letter requesting that the Shingle Springs Band of Miwok Indians (The Band) be treated by the U.S. Army Corps of Engineers (Corps) as a "consulting party" for the National Historic Preservation Act (NHPA) Programmatic Agreement (PA) for the Natomas Levee Improvement Program, Landside Improvements Project (NLIP).

Your correspondence indicates you have three primary areas of concern. First, you notified the Corps that The Band is designated as the Most Likely Descendant (MLD) by the Native American Heritage Commission, for certain actions involving the NLIP. Second, requested we investigate the actions of EDAW, a consulting firm to the Sacramento Area Flood Control Agency (SAFCA), regarding its treatment of Native American remains during recent field investigations at the site identified as CA-Sac-485/H. Lastly, you requested to be treated as a consulting party on the NLIP PA and provided substantive comments for our consideration.

We appreciate your desire to be fully engaged with all aspects of the PA. Please find enclosed a copy of the executed PA, dated May 1, 2008. As an alternative to amending the completed PA, the Corps would like invite you to consult on the creation of the Historic Properties Treatment Plan (HPTP). It is our belief that the concerns you expressed in your May 8 correspondence can be adequately addressed in the HPTP. Additionally, upon receipt of your letter the Corps, initiated an inquiry into EDAW's actions, and will share the results of this effort with you as soon as we can meet. While the Corps does not have the authority to direct the activities of EDAW or SAFCA, it has been in close contact with both entities and has recommended EDAW, who is acting through SAFCA, review its MLD procedures with the Native American Heritage Commission. That said, we understand controlled investigations/excavations may be continuing, by-way-of field consultations with input from one of the Band's representatives, as a standard operating procedure. Further, EDAW and SAFCA have assured the Corps that every effort is being made to address the Band's concerns and that they will continue to do so.

The Corps acknowledges that the Shingle Springs Band of Miwok Indians is a federally recognized tribe and desire to meet with you and/or your staff as soon as practicable. In preparation for our meeting, please let me know if I have not fully captured your concerns and if there are any other concerns which we may prepare to address.

Mr. Mark Gilfillan is the District's Tribal Liaison and point of contact for all Sacramento District and Tribal Nation consultations and concerns. Mr. Gilfillan will soon be in contact with you or your designated staff to facilitate and arrange our meeting with dates amenable to The Band. If you have any questions regarding our meeting, please contact Mr. Gilfillan at our Colorado West Regulatory Branch, 400 Rood Avenue, Room 142, email address *mark.a.gilfillan@usace.army.mil*, or telephone (970) 243-1199, extension 15. I look forward to our meeting and addressing your concerns.

Sincerely,

Original Signed

Thomas C. Chapman, P.E.
Colonel, U.S. Army
District Engineer

Enclosure

GILFILLAN/rr
CESPK-RD-C

JACOBSON
CESPK-RD-C
MAJ
JEWELL
CESPK-RD-

K
KORMAN
CESPK-DC

COWAN *MEC ul/lor*
CESPK-DE-EA

ALTENDORF
CESPK-DE-PM

PORTER
CESPK-DDE

CHAPMAN
CESPK-DE *TCC*



June 12, 2008

Mr. John Tayaba

Tribal Vice Chair
Shingle Springs Rancheria
P.O. Box 1340
Shingle Springs, CA
95682

Dear Mr. Tayaba:

RE: Your letter of May 08, 2008 and our meeting on June 04, 2008.

On behalf of the Sacramento Area Flood Control Agency (SAFCA) we wish to thank you for the opportunity to meet in person last week in the office of the Native American Heritage Commission. This letter is in response to the concerns raised in your letter of May 8, 2008 and at our meeting on June 4th regarding the treatment of historic properties that could be affected by the Natomas Levee Improvement Program (Program). This urgently needed Program will address identified deficiencies in the levee system protecting the Natomas Basin and will provide the 80,000 residents of the basin with a high level of protection against potentially catastrophic flooding.

SAFCA values the input of the Shingle Springs Band of Miwok Indians (Band) as we make important decisions about the management of historic properties that could be affected by the Program. We recognize that the Band has a significant role in determining the treatment of historic properties as a consulting party under Section 106 of the National Historic Preservation Act, in addition to your role as the most likely descendant (MLD) under California Public Resources Code Section 5097.98. It is our intention to make every effort to incorporate your input and be responsive to your concerns as we move forward with the Program in a timely fashion. This letter provides a brief discussion of three items of critical concern, and then addresses other issues raised in your letter and at our meeting.

Future Steps for 106 Consultations

The Corps, SAFCA, and the California State Historic Preservation Officer (SHPO) have executed a programmatic agreement (PA) that governs treatment of significant cultural resources that may be affected by the Program. The PA requires consultation with the public and Native American individuals and

Office: 916-674-3006
Fax: 916-674-8200

Fax: 916-674-8200
Sacramento, CA 95814-3817

Letter to John Tayaba

June 12, 2008

Page 2 of 4

organizations (Stipulation VI). We expect to collaborate closely with you as the MLD on behalf of the Band in determining how cultural resources are managed for the Program. For each phase of construction (2008, 2009, 2010) we will consult with you regarding the area of potential effects, the inventory of historic properties, and the management of potentially adverse effects under historic property treatment plans.

Excavation of Skeletal Remains at CA-SAC-485/H

SAFCA's consultant, EDAW, is conducting ongoing excavations at CA-SAC-485/H. This site contains burial features and skeletal remains. In accordance with State law, EDAW contacted the Native American Heritage Commission (NAHC) in early March 2008, during the 2008 season of fieldwork, when human remains were encountered during archaeological excavations needed for compliance with Section 106. The NAHC assigned you as MLD on April 15, 2008. To enlist your input and ensure appropriate treatment of human remains, our Consultant has provided the Band (email of May 21, 2008) with proposed field protocols for dealing with cultural resources and a draft burial treatment plan. The Band's review and comment on these documents would be greatly appreciated.

In your May 8th letter you indicate that the burial site may have been inappropriately excavated, and the treatment of the site may not comply with Federal and State law. We are not presently aware of any violation of federal or state law, including your right to determine disposition of human remains under Section 5097.98 of the California Public Resources Code. However, we will conduct an impartial investigation of events at CA-SAC-485/H to determine if the previous activities at the site were in compliance with State and Federal laws as well as standard protocols for site investigation. We will follow up with you as this process moves forward.

Independent Peer Review

As part of our effort to ensure sufficient and appropriate identification and treatment of cultural resources, we are prepared to provide an ethnographer for assistance in the identification process and to retaining consultants acceptable to the Band to conduct an external peer review of EDAW's ongoing efforts and strategy. We have identified Far Western Anthropological Research Group as a firm with regional expertise in archaeology and geomorphology. However, as discussed at the June 4th meeting, we would welcome any alternative suggestions you may have regarding a qualified ethnographer and a firm to conduct the peer review.

Other Concerns

1. Definition of Historic Properties

Letter to John Tayaba

June 12, 2008

Page 3 of 4

The Band notes that it is appropriate to include traditional cultural places (TCPs) in the definition of historic properties. Eligible and National Register of Historic Places (NRHP) listed TCPs are included in the definition of historic properties in the implementing regulations, and are included in our definitions by reference to the regulations in the PA.

2. Ongoing Communication & MLD Liaison

SAFCA would appreciate your clarification regarding how SAFCA and its consultants should communicate with the MLD, the Band and its representatives. A clear definition of contacts and their specific roles will help us meet your expectations and facilitate cooperation as the project moves forward.

3. Modified Construction Methods

As discussed at our June 4th meeting SAFCA's engineering staff are developing a series of modifications to standard construction methods proposed for sensitive historic properties. We will be circulating a memo identifying these methods and hope to discuss them with you when we meet again. As the Band offered during the meeting, SAFCA would appreciate receiving the results of the cultural resources 'damage' study that was prepared for an undisclosed site. This study should assist us as we develop our modified construction methods.

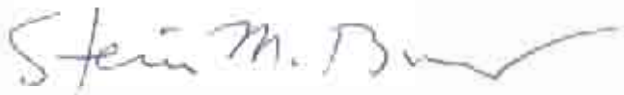
4. Final Report

SAFCA will forward a copy of the draft final report(s) to be prepared per Stipulation V(C) of the PA and will consider the Band's comments in making final revisions to that document.

Summary

SAFCA seeks to accomplish the Program in a manner which is respectful and sensitive to Native American heritage. We appreciate your input and welcome your continued assistance in implementing the PA and managing historic properties associated with this important Program. We also look forward to hosting you on a Program field trip at a mutually convenient time. Please contact Peter Buck at 916-874-4581 if you have any questions or need further information, and please coordinate with him by phone or e-mail regarding when you are available to meet with the PA signatories.

Sincerely yours,



Stein M. Buer
Executive Director

Letter to John Tayaba

June 12, 2008

Page 4 of 4

cc.

Col. Thomas C. Chapman, District Engineer, US Army Corps of Engineers.

Larry Myers, Executive Secretary, Native American Heritage Commission.

Dwight Dutchske, Assoc. Park & Recreation Specialist, State Historic
Preservation Office.

Brigit Barnes, Attorney for the Band, Brigit S. Barnes & Associates Inc.

Michelle LaPena, Attorney, LaPena Law Corporation.



Sacramento
Area Flood
Control
Agency

July 23, 2008

Janis Offermann
Senior Environmental Planner
Department of Water Resources
Division of Environmental Services
Environmental Compliance and Evaluation Branch
1725 23rd Street, Suite 220
Sacramento, CA 95816

Dear Ms. Offermann:

The Sacramento Area Flood Control Agency (SAFCA) is constructing the Natomas Levee Improvement Program (NLIP), Landside Improvements Project. This project will provide necessary improvements to the levee system that surrounds the Natomas Basin, including portions of Sutter County, Sacramento County and the City of Sacramento, California. This project requires permits and authorization from the U.S. Army Corps of Engineers (Corps) to discharge fill to waters of the United States and to modify federal flood control structures. These federal actions require that the Corps comply with Section 106 of the National Historic Preservation Act (NHPA).

Section 106 mandates that federal agencies consider the effects of their undertakings on historic properties and allow the Advisory Council on Historic Preservation (ACHP) a reasonable time to comment on the action. Historic properties are cultural resources such as archaeological sites, historic buildings and objects, and traditional cultural places that are listed on, or are eligible for listing on, the National Register of Historic Places (NRHP).

Compliance with Section 106, as defined in Part 800 of Title 36 of the Code of Federal Regulations (CFR), normally requires five sequential steps:

- determination of the area in which the undertaking may affect historic properties (also referred to as the area of potential effects or "APE")
- identification of cultural resources within the APE
- evaluation of those resources for listing on the NRHP
- identification of adverse effects on NRHP-eligible resources that would result from the undertaking
- and resolution of adverse effects

The Section 106 process also requires the federal agency to consult with the public, Indian Tribes, and the State Historic Preservation Officer (SHPO) during the identification and evaluation of historic properties and to consider ways to minimize adverse effects of the undertaking on those properties. These steps may occur

Office 916-874-7606
FAX 916-874-8289

1007 - 7th Street, 7th Floor
Sacramento, CA 95814-3407

PA-Consultation Letter

July 23, 2008

Page 2 of 3

sequentially as the federal agency consults with these parties in the context of routine federal undertakings. For complex undertakings such as the NLIP, however, the Section 106 regulations provide alternate pathways to Section 106 compliance. Agencies may perform phased identification, evaluation, and resolution of adverse effects as an undertaking proceeds, per 36 CFR Part 800.4(b)(2). This section allows a phased management of resources if a specific process is defined in an agreement document such as a programmatic agreement (PA) or memorandum of agreement (MOA).

The Corps, in consultation with SAFCA and the California SHPO, has developed a PA for the NLIP detailing a phased identification, evaluation, and treatment process for this undertaking (a copy of the executed PA is attached for your information and use). This stepwise process will track the phases of project construction during 2008, 2009 and 2010. This phasing is necessary because the Corps must issue separate authorizations and permits under the Rivers and Harbor Act and the Clean Water Act for each year of work. The geographic scale of the construction involved and uncertainty about the exact nature of work for future phases also dictates that the inventory, evaluation, and treatment of historic properties be developed as phases of the NLIP proceed. These circumstances require that historic properties are identified and managed separately for each year of planned project construction. The PA provides for the following steps to comply with Section 106:

- Inventory of historic properties prior to each year of construction, and submission to the Corps and SHPO of an inventory report and APE map for each year (Stipulation III[C], Stipulation IV). This document will evaluate identified resources and make a finding of effects based on the potential of the undertaking to result in adverse effects.
- Resolution of adverse effects by preparation of a historic properties treatment plan for each adversely affected property (Stipulation V[A]).
- Consultation with the public at large and Native American individuals and organizations with cultural ties to the APE.

In summary, SAFCA and the Corps will identify and manage historic properties in phases related to construction activities over the next few years. We understand that this undertaking has the potential to effect historic properties with noteworthy values to both the archaeological and Native American communities. Such resources include CA-SAC-485/H, the remains of a prehistoric site containing numerous features and Native American burials. The full list of potentially affected resources that have been identified within the project area is provided in the Draft Environmental Impact Report (SAFCA, 2007) prepared for the project. We are currently conducting additional archaeological inventory for the 2008 construction season and additional site evaluation efforts are needed for the planned 2009 construction season.

We are contacting you to fulfill the consultation requirements under the PA and to provide you with the opportunity to consult regarding substantive decisions about how to resolve adverse effects on historic properties. This consultation replaces the general

PA-Consultation Letter

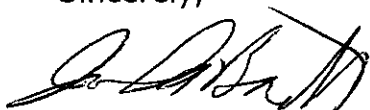
July 23, 2008

Page 3 of 3

requirement for public and Native American consultation under the Section 106 regulations because the PA replaces these regulations, in part, for these undertakings. A key part of the consultation process is to provide notice and opportunity to participate in the decision making process to determine how adverse effects will be resolved. We are preparing a draft historic property treatment plan to manage potential adverse effects on CA-SAC-485/H. If you would like to review this document please contact our office to be placed on the distribution list. We are also consulting with the Most Likely Descendant designated for CA-SAC-485/H, Mr. John Tayaba of the Shingle Springs Band of Miwok Indians, as required under state law.

Please contact Peter Buck of SAFCA, at 916-874-4581 or buckp@saccounty.net should you have questions or need further information regarding the identification or treatment of historic properties for this undertaking.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Bassett", written over a horizontal line.

John A. Bassett
Director of Engineering
Design Construction Maintenance