

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



August 7, 2014

Advice Letter: 4392-E

Brian Cherry
Vice President, Regulation and Rates
Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177

SUBJECT: Grant of Easement to the Sacramento & San Joaquin Drainage District, acting by & through the Central Valley Flood Protection Board, for Levee Construction in Sacramento County - Request for Approval under Section 851

Dear Mr. Cherry:

Advice Letter 4392-E is effective as of July 10, 2014, per Resolution E-4664 approved July 10, 2014.

Sincerely,

A handwritten signature in cursive script that reads 'Edward Randolph'.

Edward Randolph
Director, Energy Division



Brian K. Cherry
Vice President
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

Fax: 415.973.7226

April 18, 2014

Advice 4392-E
(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Grant of Easement to the Sacramento and San Joaquin Drainage District, acting by and through the Central Valley Flood Protection Board, for Levee Construction in Sacramento County – Request for Approval under Section 851

Purpose

Pacific Gas and Electric Company (“PG&E”) submits this advice letter seeking approval, under Public Utilities (P.U.) Code Section 851, to grant the Sacramento and San Joaquin Drainage District, acting by and through the Central Valley Flood Protection Board (“SSJY” or the “Grantee”) a perpetual easement on a portion of PG&E’s property (the “Property”), which formerly supported an electric transmission corridor. SSJDD will use the easement for ingress and egress access for construction to strengthen a flood control levee, and thereafter for regular maintenance and operations. This easement will not interfere with PG&E’s operations or PG&E’s ability to provide utility services to its customers, and will not be adverse to the public interest. To the contrary, the transaction will serve the public interest by devoting currently unused land to support important levee control efforts in a geographic area subject to flooding.

Background

PG&E owns land, buildings, and other facilities in connection with the provision of electric and natural gas services to its customers throughout northern and central California. In the provision of these services, PG&E relies on a portfolio of fee properties, rights-of-way, and facilities to support its electric and gas activities. One such fee property is located in Sacramento County which formerly supported an electric transmission corridor, but is currently vacant. PG&E relocated its transmission lines to better serve its customers, and does not anticipate using the subject property for any purpose.

PG&E's proposed easement to SSJDD will support strengthening a levee system at the Sacramento River, called the Natomas East Main Drain Canal Levee

Improvement Project. The project involves construction of a cement slurry wall approximately 75-feet deep through the center of an existing levee to prevent under seepage, and thereafter will allow for regular maintenance of the flood control area. SSJDD requires use of the property comprising the easement as a construction staging area to support large vehicles and supplies, and then as an area to access and maintain the levee system. The Right of Way Contract and Easement Deed (the "Agreement") define the allowable uses by SSJDD of the easement area and is attached as Attachment 1.

For the above reasons, the Commission should approve this Section 851 request to grant SSJDD an easement relating to this PG&E property, and find that doing so is not adverse to the public interest¹ because it will not impair PG&E's provision of utility service. The easement will facilitate the construction of a slurry wall and strengthen the levee system, which upon completion will improve flood safety in the adjacent area.

In accordance with General Order (G.O.) 173, PG&E provides the following information related to the proposed transaction:

(a) Identity of All Parties to the Proposed Transaction:

Pacific Gas and Electric Company	Department of Water Resources,
Darren P. Roach	State of California
Law Department	Thomas O'Neil, Associate Land Agent
P.O. Box 7442	1416 9th Street, Room 425
San Francisco, CA 94120	Sacramento, CA 95814
Telephone: (415) 973-6345	Telephone: (916) 653-7654
Facsimile: (415) 973-5520	Email: thomas.oneil@water.ca.gov
Email: DPRC@pge.com	

(b) Complete Description of the Facilities and Property Including Present Location, Condition and Use:

The Property is located at 1959 Railroad Drive in the City of Sacramento, California, more specifically identified as Sacramento County Assessor's Parcel Nos. 274-0190-019-0000 and 274-0190-020-0000. The property is owned by PG&E and previously supported an electric transmission corridor; however the site is currently vacant. The Legal Description and Drawing of the easement area is attached hereto as Attachment 2.

¹ "The Commission has long recognized that the public interest is served when utility property is used for other productive purposes without interfering with the utility's operations or the provision of utility services to the public." (D.06-07-023, p. 1.)

(c) Intended Use of the Property and Facilities:

The Grantee will utilize the easement to excavate, construct, reconstruct, enlarge, operate, maintain, repair and replace levee materials and equipment for any present or future flood control project. The proposed easement will encumber approximately 0.74 acres of the approximately 3.39-acre PG&E fee property.

(d) Complete Description of Financial Terms of the Proposed Transaction:

PG&E will receive a one-time nominal fee of \$1,300 for granting the easement (Attachment 3).

(e) Description of How Financial Proceeds of the Transaction Will Be Distributed:

The property at issue in this advice letter is non-depreciable land used for electric transmission service and is currently included in PG&E's rate base. The PG&E electric transmission system is within the control of the California Independent System Operator and is subject to Federal Energy Regulatory Commission ("FERC") jurisdiction for ratemaking. All costs for PG&E's electric transmission system are now part of FERC ratemaking for transmission service in PG&E's transmission owner cases. In consideration for the easement, SSJDD has agreed to pay PG&E a one-time fee of One Thousand Three Hundred Dollars (\$1,300) as the fair market value for the proposed easement. The fair market value for the easement was determined by a current valid appraisal and found acceptable to PG&E. PG&E will account for this one-time fee as Electric Other Operating Revenue.

(f) Statement on the Impact of the Transaction on Ratebase and Any Effect on the Ability of the Utility to Serve Customers and the Public:

No PG&E property is being sold or disposed of, and as such, there are no changes to PG&E's rate base as a result of granting the proposed easement.

(g) The Original Cost, Present Book Value, and Present Fair Market Value for Sales of Real Property and Depreciable Assets, and a Detailed Description of How the Fair Market Value Was Determined (e.g., Appraisal):

Not Applicable.

(h) The Fair Market Rental Value for Leases of Real Property, and a Detailed Description of How the Fair Market Rental Value Was Determined:

Not Applicable.

(i) For Fair Market Rental Value of the Easement or Right-of-Way and a Detailed Description of How the Fair Market Rental Value Was Determined:

The fair market value for the easement was determined by an appraisal, details of which are provided in Attachment 3. PG&E has reviewed the aforementioned appraisal and accepted its findings on estimated values. PG&E believes that the appraised value accurately reflects and falls within the reasonable range for a fair market easement valuation.

(j) A Complete Description of any Recent Past (Within the Prior Two Years) or Anticipated Future Transactions that May Appear To Be Related to the Present Transaction:²

Not Applicable.

(k) Sufficient Information and Documentation (Including Environmental Review Information) to Indicate that All Criteria Set Forth in Rule 3 of General Order (“GO”) 173 are Satisfied:

PG&E has provided information in this Advice Letter to satisfy the eligibility criteria under GO 173 in that:

- The activity proposed in the transaction will not require environmental review by the CPUC as a Lead Agency;
- The transaction will not have an adverse effect on the public interest or on the ability of PG&E to provide safe and reliable service to its customers at reasonable rates;
- The transaction will not materially impact the rate base of PG&E; and
- The transaction does not warrant a more comprehensive review that would be provided through a formal Section 851 application.

² During adoption of the Advice Letter pilot program in ALJ-186 (later followed by ALJ-202, ALJ-244 and ALJ-268), this category of information was included to enable the CPUC to ensure that utilities were not seeking to circumvent the \$5 million Advice Letter threshold by dividing what is a single asset with a value of more than \$5 million into component parts each valued at less than \$5 million, which is clearly not the case here. (See CPUC Resolution ALJ-186, issued August 25, 2005, mimeo, p.5.)

(l) Additional Information to Assist in the Review of the Advice Letter:

PG&E is not aware of any additional relevant information other than what is included with this advice letter.

(m) Environmental Information

Pursuant to GO 173, the Advice Letter program applies to proposed transactions that will not require environmental review by the CPUC as a lead agency under the California Environmental Quality Act ("CEQA") either because: (a) a statutory or categorical exemption applies (the applicant must provide a notice of exemption from the Lead Agency or explain by an exemption applies), or (b) because the transaction is not a project under CEQA (the applicant must explain the reasons why it believes that the transaction is not a project), or (c) because another public agency, acting as the Lead Agency under CEQA, has completed environmental review of the project, and the Commission is required to perform environmental review of the project only as a Responsible Agency under CEQA.

For this advice letter, the Grantee has completed environmental review as a Lead Agency, and the Commission can serve as a Responsible Agency.

c. CPUC as a Responsible Agency under CEQA

If another public agency, acting as the Lead Agency under CEQA, has completed an environmental review of the project and has approved the final CEQA documents, and the Commission is a Responsible Agency under CEQA, the applicant shall provide the following.

- a. The name, address, and phone number of the Lead Agency, the type of CEQA document that was prepared (Environmental Impact Report, Negative Declaration, Mitigated Negative Declaration), the date on which the Lead Agency approved the CEQA document, the date on which a Notice of Determination was filed.

Lead Agency	Erin Brehmer Central Valley Flood Protection Board 3464 El Camino Avenue Sacramento, CA 95821 Phone: (916) 574-2313
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Type of CEQA Document Prepared	Mitigated Negative Declaration and Environmental Assessment / Initial Study (Attachment 4)
Date Mitigated Negative Declaration Adopted	12/20/2013 (Attachment 5)
Date Notice of Determination Filed	12/23/2013 (Attachment 6)

- b. A copy of all CEQA documents prepared by or for the Lead Agency regarding the project and the Lead Agency's resolution or other document approving the CEQA documents.

See Attachment 4 and 5.

- c. A list of section and page numbers for the environmental impacts, mitigation measures, and findings in the prior CEQA documents that relate to the approval sought from the Commission.

See Attachment 4.

- d. An explanation of any aspect of the project or its environmental setting which has changed since the issuance of the prior CEQA document.

Not Applicable

- e. A statement of whether the project will require approval by additional public agencies other than the Commission and the Lead Agency, and, if so, the name and address of each agency and the type of approval required.

Not Applicable

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than May 8, 2014, which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter. (General Order 96-B, Section 7.4.) The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

Pursuant to the review process outlined in General Order 173, PG&E requests that this Tier 3 advice filing become effective upon disposition by a Commission resolution

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and/or via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service

list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>.

Brian Cherry /IG

Vice President – Regulatory Relations

Attachments

***** SERVICE LIST Advice 4392-E *****
APPENDIX A

***** 3rd Party *****

Timothy J. Sullivan
Administrative Law Judge Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-2726
tjs@cpuc.ca.gov

Department of Water Resources,
State of California
Thomas O'Neil, Associate Land Agent
1416 9th Street, Room 425
Sacramento, CA 95814
Telephone: (916) 653-7654
Email: thomas.oneil@water.ca.gov

Myra J. Prestidge
Administrative Law Judge Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-2629
tom@cpuc.ca.gov

Jonathan Reiger
Legal Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 355-5596
jzr@cpuc.ca.gov

Mary Jo Borak
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-1333
bor@cpuc.ca.gov

Edward Randolph
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-2083
efr@cpuc.ca.gov

Brewster Fong
Division of Ratepayer Advocates
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703- 2187
bfs@cpuc.ca.gov

Andrew Barnsdale
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102
(415) 703-3221
bca@cpuc.ca.gov

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Igor Grinberg

Phone #: (415) 973-8580

E-mail: ixg8@pge.com and PGETariffs@pge.com

EXPLANATION OF UTILITY TYPE

(Date Filed/ Received Stamp by CPUC)

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

Advice Letter (AL) #: **4392-E**

Tier: **3**

Subject of AL: **Grant of Easement to the Sacramento and San Joaquin Drainage District, acting by and through the Central Valley Flood Protection Board, for Levee Construction in Sacramento County – Request for Approval under Section 851**

Keywords (choose from CPUC listing): Agreements

AL filing type: Monthly Quarterly Annual One-Time Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: N/A

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: N/A

Confidential information will be made available to those who have executed a nondisclosure agreement: Yes No

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information:

Resolution Required? Yes No

Requested effective date: **Upon Approval**

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission

Energy Division

EDTariffUnit

505 Van Ness Ave., 4th Flr.

San Francisco, CA 94102

E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company

Attn: Brian Cherry

Vice President, Regulatory Relations

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

Advice 4392-E

Attachment 1:
Right of Way Contract and Easement Deed

Grantor: Pacific Gas and Electric Company,
a California Corporation
343 Sacramento Street
Auburn, California 95603

Project: American River Common Features,
Natomas East Main Drainage Canal North,
Water Resources Development Act 1999
Parcel No.: 13781

RIGHT OF WAY CONTRACT

Document No. 13781 in the form of an easement deed covering that property particularly described in the above instrument has been executed and delivered to Thomas M. O'Neil, Associate Land Agent for the Sacramento and San Joaquin Drainage District, acting by and through the Central Valley Flood Protection Board of the State of California, hereinafter referred to as STATE.

In consideration of which, and the other considerations hereinafter set forth, it is mutually agreed as follows:

1. a. The parties have herein set forth the whole of their agreement. The performance of this agreement constitutes the entire consideration for said document and shall relieve STATE of all further obligation or claims on this account, or on account of the location, grade or construction of the proposed public improvement.
- b. STATE requires an easement deed on Parcel No 13781 for the construction of American River Common Features, Natomas East Main Drainage Canal North, Water Resources Development Act 1999 Project a public use for which STATE may exercise the power of eminent domain. Grantor is compelled to sell, and STATE is compelled to acquire an easement deed on said Parcel.

Both Grantor and STATE recognize the expense, time, effort, and risk to both Grantor and STATE in determining the compensation for said Parcel by eminent domain litigation; and the compensation set forth herein for an easement deed on said Parcel is in compromise and settlement in lieu of such litigation.

2. STATE shall:
 - a. Pay the sum of \$1,300 for an easement deed on the property described in said document to the following title company: Fidelity National Title Company for the account of Grantor, Escrow No. 12-5012587-CD conditioned upon the property vesting in the State of California free and clear of all liens, leases, encumbrances, easements, (recorded and/or unrecorded), assessments, and taxes, except:
 - (1) Taxes for the tax year in which this escrow closes shall be cleared and paid in the manner required by Section 5086 of the Revenue and Taxation Code, if unpaid at the close of escrow.
 - (2) Covenants, conditions, restrictions and reservations of record, or contained in the above-referenced document.
 - (3) Easements or rights of way over said land for public or quasi-public utility or public purposes, if any.
 - (4) That certain easement granted by Pacific Gas and Electric Company to the City of Sacramento and recorded on April 7, 1982 in Book 82-04-7 at Page 653 of Official Records of the County of Sacramento.
 - b. Pay all expenses incidental to and necessarily incurred for the conveyance of the real property to the STATE, including but not limited to recording fees, title insurance charges, reconveyance fees, trustee's fees, forwarding fees and prepayment penalties, limited to twenty percent of the compensation due under this transaction.

- c. Have the authority to deduct and pay from the amount shown in paragraph 2.a. above, any or all monies payable under this agreement to discharge any obligations which are liens upon the property, including but not limited to those arising from judgments, assessments, delinquent taxes for other than the tax year referred to in paragraph 2.a.(1), or debts secured by deeds of trust or mortgages, except those items listed in paragraph 2.a. hereof, and/or to defray any other incidental costs other than those specified in paragraph 2.b. hereof to be borne by the STATE.
3. Pursuant to Section 1263.025 of the Civil Code of Procedure, you are entitled to obtain an independent appraisal and to be reimbursed for the actual reasonable cost of the appraisal up to \$5,000 if certain conditions are met. For further information on the requirements for reimbursement, contact Thomas M. O'Neil, Associate Land Agent for the State of California.
4. The easement deed on said property shall be granted immediately upon close of escrow. The issuance of any escrow instructions shall be the sole responsibility of STATE.
5. Grantor warrants that there are no oral or written leases on all or any portion of the property exceeding a period of one month, and Grantor further agrees to hold STATE harmless and reimburse STATE for any and all of its losses and expenses occasioned by reason of any lease of said property held by any tenant of Grantor for a period exceeding one month, except as may be otherwise provided herein.
6. The undersigned Grantor hereby agrees and consents to the dismissal of any eminent domain action in the Superior Court wherein the herein described land is included and also waives any and all claims to any money that may now be on deposit in said action.
7. To the best of Grantor's knowledge and after reasonable inquiry, Grantor represents and warrants the following:
 - a. During the Grantor's ownership of the property, there have been no disposals, releases, or threatened releases of hazardous substances on, from, or under the property. Grantor further represents and warrants that Grantor has no knowledge of disposal, release, or threatened release of hazardous substances on, from, or under the property, which may have occurred prior to Grantor taking title to the property.
 - b. There is no pending claim, lawsuit, agency proceeding, or any administrative challenge concerning the presence or use of hazardous substances on the property.
 - c. Grantor has not used the property for any industrial operations that use hazardous substances. Grantor is not aware of any such prior use of the property.
 - d. Grantor has not installed any underground storage tanks, aboveground storage tanks, barrels, sumps, impoundments or other containers used to contain hazardous substances on any part of the property. Grantor is not aware of any such prior installations.
 - e. For the purposes of this paragraph, the term "hazardous substances" shall mean any substance which at any time shall be listed as "hazardous" or "toxic" in the regulations implementing the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 USC §§6901, et seq.), or other federal or State law, or any other substance, chemical, material or waste product whose presence, nature or quality is potentially injurious to the public health, safety, welfare, the environment or the property. The term "reasonable inquiry" shall mean a thorough examination of the property and all records of the property, and any examination that Grantor was legally obligated to conduct as a result of any judicial or administrative order, or federal or State law.
 - f. The acquisition price of the easement deed being acquired reflects the fair market value of such property without the presence of hazardous substances. If the property being acquired is found to be contaminated by a hazardous substance which may require remediation under federal or State law, STATE may elect to recover its clean-up costs from those who caused or contributed to the contamination.

8. This contract may be modified, changed, or rescinded only by an instrument in writing executed by the parties hereto. The foregoing representations and warranties shall survive the close of escrow and shall remain in full force and effect for the duration of this easement and shall accrue for the benefit of STATE and its successors and assigns.

NO OBLIGATION OTHER THAN THOSE SET FORTH HEREIN SHALL BE RECOGNIZED.

IN WITNESS WHEREOF, the parties have executed this contract.

GRANTOR(S): PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION

Name: _____

Date: _____

SACRAMENTO AND SAN JOAQUIN DRAINAGE DISTRICT
acting by and through the Central Valley Flood Protection Board
of the State of California

APPROVAL RECOMMENDED:

APPROVED:

Thomas M. O'Neil, Associate Land Agent Date

Jeanne M. Kuttel, Chief
Division of Engineering

Wesley M. Dote, Senior Land Agent Date

Date: _____

Paul Farris, Chief
Real Estate Branch Date

RECORDING REQUESTED BY

WHEN RECORDED MAIL TO:

DEPARTMENT OF WATER RESOURCES

Division of Engineering
Real Estate Branch
1416 9th Street, Room 425
Sacramento, CA 95814

SPACE ABOVE THE LINE FOR RECORDER'S USE

APN: 274-0190-020

EASEMENT DEED
(CORPORATION)

Project AMERICAN RIVER COMMON FEATURES
PG&E EASEMENT AT THE NEMDC

Parcel No. PARCEL 13781
Comp Bk 175-C, Dwg No. 34-0020-A04

PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, organized and existing under and by virtue of the laws of the State of California, does hereby grant, convey, and dedicate to the **SACRAMENTO AND SAN JOAQUIN DRAINAGE DISTRICT**, acting by and through **THE CENTRAL VALLEY FLOOD PROTECTION BOARD** of the State of California, a public agency, exclusive perpetual rights of way and easements in the hereinafter described real property situated in the City and County of Sacramento, State of California, for any present or future flood control project to:

1. Construct, reconstruct, enlarge, fence, plant with trees, shrubs, and other vegetation (which at maturity will not exceed fifteen (15) feet in height), preserve and retain all vegetative growth desirable for project purposes, repair and use flood control works, which shall include, but not be limited to, access, haul, and patrol roads, levees, ditches, embankments, channels, berms, fences, and appurtenant structures, and operate and maintain said flood control works in conformity with the Code of Federal Regulations, Corps of Engineers' Standard Operation and Maintenance Manual, and State of California Standards.
2. Clear and remove from said flood control works any or all natural or artificial obstructions, improvements, trees, and vegetation necessary for construction, operation, maintenance, repair, reconstruction, and emergence flood fight.
3. Flow waters and materials and by said flow erode.
4. Place or deposit earth, debris, sediment or other material.
5. Excavate and remove earth, debris, sediment, or other material, including that placed or deposited as above.
6. Locate or relocate roads and public utility facilities providing service to Grantee.
7. Restrict the rights of the Grantor, his successors and assigns, without limitations, to explore, extract, remove, drill, mine, or operate through the surface or upper 100 feet of the subsurface in exercise of the grantor's interest in any minerals, including oil and gas.
8. Restrict any use by others which may interfere with any of the uses listed herein or any use necessary or incidental thereto.

9. Limitations on Use.

(a) The Easement Area (described in Exhibit A), and any facilities permitted to be constructed thereon, are to be used by Grantee only for those uses permitted in Sections 1 through 8 above, and for no other purpose.

(b) Except for appurtenant structures for flood control purposes permitted in Section 1, Grantee shall not erect or construct any buildings or other structures within the Easement Area.

(c) Grantee shall not erect drill or operate any well, within ten (10) feet of any of PG&E's electric or gas facilities without PG&E's express written permission, which shall not be unreasonably withheld.

10. Grantee's Covenants. Grantee hereby covenants and agrees not to interfere in any way or permit any interference with the use of the Property by PG&E. Interference shall include, but not be limited to, any activity by Grantee that places any of PG&E's gas or electric facilities in violation of any of the provisions of General Order Nos. 95 (Overhead Electric), 112 (Gas), and 128 (Underground Electric) of the CPUC or to any other laws or regulations under which the operations of utility facilities are controlled or regulated. Grantee shall not erect, handle, or operate any tools, machinery, apparatus, equipment, or materials closer to any of PG&E's high-voltage electric conductors than the minimum clearances set forth in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety; which minimum clearances are incorporated herein by reference; but in no event closer than ten (10) feet to any energized electric conductors or appliances. Grantee shall provide notice to Underground Service Alert at 811 at least two (2) business days prior to commencing any drilling, boring or excavating permitted hereunder to assist Grantee with locating any and all underground facilities, including, but not limited to, gas pipelines, valves, regulators or electric conduits.

11. Indemnification. Grantee shall indemnify and hold harmless PG&E, its officers, agents and employees from and against all loss, damage, expense and liability resulting from injury or death to any person, including employees of PG&E, Grantee or any third party, or loss, destruction or damage to property, including but not limited to property of PG&E, Grantee or any third party, arising from or in any way connected to Grantee's use of the Property or the exercise the rights hereunder, however caused, except to the extent caused by the negligence of PG&E, its officers, agents and employees.

12. Reserved Rights. PG&E reserves the right to use the Easement Area for any and all purposes which will not unreasonably interfere with Grantee's facilities. PG&E's use of the Easement Area shall be subject to all applicable laws and regulations, including those applying to use of lands with flood control works. To the extent any regulatory approvals for PG&E's use of the Easement Area are required from Grantee, Grantee agrees that such approvals shall not be unreasonably withheld, conditioned or delayed. PG&E reserves the right to install, maintain and use gates in any fences which Grantee may construct within the Easement Area.

13. Governmental Approvals. This Agreement shall not become effective, notwithstanding that it may have been executed and delivered by the parties, and Grantee shall not commence construction or other activities hereunder, unless and until the CPUC approves this Agreement and the easements granted and other transactions contemplated hereby (including the adequacy of the compensation to be paid by Grantee), by an order which is final, unconditional and unappealable (including exhaustion of all administrative appeals or remedies before the CPUC). Grantee further acknowledges and agrees that PG&E makes no representation or warranty regarding the prospects for CPUC approval, and Grantee hereby waives all Claims against PG&E which may arise out of the need for such CPUC approval or the failure of the CPUC to grant such approval. This Agreement is made subject to all the provisions of such approval, as more particularly set forth in CPUC Decision D _____ (Application No. _____), in like manner as though said provisions were set forth in full herein.

14. Notice. Any notices or communications hereunder shall be in writing and shall be personally delivered or sent by first class mail, certified or registered, postage prepaid, or sent by national overnight courier, with charges prepaid for next business day delivery, addressed to the addressee party at its address or addresses listed below, or to such other address or addresses for a party as such party may from time to

time designate by notice given to the other party. Notices shall be deemed received upon actual receipt by the party being sent the notice, or on the following business day if sent by overnight courier, or on the expiration of three (3) business days after the date of mailing.

If to PG&E:

Pacific Gas and Electric Company
Attention: Land Agent
Piper J. Wagner
343 Sacramento Street
Auburn, CA 95603

With a copy to:

If by registered or certified mail, return receipt requested:

Pacific Gas and Electric Company
Law Department
P.O. Box 7442
San Francisco, CA 94120
Attention: Director & Counsel, Contracts Section (Real Estate)

If by personal delivery or overnight courier:

Pacific Gas and Electric Company
Law Department
77 Beale Street, Mail Code B3OA
San Francisco, California 94120
Attention: Director & Counsel, Contracts Section (Real Estate)

If to Grantee:

Thomas M. O'Neil
State of California
Department of Water Resources
1416 9th Street, Room 425
Sacramento, CA 95814
Telephone: (916) 653-7654
Facsimile: (916) 654-0738

15. **Governing Law.** This Agreement shall in all respects be interpreted, enforced, and governed by and under the laws of the State of California.

16. **Attorneys' Fees.** Should either party bring an action against the other party, by reason of or alleging the failure of the other party with respect to any or all of its obligations hereunder, whether for declaratory or other relief, then the party which prevails in such action shall be entitled to its reasonable attorneys' fees (of both in-house and outside counsel) and expenses related to such action, in addition to all other recovery or relief. A party shall be deemed to have prevailed in any such action (without limiting the generality of the foregoing) if such action is dismissed upon the payment by the other party of the sums allegedly due or the performance of obligations allegedly not complied with, or if such party obtains substantially the relief sought by it in the action, irrespective of whether such action is prosecuted to judgment.

17. **No Dedication.** Nothing contained in this Agreement shall be deemed to be a gift or dedication of land or rights to the general public. The right of the public or any person, including Grantee, to make any use whatsoever of the Easement Area(s) or any portion thereof, other than as expressly permitted herein or as expressly allowed by a recorded map, agreement, deed or dedication, is by permission and is subject to the control of PG&E in its sole discretion.

18. **No Third Party Beneficiary.** This Agreement is solely for the benefit of the parties hereto and their

respective successors and permitted assigns, and, except as expressly provided herein, does not confer any rights or remedies on any other person or entity.

19. Time. Except as otherwise expressly provided herein, the parties agree that as to any obligation or action to be performed hereunder, time is of the essence.

20. Counterparts. This Agreement may be executed in identical counterpart copies, each of which shall be an original, but all of which taken together shall constitute one and the same agreement.

EXHIBIT "A"

All that certain real property situate in Sections 1, Rancho Del Paso, also being in the projected Section 6, Township 9 North, Range 5 East, Mount Diablo Meridian, City of Sacramento, County of Sacramento, State of California, being a portion of the strip of land, 40.00 feet wide, retained by Pacific Gas and Electric in that certain deed recorded March 18, 1926, in Book 64 at Page 237, Official Records of said County, being described as follows:

PARCEL 13781

COMMENCING at a found 1-inch iron pipe at the easterly corner of Parcel B of the levee easement conveyed to the American River Flood Control District, recorded February 20, 1934 in Book 464 of Official Records of said county, at Page 294, said iron pipe being shown on the Lauszus Industrial Park Subdivision Map, filed in Book 61 of Record Maps at Page 33, Official Records of said county, said point also being North 68° 16' 58" West 380.54 feet from a found United States Army Corps of Engineers 3-1/2 inch brass cap, stamped "AM-53", as shown on said subdivision map; thence northerly along the landside right of way line of said Parcel B North 31° 09' 50" West 131.19 feet to the southeasterly corner of Parcel 3 of the levee easement conveyed to the American River Flood Control District, recorded September 8, 1932 in Book 408 of Official Records of said county, at Page 108;

thence along the landside right of way line of said Parcel 3 following three (3) courses:

- 1) North 31° 09' 50" West 376.15 feet;
- 2) along a curve to the right, having a radius of 357.58 feet, through a central angle of 86° 27' 57", an arc length of 539.63 feet and;
- 3) North 55° 18' 10" East 444.22 feet to a point on the general southerly line of said lands of Pacific Gas and Electric, said point also being the Point of Beginning;

THENCE FROM SAID POINT OF BEGINNING, along said southerly line the following two (2) courses:

- 1) South 68° 35' 40" West 564.68 feet; and
- 2) South 85° 08' 25" West 178.92 feet to the northwest corner of said Parcel 3;

thence along the northeasterly projection of the general westerly line of said Parcel 3, being a non-tangent curve to the right having a radius of 632.58 feet, the center of which bears radially South 59° 01' 05" East, through a central angle of 4° 36' 29", an arc length of 50.88 feet to the northerly line of said lands of Pacific Gas and Electric;

thence along said northerly line the following two (2) courses:

- 1) North 85° 08' 25" East 141.69 feet; and
- 2) North 68° 35' 40" East 726.89 feet to a corner on the southerly line of Parcel 2 of said levee easement conveyed to the American River Flood Control District, recorded September 8, 1932 in Book 408 of Official Records of said county, at Page 108;

thence South 55° 12' 12" West 172.71 feet to the point of beginning.

Containing 0.74 acres, more or less.

The basis of bearings for this description is based on the California Coordinate System, CCS 83 (1991.35), Zone II. All distances and coordinates cited herein are grid values, which are basis for the areas shown hereon. To obtain ground values multiply the distance cited herein by 1.00004783.

End of Description



State of California
California Natural Resources Agency
Department of Water Resources
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

Grantor, for himself, his successors, and assigns, hereby waives any claims for any and all damages which will accrue to the remaining property of grantor by reason of its severance from that portion granted herein and the construction of the improvement in the manner presently proposed.

IN WITNESS WHEREOF, said corporation has caused its corporate name to be hereunto subscribed and its corporate seal to be affixed hereto, this _____ day of _____, 20 _____.

Marvin Penner, Manager
Land Asset Management

[CORPORATE SEAL]

STATE OF CALIFORNIA} SS

County of _____

On _____, 20____, before me, _____

personally appeared _____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

{SEAL}

NOTARY PUBLIC IN AND FOR THE STATE OF CALIFORNIA

(CERTIFICATE OF ACCEPTANCE, GOVERNMENT CODE, SECTION 27281)

This is to Certify, that the real property or interests therein described in the within deed to the SACRAMENTO AND SAN JOAQUIN DRAINAGE DISTRICT, acting by and through the Central Valley Flood Protection Board of the State of California, a public agency, is hereby accepted on behalf of the grantee.

Dated _____, 20 _____

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

By _____

Jeanne M. Kuttel, Chief, Division of Engineering

(Name/Title)

DEPARTMENT OF WATER RESOURCES

Advice 4392-E

Attachment 2:
Legal Description and Drawing

EXHIBIT "A"

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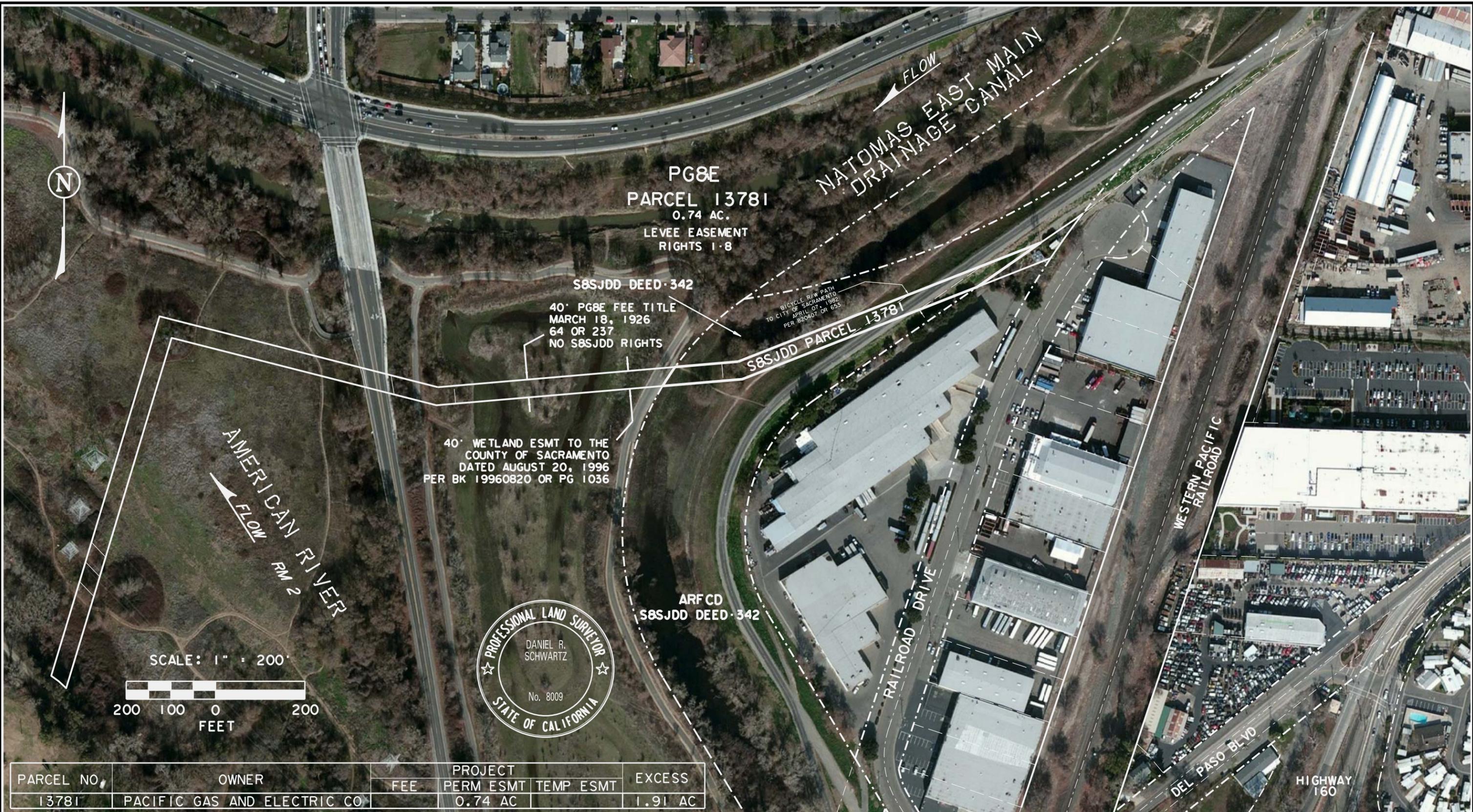
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Containing 0.74 acres, more or less.

The basis of bearings for this description is based on the California Coordinate System, CCS 83 (1991.35), Zone II. All distances and coordinates cited herein are grid values, which are basis for the areas shown hereon. To obtain ground values multiply the distance cited herein by 1.00004783.

End of Description





PARCEL NO.	OWNER	PROJECT			EXCESS
		FEE	PERM ESMT	TEMP ESMT	
13781	PACIFIC GAS AND ELECTRIC CO.		0.74 AC		1.91 AC

PACIFIC GAS AND ELECTRIC PARCEL
 PER BOOK 64 OF OFFICIAL RECORDS, PAGE 237,
 SACRAMENTO COUNTY RECORDS

APN : 274-0190-019 AND 020

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
 DIVISION OF ENGINEERING – GEODETIC BRANCH

Advice 4392-E

Attachment 3:
Appraisal of Easement

APPRAISAL SUMMARY STATEMENT

Parcel No.: CVFPB 13781
Report No.: Original
Date of Value: February 14, 2013
County: Sacramento
Project: American River Common Features, Natomas East Main Drainage Canal (NEMDC) North, Water Resources Development Act (WRDA) 1999 Project

Owner: Pacific Gas and Electric Company, a California Corporation
APNs: 274-0190-019-0000 and 274-0190-020-0000
Property Location: 1959 Railroad Drive, Sacramento, California 95814
Zoning: ARP-F (American River Parkway – Flood Zone)
Present Use: Levee/Utility Corridor
Highest and Best Use: Development Impaired Land -- Floodway
Proposed Public Use: as current Levee/Utility Corridor

Area and Property Right to be Acquired: 0.74 ± ac.
Area of Remainder: 2.65 ± ac.

Market Value of Required Property:Permanent Exclusive Easement:

Land: 0.74 acres x \$1,900/acre x 90% (easement) =	\$1,265
Total	\$1,265
Rounded To:	\$1,300

The market value of the property rights being purchased is based upon a market value appraisal prepared in accordance with accepted appraisal procedures. Valuation of your property is based upon an analysis of recent sales of similar property in this locality. Valuation of the land recognizes all factors influencing its current value.

Damages to the remaining property due to the State's acquisition and construction are: \$ -0-

Total Payment is: \$1,300

This summary of the amount offered as compensation is presented in compliance with federal and State law and has been derived from a formal appraisal. The value of any property rights retained by the owner, which are not now reflected in the appraisal must be deducted from the market value shown above.

Attachment 4:

Mitigated Negative Declaration and
Environmental Assessment/Initial Study

**MITIGATED NEGATIVE DECLARATION
AMERICAN RIVER WATERSHED COMMON FEATURES PROJECT
CALIFORNIA
LOWER AMERICAN RIVER FEATURES AS MODIFIED BY WATER RESOURCES
DEVELOPMENT ACT OF 1999
NATOMAS EAST MAIN DRAIN CANAL
(AMERICAN RIVER NORTH LEVEE, RIVER MILE 2.0 TO 3.6)
SACRAMENTO COUNTY, CALIFORNIA**

Project Background

The American River Watershed Common Features Project was initially described in the Supplemental Information Report and was first authorized in Water Resources Development Act (WRDA) of 1996 and modified in WRDA 1999. The State authorized the American River Watershed Common Features Project in 1997 under California Water Code Sections 12670.10, 12670.14 and 12670.16

The American River Watershed Common Features as Modified by Water Development Act of 1999, Natomas East Main Drainage Canal (Project) is a cooperative effort among the U.S. Army Corps of Engineers (USACE), the Central Valley Flood Protection Board and the Sacramento Area Flood Control Agency. The Project is one of five modifications approved by WRDA 1999.

Project Location

The proposed work is located upstream of the confluence of the Sacramento and American Rivers along the right (north) levee of the lower American River between River Mile (RM) 2.0 and 3.6. The project reach is bisected by Highway 160, the Union Pacific Railroad (UPRR) tracks and Del Paso Boulevard. The downstream end of the reach terminates at the Natomas East Main Drain Canal (NEMDC.) Highway 160 divides the project reach into upstream and downstream segments. The upstream segment (from upstream terminus to approximately Highway 160) is 3,250 linear ft [lf]. The downstream segment of the project is divided into two sections based on the requirements of each section of levee: the section from the UPRR tracks to Del Paso Boulevard is 1,467 lf.

Project Description

The upstream segment (from upstream terminus to approximately Highway 160) would require installation of a 3,250 lf seepage cutoff wall.

The downstream segment of the project would require landside levee slope repairs and slope flattening (approximately 120 lf); the section from Del Paso Boulevard to terminus would require installation of a 1,467 lf seepage cutoff wall.

Potential Impacts

Recreation

The project will temporarily close approximately 2,400 feet of the Sacramento Northern Bike Trail from Del Paso Boulevard to the end of Railroad Drive for three months in 2014.

In order to mitigate for effects to the recreation trail use:

- The public will be informed of the project;
- Warning signs and signs regarding restricted access, trail closures and detours will be posted;
- Detour routes would be clearly marked, and fences erected in order to prevent access to the project area.

In areas where recreational traffic intersects with construction vehicles:

- Traffic control will be utilized in order to maintain public safety;
- Public outreach conducted through mailings, posting signs, coordination with interested groups, and meetings, if necessary, in order to provide information regarding changes to recreational access in and around the Parkway.

Water-filled barriers would be installed as a safety measure to keep equipment, soil or other materials from encroaching on the trail in the upstream and middle sections of the project where the Jedediah Smith Recreational Trail is in close proximity to the waterside levee toe.

Any effects to recreation would be temporary and considered less than significant after mitigation.

Vegetation and Wildlife

It is anticipated that two trees will be removed to accommodate construction activities and meet levee safety requirements.

Removal of these trees may require a permit from the City of Sacramento. The trees are 15" to 29" dbh. This impact is being coordinated with the US Fish and Wildlife Service (USFWS) through the Fish and Wildlife Coordination Act. The USFWS's draft recommendations (Appendix D) to mitigate this impact are:

- Replacement of the oak trees removed along the upstream and downstream segments at an inch for inch ratio; and
- All tree removal activities should be performed by, or under the direct supervision of, a certified arborist.

Impacts related to removal of two oak trees would be less than significant after mitigation.

Special Status Species

Valley Elderberry Longhorn Beetle (VELB)

Construction of the NEMDC levee improvements would result in direct and indirect effects to several elderberry shrubs. Direct effects would include trimming and/or removal of shrubs. Indirect effects would include physical vibration and increase in dust during operation of equipment and trucks during construction activities.

Consultation under Section 7 of the Endangered Species Act has been initiated with the USFWS to assess potential impacts and required compensation. The USACE requested concurrence from USFWS with the determination that potential project impacts may affect, but are not likely to adversely affect, the valley elderberry longhorn beetle. The USACE also proposes compensation for the loss of an estimated 12 elderberry shrubs. This would require planting 72 elderberry seedlings

and 144 associated native plantings on a 0.9 acre site (s). To minimize potential take of the valley elderberry longhorn beetle, the following measures taken from the USFWS "Conservation Guidelines for the Valley Elderberry Longhorn Beetle," July 1999 would be incorporated into the project:

- A minimum setback of 100 feet from the dripline of all elderberry shrubs will be established, if possible. If the 100 foot minimum buffer zone is not possible, the next maximum distance allowable will be established. Due to the limited options for locating the staging area, as well as the limited space within the staging area, it would be difficult to observe the required 100-foot radius buffer zone for protection of the elderberry shrubs. The USACE is proposing a 20-foot radius buffer zone, using concrete or water-filled barriers for protection, and limiting construction until after the no-disturbance period (after June 15). These areas would be fenced, flagged and maintained during construction;
- Environmental awareness training would be conducted for all workers before they begin work. The training would include status, the need to avoid adversely affecting the elderberry shrub, avoidance areas and measures taken by the workers during construction, and contact information; and
- Signs would be placed every 50 feet along the edge of the elderberry buffer zones. The signs would include: "This area is the habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be readable from a distance of 20 feet and would be maintained during construction.

Sensitive raptors

Swainson's hawk and White-tailed kite may be present in the area and may nest near the construction site. Construction would be timed to avoid activities near active bird nests or young of birds that breed in the area. The nesting seasons associated with the potential presence of raptors and protected avian species could further reduce the available construction season into September. For this reason, it would be unrealistic to propose no construction would take place during the breeding/nesting seasons of these avian species during the available construction season (June 15 – October 1).

The USACE would however, take steps to avoid and minimize impacts to raptors and other protected avian species. If it is not feasible for construction to occur outside of nesting periods (April-September 15th), a qualified biologist would survey the project area, and all areas within one-half mile of the project, prior to initiation of construction. If the survey determines that a nesting pair is present, the USACE would coordinate with CDFG and/or USFWS, and the proper avoidance and minimization measures would be implemented. To avoid potential effects to nesting Swainson's hawks, CDFG typically requires the avoidance of nesting sites during construction activities. These measures include avoiding construction during the breeding season and monitoring of the nest site by a qualified biologist. The project is currently scheduled to begin in late summer 2013. It is anticipated that the timing of the project would begin after the young Swainson's hawks and white-tailed kites have fledged which is normally by July-August.

The proposed mitigation measures would reduce the effects on the white-tailed kite and the Swainson's hawk to less than significant.

Air Quality

Emissions would result from the use of construction equipment, truck haul trips to and from the borrow sites, and worker vehicle trips to and from the construction sites. Prior to construction, the contractor would submit a construction equipment list to be used in the project for approval by USACE and SMAQMD. SMAQMD would confirm the fleet emissions and endorse the list only if the total fleet emissions would meet a 20% reduction in NO_x and a 45% reduction in PM₁₀ in comparison to the state fleet emissions average. The contractor will be required to follow the requirements of SMAQMD's standard mitigation program (Appendix B). Any remaining emissions over the NO_x threshold should be reduced via a mitigation fee payment. The projected (2012) cost of reducing one ton of NO_x is \$16,640 (\$8.32/lb). The contractor will be responsible for payment of any required mitigation and administrative fees.

The standard mitigation measures for the SMAQMD Recommended Mitigation for Reducing Emissions from Heavy-Duty Construction Vehicles are:

- Use diesel-fueled equipment manufactured in 2003 or later, or retrofit equipment manufactured prior to 2003 with diesel oxidation catalysts; use low-emission diesel products, alternative fuels, after-treatment products, and/or other options as they become available;
- Maintain properly functioning emission control devices on all vehicles and equipment;
- The contractor would provide a plan, for approval by the USACE and SMAQMD, demonstrating that the heavy-duty (> 50 horsepower) self-propelled off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction;
- The contractor shall submit to the USACE and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman;
- The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and [DERA, City of x, SMAQMD, etc.] shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine

compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations; and

- If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with SMAQMD prior to construction will be necessary to make this determination.

Implementation of the BMPs listed below would reduce air quality degradation caused by dust and other contaminants:

- During construction, implement all appropriate dust control measures, such as tarps or covers on dirt piles, in a timely and effective manner;
- Periodically water all construction areas having vehicle traffic, including unpaved areas, to reduce generation of dust. Application of water would not be excessive or result in runoff into storm drains;
- Suspend all grading, earth moving, or excavation activities when winds exceed 20 miles per hour;
- Water or cover all material transported offsite to prevent generation of dust;
- Sweep paved streets adjacent to construction sites, as necessary, at the end of each day to remove excessive accumulations of soil or dust;
- Cover all trucks hauling dirt, sand, soil, or other loose material, or maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision would be enforced by local law enforcement agencies; and
- Re-vegetate or pave areas cleared by construction in a timely manner to control fugitive dust.

Impacts to air quality would be temporary and short-term, and would be less than significant after mitigation.

Climate Change

There would be no increase of long-term emissions (permanent sources) of greenhouse gases from this project. Long-term emissions would be the same with or without the project; maintenance emissions would be the same, and the slurry wall itself has no net long-term emissions. This project does not conflict with any statewide or local goals with regard to reduction of GHG.

BMPs and implementation of the standard construction mitigation measures as recommended by SMAQMD (Appendix B of EA/IS) would reduce greenhouse gas emissions through the same processes that reduce total NO_x and PM₁₀ emissions.

Water Resources and Quality

The project would disturb more than 1 acre of land, the contractor would be required to obtain a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the contractor would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP), identifying best management practices to be used to avoid or minimize any adverse effects during construction to surface waters.

The following best management practices would be incorporated into the project:

- The contractor would prepare a spill control plan and a SWPPP prior to initiation of construction. The SWPPP would be developed in accordance with guidance from the RWQCB, Central Valley Region. These plans would be reviewed and approved by the USACE before construction began;
- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on haul roads, construction areas, and stockpiles;
- Properly dispose of oil or other liquids;
- Fuel and maintain vehicles in a specified area designed to capture spills. This area cannot be near any ditch, stream, or other body of water or feature that may convey water to a nearby body of water;
- Inspect and maintain vehicles and equipment to prevent dripping of oil or other liquids;
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are scheduled to begin late summer 2013. If rains are forecasted during construction, erosion control measures would be implemented as described in the RWQCB Erosion and Sediment Control Field Manual;
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event;
- Train construction workers in stormwater pollution prevention practices; and
- Re-vegetate disturbed areas in a timely manner to control erosion.

Since no significant adverse affects to groundwater or surface water resources are anticipated, no mitigation is required.

Traffic and Circulation

Project would cause an increase in traffic volume, reduction of speeds on local residential streets, and the temporary closure of the Sacramento Northern Bike Trail.

To mitigate for the above impacts, the contractor will be required to develop a Traffic Control Plan that is reviewed and approved by the City of Sacramento prior to construction. The plan will include the following measures:

- Ensure that construction vehicles do not block any roadways or private driveways;
- Provide access for emergency vehicles at all times;
- Select haul routes to avoid schools, parks, and high pedestrian use areas, when possible. Crossing guards would be used when truck trips coincide with schools hours and when haul routes cross student travel path;
- Obey all speed limits, traffic laws, and transportation regulations during construction;
- Use signs and flagmen, as needed, to alert motorists, bicyclists, and pedestrians to avoid conflict with construction vehicles or equipment;
- Flagmen would be used at each roadway that crosses the levee to safely circulate traffic through the construction site;
- Use separate entrances and exits to the construction site;
- Prior to construction, notify local residents, business, schools, and the City of Sacramento if road closures would occur during construction; and
- Contractor would repair roads damaged by construction.

The proposed mitigation measures would reduce the effects on traffic and circulation to less than significant.

Public Utilities and Services

No utilities services would be interrupted during construction. Prior to initiating ground disturbing activities, the contractor will coordinate with Underground Service Alert (USA) to insure all underground utilities are identified and marked. No interruption of utility service would take place as a result of construction. The construction of the slurry cutoff wall in the upstream section of the project has been redesigned to ensure that the 12-inch potable water pipeline would be out of service for less than 4 hours. In order to meet this requirement, the cutoff wall would be constructed in an upstream direction from Highway 160, and in a downstream direction from the upstream terminus to meet at the location of the potable water pipeline. The water supply pipeline relocation would be the last feature of the construction in this section, prior to rebuilding of the levee.

In the downstream section PG&E would oversee all activities associated with the relocation of the 12 inch natural gas pipeline and would complete installation and connections themselves. Impacts to public utilities and services would be less than significant after mitigation.

Noise and Vibration

Construction activities would result in short-term increases in ambient noise. Sensitive receptors that could be affected by this increase include residents, wildlife, recreationists and students.

The following measures would be implemented to reduce the adverse effects on noise as much as possible:

- In accordance with the City Noise Ordinance exemptions for construction (Sacramento City Code, 8.68.080 Exemptions) the construction activities shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Saturday and 9:00 a.m. and 6:00 p.m. on Sundays.;
- Minimize construction equipment noise during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and shroud or shield impact tools;
- Turn off all equipment, haul trucks, and worker vehicles when not in use for more than 30 minutes;
- Notify residences about the type and schedule of construction.

Compliance with the local noise ordinance would minimize the exposure of residents to excessive noise. Construction of the upstream segment is scheduled to be completed within 4 months in 2013; the downstream segment is scheduled to be completed within 3 months in 2014. Therefore, the impact is less than significant after mitigation.

Esthetics/Visual Resources

Construction of the levee raise and widening would temporarily affect the esthetics in the project area. Short-term effects would include the presence and activities of construction equipment and workers in the project area.

There would be no significant long-term effects on esthetics or visual resources in the project area, therefore, no mitigation would be required. All areas impacted by the project would be re-vegetated and restored to remain consistent with preconstruction conditions.

Cultural Resources

No cultural resources are anticipated to be affected by the Project. Should cultural resources be found, the Project will comply with federal law and CEQA Guidelines.

Findings

Based on the information in the Environmental Assessment and Initial Study for the American River Watershed Common Features Project Lower American River Features as Modified by the Water resources Development Act of 1999, Natomas East Main Drain Canal and in the entire record, the Central Valley Flood Protection Board finds that although the Project could have a significant impact on the environment, mitigation measures have been incorporated into the Project that reduce these impacts to less than significant.

By: William H. Edgar
William Edgar
President

Date: 9/27/2012

By: Jane Dolan
Jane Dolan
Secretary

Date: 9/20/2012

**FINAL
ENVIRONMENTAL ASSESSMENT/ INITIAL STUDY
AMERICAN RIVER WATERSHED COMMON FEATURES
LOWER AMERICAN RIVER FEATURES
AS MODIFIED BY WRDA 1999
NATOMAS EAST MAIN DRAIN CANAL
(AMERICAN RIVER NORTH LEVEE, RIVER MILE 2.0 TO 3.6)
SACRAMENTO COUNTY, CALIFORNIA**

AUGUST 2012



**US Army Corps
of Engineers**



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**MITIGATED NEGATIVE DECLARATION
AMERICAN RIVER WATERSHED COMMON FEATURES PROJECT
CALIFORNIA
LOWER AMERICAN RIVER FEATURES AS MODIFIED BY WATER
RESOURCES DEVELOPMENT ACT OF 1999
NATOMAS EAST MAIN DRAIN CANAL
(AMERICAN RIVER NORTH LEVEE, RIVER MILE 2.0 TO 3.6)
SACRAMENTO COUNTY, CALIFORNIA**

Project Background

The American River Watershed Common Features Project was initially described in the Supplemental Information Report and was first authorized in Water Resources Development Act (WRDA) of 1996 and modified in WRDA 1999. The State authorized the American River Watershed Common Features Project in 1997 under California Water Code Sections 12670.10, 12670.14 and 12670.16

The American River Watershed Common Features as Modified by Water Development Act of 1999, Natomas East Main Drainage Canal (Project) is a cooperative effort among the U.S. Army Corps of Engineers (USACE), the Central Valley Flood Protection Board and the Sacramento Area Flood Control Agency. The Project is one of five modifications approved by WRDA 1999.

Project Location

The proposed work is located upstream of the confluence of the Sacramento and American Rivers along the right (north) levee of the lower American River between River Mile (RM) 2.0 and 3.6. The project reach is bisected by Highway 160, the Union Pacific Railroad (UPRR) tracks and Del Paso Boulevard. The downstream end of the reach terminates at the Natomas East Main Drain Canal (NEMDC.) Highway 160 divides the project reach into upstream and downstream segments. The upstream segment (from upstream terminus to approximately Highway 160) is 3,250 linear ft [lf]. The downstream segment of the project is divided into two sections based on the requirements of each section of levee: the section from the UPRR tracks to Del Paso Boulevard is 1,467 lf.

Project Description

The upstream segment (from upstream terminus to approximately Highway 160) would require installation of a 3,250 lf seepage cutoff wall.

The downstream segment of the project would require landside levee slope repairs and slope flattening (approximately 120 lf); the section from Del Paso Boulevard to terminus would require installation of a 1,467 lf seepage cutoff wall.

Potential Impacts

Recreation

The project will temporarily close approximately 2,400 feet of the Sacramento Northern Bike Trail from Del Paso Boulevard to the end of Railroad Drive for three months in 2014.

In order to mitigate for effects to the recreation trail use:

- The public will be informed of the project;
- Warning signs and signs regarding restricted access, trail closures and detours will be posted;
- Detour routes would be clearly marked, and fences erected in order to prevent access to the project area.

In areas where recreational traffic intersects with construction vehicles:

- Traffic control will be utilized in order to maintain public safety;
- Public outreach conducted through mailings, posting signs, coordination with interested groups, and meetings, if necessary, in order to provide information regarding changes to recreational access in and around the Parkway.

Water-filled barriers would be installed as a safety measure to keep equipment, soil or other materials from encroaching on the trail in the upstream and middle sections of the project where the Jedediah Smith Recreational Trail is in close proximity to the waterside levee toe.

Any effects to recreation would be temporary and considered less than significant after mitigation.

Vegetation and Wildlife

It is anticipated that two trees will be removed to accommodate construction activities and meet levee safety requirements.

Removal of these trees may require a permit from the City of Sacramento. The trees are 15" to 29" dbh. This impact is being coordinated with the US Fish and Wildlife Service (USFWS) through the Fish and Wildlife Coordination Act. The USFWS's draft recommendations (Appendix D) to mitigate this impact are:

- Replacement of the oak trees removed along the upstream and downstream segments at an inch for inch ratio; and
- All tree removal activities should be performed by, or under the direct supervision of, a certified arborist

Impacts related to removal of two oak trees would be less than significant after mitigation.

Special Status Species

Valley Elderberry Longhorn Beetle (VELB)

Construction of the NEMDC levee improvements would result in direct and indirect effects to several elderberry shrubs. Direct effects would include trimming and/or removal of shrubs. Indirect effects would include physical vibration and increase in dust during operation of equipment and trucks during construction activities.

Consultation under Section 7 of the Endangered Species Act has been initiated with the USFWS to assess potential impacts and required compensation. The USACE requested concurrence from USFWS with the determination that potential project impacts may affect, but are not likely to adversely affect, the valley elderberry longhorn beetle. The USACE also proposes compensation for the loss of an estimated 12 elderberry shrubs. This would require planting 72 elderberry seedlings and 144 associated native plantings on a 0.9 acre site (s). To minimize potential take of the valley elderberry longhorn beetle, the following measures taken from the USFWS "Conservation Guidelines for the Valley Elderberry Longhorn Beetle," July 1999 would be incorporated into the project:

- A minimum setback of 100 feet from the dripline of all elderberry shrubs will be established, if possible. If the 100 foot minimum buffer zone is not possible, the next maximum distance allowable will be established. Due to the limited options for locating the staging area, as well as the limited space within the staging area, it would be difficult to observe the required 100-foot radius buffer zone for protection of the elderberry shrubs. The USACE is proposing a 20-foot radius buffer zone, using concrete or water-filled barriers for protection, and limiting construction until after the no-disturbance period (after June 15). These areas would be fenced, flagged and maintained during construction;
- Environmental awareness training would be conducted for all workers before they begin work. The training would include status, the need to avoid adversely affecting the elderberry shrub, avoidance areas and measures taken by the workers during construction, and contact information; and
- Signs would be placed every 50 feet along the edge of the elderberry buffer zones. The signs would include: "This area is the habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and

imprisonment.” The signs should be readable from a distance of 20 feet and would be maintained during construction.

Sensitive raptors

Swainson’s hawk and White-tailed kite may be present in the area and may nest near the construction site. Construction would be timed to avoid activities near active bird nests or young of birds that breed in the area. The nesting seasons associated with the potential presence of raptors and protected avian species could further reduce the available construction season into September. For this reason, it would be unrealistic to propose no construction would take place during the breeding/nesting seasons of these avian species during the available construction season (June 15 – October 1).

The USACE would however, take steps to avoid and minimize impacts to raptors and other protected avian species. If it is not feasible for construction to occur outside of nesting periods (April-September 15th), a qualified biologist would survey the project area, and all areas within one-half mile of the project, prior to initiation of construction. If the survey determines that a nesting pair is present, the USACE would coordinate with CDFG and/or USFWS, and the proper avoidance and minimization measures would be implemented. To avoid potential effects to nesting Swainson’s hawks, CDFG typically requires the avoidance of nesting sites during construction activities. These measures include avoiding construction during the breeding season and monitoring of the nest site by a qualified biologist. The project is currently scheduled to begin in late summer 2013. It is anticipated that the timing of the project would begin after the young Swainson’s hawks and white-tailed kites have fledged which is normally by July-August.

The proposed mitigation measures would reduce the effects on the white-tailed kite and the Swainson’s hawk to less than significant.

Air Quality

Emissions would result from the use of construction equipment, truck haul trips to and from the borrow sites, and worker vehicle trips to and from the construction sites. Prior to construction, the contractor would submit a construction equipment list to be used in the project for approval by USACE and SMAQMD. SMAQMD would confirm the fleet emissions and endorse the list only if the total fleet emissions would meet a 20% reduction in NO_x and a 45% reduction in PM₁₀ in comparison to the state fleet emissions average. The contractor will be required to follow the requirements of SMAQMD’s standard mitigation program (Appendix B). Any remaining emissions over the NO_x threshold should be reduced via a mitigation fee payment. The projected (2012) cost of reducing one ton of NO_x is \$16,640 (\$8.32/lb). The contractor will be responsible for payment of any required mitigation and administrative fees.

The standard mitigation measures for the SMAQMD Recommended Mitigation for Reducing Emissions from Heavy-Duty Construction Vehicles are:

- Use diesel-fueled equipment manufactured in 2003 or later, or retrofit equipment manufactured prior to 2003 with diesel oxidation catalysts; use low-emission diesel products, alternative fuels, after-treatment products, and/or other options as they become available;
- Maintain properly functioning emission control devices on all vehicles and equipment;
- The contractor would provide a plan, for approval by the USACE and SMAQMD, demonstrating that the heavy-duty (> 50 horsepower) self-propelled off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction;
- The contractor shall submit to the USACE and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman;
- The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and [DERA, City of x, SMAQMD, etc.] shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance.

Nothing in this section shall supersede other SMAQMD or state rules or regulations; and

- If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with SMAQMD prior to construction will be necessary to make this determination.

Implementation of the BMPs listed below would reduce air quality degradation caused by dust and other contaminants:

- During construction, implement all appropriate dust control measures, such as tarps or covers on dirt piles, in a timely and effective manner;
- Periodically water all construction areas having vehicle traffic, including unpaved areas, to reduce generation of dust. Application of water would not be excessive or result in runoff into storm drains;
- Suspend all grading, earth moving, or excavation activities when winds exceed 20 miles per hour;
- Water or cover all material transported offsite to prevent generation of dust;
- Sweep paved streets adjacent to construction sites, as necessary, at the end of each day to remove excessive accumulations of soil or dust;
- Cover all trucks hauling dirt, sand, soil, or other loose material, or maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision would be enforced by local law enforcement agencies; and
- Re-vegetate or pave areas cleared by construction in a timely manner to control fugitive dust.

Impacts to air quality would be temporary and short-term, and would be less than significant after mitigation.

Climate Change

There would be no increase of long-term emissions (permanent sources) of greenhouse gases from this project. Long-term emissions would be the same with or without the project; maintenance emissions would be the same, and the

slurry wall itself has no net long-term emissions. This project does not conflict with any statewide or local goals with regard to reduction of GHG.

BMPs and implementation of the standard construction mitigation measures as recommended by SMAQMD (Appendix B of EA/IS) would reduce greenhouse gas emissions through the same processes that reduce total NO_x and PM₁₀ emissions.

Water Resources and Quality

The project would disturb more than 1 acre of land, the contractor would be required to obtain a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the contractor would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP), identifying best management practices to be used to avoid or minimize any adverse effects during construction to surface waters.

The following best management practices would be incorporated into the project:

- The contractor would prepare a spill control plan and a SWPPP prior to initiation of construction. The SWPPP would be developed in accordance with guidance from the RWQCB, Central Valley Region. These plans would be reviewed and approved by the USACE before construction began;
- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on haul roads, construction areas, and stockpiles;
- Properly dispose of oil or other liquids;
- Fuel and maintain vehicles in a specified area designed to capture spills. This area cannot be near any ditch, stream, or other body of water or feature that may convey water to a nearby body of water;
- Inspect and maintain vehicles and equipment to prevent dripping of oil or other liquids;
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are scheduled to begin late summer 2013. If rains are forecasted during construction, erosion control measures would be implemented as described in the RWQCB Erosion and Sediment Control Field Manual;

- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event;
- Train construction workers in stormwater pollution prevention practices; and
- Re-vegetate disturbed areas in a timely manner to control erosion.

Since no significant adverse affects to groundwater or surface water resources are anticipated, no mitigation is required.

Traffic and Circulation

Project would cause an increase in traffic volume, reduction of speeds on local residential streets, and the temporary closure of the Sacramento Northern Bike Trail.

To mitigate for the above impacts, the contractor will be required to develop a Traffic Control Plan that is reviewed and approved by the City of Sacramento prior to construction. The plan will include the following measures:

- Ensure that construction vehicles do not block any roadways or private driveways;
- Provide access for emergency vehicles at all times;
- Select haul routes to avoid schools, parks, and high pedestrian use areas, when possible. Crossing guards would be used when truck trips coincide with schools hours and when haul routes cross student travel path;
- Obey all speed limits, traffic laws, and transportation regulations during construction;
- Use signs and flagmen, as needed, to alert motorists, bicyclists, and pedestrians to avoid conflict with construction vehicles or equipment;
- Flagmen would be used at each roadway that crosses the levee to safely circulate traffic through the construction site;
- Use separate entrances and exits to the construction site;
- Prior to construction, notify local residents, business, schools, and the City of Sacramento if road closures would occur during construction; and

- Contractor would repair roads damaged by construction.

The proposed mitigation measures would reduce the effects on traffic and circulation to less than significant.

Public Utilities and Services

No utilities services would be interrupted during construction. Prior to initiating ground disturbing activities, the contractor will coordinate with Underground Service Alert (USA) to insure all underground utilities are identified and marked. No interruption of utility service would take place as a result of construction. The construction of the slurry cutoff wall in the upstream section of the project has been redesigned to ensure that the 12-inch potable water pipeline would be out of service for less than 4 hours. In order to meet this requirement, the cutoff wall would be constructed in an upstream direction from Highway 160, and in a downstream direction from the upstream terminus to meet at the location of the potable water pipeline. The water supply pipeline relocation would be the last feature of the construction in this section, prior to rebuilding of the levee.

In the downstream section PG&E would oversee all activities associated with the relocation of the 12 inch natural gas pipeline and would complete installation and connections themselves. Impacts to public utilities and services would be less than significant after mitigation.

Noise and Vibration

Construction activities would result in short-term increases in ambient noise. Sensitive receptors that could be affected by this increase include residents, wildlife, recreationists and students.

The following measures would be implemented to reduce the adverse effects on noise as much as possible:

- In accordance with the City Noise Ordinance exemptions for construction (Sacramento City Code, 8.68.080 Exemptions) the construction activities shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Saturday and 9:00 a.m. and 6:00 p.m. on Sundays.;
- Minimize construction equipment noise during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and shroud or shield impact tools;

- Turn off all equipment, haul trucks, and worker vehicles when not in use for more than 30 minutes;
- Notify residences about the type and schedule of construction.

Compliance with the local noise ordinance would minimize the exposure of residents to excessive noise. Construction of the upstream segment is scheduled to be completed within 4 months in 2013; the downstream segment is scheduled to be completed within 3 months in 2014. Therefore, the impact is less than significant after mitigation.

Esthetics/Visual Resources

Construction of the levee raise and widening would temporarily affect the esthetics in the project area. Short-term effects would include the presence and activities of construction equipment and workers in the project area.

There would be no significant long-term effects on esthetics or visual resources in the project area, therefore, no mitigation would be required. All areas impacted by the project would be re-vegetated and restored to remain consistent with preconstruction conditions.

Cultural Resources

No cultural resources are anticipated to be affected by the Project. Should cultural resources be found, the Project will comply with federal law and CEQA Guidelines.

Findings

Based on the information in the Environmental Assessment and Initial Study for the American River Watershed Common Features Project Lower American River Features as Modified by the Water resources Development Act of 1999, Natomas East Main Drain Canal and in the entire record, the Central Valley Flood Protection Board finds that although the Project could have a significant impact on the environment, mitigation measures have been incorporated into the Project that reduce these impacts to less than significant.

By: _____
William Edgar
President

Date: _____

By: _____
Jane Dolan
Secretary

Date: _____

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AUGUST 2012

**U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT**

**THE CENTRAL VALLEY FLOOD PROTECTION BOARD
STATE OF CALIFORNIA**

**SACRAMENTO AREA FLOOD CONTROL AGENCY
SACRAMENTO, CALIFORNIA**

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Acronyms and Abbreviations

AAQS	ambient air quality standards
APE	area of potential effects
ARFCD	American River Flood Control District
CAR	Fish and Wildlife Coordination Act Report
CARB	California Air Resources Board
CB	cement and bentonite
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CESA	California Endangered Species Act
cfs	cubic feet per second
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
Corps	United States Army Corps of Engineers
County Parks	Sacramento County Department of Regional Parks
CRWQCB	California Regional Water Quality Control Board
CSU	California State University
cy	cubic yards
CVFPB	Central Valley Flood Protection Board
dB	decibels
dbh	diameter at breast height
DFG	Department of Fish and Game
DOT	Department of Transportation
DWR	Department of Water Resources
EA/IS	Environmental Assessment/Initial Study
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EM	Engineering Manual
EPA	Environmental Protection Agency
°F	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FONSI	Finding of No Significant Impact
HTRW	hazardous, toxic, and radioactive waste
Ldn	day-night sound level
lf	linear feet
NEMDC	Natomas East Main Drainage Canal
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOx	nitrogen oxide

NPDES	National Pollution Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PA	programmatic agreement
PG&E	Pacific Gas and Electric Company
PL	public law
PM ₁₀	particulate matter 10 microns or less
RM	river mile
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SAFCA	Sacramento Area Flood Control Agency
SEIS/EIR	Supplemental Environmental Impact Statement/Environmental Impact Report
SFNA	Sacramento Federal Ozone Nonattainment Area
SHPO	State Historic Preservation Officer
SIR	Supplemental Information Report
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Metropolitan Utility District
SO _x	sulfur oxides
SPCP	Spill Prevention and Countermeasure Plan
SRA	shaded riverine aquatic habitat
SRBPP	Sacramento River Bank Protection Project
SRCSD	Sacramento Regional County Sanitation District
SSWD	Sacramento Suburban Water District
SWPPP	Storm Water Pollution Prevention Plan
UPRR	Union Pacific Railroad
USA	Underground Service Alert
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VELB	valley elderberry longhorn beetle
WRDA	Water Resources Development Act

1.0 Purpose and Need for Action

1.1 Proposed Action

The U.S. Army Corps of Engineers (Corps), the State Central Valley Flood Protection Board, (CVFPB), formerly the Reclamation Board, and the Sacramento Area Flood Control Agency (SAFCA) propose to strengthen approximately 4,800 feet of flood control levee within a 5,500 linear foot reach along the lower American River in the American River Parkway (Plate 1). The purpose of the proposed action is to reduce flood damages by improving the levee to meet current Corps standards. This levee work would require implementing seepage remediation to comply with Corps requirements. This construction would reduce flood risk by improving the levee to meet current Corps criteria in Corps Engineer Manual (EM) 1110-2-1913 for withstanding emergency releases from Folsom Dam of 160,000 cubic feet per second (cfs) with 3 feet of freeboard (equivalent to 192,000 cfs).

1.2 Location of the Project Area

The proposed work is located upstream of the confluence of the Sacramento and American Rivers along the right (north) levee of the lower American River between River Mile (RM) 2.0 and 3.6. The levee provides protection for the adjacent neighborhood of North Sacramento (Plate 2). The project reach is bisected by Highway 160, the Union Pacific Railroad tracks, and Del Paso Boulevard. The downstream end of the reach terminates at the Natomas East Main Drain Canal (NEMDC), which also serves as the project's acronym name "NEMDC". Highway 160 divides the project reach into upstream and downstream segments (Plates 3 and 4). The upstream segment (from upstream terminus to approximately Highway 160) would require installation of a seepage cutoff wall (3,300 linear ft [lf]). The downstream segment of the project is divided into two sections based on the requirements of each section of levee: (1) the section from the Union Pacific Railroad (UPRR) tracks to Del Paso Boulevard, which would require landside levee slope repairs and slope flattening (approximately 120 lf) (Plate 5); and (2) the section from Del Paso Boulevard to the terminus, which would require installation of a seepage cutoff wall (1,380 lf) (Plate 6).

1.3 Background and Need for Action

The American River Common Features Project (Common Features Project) is a cooperative effort among local, State of California, and Federal agencies to increase the level of flood protection for the city of Sacramento and surrounding areas. The Common Features Projects encompass several actions under two authorizations (the Water Resources Development Acts [WRDA] of 1996 and 1999) located along both banks within the lower American River Parkway as well as sections along the Sacramento River. Actions taken have been constructed by the Corps and the CVFPB, and are maintained by the American River Flood Control District (ARFCD).

In March 1996, the Corps and the CVFPB completed the Supplemental Information Report (SIR) and Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/EIR) for the American River Project. The SIR was undertaken to develop supplemental information to the American River Watershed Investigation, April 1991. The SIR evaluated an array of alternatives to provide increased flood control to the Sacramento area. The Chief of Engineers, in his June 27, 1996 report, deferred a decision on a comprehensive flood control plan. However, the Chief recommended the features common to all three proposed plans be authorized as the first component of a comprehensive flood control plan for the Sacramento area. Congress authorized these “common features” in WRDA 96.

Major storms in northern California caused record flood flows in 1986, 1995, 1997, 1998, and 2005 in the American River Basin. Outflows from Folsom Reservoir, together with high flows in the Sacramento River, caused water levels to rise above the safety margin for the levees protecting the Sacramento area. These major storms raised concerns over the adequacy of the existing flood control system, which led to a series of investigations of the need to provide additional protection for Sacramento. Subsequently, further modifications of the American River Common Features Project were authorized in WRDA 99. Under Section 366 of WRDA 1999, numerous specific modifications to the Common Features Project along the lower American River and in the Natomas Basin were authorized. Those modifications along the lower American River included:

- Raising the south (left) non-Federal levee upstream of the Mayhew Drain for a distance of 4,500 feet by an average of 2.5 feet.
- Raising the north (right) levee of the American River from 1,500 feet upstream to 4,000 feet downstream of the Howe Avenue Bridge by an average of 1 foot.
- Installing gates to the existing Mayhew Drain culvert to prevent backup of flood water on the Folsom Boulevard side of the gates.
- Installing a slurry wall in the north levee of the American River from the east levee of the Natomas East Main Drainage Canal upstream for a distance of approximately 1 mile.
- Installing a slurry wall in the north levee of the American River from 300 feet west of Jacob Lane, north for a distance of about 1 mile, to the end of the existing levee.

Both projects at Mayhew (Levee Raise and Drain Closure Structure) and the majority of the work at Jacob Lane have been completed at the time of this writing. The Howe Avenue project will be constructed in 2012. The remaining work at Jacob Lane is planned for construction in 2013 and NEMDC is planned for construction in 2013 and 2014.

The project levees along the American River were originally constructed by the Corps in 1955-56, which coincided with the construction of Folsom Dam. The levees were designed to contain a controlled flow of 115,000 cfs from Folsom Dam. In the early 1950s when these criteria were developed, this dam was expected to provide the

Sacramento area with 250 year level flood protection. Due to new hydrologic data, it has been determined that the dam will not provide that level of protection. Flood control capacity could be increased if releases of greater than 115,000 cfs were allowed, but the levees on the American River are not capable of handling the greater flow for any extended time period. If these deficiencies were not addressed, these releases could result in catastrophic failure of the levee causing widespread flooding. In the case of the project area, this flooding would inundate the neighborhood of Del Paso Heights, the area immediately north and east of the levee. This area contains residential, commercial and industrial buildings, and the floodwaters would not only result in a high number of property losses, but potential loss of life, as well. As a result of continued levee improvements through the American River Common Features projects, the integrity of the levee system is being increased to handle an emergency release from Folsom Dam of 160,000 cfs with 3 feet of freeboard (equivalent to 192,000 cfs). In the case of the NEMDC project levees, through-seepage is the primary concern, combined with slope stability. The slurry cutoff walls would meet both of these objectives in this project action. However, in the section of levee between the UPRR tracks and Del Paso Boulevard, several utilities passing through such a short distance complicate the use of the slurry wall methodology. In this area, slope flattening and a landside berm would address both seepage and slope stability issues.

1.4 Authority

The proposed levee work is part of the ongoing American River Watershed Common Features project. Authorization for the Common Features project is provided by Section 101 of WRDA 1996 (Public Law 104-303) and Section 366 of WRDA 1999 (Public Law 106-53).

1.5 Purpose of the EA/IS

The American River Watershed Common Features Project, California, Lower American River Features as Modified by the Water Resources Development Act of 1999, Environmental Assessment/Initial Study was completed in April 2002. The American River North Levee portion of that document is now being updated in this EA/IS.

This EA/IS: (1) describes the existing environmental resources in the project area; (2) evaluates the environmental effects of the alternatives on these resources; and (3) identifies measures to avoid or reduce any effects to less than significant. This EA/IS has been prepared in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

1.6 Decisions Needed

The District Engineer, commander of the Sacramento District, must decide whether or not the proposed levee work qualifies for a Finding of No Significant Impact (FONSI) under NEPA or whether a supplemental EIS must be prepared. Also, the

CVFPB must decide if the proposed action qualifies for a Mitigated Negative Declaration under CEQA or whether an EIR must be prepared.

2.0 Alternatives

2.1 Alternatives Eliminated from Further Consideration

The topographic and metropolitan features of the project area limit alternative project options. The project area is situated in a narrow corridor between the American River Parkway and Sacramento area industrial businesses, office buildings, transportation features and endangered species critical habitat. Just beyond this corridor is the urban community of Del Paso Heights, with many small businesses and residences. The purpose of the project is to protect these areas from flood damages by improving the levee to reduce flood risk and to meet current Corps standards.

Rather than installing a seepage cutoff wall, other alternatives that could be considered include setting back the levee in order to widen the flood plain to increase channel conveyance and reduce hydrostatic pressure on the levee. This alternative is not a feasible option because of the current proximity of the levee to the areas described, above. There is currently no land available within the project area to allow for setting back of the levee.

Another option includes protecting the various commercial and residential properties themselves to prevent flood damages. Considering the high density of these features within the flood plain, and the number of structures that would need to be flood-proofed, this alternative is considered extremely costly and was eliminated from further consideration.

A more detailed evaluation of alternatives for the American River Watershed Common Features Project can be found in the final EA/IS dated March 2002.

2.2 No Action Alternative

Under this alternative, the Corps would not participate in constructing the levee improvements. Levee conditions would remain the same and the levee would not meet the current standard requirements in EM 1110-2-1913 for Corps levees. The levee would not be in compliance with current Corps requirements to safely pass an emergency release of 160,000 cfs with 3 feet of freeboard. Under this scenario, the seepage deficiencies in this reach could result in catastrophic failure of the levee causing widespread flooding. At a minimum, this flooding would inundate the neighborhood of Del Paso Heights, the area immediately north and east of the levee. This area contains residential, commercial and industrial buildings, and the floodwaters would not only result in a high number of property losses, but potential loss of life, as well. Any floodwaters greater than 2 to 3 feet deep would also release, fuels, petroleum products, household chemicals, industrial chemicals, and potentially, raw sewage. The contaminated floodwaters would saturate the walls of all structures, promoting the growth

of molds. The ensuing hazardous waste cleanup could increase the costs of the flood event by hundreds of millions of dollars, not to mention the cost of repairing the levee(s).

2.3 Proposed Levee Improvements

This section describes the proposed action. This includes a discussion of features, construction details, staging and stockpile areas, borrow and disposal sites, construction workers and schedule, and operation and maintenance for each reach.

Features

The levees are currently designed to hold a flow of 160,000 cfs, however, during a design event the levees in the NEMDC project area do not meet the Corps criteria for seepage and slope stability. Current levee standards require that levees on the American River be capable of safely passing an emergency release of 160,000 cfs, plus three feet of freeboard, for a total flow capacity of 192,000 cfs. Specifically, the deficiency is through-seepage and the work would involve installing a seepage cutoff wall in approximately 4,680 feet of levee at an average depth of 40 feet below the levee crown, over a distance of approximately 5,500 lf by the conventional slot trench construction method. Approximately 120 feet of slope stability (slope flattening) corrections would be incorporated, as well. In order to implement these project features, a total of seven utilities located in the project area or passing through the levee would require relocation or abandonment.

Due to logistical, environmental, and construction constraints, the NEMDC project would be implemented over two construction seasons: the upstream segment is scheduled to be constructed in 2013 and the downstream segment is scheduled to be constructed in 2014.

Construction Details

Access and Staging. A combination of existing ramps and temporary ramps would be used during the construction of the project. An existing access ramp at Lathrop Way, along with three proposed temporary ramps, would be the upstream access for construction. All ramps are located on the landside of the levee. One temporary waterside ramp and three temporary landside ramps are proposed for construction at the downstream segment of the project. Ramps are shown on Plates 7 and 8.

The project would use a total of three staging areas during construction. The primary staging area is proposed to be located at the upstream end of the reach adjacent to the west end of Lathrop Way. It encompasses two parcels directly across from each other on Lathrop Way. Two smaller staging areas are proposed for the downstream segment of the project. One is located in the strip of land between Del Paso Boulevard and Highway 160, just east of the Union Pacific Railroad tracks. The last staging area is proposed for the west side of Railroad Drive from Del Paso Boulevard, north for approximately 500 feet. This staging area would narrow Railroad Drive to one lane in

the area near Del Paso Boulevard and would require a flagger and signage to safely manage traffic entering and exiting Railroad Drive. Staging areas are shown on Plates 9 and 10.

Three haul routes are proposed for the project during construction. The primary function of the haul routes is to concentrate truck movement within close proximity to the construction areas when soil is excavated from the levee and is being transferred to the staging areas. The haul routes would also be used when the construction of the slurry cutoff walls has been completed and the levees are being reconstructed. The haul routes would be used to import suitable material as well as transport spoils for disposition. The upstream haul route would be located along the landside toe of the levee, adjacent to Lathrop Way. Trucks moving material would deposit the excavated soil in the staging area at the west end of Lathrop Way. The trucks would continue in a clockwise direction, north on Lathrop Way to Commerce Circle, east on Commerce Circle to Lathrop Way and return to the levee toe. Construction in this section would work from upstream toward downstream.

The haul route in the downstream end of the upstream segment of the project would also be located along the landside levee toe and would shuttle between the primary upstream staging area and the downstream staging area. The maintenance road along the landside toe would accommodate two-way traffic. Trucks would deposit excavated soil at the upstream staging area and would use the downstream staging area as a turnaround. Construction in this section of the project would work from downstream (Highway 160) to upstream. The upstream haul routes are shown at Plates 11a and 11b.

Due to logistical constraints on both the waterside and landside of the levee, the downstream section haul route would require a loop that would operate on both sides of the levee. A maintenance road along the waterside toe of the levee would allow trucks to be loaded with excavated material and travel in a downstream direction. The trucks would follow the levee and eventually travel up a temporary ramp on top of the levee and exit the construction area where Railroad Drive meets the levee. Trucks would continue down Railroad Drive and turn left (east) to the staging area along Del Paso Boulevard. Once the trucks have left the staging area they would exit via an access road adjacent to the Highway 160 exit ramp. Trucks would exit left (west) onto Del Paso Boulevard and return to the access point on the waterside of the levee. The downstream haul route is shown at Plate 12.

The Jedediah Smith Recreation Trail (bike trail) would remain open during the entire project, but may be used occasionally for movement or repositioning of equipment. This is expected to occur infrequently. The Sacramento Northern Bike Trail would be closed from the existing Del Paso Boulevard access, north to approximately where the end of Railroad Drive meets the levee. This is due to the fact that the bike trail is on top of the levee in this section and this is where the levee repairs would take place. Access to the Sacramento Northern Bike Trail would be detoured east along Del Paso Boulevard to Acoma Street, then north to the bike trail. This closure/detour would be required during the entire time of construction in this section. That construction period is approximately

three months long, and would be the last section to be completed. It is currently scheduled for 2014. Plate 13 shows the Sacramento Northern Bike Trail closure and detour.

Site Preparation. Before the start of construction, all construction areas would be fenced off to limit access, including the staging areas. Construction fencing would be installed on the landside of the project site adjacent to the commercial property lines and along the boundary of the access/haul road at the landside toe for site safety and security. In any areas where the bike trail is in the vicinity of the project footprint, water-filled barriers would be installed along the edge of the trail in order to separate recreationists from the construction area. A 15-20 foot wide corridor for construction equipment would be established along the landside toe of the levee. A significant portion of the upstream segment of the project is adjacent to critical habitat for the valley elderberry longhorn beetle for approximately 1,400 feet on the landside of the levee. The habitat is located on private property, and would be protected from disturbance through protective measures and limiting access to this area. Fencing and/or water-filled barriers would be installed along this section of the project reach. Up to two oak trees may be removed from the landside toe of the levee in this area.

Construction of the slurry wall would require that the levee crown and the levee slopes be cleared and grubbed of all vegetation and surface material. This would total approximately 2,150 cubic yards (cy) of removed material for both segments and would be disposed by the contractor at a State-approved, licensed, and permitted facility. The project construction would require removal of two oak trees and approximately twelve elderberry shrubs.

Preparation of all staging areas would require clearing and grubbing of the top 4 to 6 inches of soil and vegetation (other than Railroad Drive) which would total 810 cy of removed material and would be disposed by the contractor at an approved, licensed, and permitted facility. Slurry batch plants would be located in the upstream staging area on the west side of Lathrop Way and the downstream staging area on Railroad Drive.

There are seven locations where utilities would require relocation in order to implement the project. In five of these locations, the project would relocate the utility during the course of construction. However, two utilities must be relocated prior to construction in order to ensure that utility service is not interrupted and that the utility does not restrict the movement of equipment and the completion of the construction feature. Both of these utilities are located in the downstream section of the project.

In the area delineated by the UPRR tracks, the project levee, and Del Paso Boulevard, an electrical power pole is located within 10 feet of the current location of the levee toe. The seepage and slope stability deficiencies in this section would be corrected by repairs to the landside levee toe and slope flattening, which would also act as a seepage berm. The location of the utility pole is a levee safety concern and would require relocation. However, because the corrections involve earthwork, the utility pole must be relocated a minimum of 15 feet further landward from the levee and all vegetation in this

area must be removed prior to construction. The Corps has coordinated with SMUD, the utility provider, and they will relocate the utility pole. One oak tree and up to twelve elderberry shrubs would require removal in order to construct the slope flattening feature.

Downstream of Del Paso Boulevard there is a 12-inch natural gas pipeline that passes through this levee section. Although some information, based on limited potholing data, indicates that the pipeline passes through the prism of the levee within the depth where the cutoff wall would be installed, this has not yet been confirmed. Some anecdotal information would support the theory that the pipeline follows the prism of the levee within the top 3 to 4 feet of soil on the levee slopes and crown. The Corps has coordinated with Pacific Gas & Electric to relocate the pipeline. Due to the critical nature of the natural gas supplied by this pipeline, it is essential that this utility service must remain uninterrupted.

The pipeline would be replaced during the construction of the slurry cutoff wall. This area would likely be the first to be constructed in this section. During site preparation and degrading, the existing pipeline would be excavated on both the landside and waterside of the levee at the locations where the new connections are to take place. Special precautions would be taken to protect the pipeline in place. Once this section of the slurry wall has cured, and prior to reconstruction of the levee, the new pipeline would be installed outside the prism of the levee and within the upper layer of soil to meet Corps requirements. Once the new section of pipeline and corresponding connections are installed, the gas supply would be temporarily shut off and the remaining gas in the existing pipeline evacuated. When this has been completed, the new connections would be made and tested by PG&E, and the service restored, in accordance with Public Utilities Commission guidelines. This process would require disturbance to portions of Railroad Drive and an area of grassy vegetation on the waterside of the levee. This process is scheduled for summer 2013.

Construction of Slurry Wall. Construction is scheduled to begin in summer 2013, with the upstream segment of the reach. The duration of the construction period for the upstream segment should last approximately four months; construction of the downstream segment should last approximately three months in 2014. The directional flow of the construction activities is varied, depending on the segment. The upstream segment would progress from both ends of the segment toward the potable water pipeline, which must be relocated. The pipeline would be relocated once both of these sections of cutoff wall get to this point. The downstream segment of the project would progress in a downstream direction. As the project would be implemented in two construction years, many activities would be conducted twice: mobilization and demobilization, clearing and grubbing, degrading, excavation, export of spoils, installation of the cutoff wall, import of new material, and site restoration. After each segment of the reach has been cleared and grubbed, the levee would be degraded by 6 feet. The material removed during this process would be off-hauled as spoils. It is estimated that 37,690 cy of material would be removed from the levee through degrading and excavation: 29,030 cy for the upstream segment, and 8,660 cy for the downstream segment. Due to the limited space in the staging areas, and the proposed slurry wall

construction methodology, all soil removed during clearing and grubbing, levee degrade, and excavation would be disposed as spoils. Although the of the slurry wall would be constructed without using any soil, for the purposes of estimating air quality emissions, equal amounts of cy would be assumed to be imported.

Once the levee has been degraded, the slurry cutoff wall would be constructed. The conventional “slot trench” method would be used where a long reach, or “long-stick”, excavator would dig the trench as deep as 45 feet, in order for the wall to tie into an impervious layer of soil. The wall would be constructed of cement and bentonite (CB). The CB method would result in a greater amount of soil to be disposed, and generally takes longer to construct, however this process is less expensive. Slurry batch plants would be located at one of the upstream and downstream staging areas (Plates 9 and 10).

Slope Stability. The section of levee between the UPRR tracks and Del Paso Boulevard would require flattening of the landside levee slope to stabilize the levee and to act as a type of seepage berm. This section, although short (approximately 120 feet), is complicated by several site factors that the “low-tech” earthwork would address: the short length of the reach restricts the use of equipment on top of the levee to install a cutoff wall; the wing walls associated with the Del Paso Boulevard flood gates and the UPRR tracks restrict the ability to degrade the levee crown; several utilities passing through the levee also restrict incursion through the center of the levee; the landside toe of the levee has been severely altered by a long-standing homeless encampment; significant growth of woody vegetation at the landside levee toe and an existing power pole are levee safety concerns that must be addressed. The repairs would first require removal of the vegetation and relocation of the power pole. Once the levee toe is repaired to its designed configuration, the slope would be extended further landward and flattened. This would serve the dual purpose of stabilizing the levee and extending the seepage path to reduce the seepage risk. All earthwork activities would be conducted from the landside of the levee.

Restoration and Cleanup. Once the levee work is completed, all equipment and excess materials would be transported offsite via neighborhood streets and regional highways. The barren earthen and levee slopes would be reseeded with native grasses to promote re-vegetation and minimize soil erosion. The levee crown and access ramps would be restored to pre-project conditions and the staging areas would be reseeded. Any damage to the residential streets and bike trails from construction activities would be repaired. Finally, the work sites and staging areas would be cleaned of all rubbish, and all parts of the work area would be left in a safe and neat condition suitable to the setting of the area.

Borrow and Disposals Sites

The project in this reach would require approximately 43,760 cy of borrow material to build/rebuild the features in the two segments: 32,350 cy in the upstream cutoff wall segment, 650 cy in the downstream slope stability section, and 10,760 cy in

the downstream cutoff wall section. It is reasonable to assume the material would be acquired from sites along the Highway 50 corridor within 10 to 15 miles of the project site. Similarly, it is assumed the disposal sites for excess materials or spoils would be located within 10 to 15 miles of the project site. The contractor is responsible for determining the location of borrow and disposal sites; however, they must be licensed and permitted, and they must be approved by the Corps.

It is assumed that the haul routes used to transport soil and materials to the project site and to transport spoils offsite for disposal would use Highway 50, Interstate 5, Interstate 80, Richards Boulevard, Highway 160, Northgate Boulevard, and Del Paso Boulevard. Once trucks are within the project site, the respective internal project haul routes, described above, would be used.

Construction Workers and Schedule

An estimated 5 to 10 workers would be onsite each day during construction. These workers would access the area via regional and local roadways, and park their vehicles in the primary staging area located at the upstream end of the reach near Lathrop Way. Although the project construction is located within the American River Parkway, managed by the County of Sacramento, the areas surrounding the project area are within the city of Sacramento therefore, the requirements of the City of Sacramento Noise Ordinance would dictate the work hours of the project. Section 8.68.080 of the ordinance states that construction activity between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday is exempt from the ordinance. Construction is projected to begin summer 2013 with the upstream segment and last approximately four months. The project would be completed in the summer of 2014 and last approximately three months.

Operation and Maintenance

After construction is completed, responsibility for the project would be turned over to the CVFPB, the non-Federal sponsor for the project. This would include operation, maintenance, repair, rehabilitation, and replacement of all project features. The CVFPB would transfer these responsibilities to SAFCA, who would contract with the American River Flood Control District (ARFCD) to operate and maintain the levee. Regular maintenance activities include mowing and herbicide treatments of the levee slopes, controlling rodents, clearing the maintenance road, and inspecting the levee. All O&M activities would be conducted consistent with Corps guidance and O&M manuals.

3.0 Affected Environment and Environmental Consequences

This section describes the environmental resources in the project area, as well as any effects of the alternatives on those resources. The section is arranged by environmental resources. Each resource section presents existing resource conditions, environmental effects, and when necessary, mitigation measures are also proposed to avoid, reduce, minimize, or compensate for any significant effects. In determining

effects, the consequences of the proposed action are compared to the consequence of taking no action. Impacts are identified as direct, indirect, or cumulative. Cumulative impacts are addressed in Section 5. Effects are assessed for significance based on significance criteria. The significance criteria used in this document are based on the checklist presented in Appendix G of the State CEQA Guidelines; factual or scientific information and data; and regulatory standards of Federal, State, and local agencies.

3.1 Environmental Resources Not Considered in Detail

Initial evaluation of the effects of the project indicated that there would likely be little to no effect on several resources. These resources are discussed below to add to the overall understanding of the project area.

3.1.1 Climate

The climate of the area is characterized by cool, wet winters and hot, dry summers. The average yearly temperature for Sacramento is 61 degrees Fahrenheit (°F) with an average high of 74°F and an average low of 48°F. The hottest months are June through September and the coldest months are November through January (Weatherbase, 2008).

Most of the seasonal rainfall occurs in two or three of the winter months. Precipitation ranges from 16 to 20 inches on the valley floor. Annual precipitation occurs almost entirely during the winter storm season (November to April). The prevailing wind direction in the Lower American River basin is from the south and southeast from April to September and from the north from October to March.

The project would have no effect on the climate in the project area.

3.1.2 Topography, Geology, and Soils

The lower American River area consists of low rolling foothills and flood plain areas near the confluence with the Sacramento River. The floor of the Sacramento Valley is generally flat and open with little natural relief. Flood control levees provide the only significant topographic relief in or near the project area.

Geologic formations underlying the Sacramento Valley include igneous, metamorphic, and sedimentary rock types, which range in age from pre-cretaceous to recent. The valley is situated on vast alluvial deposits which have slowly accumulated over the last 100 million years. The materials have been derived from the surrounding uplands; transported by major streams; and deposited in successive clay, silt, sand, and gravel layers on the valley floor.

The lower American River area is part of the Great Valley Geomorphic province of California. The broad valley was filled with erosion debris that originated in the surrounding mountains. Most soils in the area are recent alluvial flood plain soils

consisting of unconsolidated deposits of clay, silt, and sand that occur as flood plain deposits. Fresh alluvium is deposited with each floodflow.

Sedimentation rates in the American River basin and adjacent river basins are relatively low due to limited development, the general shallowness of soils, a low rate of upstream erosion, and numerous containment basins. Sedimentation in the river is also controlled by Folsom and Nimbus Dams. Estimates of the annual sediment yield range from 0.1 to 0.3 acre-feet per square mile. As a result, the channel is in a state of degradation and sedimentation is not causing a reduction in channel conveyance or levee stability. Since the completion of Folsom Dam in 1955, only about 2 percent of the reserved sediment storage space in the reservoir has been filled.

The work proposed primarily consists of earth work, as the surface of the levee would be cleared and grubbed of the immediate surface material. All suitable excavated soil material would be reused in the project, and any unsuitable material would be disposed offsite at a commercial landfill. Soil material would be brought to the site to widen the levee crown and increase the height of the levee. Areas temporarily disturbed by construction would be returned to pre-project conditions after construction. Barren areas would be seeded with native grasses to reduce the potential for erosion except the levee crown where the aggregate base would be reinstalled.

The change in levee width and levee height is not a significant change to the project area topography. The project would not affect project area geology. The removal or import of soil material for the levee construction would not significantly affect the soil condition in the project area. The project would not alter flows within the channel, nor would it promote sedimentation downstream.

3.1.3 Land Use and Socioeconomics

A detailed discussion of socioeconomics (population, housing, and the economy) and land use are presented in the 1996 SEIS/EIR. The project area is located within the Sacramento metropolitan area. The predominant land use in the area is residential, with some commercial, industrial, and public land also included in the project area. The project would not result in any long-term changes in land use or socioeconomics in the area. The residential development adjacent to the levee in both reaches would remain the same, and the staging areas would be returned to pre-project uses after construction.

As directed in Executive Order 12898, all Federal agencies must identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority or low-income populations that would be disproportionately affected by the proposed action, however a small homeless encampment located on the landside levee toe in the area between the UPRR tracks and Del Paso Boulevard would be permanently displaced. The vegetation located at the landside toe of the levee and within the area where the slope stability would be implemented currently provides cover for this small encampment. That vegetation

would be removed in order to repair the levee toe and construct this feature. All nearby residents would benefit equally from the project.

3.1.4 Fisheries

Fisheries and fish habitat is associated with the American River and vegetation along its shoreline. The Central Valley steelhead distinct population segments (DPS) and its habitat is present on the lower American River adjacent to the project reach. Construction would take place on the levee crown and the approximate 20-foot area adjacent to the waterside toe of the levee. The closest the American River channel gets to the project area is approximately 1,700 feet. There would be no construction in, or near, the American River. A slough, which does not support fish habitat, is adjacent to the Jedediah Smith Recreational Trail on the waterside of the levee and is approximately 100 feet from the slurry wall construction on the upstream, and middle sections of the project.

The contractor would be required to develop and submit a Storm Water Pollution Prevention Plan (SWPPP) to minimize the potential for soil or contaminants to enter the slough. Erosion/sediment controls such as hay bales, straw wattles, and silt fencing at the waterside toe of the levee, along with water-filled barriers, would be utilized to prevent soil from entering the slough. Water trucks would be used for dust suppression along all areas of disturbed soil and along the haul routes on the top of the levee, and at the levee toes. The contractor would not be allowed to store fuels, lubricants, or other potential hazardous substances on site. If equipment is to be refueled on site, the contractor would take measures to avoid and contain any spills. The contractor would be required to develop and submit a Spill Prevention and Countermeasure Plan (SPCP) prior to initiating construction activities. The SWPPP and SPCP must be approved by the Corps. No riparian habitat would be affected by construction. This project would have no effect on fisheries, fish habitat, or shaded riverine aquatic (SRA) habitat.

3.1.5 Hazardous and Toxic Waste

A Phase I environmental site assessment was conducted to identify and evaluate potential hazardous and toxic waste issues in and near the project area. The purpose of the Phase I was to review available documentation regarding past and current land use activities to assess the possible presence of hazardous substances and wastes. The site assessment was completed in December 2011 and concluded that there is no apparent hazardous and toxic waste contamination within the study area. If any evidence of hazardous and toxic waste had been found, then more detailed studies including field sampling and analysis would have been conducted to determine the nature and extent of any hazardous and toxic waste.

3.2 Recreation

Recreation is the first resource considered in detail.

3.2.1 Existing Conditions

The project area is located along the north bank of the lower American River within the American River Parkway. The American River Parkway consists of a 5,000-acre regional park along the riparian corridor stretching from the confluence with the Sacramento River upstream to Folsom Lake. The Parkway is valuable regional resource which attracts bicyclists, runners, walkers, horseback riders, and rafters. The Sacramento County Department of Regional Parks (County Parks) is the agency with primary responsibility over the American River Parkway.

The lower American River is a Federally- and State-designated Wild and Scenic River. The lower American River was included in the Federal and State Wild and Scenic Rivers systems because of some or all of its fisheries, wildlife, scenic, and recreational values, but primarily its recreation and anadromous fishery values

The primary recreational feature within the Parkway which could be affected by the project is the Jedediah Smith Recreation Trail, which provides bicycle, pedestrian, and equestrian trails from Discovery Park to Folsom Lake. The trail also connects with the Sacramento River Trail and Old Sacramento State Historic Park, and many people use it daily to commute to work by bicycle into Downtown Sacramento. The southern terminus of the Sacramento Northern Bike Trail is located at the point where the Jedediah Smith Recreation Trail crosses Del Paso Boulevard headed downstream. The Sacramento Northern Bike Trail transitions to the top of the levee from the Jedediah Smith Recreation Trail at this location and continues north through Sacramento County. The levee crown is covered with a compacted aggregate base material that is also used for pedestrian recreational activities.

Within the project boundary there is no vehicular access for recreationists into the American River Parkway. There are two formal locations where pedestrians and bikers may access the Jedediah Smith Recreation Trail. The upstream access point is at the maintenance ramp at Lathrop Way. The other is at the downstream end of the reach at Del Paso Boulevard.

3.2.2 Environmental Effects

Basis of Significance

Effects to recreational resources are considered significant if construction would result in any of the following:

- Eliminate or severely restrict access to recreational facilities and resources.
- Result in substantial long-term disruption of use of an existing recreation facility.
- Inconsistency with the State or Federal Wild and Scenic Rivers Act.

No Action Alternative

Under this alternative, the levee improvement project would not be constructed; therefore there would be no effects on recreation. The bike trail and levee roads would remain open, and there would be no changes to the project area.

Proposed Levee Improvements

Construction of the levee improvements would have short-term effects on recreational use in the American River Parkway. The road on the top of the levee would be closed to pedestrian access during the six month construction period. There would be no effects on the Jedediah Smith Recreation Trail or the equestrian trails within the American River Parkway. The proximity of trail users and other recreationists to construction equipment and activities (noise, visual effects, and smells) may also degrade recreational experiences.

There are potential impacts to recreation on the Sacramento Northern Bike Trail. Construction of the slurry cutoff wall in the downstream section of the project would temporarily close approximately 2,400 feet of the Sacramento Northern Bike Trail from Del Paso Boulevard to the end of Railroad Drive for three months in 2014 (Plate 13).

The project would neither adversely affect the resources for which the American River was designated under the Wild and Scenic Rivers Act nor adversely affect the river's free-flowing status. All construction activities would be at least 1,700 feet away from the river. Implementation of the project would be consistent with the Wild and Scenic Rivers Act.

3.2.3 Mitigation

In order to mitigate for effects to the recreation trail use, measures would be taken to keep the public informed of the project. To ensure public safety, warning signs and signs regarding restricted access, trail closures and detours would be posted before and during construction, as necessary. Detour routes would be clearly marked, and fences erected in order to prevent access to the project area.

In areas where recreational traffic intersects with construction vehicles, traffic control would be utilized in order to maintain public safety. Public outreach would be conducted through mailings, posting signs, coordination with interested groups, and meetings, if necessary, in order to provide information regarding changes to recreational access in and around the Parkway.

In the upstream and middle sections of the project where the Jedediah Smith Recreational Trail is in close proximity to the waterside levee toe, water-filled barriers would be installed as a safety measure to keep equipment, soil or other materials from encroaching on the trail.

Any effects to recreation would be temporary and considered less than significant. Therefore, no further mitigation would be required.

3.3 Vegetation and Wildlife

3.3.1 Existing Conditions

There are five major plant communities and cover types in the project area: ruderal herbaceous, ornamental landscaping, developed areas, riparian forest and scrub, and open water (American River). A plant community is a natural or human influenced assemblage of plants that have common characteristics and can be easily identified by key species. These communities and associated wildlife are described below. Sensitive native communities are considered native-diverse communities that are regionally uncommon or of special concern to Federal, State, and local resource agencies. The riparian forest and scrub, and open water habitats are considered sensitive native communities. Due to their local significance native oak trees are separately addressed.

Ruderal Herbaceous. Ruderal herbaceous community is a native community that occurs in the project area. This community is located on the levee slopes and landside area between the levee and fences of the nearby buildings and in undeveloped properties. Areas of ruderal herbaceous community also occur in the waterside area between the levee, the slough, and American River.

This community is dominated by annual grasses such as ripgut brome (*Bromus diadrus*), wild oat (*Avena fatua*), and forbs including horsetail (*Equisetum hyemale*). Ruderal herbaceous community provides cover and foraging habitat for resident and migratory songbirds, small mammals, and reptiles.

The ruderal herbaceous community within the project area is predominantly limited to the grasses on the slopes of the levee and in the undeveloped properties on the landside of the levee. The grasses on the levee occur as a result of restoration from previous levee projects and they are mowed as part of the maintenance program by ARFCD to reduce wildfire danger.

Ornamental Landscape. Ornamental landscape community is a nonnative community that occurs within the project area primarily near the landside toe and around office buildings in the upstream section. Most of the vegetation in this community is nonnative vegetation used to landscape the easement between the landside toe of the levee and Lathrop Way. Vegetation type and size are managed by property owners and is usually disturbed by maintenance practices and artificial irrigation. Some of this

vegetation is trimmed by ARFCD while performing maintenance along the landside easement. This community provides nesting, cover, and foraging habitat for resident and migratory songbirds, and other wildlife species that have become adapted to urban areas.

Developed Areas. Nonnative communities occur in areas developed for urban use in the project area. Developed areas include sidewalks, roadways, buildings, railroad tracks, parking lots, and recreation trails. This cover type provides little to no habitat for wildlife, and has little to no vegetation and ground cover.

Riparian Forest and Scrub. Riparian forest and scrub is a native community that occurs in the project area. This community consists of forested areas and underbrush habitat along the American River and adjacent slough. This community includes native and nonnative trees, shrubs, vines, and brush in narrow bands along the river and slough and larger expanses in the area between the two. There is no riparian habitat within the project boundary.

Open Water. The American River is located approximately 1,700 feet west and south of the reach and is well outside the construction footprint. There are no wetlands in the project area.

Native Oak Trees. The City of Sacramento's Heritage Tree Ordinance, Chapter 12.64 Heritage Trees (Oak tree ordinance), regulates the protection of significant specimen trees existing in the city, particularly oak tree species removal or disturbance to all species of heritage trees in the City of Sacramento. The ordinance applies to all trees with a trunk circumference of 100 inches (31 inch diameter at breast height [dbh]), or greater, or any native oak (*Quercus*), buckeye (*Aesculus California*), or sycamore (*Platanus Racemosa*) having a trunk circumference of 36 inches (11.5 inch dbh), or greater. The ordinance applies to any native oak trees immediately within, or adjacent to the project area. Typically, only trees 6 inches dbh, or greater, are protected. In the project area there are 3 Valley Oaks from 15 inches to 29 inches in diameter. Adjacent to the middle section of the project reach is approximately 22 acres of wooded habitat that has many large, mature Valley Oaks and Live Oak trees, however, their number and size are unknown, as the property is privately owned and real estate access has not been obtained. One tree identified for potential removal is located on this property; however, the current lack of real estate access may require relocation/redesign of a proposed temporary ramp.

3.3.2 Environmental Effects

Basis of Significance

A project would significantly affect vegetation and wildlife if it would, in comparison to the no-action baseline: (1) significantly reduce the amount of native vegetation and wildlife habitat in the project area to a point that native wildlife could not live or survive in the project area; or (2) permanently remove or disturb sensitive native communities.

No Action

Under the No Action alternative, the affected levee reach would continue to be maintained by local levee maintenance districts. Maintenance activities typically include mowing and herbicide treatment to the levee slopes to regulate vegetation growth. Under this alternative the proposed project would not be built. There would be no change to the native vegetation or wildlife in the project area; however, emergency actions taken to prevent flooding in the possible event of levee failure may result in loss of vegetation.

Construct Levee Improvements

One tree is anticipated for removal in the upstream section of the project in order to accommodate construction activities and meet levee safety requirements. One tree in the downstream section would be removed to implement the installation of the slope stability/seepage berm, and to meet levee safety requirements. The tree to be removed in the upstream section is adjacent to a special status critical habitat. Removal of these trees may require a permit from the City of Sacramento. The trees are 15” to 23” dbh and the mitigation planting would follow the recommendations proposed by the U.S. Fish and Wildlife Service (USFWS) in their Fish and Wildlife in the Coordination Act Report.

Common wildlife species present within or near the project area may be directly or indirectly affected by the implementation of the proposed project. Direct impacts may include mortality or injury to individuals present within the project area due to vegetation removal, movement of heavy equipment, and construction noise.

Impacts related to removal of two oak trees would be less than significant with mitigation.

3.3.3 Mitigation

Mitigation would be coordinated with the USFWS as required by the Fish and Wildlife Coordination Act. The USFWS has recommended that the project replace the oak trees removed along the upstream and downstream segments, at an inch for inch ration based on dbh. Typically tree mitigation is implemented at a one gallon planting per every ¼ inch of dbh. In this case the 38 inches combined dbh would result in 152 plantings. The Corps would work with the USFWS, County Parks and the Department of Water Resources to implement the mitigation. It is often desirable to install the plantings at established mitigation sites in order to maximize the use of established irrigation systems and maintenance programs. All tree removal activities would be performed by, or under the direct supervision of, a certified arborist. With mitigation, impacts related to removal of two oak trees would be less than significant.

3.4 Special Status Species

3.4.1 Existing Conditions

Regulatory Setting

Certain special status species and their habitats are protected by Federal, State, or local laws and agency regulations. The Federal Endangered Species Act (FESA) of 1973 (50 CFR 17) provides legal protection for plant and animal species in danger of extinction. This act is administered by USFWS and the National Marine Fisheries Service (NMFS). The California Endangered Species Act (CESA) of 1977 parallels FESA and is administered by the California Department of Fish and Game (CDFG). Other special status species lack legal protection, but have been characterized as “sensitive” based on policies and expertise of agencies or private organizations, or policies adopted by local government. Special status species are those that meet any of the following criteria:

- Listed or candidate for listing under the Federal Endangered Species Act of 1973 (50 CFR 17).
- Listed or candidate for listing under the California Endangered Species Act of 1977.
- Nesting bird species and active nests of birds listed under the Migratory Bird Treaty Act.
- Species listed in the Bald and Golden Eagle Protection Act.
- Fully protected or protected species under stated CDFG code.
- Wildlife species of special concern listed by the CDFG.
- Plant species listed as Rare under the California Native Plant Protection Act.
- Plant species listed by the California Native Plant Society.
- Species protected by local ordinances such as the Sacramento County Ordinance, Chapter 19.12, Tree Preservation and Protection.
- Species protected by goals and policies of local plans such as the American River Parkway Plan, which includes anadromous and resident fishes, as well as migratory and resident wildlife.
- Essential Fish Habitat listed under the Magnuson-Stevens Act. Essential Fish Habitat is defined in the Magnuson-Stevens Act as “. . . those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The act requires that Federal agencies consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a Federal agency may have adverse effects on designated Essential Fish Habitat.

3.4.2 Special Status Species Evaluation

A list of Federally listed and candidate species, and species of concern that may be affected by projects in USGS quad East Sacramento was obtained on February 27,

2012 via the USFWS website. In addition, a search of the California Natural Diversity Database (CNDDDB) conducted on February 28, 2012 indicated several State and Federal listed species have been reported within, or near the project boundaries. The CNDDDB showed that only the Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and the valley elderberry longhorn beetle (*Desmoceros californicus dimorphus*) (VELB) have been reported within one half mile of the project boundary. The USFWS and CNDDDB lists are included in Appendix A. Elderberry shrubs (*Sambucus sp.*) were also identified within the project area as elderberry savanna due to the density of shrubs. The shrubs are the sole host plant for the beetle. In this case the site is designated as critical habitat for the VELB. The site is located directly adjacent to a section of the upstream segment of the project on the landside of the levee.

Special status species that were not identified as occurring or having habitat in the project area are not discussed further in this document. The following Federal and State listed terrestrial special status species were identified as having the potential to occur in the vicinity of the project area and be impacted by construction activities:

- Valley elderberry longhorn beetle (Federal Threatened) and Critical Habitat;
- White-tailed kite (CDFG Fully Protected)
- Swainson's hawk (State Threatened);

The green sturgeon (*Acipenser medirostris*), the delta smelt (*Hypomesus transpacificus*) and its critical habitat, the Central Valley steelhead (*Oncorhynchus mykiss*) and its critical habitat, the Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*) and its critical habitat, and the Sacramento River winter-run Chinook salmon are listed by the USFWS as "Federal Threatened or Endangered species that Occur in or may be Affected by Projects in the Sacramento East U.S.G.S. 7 ½ Quad", however, there have been no occurrences reported in the CNDDDB. It should be pointed out that presence or absence of a species should not be based solely on CNDDDB occurrence reports. The project area is over 1,700 feet away from the American River and is approximately two miles from the Sacramento River. The Corps has therefore determined that the project would have no effect on these species and they will not be further discussed in this document.

Valley Elderberry Longhorn Beetle

The VELB is endemic to the riparian habitats in the Sacramento and San Joaquin Valleys where it resides on elderberry (*Sambucus spp.*) plants. The beetle's distribution is patchy throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield (USFWS 1984). The beetle is a pith-boring species that depends on elderberry plants during its entire life cycle. The beetle tends to be located in population clusters that are not evenly distributed across the Central Valley (Barr, 1991). In October 2006, the USFWS recommended, based on a review of the species status, it be delisted, however, the USFWS has taken no formal action as yet.

The Parkway, with an abundance of elderberry shrubs in a well-connected corridor, provides high quality habitat for the VELB. As a part of their recovery plan, the Service has concluded that two areas in Sacramento County should be designated Critical Habitat for VELB based on the highest known populations of the beetle at that time. As discussed above, the project area is located adjacent to one critical habitat site. There are also approximately 12 elderberry shrubs adjacent to the levee in the slope stability section. The exact number of shrubs and size of associated stems must be approximated due to the presence of a homeless encampment.

White-tailed Kite

White-tailed kite (*Elanus leucurus*) is a common to uncommon, yearlong resident in coastal and valley lowlands and is rarely found away from agricultural areas. However, it does inhabit herbaceous and open stages of most habitats, mostly in cismontane California. The main prey of white-tailed kite is voles and other small, diurnal mammals, but it occasionally preys on birds, insects, reptiles, and amphibians. White-tailed kite forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Nests are made of loosely piled sticks and twigs and lined with grass, straw, or rootlets and placed near the top of a dense oak, willow, or other tree stand; usually 6-20 meters (20-100 feet) above ground. Nests are located near open foraging areas in lowland grasslands, agricultural areas, wetlands, oak-woodland and savannah habitats, and riparian areas associated with open areas. White-tailed kite are recorded as occurring in several locations along the American River and the riparian habitat in the vicinity of the project area provides suitable nesting habitat for this species. The most recent record of a nesting white-tailed kite in CNDDDB was recorded in August of 2009 and is located over a half mile east of the project area along the American River. Other CNDDDB records (1974 and 1988) indicate observations of nests even further away from the project area.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is an uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and the Mojave Desert. Swainson's hawks breed in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley and forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Swainson's hawks breed in California and over winter in Mexico and South America. Swainson's hawks usually arrive in the Central Valley between March 1 and April 1, and migrate south between September and October. Swainson's hawks nest usually occur in trees near the edges of riparian stands, in lone trees or groves of trees in agricultural fields, and in mature roadside trees. Valley oaks, Fremont cottonwoods, walnuts, and large willows with an average height of about 58 feet, and ranging from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. Suitable foraging areas for Swainson's hawk include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Swainson's hawks primarily feed on voles; however, they will feed on a variety of prey including small mammals, birds, and insects. Records

in the CNDDDB (2001, 2005, 2006, and 2011) indicate that the Swainson's hawk have been observed nesting within one half mile of the project area, and as close as the VELB critical habitat.

Raptor surveys would be conducted in the spring prior to each construction season of the project.

3.4.3 Environmental Effects

Basis of Significance

Adverse effects on special status species were considered significant if an alternative would result in any of the following:

- Direct or indirect reduction in the growth, survival, or reproductive success of species listed or proposed for listing as threatened or endangered under the Federal or State Endangered Species Acts.
- Direct mortality, long-term habitat loss, or lowered reproduction success of Federally or State-listed threatened or endangered animal or plant species or candidates for Federal listing.
- Direct or indirect reduction in the growth, survival, or reproductive success of substantial populations of Federal species of concern, State-listed endangered or threatened species, species of special concern, or regionally important commercial or game species.
- An adverse effect on a species' designated critical habitat.

No-Action Alternative

Under the no action alternative, there would be no effects on existing special status species or critical habitat. The types of special status species and their associated habitat would remain the same. Current levee maintenance, recreation, and public activity would not change. The effects of these activities on special status species and their associated habitat would be the same.

Construct Levee Improvements

Construction of the NEMDC would directly and indirectly affect the habitat (elderberry shrubs) of the Federally-listed valley elderberry longhorn beetle. The project could also result in direct and indirect affects to the white-tailed kite and the Swainson's hawk. These effects could be considered significant to these special status species unless mitigated.

Effects to Valley Elderberry Longhorn Beetle. Construction of the NEMDC levee improvements would result in direct and indirect affects to several elderberry shrubs.

Direct effects would include trimming and/or removal of shrubs. Indirect effects would include physical vibration and increase in dust during operation of equipment and trucks during construction activities.

The levee repair work would require an excavator operated from the top of the levee to remove soil to create the trench for the cutoff wall. In the upstream segment of the project the remaining soil would be placed in dump trucks at the landside toe, and the soil would be transported off-site for disposal. The maintenance road along the landside toe is directly adjacent to the VELB critical habitat. The trucks would use this as a two-way haul route between the staging areas. The shrubs are not immediately adjacent to the haul route and would not be directly impacted by the construction work, but water-filled barriers would protect the critical habitat along the haul route. The west staging area in the upstream section is also adjacent to the critical habitat and would be used for the construction trailer(s) and the slurry batch plant. The construction trailer would be positioned between the staging area and the critical habitat to act as a buffer.

In the downstream section of the project, levee repairs/slope stability would require removal of the vegetation in this area including approximately 12 elderberry shrubs with one stem each greater than 5 inches in diameter at ground level, and one oak tree. Estimates related to the elderberry shrubs were necessary due to the presence of a homeless encampment located within the shrubs. The situation was considered unsafe for entry by Corps or USFWS staff. Estimates were based on observations taken on top of the levee and adjacent to the UPRR tracks. This area is considered non-riparian however, as a conservative approach, the shrubs are assumed to have exit holes. Initial formal consultation has been initiated based on this information. When the homeless encampment has been removed prior to construction activities in this section, protocol surveys would be conducted for the elderberry shrubs and consultation would be reinitiated to recalculate compensation requirements. Other shrubs located within this area would not be directly impacted by the construction work, but to avoid damage to the shrubs by the equipment, they would be protected in place with concrete or water-filled barriers. The barriers would be placed as far from the dripline of the shrubs as possible. Due to the limited space within this construction area, it would be difficult to observe the USFWS recommended 100-foot radius buffer zone for protection of the elderberry shrubs. The Corps is proposing a 20-foot radius buffer zone, using barriers for protection, and limiting construction until after the no-disturbance period (after June 15).

3.4.4 Mitigation

Valley Elderberry Longhorn Beetle

Consultation under Section 7 of the Endangered Species Act has been initiated with the USFWS to assess potential impacts and required compensation. The Corps has requested concurrence from USFWS with the determination that potential project impacts may affect, but are not likely to adversely affect the VELB. The Corps also proposed compensation for the loss of twelve elderberry shrubs. This would require the planting of 72 elderberry seedlings and 144 associated native plantings. Transplants and

compensation plantings would be proposed at an existing mitigation site, such as Goethe or Rossmoor. However, if adequate space is not available at existing mitigation site, a mitigation bank would be used. To minimize potential take of the VELB, the following measures taken from the USFWS “Conservation Guidelines for the Valley Elderberry Longhorn Beetle,” July 1999 would be incorporated into the project:

- A minimum setback of 100 feet from the dripline of all elderberry shrubs will be established, if possible. If the 100 foot minimum buffer zone is not possible, the next maximum distance allowable will be established. Due to the limited options for locating the staging area, as well as the limited space within the staging area, it would be difficult to observe the required 100-foot radius buffer zone for protection of the elderberry shrubs. The Corps is proposing a 20-foot radius buffer zone, using concrete or water-filled barriers for protection, and limiting construction until after the no-disturbance period (after June 15). These areas would be fenced, flagged, and maintained during construction.
- Environmental awareness training would be conducted for all workers before they begin work. The training would include status, the need to avoid adversely affecting the elderberry shrub, avoidance areas and measures taken by the workers during construction, and contact information.
- Signs would be placed every 50 feet along the edge of the elderberry buffer zones. The signs would include: “This area is the habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.” The signs should be readable from a distance of 20 feet and would be maintained during construction.

Impacts would be less than significant with implementation of the USFWS conservation guidelines for the beetle.

Several factors limit the available construction season for Corps projects related to levee repair or improvements. The two most common are the non-flood season established by the State of California (April 15th – October 31st) and the seasonal requirements of sensitive species that may occur in the project area. In this case, the presence of VELB habitat has reduced the construction season by two months by limiting the construction start date to no earlier than June 15th due to protective measures.

White-tailed Kite and Swainson’s Hawk

Whenever possible, construction would be timed to avoid activities near active bird nests or young of birds that breed in the area. The nesting seasons associated with the potential presence of raptors and protected avian species could further reduce the available construction season into September. For this reason, it would be unrealistic to propose no construction would take place during the breeding/nesting seasons of these avian species during the available construction season (June 15 – October 1).

The Corps would however, take steps to avoid and minimize impacts to raptors and other protected avian species. If it is not feasible for construction to occur outside of nesting periods (April-September 15th), a qualified biologist would survey the project area, and all areas within one-half mile of the project, prior to initiation of construction. If the survey determines that a nesting pair is present, the Corps would coordinate with CDFG and USFWS, and the proper avoidance and minimization measures would be implemented. To avoid potential effects to nesting Swainson's hawks, CDFG typically requires the avoidance of nesting sites during construction activities. These measures include avoiding construction during the breeding season and monitoring of the nest site by a qualified biologist. The project is currently scheduled to begin in late summer 2013. It is anticipated that the timing of the project would begin after the young Swainson's hawks and white-tailed kites have fledged which is normally by July-August.

The proposed mitigation measures would reduce the effects on the white-tailed kite and the Swainson's hawk to less than significant.

3.5 Air Quality

3.5.1 Existing Conditions

Regulatory Background. The Federal Clean Air Act establishes National Ambient Air Quality Standards (AAQS) and delegates enforcement to the states, with direct oversight by the U.S. Environmental Protection Agency (EPA). In California, the Air Resources Board (CARB) is the responsible agency for air quality regulation.

The California Clean Air Act established California AAQS. These standards are more stringent than Federal standards and include pollutants not listed in Federal standards. All Federal projects in California must comply with the stricter State air quality standards. The Federal standards and local thresholds for Sacramento County are shown in Table 1.

On November 3, 1993, the U.S. EPA issued the General Conformity Rule, stating Federal actions must not cause or contribute to any violation of a National AAQS or delay timely attainment of air quality standards for those areas designated as in nonattainment of Federal standards. A conformity determination is required for each pollutant where the total of direct and indirect emissions caused by a Federal action in a nonattainment area exceeds *de minimus* threshold levels listed in the rule (40 CFR 93.153).

Table 1. Air Emission Thresholds for Federal and Local Criteria Pollutants

Criteria Pollutant	Federal Standard (tons/year)	SMAQMD Threshold (lbs/day)
NO _x	25**	85
CO	100	*
SO	100	*
PM ₁₀	100	*
ROG	25**	*

NO_x = nitrogen oxides

PM₁₀ = particulate matter

CO = carbon monoxide

ROG = reactive organic gases

SO = sulfur oxides

* = default to State standard (see California Ambient Air Quality Standards, Appendix B)

** = rates for “severe” Federal nonattainment areas [Federal Register (40 CFR), 1993]

SMAQMD = Sacramento Metropolitan Air Quality Management District

Source: SMAQMD, 2011

Local Air Quality Management. The Sacramento area is included in the Sacramento Valley Air Basin. The air quality in the area is managed by the Sacramento Metropolitan Air Quality Management District (SMAQMD), which is included in the Sacramento Federal Ozone Nonattainment Area (SFNA) and is also subject to regulations, attainment goals, and standards of the U.S. and California EPAs. The EPA General Conformity Regulation requires that “serious” designated nonattainment areas further reduce nitrogen oxides (NO_x) and reactive organic gases (ROG) thresholds to 50 tons/year rather than 100 tons/year. On February 14, 2008, CARB, on behalf of the air districts in the Sacramento region, submitted a letter to EPA requesting a voluntary reclassification (bump-up) of the Sacramento Federal Nonattainment Area from a “serious” to a “severe” 8-hour ozone nonattainment area with an extended attainment deadline of June 15, 2019, and additional mandatory requirements. On May 5, 2010 EPA approved the request effective June 4, 2010 (SMAQMD, 2011). The SFNA is thus designated a “severe” nonattainment area for the National 8-hour AAQS for ozone.

With respect to the State and Federal 24-hour particulate matter 10 microns or larger (PM₁₀) AAQS, Sacramento County is designated as a nonattainment area. Additionally, on October 16, 2006, the EPA promulgated a new 24-Hour standard for PM_{2.5}. This change lowered the daily standard from 65µg/m³ to 35µg/m³ to protect the general public from short term exposure of the fine particulate matter. Sacramento does not meet the new standards (EPA, 2006). The California Clean Air Act of 1988 requires nonattainment areas to achieve and maintain the State AAQS by the earliest practicable date and local air districts to develop plans for attaining State ozone standards.

Sources of Pollutants/Sensitive Receptors. The main sources of emissions contributing to elevated ozone and PM₁₀ concentrations in this area of the Sacramento Air Basin are vehicular emissions and airborne pollutants from road dust and plowing of fields. A table of Estimated Annual Average Emissions for Sacramento County from

2010 is included in Appendix B. The table shows emissions data, in tons per day, for stationary sources, mobile sources and areawide sources. Sensitive receptors in the project area include residents and wildlife.

Toxic Air Contaminants.

Under the Clean Air Act, toxic air contaminants (TACs) are airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health. A chemical becomes a regulated TAC after it is identified by ARB's California Air Toxics Program or the U.S. Environmental Protection Agency's (EPA) National Air Toxics Assessments, assessed for its potential for human exposure, and evaluated for its health effects on humans. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, or genetic damage; or short-term acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches. Regulating TACs is important not only because of the severity of their health effects, but also because the health effects can occur with exposure to even small amounts of TACs. TACs are not classified as criteria air pollutants (CAPs) and no ambient air quality standards have been established for them. The effects of various TACs are very diverse and their health impacts tend to be local rather than regional; consequently uniform standards for these pollutants have not been established.

The California Almanac of Emissions and Air Quality (Almanac), which is published annually by ARB, presents the trends of various TAC emissions in California. Currently, the estimated risk from particulate matter emissions from diesel exhaust (diesel PM) is higher than the risk from all other TACs combined, and this TAC poses the most significant risk to California's population. In fact, ARB estimates that 79% of the known statewide cancer risk from the top 10 outdoor air toxics is attributable to diesel PM. In September 2000, ARB adopted the Diesel Risk Reduction Plan (DRR Plan), which recommends many control measures to reduce the risks associated with diesel PM and achieve a goal of 75% PM reduction by 2010 and 85% by 2020. The key elements of the Plan are to clean up existing engines through engine retrofit emission control devices, to adopt stringent standards for new diesel engines, to lower the sulfur content of diesel fuel, and implement advanced technology emission control devices on diesel engines.

Construction activity can result in emissions of particulate matter from diesel exhaust (diesel PM). The use of off-road heavy-duty diesel equipment for site grading and excavation, paving, and other construction activities results in the generation of diesel PM emissions, which was identified as a TAC by ARB in 1998. SMAQMD has not established a quantitative threshold of significance for construction-related TAC emissions. Therefore, the SMAQMD recommends that lead agencies address this issue on a case-by-case basis, taking into consideration the specific construction-related characteristics of each project and its proximity to off-site receptors.

Implementation of SMAQMD's Basic Construction Emission Control Practices would result in the reduction of diesel PM exhaust emissions in addition to CAP

emissions, particularly the measures to minimize engine idling time and maintain construction equipment in proper working condition and according to manufacturer's specifications.

3.5.2 Environmental Effects

Basis of Significance

A project would significantly affect air quality if it would: (1) violate any ambient air quality standard; (2) contribute on a long-term basis to existing or projected air quality violation; (3) expose sensitive receptors to substantial pollutant concentrations; or (4) not conform to applicable Federal and State standards, and local thresholds on a long-term basis.

No Action

Under the no action alternative, the project would not affect air quality in the project area. Air quality would continue to be influenced by climatic and geographic conditions, and local and regional emissions from vehicles, and local commercial and industrial land uses. However, air quality is expected to improve in the future. The CARB and the SMAQMD will be implementing stricter ozone precursor and PM₁₀ standards.

Construction of Levee Improvements

Emissions associated with the project would be short-term during construction. Combustion emissions would result from the use of construction equipment, truck haul trips to and from commercial sources and disposal sites, and worker vehicle trips to and from the work areas. Exhaust from these sources would contain ROG, carbon monoxide (CO), NO_x, PM₁₀, and carbon dioxide (CO₂). Exhaust emissions would vary depending on the type of equipment, the duration of use, and the number of construction workers and haul trips to and from the construction site. Fugitive dust would also be generated during disturbance of the ground surfaces during construction. Although, much of the material removed during the levee degrading process would likely be suitable for the construction of the slurry wall, as well as reconstruction of the levee, due to staging area limitations, this material would be off-hauled and new material would be imported for levee reconstruction. This will be reflected in the air quality emissions calculations regarding the number of haul trips and round trip distance.

The SMAQMD Road Construction Emissions Model (v. 6.3.2, July 2009) was used to estimate project emission rates for ROG, CO, NO_x, PM₁₀, PM_{2.5}, and CO₂. The estimated equipment to be used, volume of material to be moved, and disturbance acreages were compiled to determine the data to input into the emissions model. The emission calculations are based on standard vehicle emission rates built into the model.

Details and results of the calculations for each reach are provided in Appendix B. The estimated emissions are shown in Tables 2a and 2b.

Table 2a. Estimated Air Emissions for NEMDC Upstream Segment (Construction in 2013)

	ROG	CO	NO_x	PM₁₀	PM_{2.5}	CO₂
Total emissions (lbs/day)	12.1	96.1	88.7	43.9	11.8	12,389.2
SMAQMD thresholds (lbs/day)	N/A	N/A	85	N/A	N/A	N/A
Total (tons/construction project)	0.4	3.3	3.1	1.0	0.3	429.1
Federal standards (tons/year)	25	100	25	100	N/A	N/A

Table 2b. Estimated Air Emissions for NEMDC Downstream Segment (Construction in 2014)

	ROG	CO	NO_x	PM₁₀	PM_{2.5}	CO₂
Total emissions (lbs/day)	8.6	57.5	66.1	23.0	6.9	9,465.7
SMAQMD thresholds (lbs/day)	N/A	N/A	85	N/A	N/A	N/A
Total (tons/construction project)	0.2	1.4	1.6	0.4	0.1	235.6
Federal standards (tons/year)	25	100	25	100	N/A	N/A

Note: Estimates rounded.

Tables 2a and 2b summarize the estimated emissions (in pounds per day and total tons for the project) for the project and compare them to the Federal standards and local thresholds. Based on the air quality analysis performed, the estimated emissions totals for the NEMDC project would be below the Federal conformity *de minimis* thresholds.

The tables also show that construction emissions of PM₁₀ and ROG would each be less than the *de minimis* thresholds established by the U.S. EPA for conformity analyses. In addition, the best management practices (BMPs) listed in Section 3.5.3 would be implemented to reduce the NO_x emissions below the SMAQMD threshold. As a result, the proposed action does not require an in-depth conformity analysis to evaluate ambient air quality concentrations and instead is presumed to conform to the region's ozone and PM₁₀ State implementation plan. Therefore, the Corps has determined the proposed action is exempt from the conformity rule.

The project would not contribute on a long-term basis to existing or projected air quality violations, or expose sensitive receptors to substantial pollutant concentrations. The project would implement all the CEQA Basic Construction Emission Control Practices (included in Appendix B) and would disturb less than 15 acres of area per day. These factors, along with mitigation, below, would ensure that air quality impacts related to implementation of the project would be less than significant.

3.5.3 Mitigation

Emissions would result from the use of construction equipment, truck haul trips to and from the borrow sites, and worker vehicle trips to and from the construction sites.

Prior to construction, the contractor would submit a construction equipment list to be used in the project for approval by the Corps and SMAQMD. SMAQMD would confirm the fleet emissions and endorse the list only if the total fleet emissions would meet a 20% reduction in NO_x and a 45% reduction in PM₁₀ in comparison to the state fleet emissions average. The contractor would be required to follow the requirements of SMAQMD's standard mitigation program (Appendix B). Any remaining emissions over the NO_x threshold should be reduced via a mitigation fee payment. The current cost of reducing one ton of NO_x is \$16,640 (\$8.32/lb), however, SMAQMD has already approved an increase to the mitigation fee to \$17,080 which will be in place by mid-2012. The contractor would be responsible for payment of any required mitigation and administrative fees.

The standard mitigation measures for the SMAQMD Recommended Mitigation for Reducing Emissions from Heavy-Duty Construction Vehicles are:

- Use diesel-fueled equipment manufactured in 2003 or later, or retrofit equipment manufactured prior to 2003 with diesel oxidation catalysts; use low-emission diesel products, alternative fuels, after-treatment products, and/or other options as they become available.
- Maintain properly functioning emission control devices on all vehicles and equipment.
- The contractor would provide a plan, for approval by the Corps and SMAQMD, demonstrating that the heavy-duty (greater than 50 horsepower) self-propelled off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20% NO_x reduction and 45% particulate reduction compared to the most recent CARB fleet average at time of construction; and
- The contractor shall submit to the Corps and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
- The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be repaired immediately, and [DERA, City of x,

SMAQMD, etc.] shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

- If at the time of construction, the SMAQMD has adopted a regulation applicable to construction emissions, compliance with the regulation may completely or partially replace this mitigation. Consultation with SMAQMD prior to construction will be necessary to make this determination.

Implementation of the BMPs listed below would reduce air quality degradation caused by dust and other contaminants:

- During construction, implement all appropriate dust control measures, such as tarps or covers on dirt piles, in a timely and effective manner.
- Periodically water all construction areas having vehicle traffic, including unpaved areas, to reduce generation of dust. Application of water would not be excessive or result in runoff into storm drains.
- Suspend all grading, earth moving, or excavation activities when winds exceed 20 miles per hour.
- Water or cover all material transported offsite to prevent generation of dust.
- Sweep paved streets adjacent to construction sites, as necessary, at the end of each day to remove excessive accumulations of soil or dust.
- Cover all trucks hauling dirt, sand, soil, or other loose material, or maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision would be enforced by local law enforcement agencies.
- Revegetate or pave areas cleared by construction in a timely manner to control fugitive dust.

Impacts to air quality would be temporary and short-term, and would be less than significant with mitigation.

3.6 Climate Change

3.6.1 Environmental Setting

Warming of the climate system is now considered to be unequivocal (IPCC, 2007). Global average surface temperature has increased approximately 1.33 °F over the last one hundred years, with the most severe warming occurring in the most recent decades. In the twelve years between 1995 and 2006, eleven years ranked among the warmest years in the instrumental record of global average surface temperature (going back to 1850). Continued warming is projected to increase global average temperature between 2 and 11 °F over the next 100 years (IPCC, 2007).

The causes of this warming have been identified as both natural processes and as the result of human actions. Increases in greenhouse gas (GHG) concentrations in the Earth's atmosphere are thought to be the main cause of human induced climate change. GHGs naturally trap heat by impeding the exit of solar radiation that has hit the Earth and is reflected back into space. The six principal GHGs of concern are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, and perfluorocarbons.

3.6.2 Requirements

CEQA requires that lead agencies consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. CEQA requires that the cumulative impacts of GHG, even additions that are relatively small on a global basis, need to be considered.

NEPA requires that a “no action” alternative be established. Under the no action alternative, the project would not be constructed, and there would be no construction-related effects on climate change. Locally generated emissions, including levee operations and maintenance, would continue. However, the possible event of levee failure may result in large amounts of GHG emissions during flood-fighting activities, as well as large amounts of emissions resulting from clean-up activities and the repair and/or replacement of flood damaged housing, commercial and industrial properties, and public infrastructure.

3.6.3 Basis of Significance

It is unlikely that any single project by itself could have a significant impact on the environment. However, the cumulative effect of human activities has been linked to quantifiable changes in the composition of the atmosphere, which in turn have been shown to be the main cause of global climate change (IPCC, 2007). The Department of Water Resources has not established a quantitative significance threshold for GHG emissions; instead, each project is evaluated on a case by case basis using the most up to date calculation and analysis methods. The proposed project could result in a significant impact if it would generate GHG emissions:

- Either directly or indirectly, that may have a significant cumulative impact on the environment;
- That would conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs, including the state goal of reducing GHG emissions in California to 1990 levels by 2020, as set forth by the timetable established in AB 32, California Global Warming Solutions Act of 2006.

3.6.4 Greenhouse Gas Emissions

Construction Emissions

Vehicle Emissions. The proposed construction would use large, diesel-fueled construction vehicles during all phases of the project. The partial degrade of the levee crown would result in emissions from bulldozers and graders, as well as emissions from the haul trucks used to dispose of material. The construction of the slurry wall would result in emissions from the jet-grout equipment and haul trucks, as well as the diesel-powered mixers required for the mixing of the cement and bentonite. Diesel-powered cement mixers, pavers, and haul trucks for borrow materials would be used for the reconstruction of the levee crown.

In addition to the construction vehicles, mixers, and haul trucks involved in the actual construction of the project, there would also be GHG emissions from the workforce vehicles. Workers would commute from their homes to the construction site and park in the staging area. Workers are assumed to commute no further than 20 miles from the construction site. During construction, there may be times during which large construction vehicles on the roads slow regular traffic patterns, increasing emissions from vehicles that use the roads on a regular basis. There would also be incidental emissions from the electricity used for lighting.

Operational Emissions. The long-term operations and maintenance of the project sites would remain the same with or without project conditions. Current operations and maintenance involves the periodic mowing and spraying of the levee slopes for fire danger control. While the project does not improve operation maintenance efficiency, the project would also not increase emissions due to operations and maintenance. Additionally, the construction of the project would reduce the possibility of large amounts of GHG emissions from flood-fighting activities in the event of levee failure.

Emissions Models

In response to the concerns regarding GHG emissions, the most recent version of the SMAQMD Road Construction Emissions Model (v. 6.3.2) now generates an output for CO₂. The SMAQMD Road Construction Emissions Model 6.3.2 was based on knowledgeable individuals from SMAQMD, the California Department of

Transportation, CARB, and the U.S. EPA. The emissions model was prepared by Jones & Stokes and Rimpo and Associates, Inc., and used the 26th edition of Walker's Building Estimator's Reference Book (1999).

As discussed in Tables 2a and 2b (Section 3.5.2), estimated CO₂ emissions for the NEMDC upstream segment would total approximately 12,389.2 lbs/day or approximately 429.1 tons of CO₂ for the project; the downstream segment would total approximately 9,465.7 lbs/day or approximately 235.6 tons of CO₂ for the project. It should be noted that although CO₂ emissions can now be calculated, there is no Federal standard, or any State or local threshold to meet, which makes it difficult to fully analyze these impacts.

The CEQA Climate Change Committee has created a guidance document for GHG emissions calculations. This document requires data entry related to construction equipment, workforce transportation, materials transportation, and maintenance and operational emissions. According to this calculator, the total emissions of GHGs for the NEMDC upstream segment project would be approximately 630.1 tons of CO₂ equivalents (CO₂e) and 377.1 tons for the downstream segment. Details and results of the calculations are provided in Appendix B. While the data entered on this form is based on assumptions and estimates, the amounts of CO₂e can be used to determine significance according to CEQA.

3.6.5 Significance Determination

The construction at NEMDC is a relatively small, short-term project and emissions from construction vehicles would occur during a short time period. Using the emissions model and calculations previously discussed in Air Quality (Section 3.5.2), CO₂ emissions are estimated to be less than 2,000 tons per year. Additionally, the CEQA Climate Change Committee GHG emissions calculator estimates total project emissions to be approximately 630.1 tons and 377.1 tons of CO₂e, respectively, for the upstream and downstream segments. No state or Federal agency has yet established significance criteria (thresholds of significance) for GHGs or other impacts to global climate change. However, some statewide standards have been established that provide information about the order of magnitude of emissions that might be considered significant.

Pursuant to AB 32, CARB mandates that only “large” facilities (i.e., stationary, continuous sources of GHG emissions) that generate greater than 25,000 metric tons of CO₂e per year report their GHG emissions. In addition, CARB has released a preliminary draft staff proposal that recommends 7,000 metric tons of CO₂e per year be used as the baseline threshold for impacts. The Council on Environmental Quality (CEQ) has issued draft Federal NEPA guidance that suggests that the effects of projects directly emitting GHGs in excess of 25,000 tons annually be considered in a qualitative and quantitative manner. The CEQ does not propose this reference as a threshold for determining significance, but as “a minimum standard for reporting emissions under the [Clean Air Act]”. It is not the intention of the Corps to adopt a 25,000 or 7,000 metric ton CO₂e threshold of significance; these figures are only listed to provide context to the scale of the emissions from the proposed project.

There would be no increase of long-term emissions (permanent sources) of GHGs from this project. Long-term emissions would be the same with or without the project; maintenance emissions would be the same, and the slurry wall itself has no net long-term emissions. Based on the review discussed above, this project does not conflict with any statewide or local goals with regard to reduction of GHG.

3.6.6 Mitigation Measures

BMPs and implementation of the standard construction mitigation measures as recommended by SMAQMD (Appendix B) would reduce GHG emissions through the same processes that reduce total NO_x and PM₁₀ emissions. These measures are described in Appendix B.

3.7 Water Resources and Quality

3.7.1 Existing Conditions

The Sacramento metropolitan area is situated at the confluence of the American and Sacramento River in a low-lying flood basin. Levees along these rivers provide flood protection and convey water from the Sierra Nevada to the Sacramento-San Joaquin Delta. Winter rains and spring snow melt can cause high flows in the valley's rivers. High water flows stresses levees and berms, weakening them, causing them to erode, and possibly fail. To maintain the flood control system, areas with existing or potential erosion and seepage damage are identified and repaired.

The American River is the major waterway in the project area. The river flow is influenced by upstream dams, local weather, spring snow melt, flood by-passes, and upstream tributaries. Folsom Dam has the greatest effect on water flow in this section of the river. The mean water level for the American River at the confluence of the Sacramento River was 20.44 feet in 2007. The maximum water level of the American River was 33.54 feet and the minimal water level was 16.75 feet at the confluence in 2007 (DWR, 2012a).

The local rivers, lakes, and rainfall recharge the ground water table in the project area. The City of Sacramento utilizes the ground water to supply drinking water to businesses and residential homes. The ground water table is approximately 75 feet below the surface. Average ground water depth can be affected by seasonal changes in water volume in the valley, rivers, and lakes, local rainfall, and urban demand on the ground water (DWR, 2012b).

3.7.2 Environmental Effects

Basis of Significance

A project would significantly affect water resources if it would: (1) result in the loss of a surface or groundwater source; or (2) interfere with existing beneficial uses or water rights.

No Action

Under this alternative, there would be no construction activity to affect water resources or quality in the project area. The surface and groundwater conditions would not change.

Construct Levee Improvements

Levee construction would occur within the levee alignment and landside levee slope. The closest the American River gets to the construction limit is approximately 1,700 feet. The completed levee improvements would not significantly alter the alignment of the current levee nor would they provide for any additional flow capacity beyond the current design requirements. The improvements would stabilize the levees in this section of the levee system to safely convey an emergency release of 160,000 cfs with 3 feet of freeboard to allow for wave or wind action. The improvements would not alter the river hydraulics nor would they alter the downstream capacity of the levee system. The sections of the levee system on the American River upstream and downstream of the project reach are already capable of safely conveying an emergency release of 160,000 cfs with 3 feet of freeboard.

Approximately 10 acres of bare soil would be exposed until construction is completed and the levee slope and staging area would be reseeded. Dust control measures would be implemented on the levee crown, side slopes, maintenance roads and stockpiles to avoid dust and soil from entering the river or other drainages as a result of construction activities. Precautions would be followed to avoid erosion and movement of soils into the drainage system.

In addition, inadvertent spills of oil or fuels from construction equipment could be a source of contamination at work or staging areas. Precautions would be followed to avoid contamination. The contractor would be required to properly store and dispose of any hazardous waste generated at the site. Riparian vegetation and best management practices would prevent sediment and erosion runoff from entering the river.

As the slurry wall would only be deep enough to address through-seepage, there would be no impacts to groundwater. The project would have no impacts to water rights. Water quality impacts related to implementation of the project would be less than significant.

3.7.3 Mitigation

Since the project would disturb more than 1 acre of land, the contractor would be required to obtain a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the contractor would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP), identifying BMPs to be used to avoid or minimize any adverse effects during construction to surface waters.

The following BMPs would be incorporated into the project:

- The contractor would prepare a spill control plan and a SWPPP prior to initiation of construction. The SWPPP would be developed in accordance with guidance from the RWQCB, Central Valley Region. These plans would be reviewed and approved by the Corps before construction began.
- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on haul roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.
- Fuel and maintain vehicle in a specified area is designed to capture spills. This area can not be near any ditch, stream, or other body of water or feature that may convey water to a nearby body of water.
- Inspect and maintain vehicles and equipment to prevent dripping of oil or other liquids.
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are scheduled to begin late summer 2013. If rains are forecasted during construction, erosion control measures would be implemented as described in the RWQCB Erosion and Sediment Control Field Manual.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in stormwater pollution prevention practices.
- Revegetate disturbed areas in a timely manner to control erosion.

Since no significant adverse affects to groundwater or surface water resources are anticipated, no additional mitigation is required.

3.8 Traffic and Circulation

3.8.1 Existing Conditions

Streets in the project area consist of a mix of regional highways, minor traffic arteries and minor industrial/office access streets maintained by the City of Sacramento. Sidewalks are virtually non-existent in the project area and the nearest residences are located approximately 900 feet from the project. The American River Parkway provides recreation trails used for pedestrian traffic (running and walking), horseback riding, and bicycling adjacent to the entire project area.

Roadways adjacent to the reach include: Highway 160, Northgate Boulevard, Del Paso Boulevard, Railroad Drive, and Lathrop Way. With the exception of Highway 160, these roadways are two-lane roadways on both the landside and waterside of the levee. The smaller roads connect industrial area and office complexes to major urban connector roads. Traffic on these streets includes private automobiles, light and heavy (semi-trucks) commercial vehicles, delivery/service vehicles, bicycles and pedestrians. The average daily traffic (ADT) on Del Paso Boulevard at Railroad Drive in 1988 was 9,131 vehicles. The ADT dropped to 4,840 vehicles in 1995. (City of Sacramento, 2012). Traffic volume on these roads peaks during the morning and evening rush hours and reduces in volume during the middle of the day.

The nearest major road to the project area is Highway 160. This highway is a major, four-lane urban roadway that connects residential and commercial areas in downtown Sacramento to the Arden area, the Capitol City Freeway, and other parts of the metropolitan area. Highway 160 is outside of the project area but would be used to access the project area during construction. Types of traffic on Highway 160 include private automobiles, light commercial vehicles, semi-truck trailers, emergency vehicles, public buses, and bicycles. Traffic volume on Highway 160 peaks during the morning and evening rush hour and becomes a steady but lower volume during the day.

Pedestrian traffic is low during the day and peaks in the early evening. Recreation traffic in the American River Parkway and levee bicycle trail is moderate throughout the day. The American River Parkway trail is a paved two-lane bike trail. The levee trail is a gravel road on top of the levee.

The City of Sacramento posts traffic counts on their web site for roadways in the project area. The average daily traffic (ADT) count at Del Paso Boulevard and Railroad Drive was 4,840 cars. This information was from May of 1995 and was the most current information available for this intersection, which is located in the middle of the project reach. It represents the number of vehicles travelling through this intersection during a 24 hour period on an average day, considered to be Tuesday, Wednesday, or Thursday. (City of Sacramento, 2012).

3.8.2 Environmental Effects

Basis of Significance

The project would significantly affect traffic if it would: (1) cause an increase in traffic volume that is substantial in relation to the existing load and capacity of a roadway; (2) cause an increase in safety hazards on an area roadway; or (3) cause substantial deterioration of the physical condition of the nearby roadways.

No Action Alternative

The no action alternative would have no effect on the traffic and circulation in the project area. The existing roadways, bike paths, types of traffic, traffic volume, and circulation patterns would not change.

Construct Levee Improvements

The project would temporarily affect local roads and major urban connector roads used as a haul route during construction. Haul trucks would cause an increase in traffic volume and reduce traffic speeds on local residential roads. Haul trucks would have a minor affect on traffic volume (less than 5%) and traffic speeds on the major urban connector roads.

In the upstream segment, the directional flow of construction is from both ends of the segment toward the center. During construction, the haul trucks would travel between the licensed disposal facility, the commercial borrow pit, and the construction site. Internal haul routes would be located primarily along the landside toe of the levees. External haul routes would require the use of Del Paso Boulevard, Northgate Boulevard, Lathrop Way, Highway 160, Interstate 5, Highway 50, and Interstate 80. Access points for off-hauling or importing material would be at Lathrop Way, Del Paso Boulevard and Railroad Drive. To reduce traffic safety hazards, a flagman at Railroad Drive would direct construction traffic as the haul trucks leave the construction site. During the height of construction it is estimated that trucks conducting approximately 65 haul trips would be accessing the site per day. The type and volume of construction traffic should not cause a substantial deterioration of the physical condition of the nearby roadways, however pre-construction and post-construction conditions would be documented by the contractor. Any deteriorated roadways determined to be caused by the project would be repaired by the contractor.

The closure of the Sacramento Northern Bike Trail would be necessary for safety reasons. Pedestrians and bicyclists would be encouraged through the use of concrete barriers and/or fencing, and detour signs to use the designated detour during the construction period. These effects could be considered significant to traffic and circulation unless mitigated.

3.8.3 Mitigation

The contractor would be required to develop a Traffic Control Plan, which would be reviewed and approved by the City of Sacramento prior to construction. This plan would include the following measures:

- Do not permit construction vehicles to block any roadways or private driveways.
- Provide access for emergency vehicles at all times.
- Select haul routes to avoid schools, parks, and high pedestrian use areas, when possible. Crossing guards would be used when truck trips coincide with schools hours and when haul routes cross student travel path.
- Obey all speed limits, traffic laws, and transportation regulations during construction.
- Use signs and flagmen, as needed, to alert motorists, bicyclists, and pedestrians to avoid conflict with construction vehicles or equipment.
- Provide a safe, clearly-marked detour during the closure of the Sacramento Northern Bike Trail. Erect signs providing information regarding closure and detour, at least two weeks prior to the closure date.
- Flagmen would be used at each roadway that crosses the levee to safely circulate traffic through the construction site.
- Use separate entrances and exits to the construction site.
- Prior to construction, notify local residents, business, schools, and the City of Sacramento if road closures would occur during construction.
- Contractor would repair roads damaged by construction.

The proposed mitigation measures would reduce the effects on traffic and circulation to less than significant.

3.9 Public Utilities and Services

3.9.1 Existing Conditions

The project site is surrounded by the American River Parkway, undeveloped private property, light industrial and office buildings, and is not immediately adjacent to residences. Implementation of the project is not expected to interrupt public services such as mail delivery, trash pickup, street sweeping, etc. However, several utilities are located within the project area and pass through the levee, including: communications,

potable water supply, natural gas, sanitary sewer, and electricity. In order to be in compliance with Corps levee safety policy, several utilities would require relocation outside of the “prism” of the levee. The Corps has coordinated with the utility providers which include Pacific Gas & Electric (PG&E), Sacramento Municipal Utility District (SMUD), the City of Sacramento (City), and the Sacramento Regional County Sanitation District (SRCSD).

3.9.2 Environmental Effects

Basis of Significance

A project would significantly affect public utilities and services if it would: (1) disrupt or significantly diminish the quality of the public utilities and services for an extended period of time; or (2) damage public utility and service facilities, pipelines, conduits, or power lines.

No Action

Under the no action alternative there would be no effects on public utilities and services in the project area. There would be no change in type, quality, or availability of services in the project area.

Construct Levee Improvements

Construction of the project (seepage cutoff wall, slope stability/slope flattening) would encounter seven locations where utilities must be addressed (Plate 5). In the upstream segment (upstream of Highway 160), a 12-inch potable water supply pipeline and a 24-inch sanitary sewer pipeline must be raised. The SRCSD would allow the sanitary sewer line to be inactive during the duration of the construction, however, the City has requested that the water supply be out of service for no longer than 4 hours.

Downstream of Highway 160 a greater number of utilities are located in the project area. Between the UPRR tracks and Del Paso Boulevard a fiber-optic line and a water pipeline pass through the levee and an electrical power pole is located too close to the levee on the landside. The fiber-optic line and water pipeline are among the logistical considerations that limited the repair alternatives in this area. They would not be impacted by the levee repairs, however, the utility pole would be relocated further landward to meet levee safety requirements and allow for the additional area required for the slope flattening.

The section of the project between Del Paso and the downstream terminus has no fewer than 6 utilities passing through the levee, however, a 2-inch water line and a 6-inch gas line would be avoided. Three sanitary sewer pipelines and a natural gas pipeline would be directly impacted by the construction of the seepage cutoff wall. The SRCSD will allow a 12-inch and a 16-inch sanitary sewer line to be removed from within the levee and the remaining sections capped and the pipelines abandoned. A 26-inch sanitary

sewer line would be raised above the prism of the levee and can remain inactive during the construction period. A 12-inch natural gas pipeline would be relocated within the freeboard section of the levee, above and outside the levee prism. The new pipeline would be installed by the Corps during the installation of the cutoff wall. Connections between the existing pipeline and the new section would be completed by PG&E.

These effects to public utilities and services could be considered significant unless mitigated.

3.9.3 Mitigation

No utilities services would be interrupted during construction. Prior to initiating ground disturbing activities, the contractor would coordinate with Underground Service Alert (USA) to insure all underground utilities are identified and marked. No interruption of utility service would take place as a result of construction. The construction of the slurry cutoff wall in the upstream section of the project has been redesigned to ensure that the 12-inch potable water pipeline would be out of service for less than 4 hours. In order to meet this requirement, the cutoff wall would be constructed in an upstream direction from Highway 160, and in a downstream direction from the upstream terminus to meet at the location of the potable water pipeline. The water supply pipeline relocation would be the last feature of the construction in this section, prior to rebuilding of the levee.

In the downstream section PG&E would oversee all activities associated with the relocation of the 12 inch natural gas pipeline and would complete installation and connections themselves. With mitigation, impacts to public utilities and services would be less than significant.

3.10 Noise and Vibration

3.10.1 Existing Conditions

Noise is defined as unwanted sound that evokes a subjective reaction to the physical characteristics of a physical phenomenon. Ambient noise in the project area is generated by the traffic on the adjacent surface streets. Other noise may be generated primarily in the summer by motorized recreation on the American River. Based on experience with similar settings, it is assumed existing noise levels in the project area are in the range of 60 to 70 decibels (dB) day-night sound level (Ldn). Noise-sensitive receptors in the project area include residents, recreational users, and wildlife.

The project area is in a relatively quiet area with single family residential homes. Currently the main source of noise includes motor vehicles, human activity, and natural sounds. Construction noise related to commercial or residential activity varies with the type of equipment and length of activity.

Construction activities associated with the project may result in some minor amount of ground vibration. Vibration from construction activity is typically below the

threshold perception when the activity is more than about 50 feet from the receptor. The closest residences to the construction activities would be approximately 900 feet away, or greater. Due to the transitional nature of the construction activities, exposure at any one location would be intermittent. The most common activity throughout each reach would be truck traffic. Additionally, vibration from these activities would be short term and would end when construction is completed. The construction activities would not involve high-effect activities like pile driving.

Since the reach lies within the city of Sacramento, the City's noise policies and regulations apply to the project. The City has established policies and regulations concerning the generation and control of noise that could adversely affect their citizens and noise-sensitive land uses. The General Plan is a document required by state law that serves as the city's "blueprint" for land use and development. The General Plan provides an overall framework for development in the city and protection of its natural and cultural resources. The Noise Element of the General Plan contains planning guidelines relating to noise.

In addition, the Sacramento Municipal Code, Title 8 (Health and Safety) establishes the enforcement mechanism for controlling noise in the City. Specifically, the Noise Ordinance in the Municipal Code is described under Chapter 8.68 (Noise Control), Article II (Noise Standards). Section 8.68.060 sets the standards, Section 8.68.060B discusses the length of exposure, and Section 8.68.080 details the exemption, including the exemption for construction.

The City's Noise Ordinance establishes 60 A-weighted decibels (dBA) Ldn as the maximum acceptable exterior noise level for schools and single and multi-family residential areas. The City's Noise Ordinance also states any exterior noise limits must not exceed 50 dBA between 10:00 p.m. and 7:00 a.m. and 55 dBA between 7:00 a.m. and 10:00 p.m. for residential and agricultural areas. However, Section 8.68.080 of the Sacramento Municipal Code exempts construction activities between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday, and 9:00 a.m. and 6:00 p.m. on Sunday. The ordinance further states internal combustion engines in use on construction sites must be equipped with "suitable exhaust and intake silencers which are in good working order."

The County of Sacramento General Plan Noise Element (1993) has established noise standards for various land use categories. These standards are broken out into Acceptable, Conditionally Acceptable, and Unacceptable noise exposure ranges based on A-weighted decibel (dBA) Ldn, measurements. The project reach would most likely fall into the land use category of Agricultural/Residential 5 to 10 acres. The noise standards for this land use category are: Acceptable – up to 60; Conditionally Acceptable – 65 to 75; Unacceptable – above 75.

Although construction equipment may cause noticeable increase in ambient noise levels near individual levee construction and staging areas any noise increases would be short term and intermittent. Construction noise would fluctuate, depending on

construction phase, equipment type and duration of use, distance between noise source and receptor, and presence or absence of barriers between noise source and receptor. Noise from construction activity generally attenuates at six to nine dBA per doubling of distance. Assuming an attenuation rate of six dBA per doubling of distance, construction equipment noise in the range of 80 to 90 dBA at 50 feet would generate noise levels of 74 to 84 dBA at 100 feet from the source. The residences in this project area are located approximately 900 feet from the construction area. Using the same attenuation rate of 6dBA per doubling of distance, the noise levels would not drop substantially based on the distance from the source. There is also a substantial amount of large, mature trees located between the nearest residences and this section of the levee, to include a densely wooded property which adjoins the landside boundary of the project area. This vegetation should provide for considerable attenuation of the noise.

3.10.2 Environmental Effects

Basis of Significance

Adverse effects on noise are considered significant if an alternative would result in any of the following:

- Exposure of persons or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Substantial short-term or periodic increase in ambient noise levels in the project vicinity above existing levels existing without the project.
- Substantial long-term increase in ambient noise levels in the project vicinity above levels existing without the project.
- Vibration exceeding 0.2 inch per second within 75 feet of existing buildings.

The significance criteria for changes in noise from project operations are listed below. These criteria are based on the City of Sacramento Noise Ordinance.

- A 3-dBA increase in noise if the existing noise level already exceeds the “normally acceptable range” for the land use (60 dBA or less for residential uses).
- A 5-dBA increase in noise if the existing noise level is in the “normally acceptable range” and the resulting level is within the “normally acceptable range” for the land use.
- A resulting offsite exterior noise level that exceeds 55 dBA for a cumulative duration of 30 minutes in an hour (L50) during the daytime (7:00 a.m. to 10:00 p.m.) or 50 dBA L50 during the nighttime (10:00 pm to 7:00 a.m.).

No-Action Alternative

Under the no action alternative, there would be no effects on noise. Sources of noise and noise levels would continue to be determined by local activities, development, and natural sounds.

Construct Levee Improvements

Construction activity noise levels at and near the construction areas would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types of construction equipment generate impulsive noises (such as pile driving), which can be particularly annoying. Pile driving, however, is not proposed for project development. Table 3 shows typical noise levels during different construction stages. Table 4 shows typical noise levels produced by various types of construction equipment.

Table 3. Typical Construction Noise Levels

Construction Phase	Noise Level (dBA, Leq) ^a
Ground Clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

^a Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase. Source: U.S. Environmental Protection Agency, 1971.

Table 4. Typical Noise Levels From Construction Equipment

Construction Equipment	Noise Level (dBA, Leq at 50 feet)
Dump Truck	88
Portable Air Compressor	81
Concrete Mixer (Truck)	85
Scraper	88
Jack Hammer	88
Dozer	87
Paver	89
Generator	76
Pile Driver	101
Backhoe	85

Source: Cunniff, Environmental Noise Pollution, 1977.

Noise from construction activities generally attenuates at a rate of 6 to 7.5 dBA per doubling of the distance from the reference noise source. Based on the project site layout and terrain, an attenuation of 6 dBA will be assumed. Residences are located approximately 900 feet from the construction activities. During the height of construction, the haul route is expected to have 65 round trips per day. A receptor at 50 feet from a dump truck would experience noise levels up to approximately 88 dBA during a pass by.

Construction noise at these levels would be substantially greater than existing noise levels at nearby sensitive receptor locations. Construction activities associated with

the project would be temporary in nature and related noise impacts would be short-term. However, since construction activities could substantially increase ambient noise levels at noise-sensitive locations, especially if they were to occur during the nighttime hours, noise from construction would be potentially significant without mitigation.

Construction activities would result in short-term increases in ambient noise. Sensitive receptors that could be affected by this increase include residents, wildlife and recreationists. Construction of the project would occur between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday. The noise associated with the construction activities would typically fall within the City of Sacramento's conditionally acceptable noise exposure category at the point of sensitive receptors. Construction would be short-term, and construction activities would be limited to these times.

Construction activities associated with the project may result in some minor amount of ground vibration. Vibration from construction activity is typically below the threshold perception when the activity is more than about 50 feet from the receptor. The closest residences to the construction activities would be approximately 900 feet away, or greater. Due to the transitional nature of the construction activities, exposure at any one location would be intermittent. The most common activity throughout each reach would be truck traffic. Additionally, vibration from these activities would be short term and would end when construction is completed. The construction activities would not involve high-effect activities like pile driving.

Due to the distance between the nearest residences and the project construction area, impacts related to noise and vibration would be considered less than significant.

3.10.3 Mitigation

The following measures would be implemented to further reduce the adverse effects related to noise and vibration:

- In accordance with the City Noise Ordinance exemptions for construction (Sacramento City Code, 8.68.080 Exemptions) the construction activities shall be limited to between 7:00 a.m. and 6:00 p.m. Monday through Saturday and 9:00 a.m. and 6:00 p.m. on Sundays.
- Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools.
- Turn off all equipment, haul trucks, and worker vehicles when not in use for more than 30 minutes.
- Notify residences about the type and schedule of construction.

Compliance with the local noise ordinance would minimize the exposure of residents to excessive noise. Construction of the upstream segment is scheduled to be completed within 4 months in 2013; the downstream segment is scheduled to be

completed within 3 months in 2014. Therefore, the impact after mitigation is less than significant.

3.11 Esthetics/Visual Resources

3.11.1 Existing Conditions

The lower American River is a component of the National Wild and Scenic Rivers System. Section 7 of the Wild and Scenic Rivers Act prohibits Federal agencies from “assist[ing] by loan grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established.” The lower American River is designated under this act for its recreational values pertaining to fishing and parkway activities.

Esthetic resources must be considered along with other natural resources. Esthetic resources are those natural resources, landforms, vegetation, and manmade structures in the environment that generate one or more sensory reactions and evaluations by the observer, particularly in regard to pleasurable response. These sensory reactions are traditionally categorized as pertaining to sight, sound, and smell. Esthetic quality is the significance given to esthetic resources based on the intrinsic physical attributes of those specific features and recognized by public, technical, and institutional sources. The identification of scenic resources in the landscape requires a process that identifies the relevant visual features and that is derived from established Federal procedures. Visual quality is influenced by many landscape features including geologic, hydrologic, botanical, wildlife, recreational, and urban characteristics.

The area along this stretch of the American River has a moderate esthetic value. The American River is located over 1,700 feet from the project reaches and provides valuable riparian habitat as well as recreational opportunities. Nearer to the project area, the esthetic components include residential development, the project levee, American River Parkway access points, the Jedediah Smith Recreation Trail (bike trail), and small local parks. These components intermix with the parkway at its fringes which also tempers the esthetic value in these areas.

3.11.2 Environmental Effects

Basis of Significance

An alternative would be considered to have a significant effect on esthetics if changes in landform, vegetation, or structural features create substantially increased levels of visual contrast as compared to surrounding conditions.

No Action Alternative

Under the no action alternative, there would be no effect on esthetics. The views and esthetic quality of both reaches would remain the same.

Construct Levee Improvements

Construction of the levee seepage repairs would temporarily affect the esthetics in the project area. Short-term effects would include the presence and activities of construction equipment and workers in the project area.

Short-term activities would include preparing the site, removing vegetation on the waterside slope of the levee, degrading the top of the levee and the staging area, and constructing the levee raise.

After completion of construction the site would be landscaped consistent with the preconstruction conditions. Although the levee would be permanently higher, the overall raise would be minimal (approximately 1 foot) and the viewshed would not be altered. The reconstructed levee would remain consistent with the preconstruction visual resources of the project area.

3.11.3 Mitigation

There would be no significant long-term effects on esthetics or visual resources in the project area, therefore, no mitigation would be required. All areas impacted by the project would be revegetated and restored to remain consistent with preconstruction conditions.

3.12 Cultural Resources

3.12.1 Existing Conditions

Regulatory Setting

Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800) requires Federal agencies, or those they fund or permit, to consider the effects of their actions on the properties that may be eligible for listing or are listed in the National Register of Historic Places. To determine whether an undertaking could affect National Register-eligible properties, cultural resources (including archeological, historical, and traditional cultural properties) must be inventoried and evaluated for listing in the National Register prior to implementation of the undertaking.

CEQA also requires that for public or private projects financed or approved by public agencies, the effects of the projects on historical resources and unique archeological resources must be assessed. Historical resources are defined as buildings, sites, structures, objects, or districts that have been determined to be eligible for listing in

the California Register of Historical Resources. Properties listed in the National Register are automatically eligible for listing in the California Register.

As a component of the American River Watershed Project, the NEMDC project is subject to the stipulations of the 1991 Programmatic Agreement (PA) among the Corps of Engineers, Bureau of Reclamation, California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Implementation of the American River Watershed Project. The PA requires the Corps to consult with the State Historic Preservation Officer (SHPO) and signatories of the agreement regarding its determinations of eligibility and findings of effect once an alternative has been selected. The American River Parkway Plan also requires preservation and interpretation of archeological and historical resources within the Parkway.

Cultural Setting

The term “cultural resources” is used to describe several different types of properties: prehistoric and historic archeological sites; architectural properties, such as buildings, bridges, and infrastructure; and resources of importance to Native Americans (traditional cultural properties). Artifacts include any objects manufactured or altered by humans.

Prehistoric archeological sites date to the time before recorded history and in this area of the U.S. are primarily sites associated with Native American use before the arrival of Europeans. Archeological sites dating to the time when these initial Native American-European contacts were occurring are referred to as protohistoric. Historic archeological sites can be associated with Native Americans, Europeans, or any other ethnic group. In the study area, these sites include the remains of historic structures and buildings.

Structures and buildings are considered historic when they are more than 50 years old or when they are exceptionally significant. Exceptional significance can be gained if the properties are integral parts of districts meet the criteria for eligibility for listing in the National Register or if they meet special criteria considerations.

A traditional cultural property is defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community (Parker and King, n.d.). Although normally associated with Native Americans, traditional cultural properties can include those that have significance derived from the role the property plays in any cultural group’s or community’s historically rooted beliefs, customs, and practices.

Cultural Resources in the Area of Potential Effects (APE)

Discussion of cultural resources has been provided in the American River Watershed, California Long-Term Study Final Supplemental Plan Formulation

Report/Environmental Impact Statement/Environmental Impact Report, Volume II: Appendix A, Attachment 1, Appendix 1E (Corps, 2002). This study provided a general overview and background research for cultural resources within the entire American River Watershed Project and did not focus on any particular project component area. The study identified no cultural resources that fall within the NEMDC APE.

Records and Literature Search

A records and literature search indicated that the APE has been surveyed a number of times (A. Peak 1973, 1974; Dondero 1978; Nilsson et al 1995; M. Peak 2001). At least six prehistoric archaeological sites exist along the American River within a mile of the proposed work, and three historical resources are located within the APE or in the immediate proximity: the existing Federal levee (CA-SAC-481H), Del Paso Boulevard (CA-SAC-570H), and the Union Pacific Railroad tracks and trestle (CA-SAC-464H).

Field Survey

On October 31, 2011, Corps Archaeologist, Mr. S. Joe Griffin performed a pedestrian survey of the APE, inspecting the ground surface on either side of the levee, road, or rail road grade. After staging areas were defined, Mr. Griffin returned to the area to survey those parcels on March 9, 2012. Mr. Griffin did not identify any cultural resources beyond those known from the record search.

3.12.2 Environmental Effects

Basis of Significance

An alternative would be considered to have a significant adverse effect on cultural resources if it diminishes the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Types of effects include physical destruction, damage, or alteration; isolation or alteration of the character of the setting; introduction of elements that are out of character; neglect; and transfer, lease, or sale.

No Action Alternative

The no-action alternative assumes that no levee improvements would be constructed by the Corps. The cultural resources are expected to remain as described in the existing conditions and there would be no effects to these resources. However, a major flooding event could alter existing conditions by burying, destroying, or revealing cultural resources.

Construct Levee Improvements

The project, as planned, would impact only the Federal levee, site CA-SAC-481H. Herbert and Blosser's (2001) extensive site record form concluded that CA-SAC-481H was not eligible for listing in the National Register of Historic Places (NRHP). The

Corps formally evaluated the levee for the 2008 Jacob Lane project which was part of the WRDA 99 Remaining Sites Study. In a letter dated July 7, 2009 the State Historic Preservation Officer concurred with Corps, and Herbert and Blosser, that CA-SAC-481H is not eligible for listing in the NRHP.

On March 29, 2012, letters were sent to potentially interested Native American individuals and groups identified by the Native American Heritage Commission. No responses have been received to date.

3.12.3 Mitigation

Inasmuch as there are no cultural resources that would be recommended as eligible for listing in the National Register of Historic Places, no mitigation measures are warranted. The project would have no effect on historic properties pursuant to 36 CFR 800.4(d)(1).

The possibility exists that potentially significant unidentified cultural remains could be encountered during project construction. If buried or otherwise obscured cultural resources are encountered during construction, activities in the area of the find would be halted, and a qualified archeologist would be consulted immediately to evaluate the find.

Should any potentially significant cultural resources be discovered, compliance with 36 CFR 800.13(b), "Discoveries without prior planning," would be implemented. Data recovery or other mitigation measures might be necessary to mitigate adverse effects to significant properties. Implementation of Mitigation Measure CUL-MM-1, Compliance with National Historic Preservation Act of 1966, Historic and Archeological Resources Protection Act, and Protection of Historic Properties, would reduce this effect to a less-than-significant level. On March 29, 2012, a letter was sent to the State Historic Preservation Officer asking for their concurrence with a finding of no effect on historic properties (36 CFR 800.4[d][1]).

4.0 Growth-Inducing Effects

The proposed action alternative would not induce growth in or near the project area. Local population growth and development would be consistent with the City of Sacramento 2030 General Plan, adopted in 2009 (City of Sacramento, 2009). As mentioned previously, the goal of the proposed action alternative is to construct levee improvements in one reach along the American River that would meet Corps requirements for levee seepage criteria. In addition, construction, operation, and maintenance of the improved levee would not result in a substantial increase in the number of permanent workers or employees.

5.0 Cumulative Effects

The NEPA regulations and CEQA guidelines require an EIS/EIR discuss project effects that, when combined with the effects of other projects, result in significant cumulative effects. The NEPA regulations define a cumulative effect as:

“The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor or collectively significant actions taken over a period of time” (40 CFR 1508.7).

The CEQA Guidelines require an EIR discuss cumulative effects “when they are significant” (Section 15130). The CEQA Guidelines define cumulative effects as “two or more individual affects which, when considered together, compound or increase other environmental impacts” (Section 15355). Additionally, the CEQA Guidelines state: “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to the other closely related past, present, and reasonable foreseeable probable future projects” (Section 15355).

The NEPA and CEQA require that an environmental evaluation discuss cumulative projects effects. The effects of the proposed construction of the Common Features Project would result in minor net cumulative effects for some resources. Resources such as wildlife habitat would be affected somewhat during construction, but should recover to comparable levels regionally over the long term as a result of mitigation measures.

The Common Features Project’s Proposed Alternative would likely have no adverse cumulative effects on topography and soils, land use, socioeconomics, noise, recreation and visual resources, cultural resources, HTRW, fisheries, vegetation and wildlife, or special-status species. There would be short term cumulative effects on traffic and air quality. The amounts of traffic and emissions would increase due to the operation of construction, and mitigation measures would be implemented to reduce the effects.

The cumulative effects of the Common Features Project were addressed in the 1996 SEIR/EIR. Cumulatively, other ongoing regional flood control projects could have beneficial effects by raising the level of flood protection provided to lands in the Sacramento Valley region, thereby reducing the risk of adverse effects related to floods. At the same time, however, the projects could reduce the riparian ecosystems along the river where construction would take place. Mitigation would occur, resulting in no loss riparian values, but causing temporary losses and probable changes in the specific types, quantities, and locations of the habitat.

5.1 Local Projects

This section briefly describes other major Federal projects in the Sacramento area. All of these projects are required to evaluate the effects of the proposed project features on environmental resources in the area. In addition, mitigation or compensation measures must be developed to avoid or reduce any adverse effects to less than significant based on Federal and local agency criteria. Those effects that cannot be avoided or reduced to less than significant are more likely to contribute to cumulative effects in the area.

5.1.1 Folsom Dam Flood Management Operations Study

The Flood Management Operations Study is being completed in conjunction with the JFP by the Corps, USBR, CVFPB, and SAFCA. The Flood Management Operations Study for Folsom Dam will develop, evaluate, and recommend changes to the flood control operations at Folsom Dam that would further reduce flood risks to the Sacramento area. Operational changes may be necessary to fully realize the flood risk reduction benefits of the following:

- The additional operational capabilities created by the auxiliary spillway;
- The increased downstream conveyance capabilities anticipated to be provided by the American River Common Features Project (Common Features);
- The increased flood storage capacity anticipated to be provided by completion of the Folsom Dam Raise Project (Dam Raise); and
- The use of improved forecasts from the National Weather Service.

Further, the Flood Management Operations Study will evaluate options for the inclusion of creditable flood control transfer space in Folsom Reservoir in conjunction with Union Valley, Hell Hole, and French Meadows Reservoirs (also referred to as Variable Space Storage). The study will result in a Corps decision document and will be followed by a water control manual implementing the recommendations of the Study. It should be recognized that the initial water control manual will implement the recommendations of the study, but will not include the capabilities to be provided by the Dam Raise and additional Common Features project improvements until such time as these projects have been completed.

5.1.2 Folsom Dam Raise

The Folsom Dam Raise project will follow the JFP. This project includes raising the Folsom Dam, and the dikes around Folsom Reservoir by 3.5 feet; replacing the three emergency spillway gates; and three ecosystem restoration projects (automation of the temperature control shutters at Folsom Dam and restoration of the Bushy and Woodlake sites downstream). The ecosystem restoration projects have been prioritized at different levels and separated, with automation of the temperature control shutters to be the next completed feature in 2017 and the two downstream restoration sites to be completed in approximately 2016-2017. For the dam raise portion of the project, the design should

begin in 2015 and be completed in FY16, with construction following in phases through 2017 and 2018.

5.1.3 Folsom Dam Safety and Flood Damage Reduction Project Ongoing Construction Activities

The Folsom Dam Safety and Flood Damage Reduction Project address the dam safety hydrologic risk at the Folsom Facility and improve flood protection. Several activities associated the project include: Phase II, Phase III, and Phase IV of the Folsom Dam Auxiliary Spillway Joint Federal Project, referred to as the Joint Federal Project (JFP), static upgrades to Dike 4, Mormon Island Auxiliary Dam (MIAD) modifications, and seismic upgrades (piers and tendons) to the Main Concrete Dam.

Auxiliary Spillway Excavation

Spring 2009 to Fall 2010. Major work under Phase II of the JFP includes partial excavation of the western portion of the auxiliary spillway, construction of the downstream cofferdams, relocation of the Natoma Pipeline, and the creation of an access road to the stilling basin. This portion of the JFP was covered under the U.S. Bureau of Reclamation (USBR) 2007 Folsom Dam Safety and Flood Damage Reduction Project EIS/EIR (2007 EIS/EIR). Construction was conducted by USBR and was completed prior to the start of the Control Structure construction effort.

Dike 4 and 6 Repairs

Summer 2009 to June 2010. To address seepage concerns due to static and hydrologic loading for Dikes 4 and 6, USBR installed full height filters, toe drains, and overlays on the downstream face of each earthen structure. This portion of the JFP was covered under the 2007 EIS/EIR.

Mormon Island Auxiliary Dam Modification Project

Summer 2010 to Summer 2014. USBR released the Draft EIS/EIR for the MIAD Modification Project in December 2009. The preferred MIAD action alternative of jet grouting selected in the 2007 EIS/EIR was determined to be neither technically nor economically feasible. Four action alternatives were analyzed in the MIAD Draft Supplemental EIS/EIR. All alternatives address methods to excavate and replace the MIAD foundation, place an overlay on the downstream side, and install drains and filters; the alternatives differ only in their method of excavation. In addition, all four action alternatives in the Draft Supplemental EIS/EIR include habitat mitigation proposed for up to 80 acres at Mississippi Bar on the shore of Lake Natoma to address impacts from the JFP.

Pier Tendon Installation, Spillway Pier Wraps, and Braces at Main Concrete Dam

April 2011 through Spring 2012. These three projects address seismic concerns at the main concrete dam. These improvements will help to stabilize the main concrete dam against movement during a major earthquake. This portion of the JFP was covered under the 2007 EIS/EIR, and will be completed prior to implementation of the NEMDC project.

Control Structure, Chute and Stilling Basin

Spring 2011 to Fall 2017. Phase III of the JFP consists of construction of the auxiliary spillway control structure. This effort is currently under construction by the Corps and will be completed in approximately fall 2014. Concrete lining of the spillway chute and stilling basin will be conducted by the Corps as the final phase of the JFP. These actions will be constructed from approximately summer 2013 to fall 2017. Construction of the control structure, and the concrete lining of the chute and stilling basin were all covered under the Corps' 2010 EA/EIR.

Additional Downstream Features

Fall 2012 to Spring 2013. The design refinements to Phase III construction are being evaluated in a supplemental EA/EIR include the construction of a temporary traffic light, modification to the existing dirt access haul road, installation of the stilling basin drain, and use of the existing nearby staging area with the installation of a new batch plant to be used and operated for other downstream features work. A draft EA/EIR is scheduled for public review in summer 2012.

Approach Channel

Spring 2013 to Fall 2017. The approach channel project is the final construction activity of Phase IV of the JFP. The primary and permanent structures consist of the 1,100 foot long excavated approach channel and spur dike. A transload facility and concrete batch plant will be constructed as necessary temporary structures to facilitate the construction. Additional existing sites and facilities that would be utilized for the length of the project include the Folsom Prison staging area, the existing Bureau of Reclamation Overlook, the MIAD area, and Dike 7. These sites and facilities are connected by an internal project haul road. Criteria pollutant emissions from the approach channel project and the downstream project would be less than significant for ROG, CO, SO₂, and PM_{2.5}, less than significant with mitigation for PM₁₀. NO_x exceeds the GCR de minimis threshold, but would be addressed by inclusion in the State Implementation Plan, which would provide compliance with the GCR of the Federal Clean Air Act. The draft supplemental EIS/EIR is scheduled to be available for public review in summer 2012.

5.1.4 Lower American River Common Features Project

Based on congressional authorizations (Water Resource Development Act, or WRDA) in 1996 and 1999, the Corps, the Board, and SAFCA have undertaken various improvements to the levees along the north and south banks of the American River and the east bank of the Sacramento River. Under WRDA 96, the most recent improvements include seepage protection at RM 62 on the east bank of the Sacramento River (2009), RM 7.0 left and right bank (2010), RM 8.5 left bank (2010), and RM 5.5 right bank (2011), all on the American River. A site at RM 6.5 right bank (Site R6) is scheduled for construction in 2012 and a site at RM 9.5 (Site R10) is scheduled for construction in 2013. Two smaller sites under WRDA 96 (L9/L9A, and L5A, totaling 371 linear feet) are currently scheduled for construction in 2013, however they are expected to be approved under NEPA Categorical Exclusions and would not have air quality emissions data to consider under cumulative effects. Several other sites are being considered for construction in 2014 and beyond, but evaluations of environmental impacts have not yet begun.

Of the five sites authorized under WRDA 99, Mayhew Levee Raise (2008) and Mayhew Drain Closure Structure (2008) have been completed; Jacob Lane (Reaches A & B, 2009 and 2010) would be completed with the construction of Reach C scheduled for 2013; Howe Avenue is scheduled for construction in 2012 and the Natomas East Main Drain Canal is scheduled for construction in 2013 and 2014.

Several other phases of repairs have been completed in the Natomas Basin under the Lower American River Common Features Project. The project will continue to study potential erosion control repairs along the lower American River and the east bank of the Sacramento River.

5.1.5 Sacramento River Bank Protection Project

The Sacramento River Bank Protection Project (SRBPP) was authorized to protect the existing levees and flood control facilities of the Sacramento River Flood Control Project. The SRBPP is a long-range program of bank protection authorized by the Flood Control Act of 1960. The SRBPP directs the Corps to provide bank protection along the Sacramento River and its tributaries, including that portion of the lower American River bordered by Federal flood control project levees. Beginning in 1996, erosion control projects at five sites covering almost 2 miles of the south and north banks of the lower American River have been implemented. Additional sites at RM 149 and 56.7 on the Sacramento River totaling one-half mile have been constructed since 2001. During 2005 through 2007 construction of 29 critical sites under the Declaration of Flood Emergency by Governor Schwarzenegger totaling approximately 16,000 linear feet. This is an ongoing project, and additional sites requiring maintenance will continue to be identified indefinitely until the remaining authority of approximately 24,000 linear feet is exhausted over the next 3 years. The Water Resources Development Act of 2007 authorized an additional 80,000 linear feet of bank.

These projects would help to improve flood protection to residents in the Sacramento area by ensuring the integrity of the levees along the American and Sacramento Rivers. The Lower American River Common Features Project and the Sacramento River Bank Protection Project would also help meet FEMA's 100-year flood criteria for the Sacramento area levee system. These would be considered beneficial cumulative effects.

5.1.6 Natomas Levee Improvement Project

The Natomas Levee Improvement Project was authorized in 2007 as an early-implementation project initiated by SAFCA in order to provide flood protection to the Natomas Basin as quickly as possible. These projects consist of improvements to the perimeter levee system of the Natomas Basin in Sutter and Sacramento Counties, California, as well as associated landscape and irrigation/drainage infrastructure modifications. SAFCA, DWR, CVFPB, and the Corps have initiated this effort with the aim of incorporating the Landside Improvements Project and the Natomas Levee Improvement Project into the Federally authorized American River Common Features Project. The project is still under construction at this writing. Future project features would be completed under the proposed American River Common Features General Reevaluation Report, upon authorization.

5.2 Cumulative Effects

Land Use

The River Corridor Management Plan and American River Parkway Plan recognize the American River Parkway as the key feature of the American River flood control system in Sacramento, and consider flood management the primary land use on the Parkway. The use of Parkway land to provide flood protection to the Sacramento area is consistent with these plans. As a result, the project is consistent with adopted plans and policies on land use in the project area and would not contribute significantly to cumulative effects on land use.

Recreation

The project would have a short-term restriction on recreation access during construction. The project would have a minor, short-term restriction on recreation access during construction. This project and other similar past, present, and reasonably foreseeable future projects are not expected to result in changes to recreation access or opportunities on the Parkway and therefore are not expected to result in adverse cumulative effects.

Esthetics and Visual Resources

The project would result in short-term and long-term changes to the esthetics in the project area. All areas that would be disturbed during construction would be restored

and revegetated upon completion of construction activities. Any trees that would be removed during construction would be replaced with native tree species.

The project would temporarily affect local scenic views and contribute to adverse cumulative effects on local esthetics based on the presence of construction equipment and the construction of levees, but is not expected to result in a significant long-term effects on esthetics. Thus the NEMDC project would not significantly contribute to cumulative effects in the project vicinity.

Traffic and Circulation

The project would result in minor changes in the types, volumes, and movement of traffic in the area during construction. Large trucks transporting equipment and materials to the work area would be consistent with the types of traffic using the local streets. These trucks, as well as worker vehicles, would use the local streets to access the work areas from Highway 160 and Del Paso Boulevard. The daily number of trips during construction would actually vary, depending on the work being conducted and the duration of the work. However, the increases in traffic would not be significant as compared with existing levels of local traffic on all but one street proposed as part of a haul route. During construction, trucks and worker vehicles would be entering and exiting the project area via Del Paso Boulevard. This could occasionally disrupt the traffic flow at intersections and possibly pose a safety hazard to other motorists, pedestrians, and bicyclists on and along this roadway and access points to the Parkway. Implementation of measures in the Traffic Management Plan would minimize traffic congestion and delays, and ensure public safety. These projects would be constructed in different areas and on different schedules, thus, due to the minimal increase in local traffic, and proposed mitigation measures, the project would not contribute to adverse cumulative effects on local traffic.

Noise

The project would have a temporary, short-term impact on ambient noise levels in the residential area and Parkway during construction. Movement and operation of equipment, haul trucks, and worker vehicles would generate noise in the work area, as well as on neighborhood roadways that provide access through the residential area. Noise levels could reach the high 80's dBA, depending on the type of equipment or truck. Since ambient noise levels normally range in the low to mid-50's dBA, such an increase would be significant. However, the City Noise Ordinance (Sacramento City Code, 8.68.080 Exemptions) contains a section specifically exempting construction activities from the standards between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, as well as between the hours of 9:00 a.m. and 6:00 p.m. on Sundays. As a result, the project would not contribute significantly to cumulative effects on local noise.

Air Quality

According to SMAQMD, a project is considered to have a significant cumulative effect if:

- The project requires a change in the existing land use designation (general plan amendment or rezone), and
- Projected emissions (ROG or NO_x) or emission concentrations (criteria pollutants) of the proposed project are greater than the emissions anticipated for the site if developed under the existing land use designation.
- The project individually would result in a significant effect on air quality.

Construction of the NEMDC project is not expected to have any long-term effects on air quality since the operational activities (including inspection and maintenance) are expected to be similar to existing conditions. However, construction would result in direct, short-term effects on air quality mainly related to combustion emissions and dust emissions. If the upstream segment of the NEMDC project is constructed in late 2013 it may overlap with the construction of Jacob Lane Reach C, the WRDA 1996 site R10 project, as well as the construction of the auxiliary spillway for the Folsom Dam Joint Federal Project (JFP). Neither the NEMDC project nor the Site R10 project would add significantly to this determination nor would it change the determination. Table 5 shows the combined emissions for the Jacob Lane Reach C, NEMDC and Site R10 projects if they were constructed concurrently. No Federal standards would be exceeded and only the SMAQMD threshold for NO_x (combined total) would be exceeded, however this was already an impact for the JFP. The JFP identified impacts to air quality that would be significant and unavoidable. The JFP is currently evaluating measures to reduce or offset emissions to demonstrate conformity with the SIP under the CAA.

When the project air emissions calculations indicates that the project would not meet SMAQMD thresholds, the contractor would be required to follow the requirements of SMAQMD's standard mitigation program (Appendix B) which is intended to reduce NO_x emissions by 20 percent. Any remaining emissions over the NO_x threshold should be reduced via a mitigation fee payment. No Federal standards would be exceeded for the combined project emissions. Implementation of mitigation measures during construction would reduce emissions to the extent possible. Since the project would not require a change in the existing land use designation, long-term projected emissions of criteria pollutants would be the same with or without the construction of the levee improvements. Therefore, the NEMDC project would not contribute significantly to cumulative effects on air quality.

Table 5. Combined Estimated Air Emissions for Concurrent Construction of the NEMDC, Jacob Lane Reach C and Site R10 Projects

	ROG	CO	NO_x	PM₁₀	PM_{2.5}	CO₂
Total emissions (lbs/day)	22.8	169.3	162.2	58.6	16.8	22,414.4
SMAQMD thresholds (lbs/day)	N/A	N/A	85	N/A	N/A	N/A
Total (tons/construction project)	0.6	4.9	4.7	1.4	0.4	647.2
Federal standards (tons/year)	25	100	25	100	N/A	N/A

Note: Estimates rounded.

Climate Change

Projects in the area would emit GHGs as part of the combustion engine process in light-and heavy-duty vehicles. GHGs by definition are cumulative in nature; that is, the significance of GHG emissions is negligible until all GHG emissions are accounted for on a global scale. Protocol is being developed that would enable greater analysis and understanding of the effects of GHG emissions in order to reduce the effects of climate change. That being said, there are currently no Federal, State, or Agency thresholds of significance on GHGs, making analysis of the cumulative effects of GHG emissions speculative at best. Although projects in the local area and state wide would have varying levels of GHG emissions, standard construction techniques and BMPs would reduce the GHGs emitted from these construction projects to below significant levels. Therefore, the emissions from other local construction projects would not contribute significantly to climate change.

Water Resources and Quality

The NEMDC project could result in accidental spills or leaks that could affect surface and ground water resources. Measures included during each project construction would be implemented to avoid or reduce these effects to less than significant. As a result, the project would not contribute significantly to cumulative effects on water resources and quality.

In addition, the NEMDC project may have an overall positive effect on water quality. By diminishing the possibility for a catastrophic flood event, this would avoid significant long term impacts to water quality by avoiding contamination from flooded vehicles, household and industrial chemicals, raw sewage, and other wastes that may be present in the area.

Vegetation and Wildlife

The grassland habitat that would be occupied by the staging area would be disturbed during project construction. The waterside slope of the levee would also be disturbed in order to implement the levee improvements. These areas would be restored and re-vegetated upon completion of project construction. The project would not remove

any riparian habitat; however, the project would directly impact twelve elderberry shrubs and potentially affect any VELB potentially occupying the shrubs. The project would result in short-term disturbances of wildlife habitat, but the project would not substantially reduce the connectivity or extent of natural vegetation and wildlife habitat along the American River. Mitigation measures through the establishment of native vegetation on the Parkway for this and other projects including the Jacob Lane Reach C Project would have short-term effects on vegetation and wildlife associated with construction activities. However, improved habitat would be provided by planting native tree species, such as valley oak and sycamore, for mitigation measures. Such measures are expected to result in a net, long-term improvement in native vegetation and wildlife habitat values in the Parkway primarily by restoring degraded areas at a ratio higher than what was removed.

Special Status Species

The NEMDC Project would result in direct and indirect effects on elderberry plants, which is the host plant for the Federally-listed threatened valley elderberry longhorn beetle. However, with implementation of the conservation measures stated previously, effects to the valley elderberry longhorn beetle would be minimized.

Other local projects including the Mayhew Levee Raise Project and the Mayhew Drain Closure Structure Project resulted in the removal of elderberry shrubs. The limited spatial extent of elderberry shrub removal, prevalence of existing elderberry shrubs in the project vicinity, and the transplanting of up to 140 shrubs from the Levee Raise Project area to the vicinity, the overall extent and connectivity of beetle habitat is not expected to be diminished by this project. Establishment of new, additional beetle mitigation areas on the Parkway consistent with USFWS Guidelines would result in the long-term net improvement of beetle habitat by increasing habitat extent and connectivity along the American River. While this and other projects have resulted in short-term, localized effects to beetle habitat, the incorporation of habitat mitigation on the Parkway is expected to result in the long-term, cumulative improvement to beetle habitat on the Parkway and ultimately assist in the recovery of the species.

No other special status species would be affected in addition to the VELB. As a result, the project would not contribute significantly to cumulative adverse effects on special status species.

Fisheries

Construction of the NEMDC project could indirectly affect Central Valley steelhead, and Central Valley fall/late fall run Chinook salmon or their critical habitat due to potential effects to water quality. However, the project would have no affect on steelhead and salmon provided that erosion and sediment control measures implemented as part of the SWPPP are incorporated into the proposed project.

Construction activities and the staging area would be confined to the levees and terraces 1,700 hundred feet from the streambank and channel. The project includes no work in or near the stream or associated riparian vegetation, and no work in ponds, tributaries, or drainage ditches that flow into the river from the project area. Whereas other local projects may result in potential impacts to fisheries, the construction of the NEMDC project would not contribute significantly to cumulative adverse effects to fisheries.

Cultural Resources

Based on existing information from literature searches and field examination, the project would have no effect on historic properties in the NEMDC project area. If necessary, mitigation measures would be implemented to provide for any buried resources that might be uncovered during construction. Since the anticipated effects on known and potential archaeological sites would be less than significant, the project would not contribute significantly to cumulative effects on cultural resources.

6.0 Compliance with Environmental Laws and Regulations

6.1 Federal

Archaeological Resources Protection Act of 1979, 16 U.S.C. 470, et seq. *Full Compliance.* This act prohibits the removal, sale, receipt, and interstate transportation of archaeological resources obtained illegally (without permits) from public lands. The proposed project would not involve any such archaeological resources.

Clean Air Act of 1972, as amended, 42 U.S.C. 7401, et seq. *Full Compliance.* The proposed action is not expected to violate any Federal air quality standards, exceed the U.S. EPA's general conformity *de minimis* threshold, or hinder the attainment of air quality objectives in the local air basin. Implementation of best management practices and adopted SMAQMD measures would reduce NO_x emissions to below local thresholds. Thus, the Corps has determined that the proposed project would have no significant effects on the future air quality of the area.

Clean Water Act of 1972, as amended, 33 U.S.C. 1251, et seq. *Full compliance.* The proposed action is not expected to adversely affect surface or ground water quality or deplete ground water supplies. Best management practices would be implemented to avoid movement of soils or accidental spills into the river. No discharge of dredge or fill materials into navigable waters or adjacent wetlands would occur under the project. The Corps has determined that the proposed project would have no significant effects on the future water quality of the area.

The contractor would be required to obtain a NPDES permit from the CRWQCB, Central Valley Region, since the project would disturb 1 or more acres of land and involve possible storm water discharges to surface waters. As part of the permit, the

contractor would be required to prepare a SWPPP identifying best management practices to be used to avoid or minimize any adverse effects of construction on surface waters.

Endangered Species Act of 1973, as amended, 16 U.S.C. 1531, et seq. *Partial compliance.* In accordance with Section 7(c), the Corps obtained a list from USFWS of Federally listed and proposed species likely to occur in the project area. The only listed species potentially affected by the project would be the valley elderberry longhorn beetle. The Corps' determination is that the project may affect, but is not likely to adversely affect this species.

The Corps as the action agency has made the determination that there would be “no effect” on any listed species under the jurisdiction of the National Marine Fisheries Service (NMFS). As a result, consultation is not required with NMFS under Section 7 of the Endangered Species Act.

The Corps reinitiated consultation with the USFWS on May 23, 2012, addressing changes in the project description. The Corps' determination was that while the revised project will result in additional impacts to the beetle it will not jeopardize the continued existence of the species or adversely modify critical habitat for the species. The USFWS is currently reviewing the Corps determination.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. *Full compliance.* This order directs all Federal agencies to identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority, or low-income populations in the project area. All nearby residents would benefit equally from the proposed project.

Farmland Protection Policy Act (7 U.S.C. 4201, et seq). *Full compliance.* There are no prime and unique farmlands in the project area.

Fish and Wildlife Coordination Act of 1958, as amended, 16 U.S.C. 661, et seq. *Partial compliance.* Coordination with USFWS is ongoing to determine the effects on vegetation and wildlife in the project area. The USFWS provided a draft Coordination Act Report (CAR) on May 23, 2012 to address these effects (Appendix D).

The project will be in full compliance when the final CAR is issued by USFWS.

Migratory Bird Treaty Act (15 U.S.C 701-18h). *Full compliance.* Construction would be timed to avoid physical destruction of active bird nests or young of birds that breed in the area. If this is not feasible, a qualified biologist would survey the area prior to initiation of construction. If active nests are located, a protective buffer would be delineated and the entire area avoided, preventing direct physical disturbance of nests until they are no longer active. Because only minimal removal of vegetation would be required for construction, no impacts to nesting migratory birds are anticipated.

National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321, et seq. *Full Compliance.* This EA/IS is in full compliance with this act. Comments received during the public review period were incorporated into the EA/IS, as appropriate, and a comments and responses appendix has been prepared (Appendix E). This final EA/IS is accompanied by a final FONSI as determined appropriate by the District Engineer after consideration of public comments. These actions provide full compliance with this act.

National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq. *Full Compliance.* Section 106 of this Act requires a Federal agency to take into account the effects of Federal undertakings on historical properties following the procedures outlined in 36 CFR 800. A records and literature search of the area of potential effects (APE) was conducted and the APE was surveyed on October 31, 2011, and March 9, 2012.

The American River north levee (CA-SAC-481H) is the only cultural resources known to exist in the APE. Herbert and Blosser's 2001 site record form concluded that site CA-SAC-481H is not eligible for listing in the National Register of Historic Places (NRHP). The Corps formally evaluated the levee for the 2008 Jacob Lane project, and in a letter dated July 7, 2009, the State Historic Preservation Officer concurred that CA-SAC-481H is not eligible for listing in the NRHP. The Corps has determined that the proposed project would have no effect on historic properties pursuant to 36 CFR 800.4(d)(1). Consultation with the State Historic Preservation Officer has been initiated, and upon the conclusion of this process, the Corps will be in full compliance with Section 106 of the National Historic Preservation Act.

Native American Graves Protection and Repatriation Act of 1990, 23 U.S.C. 3002. *Full Compliance.* This act requires Federal agencies to (1) establish procedures for identifying Native American groups associated with cultural items on Federal lands, (2) inventory human remains and associated funerary objects in Federal possession, and (3) return such items upon request to the affiliated groups. The law also requires that any discoveries of cultural items covered by the act be reported to the head of the Federal entity, who would notify the appropriate Native Americans group. The proposed action would not involve any such cultural items.

Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.). *Full compliance.* The lower American River has been designated as a "recreational" component of the Federal Wild and Scenic Rivers system. The project would neither adversely affect the resources for which the American River was designated nor adversely affect the river's free-flowing status. All construction activities would be at least 1,700 feet away from the river.

6.2 State

California Clean Air Act of 1988. *Full compliance.* The SMAQMD determines whether project emission sources and emission levels significantly affect air quality

based on Federal standards established by the U.S. EPA and State standards set by the California Air Resources Board. The project is in compliance with all provisions of the Federal and State Clean Air Acts.

California Endangered Species Act of 1984. *Full compliance.* The California Department of Fish and Game administers this State law providing protection of fish and wildlife resources. This act requires the non-Federal lead agencies to prepare biological assessments if a project may adversely affect one or more State-listed endangered species. No State-listed species would be adversely affected by the project. As a Federal agency, the Corps is not required to obtain a California Fish and Game Code Section 1602 Stream Alterations Agreement issued by the California Department of Fish and Game.

California Environmental Quality Act, California Public Resources Code, Section 21000 et seq. *Full compliance.* This EA/IS is in full compliance with this act. All comments received during the public review period were considered and incorporated into the EA/IS, as appropriate. This final EA/IS is accompanied by a final Negative Declaration. The Central Valley Flood Protection Board as the non-Federal sponsor has ensured full compliance with the requirements of this act.

7.0 Coordination and Review of the Final EA/IS

The draft EA/IS and draft FONSI/Negative Declaration was circulated for 30 days to agencies, organizations and individuals known to have a special interest in the project. Copies of the draft EA/IS were posted on the SAFCA website and made available for viewing at local public libraries, or provided by mail upon request. This project has been coordinated with all the appropriate Federal, State, and local government agencies including the U.S. Fish and Wildlife Service, State Historic Preservation Office, California Department of Fish and Game, and California Department of Water Resources.

8.0 Findings

This EA/IS evaluated the environmental effects of the proposed project of constructing levee improvements along one reach of the American River near the downtown area of Sacramento. Potential adverse effects to the following resources were evaluated in detail: recreation, special status species, vegetation and wildlife, air quality, water resources and quality, traffic and circulation, esthetics, noise, and cultural resources.

Results of the EA/IS, field visits, and coordination with other agencies indicate that the proposed project would have no significant long-term effects on environmental resources. Short-term effects during construction would either be less than significant or mitigated to less than significance using best management practices.

Based on this evaluation, the proposed project meets the definition of a FONSI as described in 40 CFR 1508.13. A FONSI may be prepared when an action would not have a significant effect on the human environment and for which an environmental impact statement would not be prepared. The Corps, District Commander, following public review of the draft EA, has determined that a FONSI is appropriate. Therefore, a FONSI has been prepared and accompanies the EA.

9.0 List of Preparers

John Suazo
Environmental Manager, Corps of Engineers
20 years environmental management and environmental studies
Report preparation and coordination

Anne Baker
Technical Writer, Corps of Engineers
Report review and editing

S. Joe Griffin
Archeologist, Corps of Engineers
Cultural resources analysis and coordination

Mathew Davis
NEPA Technical Specialist, Corps of Engineers
23 years environmental planning and management
Technical Review

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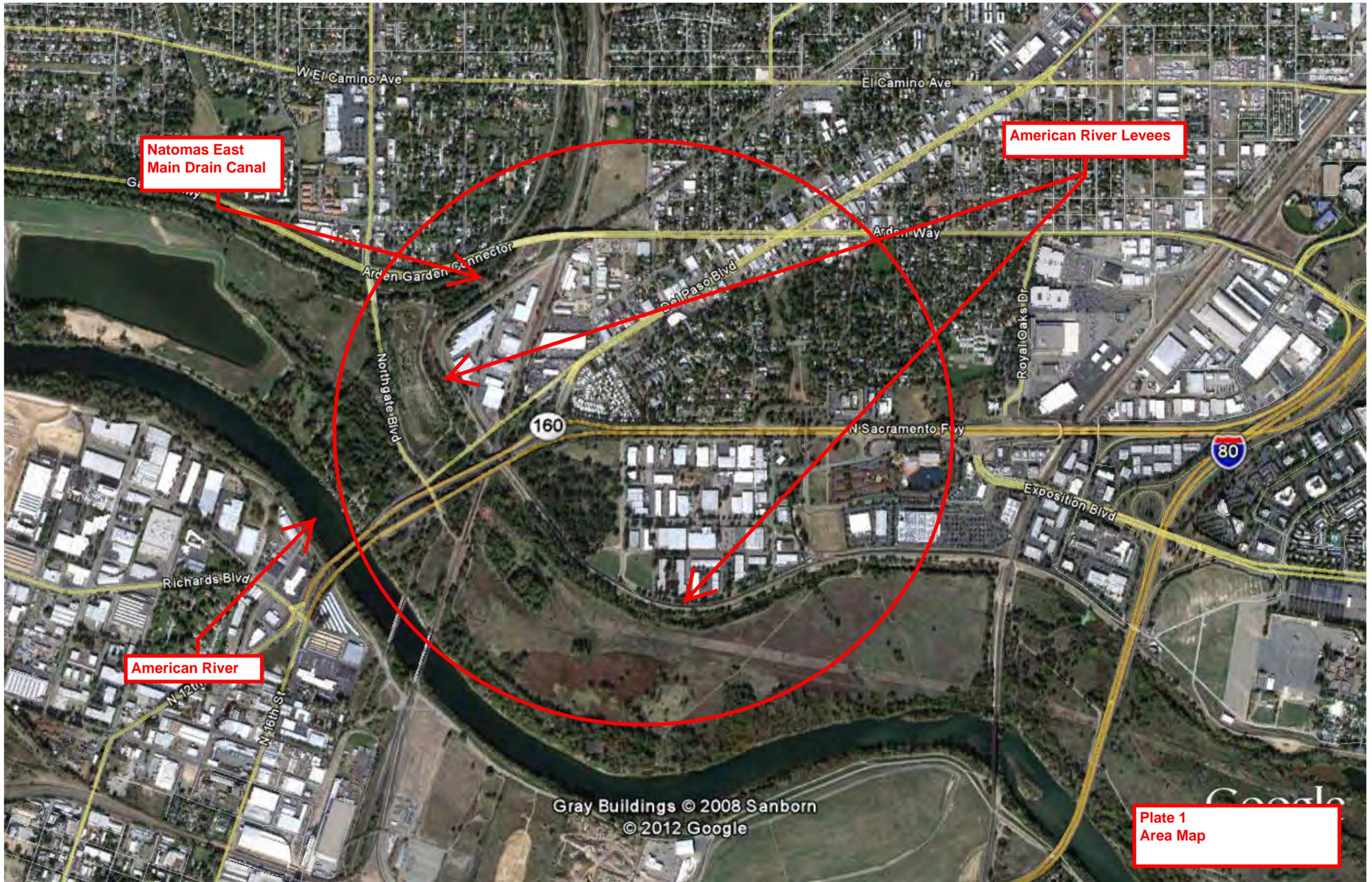
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10.2 List of Agencies and Persons Contacted

California State Department of Water Resources: Ms. Erin Brehmer
Sacramento Area Flood Control Agency: Mr. Grant Kreinberg
Sacramento County Regional Parks: Ms. Mary Maret

Plates



Natomas East
Main Drain Canal

American River Levels

American River

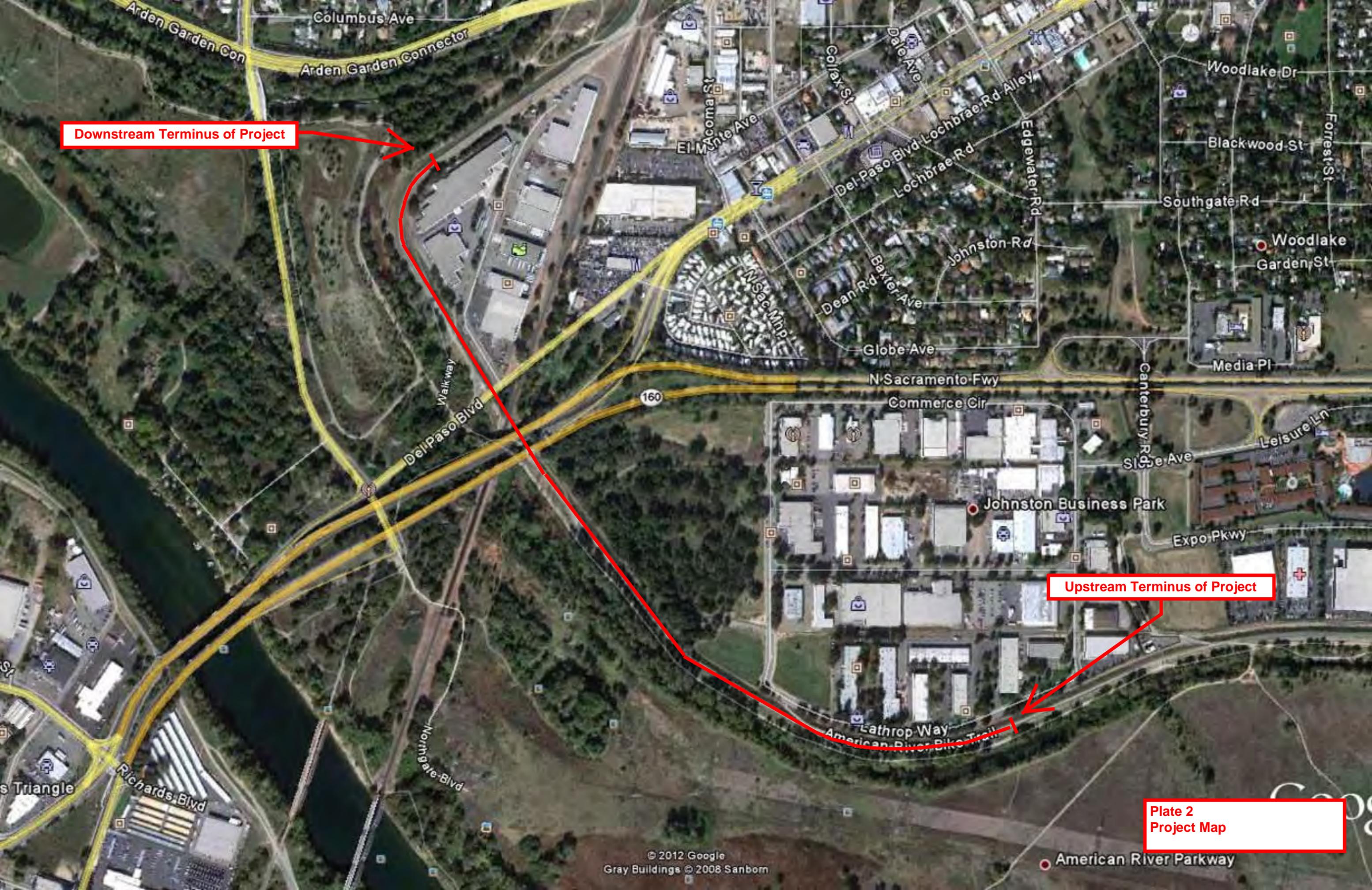
Plate 1
Area Map

Gray Buildings © 2008 Sanborn
© 2012 Google

Downstream Terminus of Project

Upstream Terminus of Project

Plate 2
Project Map



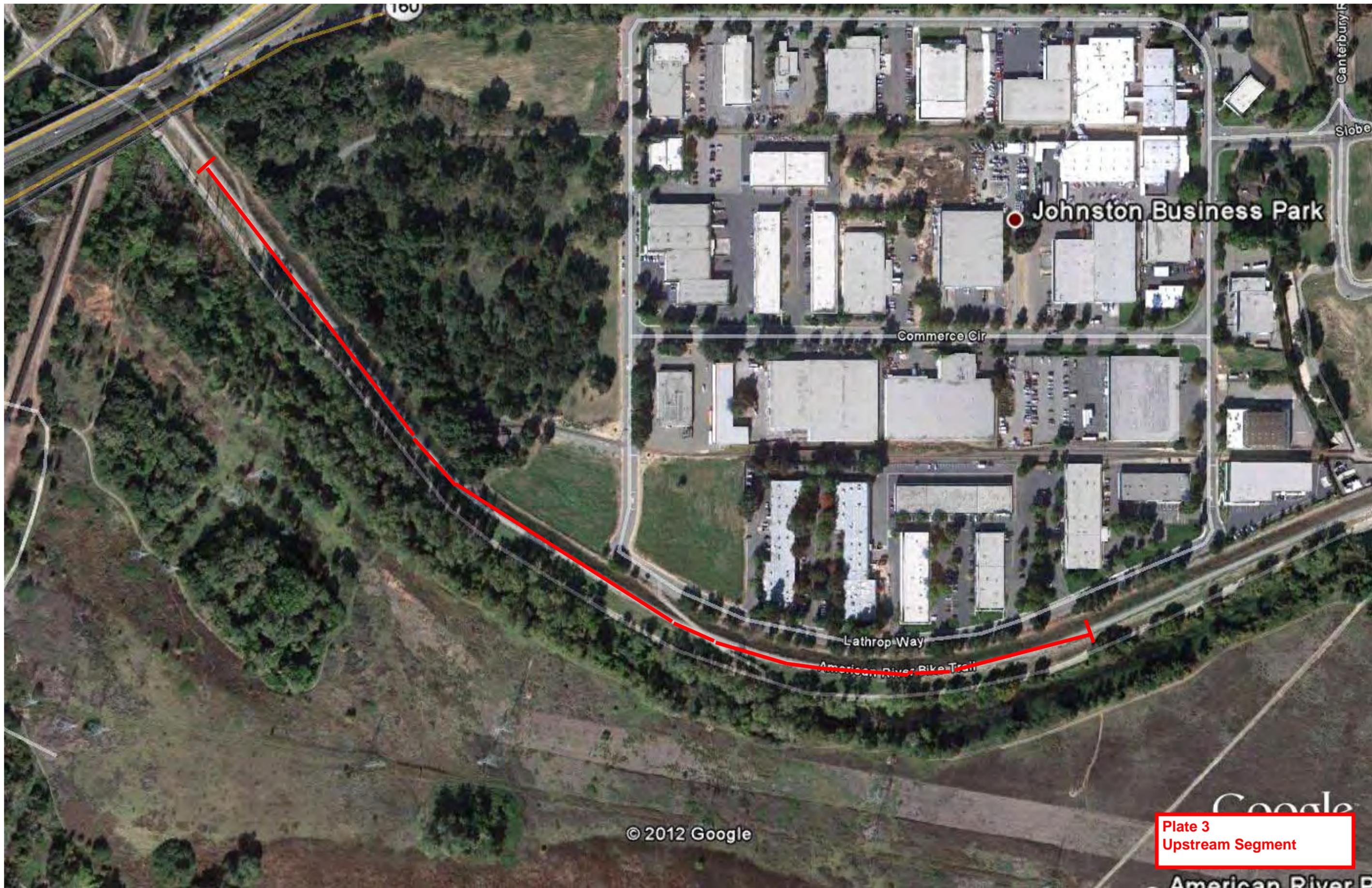


Plate 3
Upstream Segment



Plate 4
Downstream Segment

Downstream
Slurry Batch
Plant Staging
Area

Railroad Drive

Downstream
Excavated Soil
Staging Area

Del Paso
Boulevard

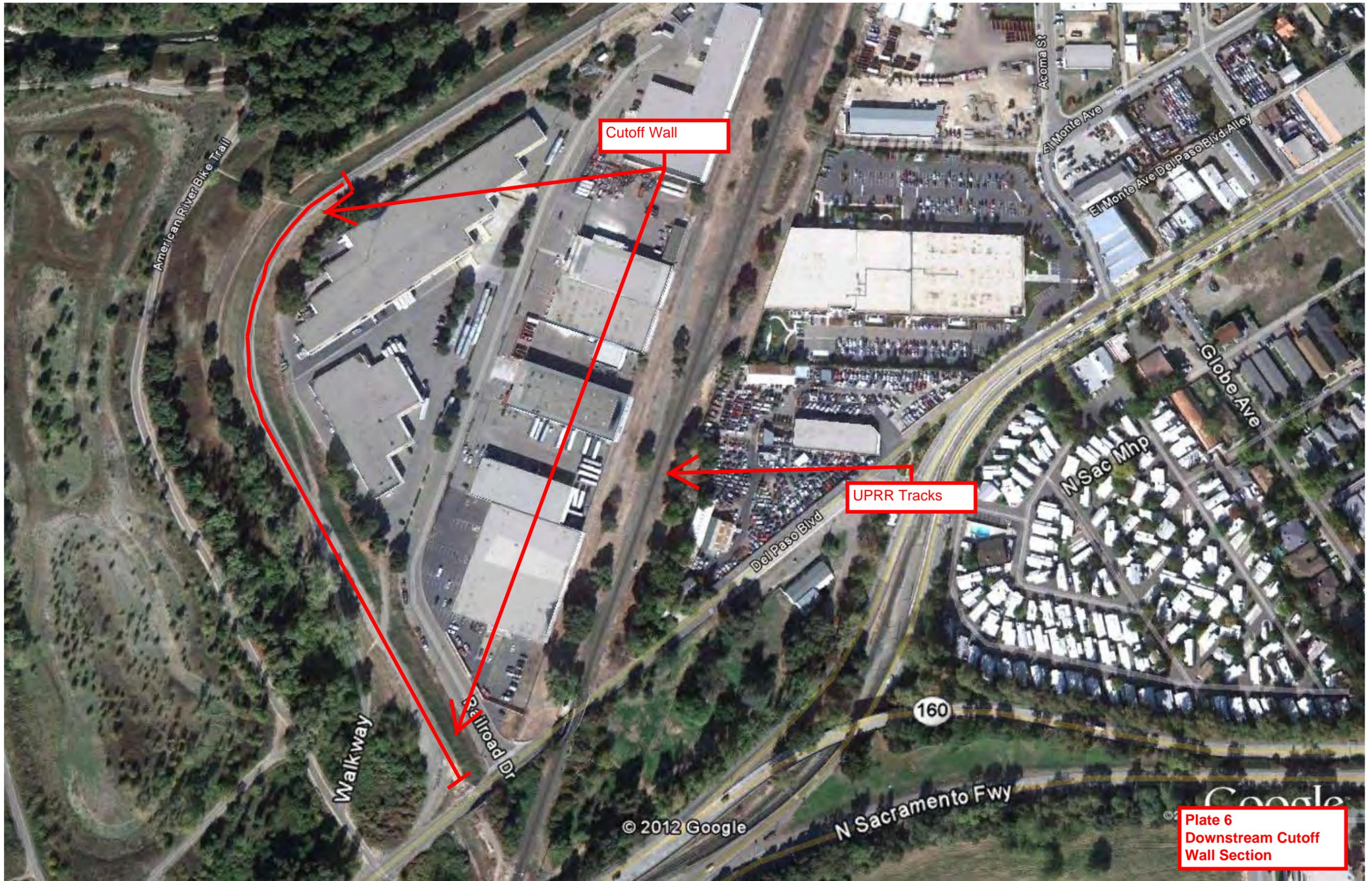
Electrical Utility
Pole

Slope Stability/
Seepage Berm

UPRR Tracks

Plate 5
Slope Stability Section

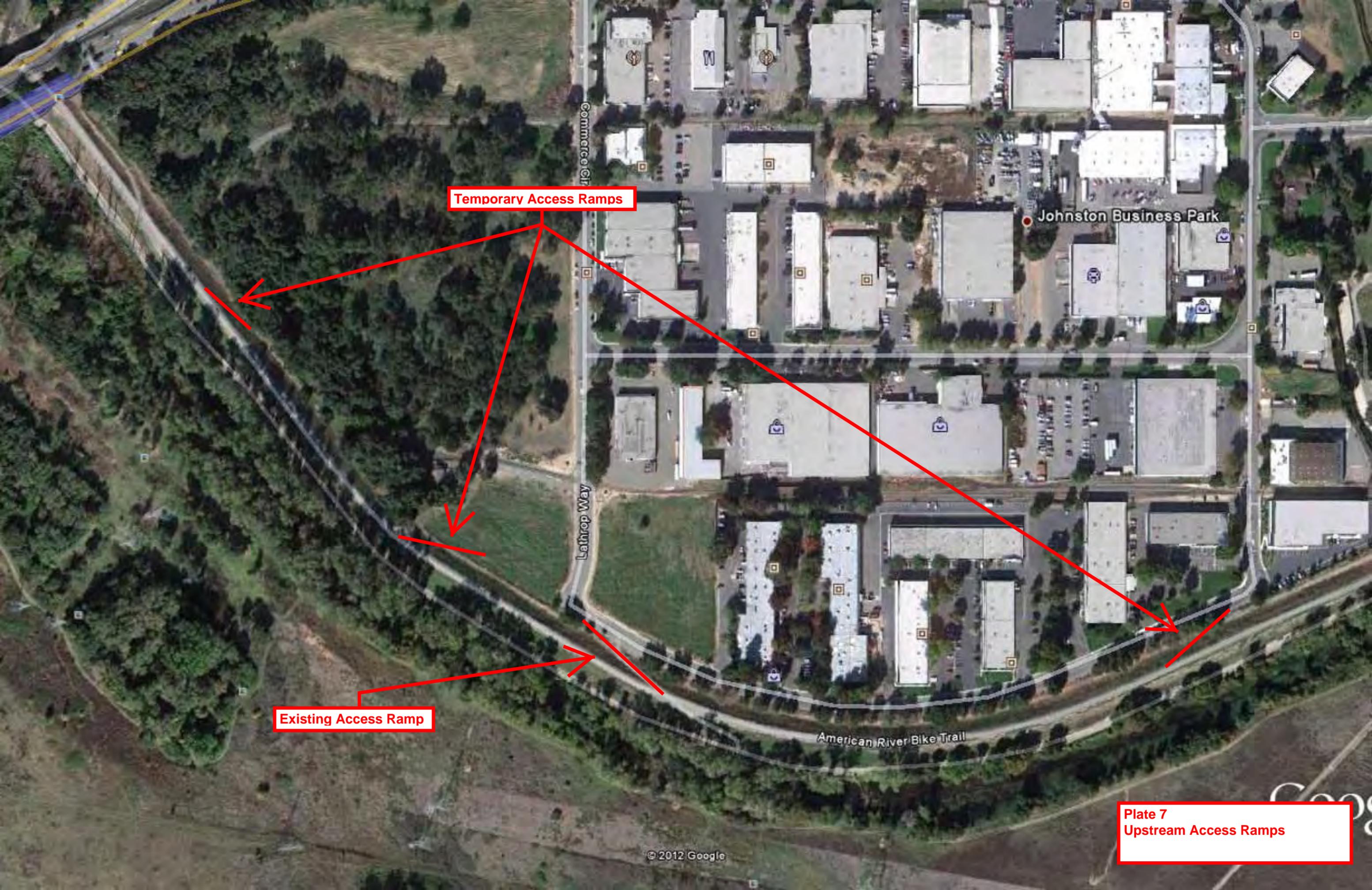




Cutoff Wall

UPRR Tracks

Plate 6
Downstream Cutoff
Wall Section



Temporary Access Ramps

Johnston Business Park

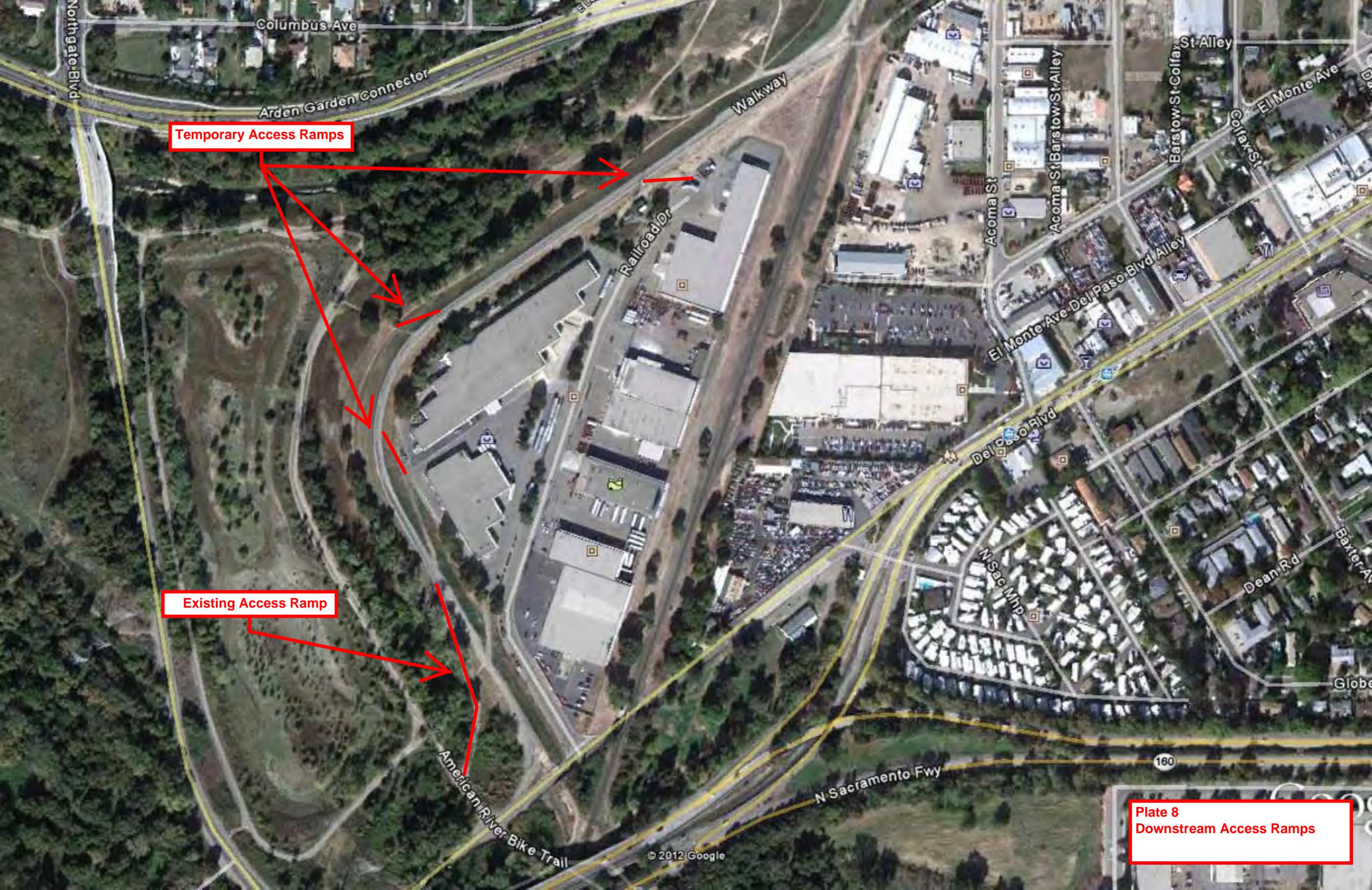
Commerce Cir

Lathrop Way

American River Bike Trail

Existing Access Ramp

Plate 7
Upstream Access Ramps



Temporary Access Ramps

Existing Access Ramp

Plate 8
Downstream Access Ramps



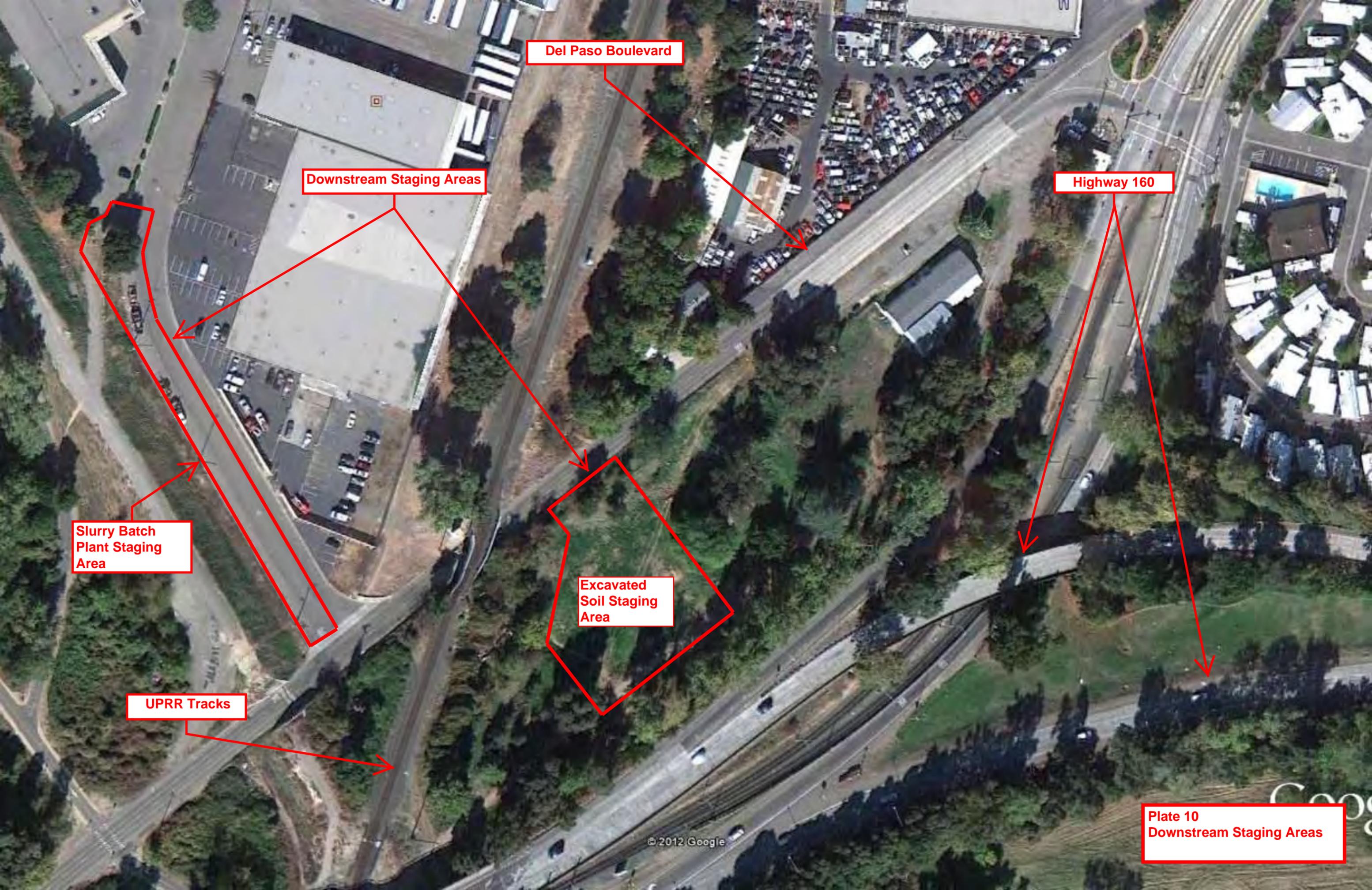
Lathrop Way

Slurry Batch
Plant Staging

Soil Staging

Primary Staging
Area

Plate 9
Upstream Staging Area



Del Paso Boulevard

Downstream Staging Areas

Highway 160

Slurry Batch
Plant Staging
Area

Excavated
Soil Staging
Area

UPRR Tracks

Plate 10
Downstream Staging Areas



Johnston Business Park

Expo Pkwy

Commerce Cir

Lathrop Way

American River Bike Trail

American River Parkway

Plate 11a
Upstream Segment Haul Route

Turnaround in Downstream Staging Area

Turnaround in Upstream Staging Area

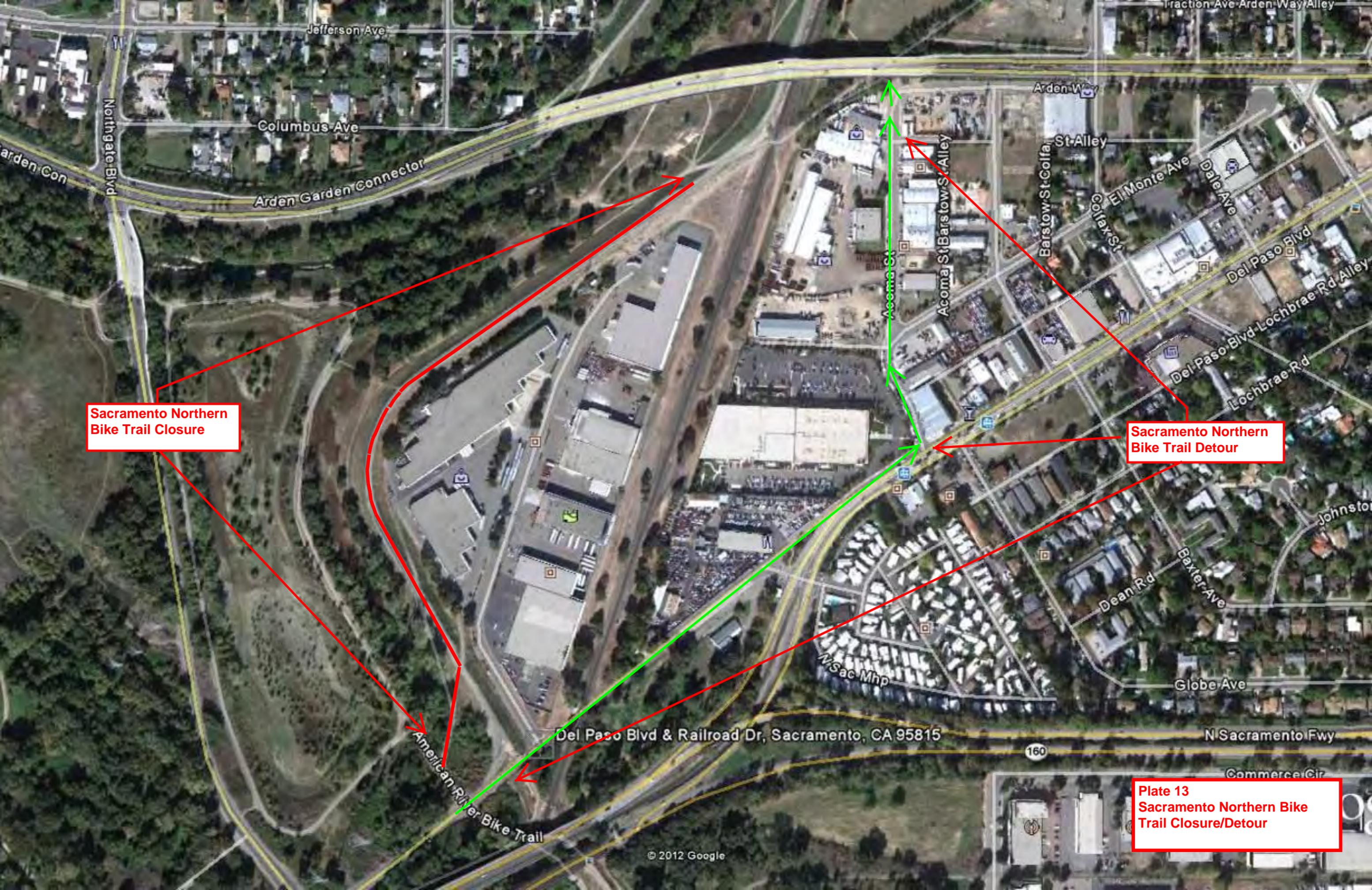
Plate 11b
Upstream Segment Haul Route (Middle section)





Downstream Staging Area

Plate 12
Downstream Haul Route



**Sacramento Northern
Bike Trail Closure**

**Sacramento Northern
Bike Trail Detour**

**Plate 13
Sacramento Northern Bike
Trail Closure/Detour**

Attachment 5:
Resolution Adopting Mitigated
Negative Declaration

STATE OF CALIFORNIA
THE RESOURCES AGENCY
CENTRAL VALLEY FLOOD PROTECTION BOARD
RESOLUTION 2012-39
AMERICAN RIVER WATERSHED COMMON FEATURES PROJECT,
CALIFORNIA
LOWER AMERICAN RIVER FEATURES AS MODIFIED BY WATER
RESOURCES DEVELOPMENT ACT OF 1999
NATOMAS EAST MAIN DRAIN CANAL
(AMERICAN RIVER NORTH LEVEE, RIVER MILE 2.0 TO 3.6)

WHEREAS, the Central Valley Flood Protection Board, (formerly known as The Reclamation Board) is the non-federal sponsor and California Environmental Quality Act (CEQA) lead agency for the American River Watershed Common Features Project, California, Lower American River Features as Modified by the Water Resources Development Act of 1999, Natomas East Main Drain Canal (American River North Levee, River Mile 2.0 to 3.6), (Project) and the U.S. Army Corps of Engineers is the federal sponsors and lead agency under the National Environmental Policy Act (NEPA) and Sacramento Area Flood Control Agency is the local sponsor and responsible agency under CEQA; and

WHEREAS, Congress authorized levee improvements known as American River Watershed Common Features Project in the Water Resources Development Act (WRDA) of 1996, (Public Law 104-303); and

WHEREAS, the State authorized the American River Watershed Common Features Project in 1997 under California Water Code Sections 12670.10, 12670.14 and 12670.16; and

WHEREAS, Congress authorized modifications to the American River Watershed Common Features Project in Section 366 of WRDA 1999, (Public Law 106-53) called the Lower American River Features which included the raising of the levee on the right (north) bank of the American River near Howe Avenue and Northrop Avenue, raising the left bank levee near Mayhew Drain and the Mayhew Drain Closure Structure, and levee strengthening near the Natomas East Main Drainage Canal and the right bank of the Lower American River near Jacob Lane, and

WHEREAS, in 2001 the Corps and the Board prepared and circulated a draft Environmental Assessment/Initial Study (EA/IS) with Findings of No Significant Impact/ draft Mitigated Negative Declaration for American River Watershed Common Features Project, California, Lower American River Features as Modified by the Water Resources Development Act of 1999, (WRDA 1999 Project) for public review; and

WHEREAS the Board re-circulated the EA/IS, adopted the Mitigated Negative Declaration and approved the WRDA 1999 Project excluding the Mayhew features which were analyzed in a separate EIS/EIR, in November, 2006 (Resolution); and

WHEREAS, the Corps determined that one reach of the levee on the north bank of the American River could not pass 160,000 cfs; and

WHEREAS the work necessary to correct the deficiencies and the associated environmental impacts on the north bank of the Lower American River near the Natomas East Main Drain Canal, have been further defined; and

WHEREAS a draft EA/IS and a draft Mitigated Negative Declaration for the Project were circulated for public review from June 15, 2012 to July 16, 2012; and

WHEREAS, comments on the draft EA/IS have been received and responses prepared and included in a Final EA/IS.

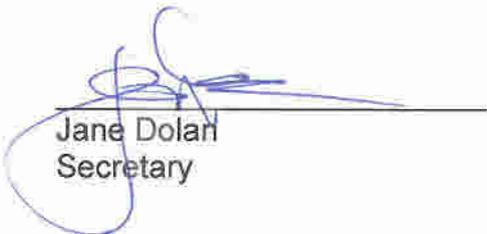
NOW, THEREFORE, BE IT RESOLVED that the Board

1. Has considered the Final EA/IS and finds that on the basis of the whole record, including comments received on the draft EA/IS, and mitigation measures that have been included in the Project, there is no substantial evidence that the proposed Project will have a significant effect on the environment, and that the Mitigated Negative Declaration reflects the independent judgment and analysis of the Board; and
2. Adopts the Mitigated Negative Declaration; and
3. Adopts the Mitigation, Monitoring, and Reporting Plan; and
4. Approves the American River Watershed Common Features Project, California, Lower American River Features, Natomas East Main Drain Canal.

PASSED AND ADOPTED by vote of the Board on August 24, 2012.



William H. Edgar
President



Jane Dolan
Secretary

Advice 4392-E

Attachment 6:
Notice of Determination

Notice of Determination

Appendix D

To:

Office of Planning and Research
For U.S. Mail: Street Address:
P.O. Box 3044 1400 Tenth St.
Sacramento, CA 95812-3044 Sacramento, CA 95814

County Clerk
County of:
Address:

From:

Public Agency: Central Valley Flood Protection Board
Address: 3310 El Camino Av.
Sacramento, CA 95821
Contact: Mary Ann Hadden
Phone: (916) 574-1431

Lead Agency (if different from above):
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2012062056

Project Title: American River Watershed Common Features Project, California, Lower American River Commons Features as Modified by WRDA 1999, Natomas East Main Drain Canal

Project Location (include county): Along the Lower American River between river miles 2.0 and 3.6, Sacramento County

Project Description:

Strengthen approximately 4,800 feet of flood control levee along the lower American River in the American River Parkway. Construction would be implemented over two construction seasons: the upstream segment is scheduled to be constructed in 2013 and the downstream segment is scheduled to be constructed in 2014.

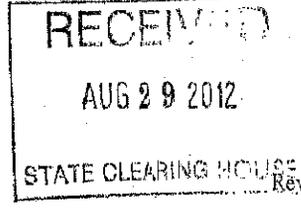
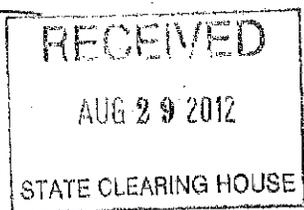
This is to advise that the Central Valley Flood protection Board has approved the above described project on August 24, 2012 and has made the following determinations regarding the above described project:
(Lead Agency or Responsible Agency)
(Date)

- 1. The project [] will [X] will not have a significant effect on the environment.
2. [] An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. [X] A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [X] were [] were not made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [X] was [] was not adopted for this project.
5. A statement of Overriding Considerations [] was [X] was not adopted for this project.
6. Findings [X] were [] were not made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: 3310 El Camino Avenue, Sacramento, CA 95821

Signature (Public Agency) [Signature] Title Executive Officer

Date 8/24/2012 Date Received for filing at OPR



Authority cited: Sections 21083, Public Resources Code. Reference Section 21000-21174, Public Resources Code.

**PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV**

1st Light Energy	Douglass & Liddell	Occidental Energy Marketing, Inc.
AT&T	Downey & Brand	OnGrid Solar
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	Pacific Gas and Electric Company
Anderson & Poole	G. A. Krause & Assoc.	Praxair
BART	GenOn Energy Inc.	Regulatory & Cogeneration Service, Inc.
Barkovich & Yap, Inc.	GenOn Energy, Inc.	SCD Energy Solutions
Bartle Wells Associates	Goodin, MacBride, Squeri, Schlotz & Ritchie	SCE
Braun Blasing McLaughlin, P.C.	Green Power Institute	SDG&E and SoCalGas
CENERGY POWER	Hanna & Morton	SPURR
California Cotton Ginners & Growers Assn	In House Energy	San Francisco Public Utilities Commission
California Energy Commission	International Power Technology	Seattle City Light
California Public Utilities Commission	Intestate Gas Services, Inc.	Sempra Utilities
California State Association of Counties	K&L Gates LLP	SoCalGas
Calpine	Kelly Group	Southern California Edison Company
Casner, Steve	Linde	Spark Energy
Center for Biological Diversity	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
City of Palo Alto	Los Angeles Dept of Water & Power	Sunshine Design
City of San Jose	MRW & Associates	Tecogen, Inc.
Clean Power	Manatt Phelps Phillips	Tiger Natural Gas, Inc.
Coast Economic Consulting	Marin Energy Authority	TransCanada
Commercial Energy	McKenna Long & Aldridge LLP	Utility Cost Management
County of Tehama - Department of Public Works	McKenzie & Associates	Utility Power Solutions
Crossborder Energy	Modesto Irrigation District	Utility Specialists
Davis Wright Tremaine LLP	Morgan Stanley	Verizon
Day Carter Murphy	NLine Energy, Inc.	Water and Energy Consulting
Defense Energy Support Center	NRG Solar	Wellhead Electric Company
Dept of General Services	Nexant, Inc.	Western Manufactured Housing Communities Association (WMA)
Division of Ratepayer Advocates	North America Power Partners	